



Consultation on Civil Aviation Authority Notice of Requirement

10 December 2025

Night Vision Imaging System (NVIS) Civil Aviation Notice - NTC 91.273

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1. Purpose of this Consultation

The purpose of this consultation is to seek feedback on a Civil Aviation Authority Notice that proposes requirements for helicopter operators engaged in operations at night using night vision imaging systems (NVIS) requirements. This notice is made under Civil Aviation Rule 91.273(a).

2. CAA Notices

The aim of CAA Notices is to better support risk-based regulation and improve the flexibility and responsiveness of the rules.

The authority for such notices is section 64(5) of the Civil Aviation Act 2023 (the Act). This section permits the Minister of Transport to make rules on any terms and conditions specified in the rule to –

- require or provide for a matter to be determined, undertaken, or approved by the CAA, the Director of Civil Aviation (Director), or another person; or
- empower CAA, Director or any other person to impose requirements or conditions as to the performance of any activity including (but not limited to) any procedures to be followed.

These requirements must be in writing and will be set out in CAA notices, which in this case can only be issued by the Director. Before notices may be issued there must be a corresponding enabling rule in the Civil Aviation Rules. That also means that not complying with the notice results in a breach of the enabling rule.

CAA notices will generally apply in circumstances where the rules may not adequately or appropriately capture technical or procedural requirements.

Notices will be used where there are benefits to taking a performance-based approach, for example in circumstances where new technological changes or innovations require more flexibility than prescriptive approach and rules may become quickly out-dated, or where there is a need to respond to safety issues which the rules cannot adequately deal with.

The use of CAA notices reflects international trends that adopt risk-based regulation, and some comparable overseas aviation regulators use similar instruments. For example, the Australian regulator (Civil Aviation Safety Authority) CASA, uses Civil Aviation Orders made by the Director of Aviation Safety for a wide variety of activities. These Orders contain detailed technical requirements and generally supplement Civil Aviation Regulations, the Australian equivalent of the New Zealand Civil Aviation Rules. CASA also issues Manuals of Standards, which include detailed technical requirements which support the implementation of the Civil Aviation Safety Regulations.

The draft CAA notice proposed in this consultation provides the technical requirements that would need to be met by operators.

These requirements are legally enforceable as they are part of the rules. The benefits of this approach are that it:

- Allows for flexibility if the technical requirements for NVIS change over time. (International Civil Aviation Organization) ICAO has not yet set Standards and Recommended Practices (SARPs) for NVIS, and a notice will make it easier should New Zealand adopt international standards when they arise.
- Allows CAA to include material previously provided in Advisory Circular (AC) 91-13 for helicopters. Including the technical detail from the AC into a notice will allow for CAA to have better regulatory oversight of helicopters conducting operations at night. ACs do not fall within the meaning of secondary legislation under the Act and therefore are legally enforceable. A notice is legally enforceable as it is part of the rules.

3. Background to the Proposal

3.1 Rules requiring CAA Notices

Part 91

91.271 Requirements for operating an aircraft at night using NVIS

- (a) A person must not operate an aircraft at night using NVIS unless
 - (1) the aircraft and NVIS meet the airworthiness and performance requirements –
 - (i) determined by the Director as specified in a notice under rule 91.273(a)(2); or
 - (ii) the Director accepts as equivalent to those in paragraph (i);
 - (2) the person –
 - (i) is suitably trained and qualified to operate the aircraft using NVIS as specified under Part 61 or in a notice under rule 91.273(a)(4); and
 - (ii) complies with the operational procedures and any limitations regarding the use of NVIS as specified in a notice under rule 91.273(a)(6).
- (b) A person operating an aircraft at night to carry out NVIS training must not carry a passenger on the aircraft.

91.273 Director may determine NVIS airworthiness and performance requirements and related matters in a notice

- (a) After complying with the procedures referred to in rule 91.273B, the Director may determine the following as specified in a notice –
 - (1) the airworthiness and performance requirements for an aircraft being operated at night using NVIS;
 - (2) the airworthiness and performance requirements for NVIS;
 - (3) the requirements regarding the testing, installation and approval of NVIS;
 - (4) suitable training requirements, courses, manoeuvres or NVG aircraft operations for a person operating an aircraft at night using NVIS;
 - (5) the requirements for the appropriate night flight using NVIS experience;
 - (6) the operational procedures and any limitations associated with operating an aircraft at night using NVIS;
 - (7) the areas of competencies on the eligibility requirements for the issue of a NVIS rating referred to in rule 61.935(a)(4)(iii); and
 - (8) definitions and abbreviations to give full meaning to the terms used in a notice.
- (b) A person must comply with any requirement specified in a notice referred to in paragraph (a) if the requirement applies to the person.
- (c) For the purposes of rule 91.271(2)(i) and this rule, suitably trained and suitable training means the person meets all the applicable training requirements specified in a notice and under Part 61.

3.2 Scope of the CAA Notice

Policy Background

There is increasing use of night-vision imaging systems (NVIS) in aviation in New Zealand. NVIS equipment aids pilots flying at night operating under visual flight rules (VFR) or instrument flight rules (IFR). NVIS equipment includes:

- interior and exterior lighting;
- cockpit windows;
- radar altimeters;
- crew station design/components such as filtration, transparencies, head-mounted night-vision goggles (NVGs); and
- ancillary equipment.

Before 2025, there were no NVIS specific Civil Aviation Rules (CAR) despite NVIS technology being used in civil aviation in New Zealand. Given that there were no specific NVIS rules, CAA developed a makeshift approach using general rules to regulate commercial users of NVIS. CAA developed specific NVIS requirements in an advisory circular (AC). However, ACs are not legally binding.

The makeshift measures to provide regulatory oversight of NVIS using the provisions under AC91-13 was fit-for-purpose at that time given that only a small number of operators were using night vision googles (NVGs) and the impact on the industry was limited.

After completing a full review of the safety risk of not specifying NVIS requirements, CAA recognised that the makeshift approach to NVIS will become less feasible as NVIS technology becomes more accessible and more widespread. Without appropriately accommodating NVIS in our regulatory framework, operators may not be appropriately trained and/or use faulty or low standard NVIS equipment. This poses a significant safety risk particularly for private users of NVIS.

At present, there are few operators that use NVIS equipment in New Zealand, because purchasing NVIS equipment and obtaining an NVIS rating can be expensive and may pose as a barrier to widespread NVIS uptake by private recreational pilots. However, NVIS equipment may become more accessible to recreational pilots in the future. For example, we are seeing an increasing number of aircraft on the market with NVIS built in.

Having a regulatory framework for NVIS also presents an opportunity to use the equipment in a way that enhances aviation safety. The use of this equipment has had a significant benefit to the operational capability and safety of night flying. In New Zealand, the main users of NVIS equipment are helicopter operations (predominantly those involved with search and rescue operations), air ambulance operations and operations supporting NZ Police. In recent years, this equipment has also been used for flying at night to emergencies such as wildfires.

In 2025, we amended CAR Part 61 and Part 91 to include rating requirements for users of NVIS (Part 61) and to only allow operators to use NVIS if their aircraft met minimum safety standards to be set out in a notice (Part 91).

After consultation with SMEs, CAA decided to limit the notice to helicopters conducting operations at night. This was for two reasons:

- Placing the NVIS requirements for helicopter and fixed wing aircraft in the same notice could cause it to be unwieldy and create confusion;

AC91-13 has provisions relevant to helicopters that currently meet international standards. The notice is an opportunity to make those provisions binding while we explore NVIS requirements for fixed wing aircrafts further. The notice was developed in accordance with notice making procedure in rules 91.273B and 91.258A. The CAA conducted a full review to assess the aviation safety of the requirements taking into account their

compatibility with existing NVIS equipment and performance standards and practicality of the requirements. The CAA also took into account how the notice aligns with our ICAO obligations under the Convention and Annexes in our assessment. See discussion below.

Policy Objective

The objective of this notice is to set out the requirements for:

- Airworthiness, performance, and operating requirements for NVIS for helicopters (Subpart B); and
- NVIS training, relevant experience and competencies (Subpart C).

Subpart B will require helicopters wishing to operate NVIS equipment to have NVIS certification in accordance with the NVIS lighting system. If helicopters are using NVG, helicopters must meet performance standards as specified in FAA TSO-C164. Any NVIS related design changes or modifications will have to meet the requirements in CAR 21.503 and Appendix C or D to Part 21 regardless of whether the helicopter is operating under Part 135 or Part 91.

Subpart C will require pilots, crew members and instructors to meet certain training requirements appropriate to their role. Additionally, pilots are required to undertake an NVIS pilot competency check.

An operator with an air operator certificate (AOC) must be authorised to:

- carry out helicopter operations under CAR Part 135; and
- perform the operation using NVIS in a way that meets the requirements in the notice.

Operators with an AOC must establish operating procedures for NVIS that meet the requirements of Parts 91 and 135 and amend their exposition to include procedures acceptable to the Director of CAA and include any other procedures required in the interests of aviation safety.

This is in contrast to an operator carrying out helicopter operations under Part 91. An operator carrying out helicopter operations under Part 91 who wishes to use NVIS has to be approved by the Director before carrying out the helicopter operation as well as complying with all applicable requirements.

3.3 Consistency with International Obligations

Currently there are no ICAO SARPs for Member States to adopt as best practice international standards for NVIS.

4. Submissions on the Consultation

4.1 Submissions are invited

Interested persons are invited to participate in the making of the proposed Notice by submitting written data, views, or comments. All submissions will be considered before final action on the proposed Notice is taken. If there is a need to make any significant change to the Notice requirements in this proposal as a result of the submissions received, then interested persons may be invited to make further submissions.

4.2 Examination of submissions

All submissions will be available for examination by interested persons both before and after the closing date for submissions. A consultation summary will be published on the CAA web site and provided to each person who submits a written submission on this consultation.

Submissions may be examined by appointment with the Docket Clerk at the Civil Aviation Authority Level 15, Datacom Centre, 55 Featherston Street, Wellington 6011 between 8:30 am and 4:30 pm on weekdays, except statutory holidays. Appointments to examine submissions are to be arranged by phone or email docket@caa.govt.nz.

4.3 Official Information Act

Submitters should note that subject to the Official Information Act 1982 any information attached to submissions will become part of the docket file and will be available to the public for examination.

Submitters should state clearly if there is any information in their submission that is commercially sensitive or for some other reason the submitter does not want the information to be released to other interested parties. The CAA will consider this in making a decision in respect of any Official Information Act requests. It should be noted that the CAA cannot guarantee confidentiality in respect of any specific submissions.

4.4 How to make a submission

Online response form

An online response form is available on the CAA website at [Proposed Notices open for consultation | aviation.govt.nz](#). When submitted, this form will be sent directly to the Docket Inbox.

Submission response sheet

A submission response sheet may also be downloaded from our website and sent by the following methods:

e-mail: docket@caa.govt.nz

by mail: Docket Clerk

Civil Aviation Authority

PO Box 3555

Wellington 6140

delivered: Docket Clerk

Civil Aviation Authority

Datacom Centre Level 15

55 Featherston Street

Wellington 6011

REFERENCES AND NOTES

Comments must be received before 5pm on 2 February 2023.

4.0 Further information

For further information, contact: ucket@caa.govt.nz

Appendix 1: Draft Civil Aviation Authority Notice

Notice of Requirement

NTC 91.273

NIGHT VISION IMAGING SYSTEMS (NVIS)

Revision 1
05 Apr 2026

Preliminary

The Director of Civil Aviation issues the following provisions relating to the use of night vision imaging systems (NVIS) under section 64(5) of the Civil Aviation Act 2023 and civil aviation rule 91.273(a).

Purpose

The purpose of this notice is to specify –

- (1) the airworthiness and performance requirements for aircraft operating at night using NVIS;
- (2) the airworthiness and performance requirements for NVIS;
- (3) the requirements regarding the testing, installation and approval of NVIS;
- (4) suitable training requirements, courses, manoeuvres or NVG aircraft operations for a person operating an aircraft at night using NVIS;
- (5) the requirements for the appropriate night flight using NVIS experience;

- (6) the operational procedures and any limitations associated with operating aircraft at night using NVIS;
- (7) the areas of competencies on the eligibility requirements for the issue of a NVIS rating; and
- (8) the definitions and abbreviations to give full meaning to the terms used in this notice.

General

Civil Aviation Authority (CAA) Notices contain approvals and requirements including the detail about the approvals, standards, conditions, procedures and technical specifications that have been approved or determined by the Director under the Civil Aviation Rules. These details must be complied with by parties to whom it applies. They apply in particular circumstances to particular aviation document holders as specified in the notice.

CAA notices are issued under Civil Aviation Rules in accordance with section 64(5) of the Civil Aviation Act 2023. This section permits the Minister of Transport to make ordinary rules, and to specify any terms and conditions within the rules:

- to require a matter to be determined, or undertaken or approved by the Authority, the Director or another person; or
- to empower the Authority, Director, or another person to impose requirements or conditions as to the performance of any activity, including (but not limited to) any procedures to be followed.

Notices support a performance-based approach to regulation, and improve the flexibility and responsiveness of the Civil Aviation Rules. They may be used where performance-based regulation is the appropriate way to achieve the desired regulatory outcome, for example, in circumstances where new technological changes or challenges require more flexibility than prescribing requirements in

the rules (and rulemaking may get quickly out-dated), or where there is a need to respond to safety issues which the rules do not adequately deal with.

Related Rules

Civil Aviation Rules 91.271, 91.273, 91.273B

Issue of CAA Notice

Signed by
Director of Civil Aviation

Date

Revision History

Revision 1 Original version

Night Vision Imaging System (NVIS)



Subpart A - General

1.1. Title

This notice is the Night Vision Imaging System (NVIS) Civil Aviation Notice and may be referred to as NTC 91.273.

1.3. Effective date

This notice comes into effect on 5 April 2026.

1.5 Application

- (a) This notice applies to a holder of an air operator certificate issued under Part 119, a flight instructor, a pilot, or any other crew member who is engaged in a helicopter operation at night using NVIS under VFR or IFR.
- (b) This notice applies to a helicopter operation referred to in paragraph (a) that is conducted under Parts 135 or 91.

1.7 Definitions

Terms used in this notice have the same meaning set out in Civil Aviation Rule Part 1.

Subpart B – Airworthiness, performance and operating Requirements, etc

2.1 Airworthiness, performance and operating requirements for helicopters

- (a) For the purposes of rule 91.273(a)(1) –
 - (1) a holder of an air operator certificate must not operate a helicopter under Part 135 unless the helicopter meets the requirements of rule 21.503, and Appendix C or D to Part 21 for any NVIS related design changes or modifications as applicable; or
 - (2) a person must not operate a helicopter under Part 91 unless the helicopter meets the requirements equivalent to those in paragraph (a) that are acceptable to/approved by the Director.

- (b) The certificate holder or person referred to in paragraph (a) must ensure that the helicopter holds a current NVIS certification in accordance with the NVIS lighting system specified in clause 2.5, or an equivalent certification method acceptable to the Director.

2.3 Airworthiness and performance requirements for NVIS

For the purposes of rule 91.273(a)(2), a person operating a helicopter at night must ensure that –

- (1) if using NVG, the NVG meets at least the performance standards specified in FAA TSO-C164, or an equivalent standard acceptable to the Director; and
- (2) the NVG used in the operation is listed in the rotocraft flight manual; and
- (3) any limitations regarding the use of NVIS as specified in the flight manual supplement are complied with; and
- (4) each image intensifier tube used in a NVG is authorised for aviation use by means of an accompanying manufacturer's certification of the individual image intensifier tube.

2.5 NVIS lighting system

- (a) For the purposes of rules 91.273(a)(2) and (3), a person operating a helicopter at night must ensure that -
- (1) the internal and external lighting does not adversely affect the operation of the NVGs during any phase of the operation;
 - (2) the internal lighting provides adequate illumination of aircraft cockpit instruments;
 - (3) displays and controls for unaided flight and for 'look-under' viewing during aided flight;
 - (4) the external lighting assists other aircraft in the ability to see and avoid the aircraft; and
 - (5) modifications to the aircraft equipment do not adversely affect daylight readability.
- (b) The person must coordinate onsite testing of a NVIS to ensure that representatives from both the contracted design organisation and

the CAA are onsite at the same time when final compatibility and readability tests are carried out.

2.7 Requirements for testing and installation of NVIS

For the purposes of the testing and installation of NVIS under rule 91.273(a)(3), a person who operates a helicopter must ensure that in respect of that helicopter –

- (1) the applicable testing and installation standards specified in the FAA guidance material entitled **Miscellaneous Guidance 16 of FAA AC27-1()** and **Miscellaneous Guidance 16 of FAA AC 29-2()** are met; or
- (2) any other equivalent testing and installation standard acceptable to the Director.

2.9 Airworthiness approval of NVIS

For the purposes of the approval of NVIS under rule 91.273(a)(3) –

- (1) a holder of an air operator certificate must ensure that a helicopter is not operated at night using NVIS under Part 135 unless an appropriate supplemental type certificate has been issued under Subpart E of Part 21 in respect of the NVIS; or
- (2) a person must not operate a helicopter at night using NVIS under Part 91 unless the person complies with an equivalent airworthiness approval process to paragraph (a) as acceptable to the Director.

2.11 Instructions for continued airworthiness of helicopters and NVIS

- (a) For the purposes of rules 91.273(a)(2) and (3), a person must comply with this clause.
- (b) A person must not operate a helicopter at night using NVIS if a deviation from the cockpit or cabin configuration is made because of a NVIS modification.
- (c) The helicopter must be re-evaluated by an aircraft maintenance engineer certificated under Part 66 and certified to be airworthy for

night operations using NVIS, before the person can continue to operate the helicopter.

- (d) Each NVG used by a crew member during a helicopter operation at night must be maintained by –
 - (1) the manufacturer; or
 - (2) an appropriately rated Part 145 maintenance organisation; or
 - (3) an equivalent maintenance organisation outside of New Zealand that has been endorsed by the manufacturer of the NVG as appropriate to carry out the maintenance.
- (e) A person must not operate a helicopter at night using NVIS unless the person complies with the instructions for continued airworthiness specified in section AC 29.1529 and Appendix A of the RTCA Document DO-275, section 5.5, and including the following –
 - (1) the appliance, system or accessory maintenance manual; and
 - (2) the maintenance instructions and inspection requirements –
 - (i) to ensure that the instructions for continued airworthiness are clear on whether the operator must remove the filter or other NVIS modification prior to returning an instrument, gauge, or light to the manufacturer for maintenance; and
 - (ii) to ensure that there is clear instructions on how to de-modify and re-modify instruments and gauge; and
 - (iii) regarding periodic inspections to ensure the NVIS lighting system is NVG compatible and the configuration of the aircraft aligns with the approved data;
 - (3) airworthiness limitations;
 - (4) illustrated parts breakdown regarding aircraft transparencies (for example windscreen and windows), NVIS lighting, and any additional aircraft equipment that support NVIS operations;
 - (5) complying with the NVG manufacturer's instructions for continued airworthiness and maintenance schedules for its goggles if such instructions are available;

- (6) having a storage location or compartment on the aircraft to protect the continued airworthiness of the NVGs, without compromising the integrity of the aircraft or its systems;
 - (7) complying with instructions regarding any subsequent aircraft modifications (internal or external), including operational equipment (for example FLIR or EMS equipment) involving a light emitting or reflecting device is considered major since it can affect the operational characteristics of the NVIS lighting system and must be re-assessed against the original requirements for the NVIS certification;
 - (8) if an approval is granted for multiple aircraft, the installation and production procedures must ensure that all aircraft comply with the type design;
 - (9) the production procedures referred to in paragraph (8) must be sufficiently detailed to detect minor differences between any 2 aircraft;
 - (10) any post-production tests must include the ground and flight tests for each aircraft;
 - (11) any deviation from the cockpit or cabin configuration specified in the STC or TC type design may affect the compatibility of the NVIS and requires a re-evaluation for NVIS cockpit and NVG compatibility;
 - (12) the aircraft is not certificated for NVG operations until the re-evaluation under paragraph (11) is completed.
- (f) The release document to be used for instructions for continued airworthiness is the CAA Form One or an equivalent document acceptable to the Director.

Subpart C - Requirements for NVIS training, relevant experience, competencies, etc

3.1 NVIS flight instructors and crew members to comply with training requirements, relevant experience and competencies

- (a) For the purposes of rules 91.273(a)(4), 91.273(a)(5) and 91.273(a)(7), a person operating a helicopter or engaged in a helicopter operation at night using NVIS must comply with the training requirements, relevant experiences and competencies specified in this Subpart.
- (b) A holder of an air operator certificate must ensure that an NVIS flight instructor or crew member training for helicopter operations using NVIS under Part 135 must successfully complete the training programme required under Subpart I of Part 135.

3.3 NVIS Flight instructor prerequisites

In accordance with Part 61, a current category B or D flight instructor with a valid night instruction certification or a current category A flight instructor must not instruct in the use of NVIS unless a flight examiner authorised for NVIS has certified in the instructor's logbook that the instructor has the necessary experience and has demonstrated competency acceptable to the Director to perform NVIS flight instruction.

3.5 NVIS Flight Instructor Currency

A NVIS flight instructor must meet the recent flight experience requirements specified in clause 3.11 before giving flight instruction at night using NVIS.

3.7 NVIS pilot prerequisites

A pilot must meet the following requirements before operating a helicopter at night using NVIS -

- (1) hold a current night cross-country certification for night operations beyond 25nm of a lighted heliport or aerodrome; and
- (2) have a minimum of 20 hours VFR night flight time experience including 10 hours as PIC of which 5 hours need to be VFR night cross-country; and
- (3) demonstrate to an appropriately qualified flight instructor acceptable instrument flight competency by:

- (i) maintaining a nominated altitude within ± 100 feet, a nominated heading within $\pm 5^\circ$, in balance during straight and level flight and level turns; and
 - (ii) maintaining a rate one turn or a nominated angle of bank $\pm 10^\circ$ during all turning manoeuvres to within $\pm 10^\circ$ of pre-selected roll-out heading; and
 - (iii) maintaining a nominated climbing or descending speed within ± 5 knots. Level flight to be re-established at the pre-selected altitude \pm no more than 100 feet; and
 - (iv) performing an instrument recovery appropriate for the area of operations whilst maintaining the above manoeuvring limits; and
 - (v) correctly identifying an aircraft unusual attitude and returns to straight and level references after a small delay, without entering a second unusual attitude while attempting to regain the references; and
- (4) have at least 250 hours of flight time experience as pilot-in-command in the appropriate category of aircraft, of which no more than 50 hours can be in an approved flight simulator representative of the aircraft category that will be used for NVIS training.

3.9 NVIS pilot training

- (a) For the purposes of rule 61.935(4), a pilot must —
 - (1) have successfully completed an approved NVIS ground training course acceptable to the Director; and
 - (2) have successfully completed an approved NVIS flight training course acceptable to the Director for the same type of helicopter as the one intended for using NVIS, consisting of a minimum of 5 hours flight time; and
 - (3) have successfully completed a NVIS initial flight check conducted by an appropriately qualified flight instructor or flight examiner.
- (b) The approved NVIS ground training course referred to in paragraph (a)(1) must be conducted by an aviation training organisation certificate under Part 141 or as part of an air operator training

programme under Part 119 if the aviation training organisation certificate authorises the holder to conduct NVIS ground training and check approvals.

- (c) The approved NVIS flight training course referred to in paragraph (a)(2) must be conducted by an aviation training organisation certificate under Part 141 or as part of an air operator training programme under Part 119 if the aviation training organisation certificate authorises the holder to conduct NVIS flight training.
- (d) A NVIS initial flight check must require the pilot to demonstrate competency in at least the following areas:
 - (1) mission planning/flight planning for the flight;
 - (2) determining the serviceability of NVIS equipment, including the helicopter components;
 - (3) performing cockpit drills and 'Goggle up/de-goggle' procedure;
 - (4) performing NVIS hover (if appropriate), taxi departure, transit, navigation and arrival procedures;
 - (5) performing NVIS practice malfunctions and emergency procedures;
 - (6) performing circuit operations to unlit confined areas located in areas devoid of surrounding cultural lighting;
 - (7) performing loss of visual reference procedures on landing and take-off;
 - (8) performing inadvertent IMC penetration procedures and safe recovery to VMC flight, including a single pilot unusual attitude recovery, maintaining controlled flight within the limits stated in clause 3.5 for the demonstration of instrument flight competency; and
 - (9) performing a selection of practice emergency procedures, under NVIS conditions, applicable to the helicopter type.
- (e) A pilot-in-command of a helicopter operation under Part 91
 - (1) must have successfully completed the relevant training conducted by a training provider authorised in accordance with Part 141 or 119 to conduct the NVIS training; and

- (2) must ensure that any flight instructor, pilot, or crew member who is part of the operation has successfully completed the relevant training conducted by a training provider authorised in accordance with Part 141 or 119 to conduct the NVIS training.

3.11 NVIS pilot currency

- (a) For a pilot who has a logbook certification for night flight using NVIS -
- (1) the take-offs and landings required under rules 61.37(c), and 61.37(d) for a helicopter pilot must -
- (i) be carried out in a NVIS-equipped helicopter of the same type that is normally used by the pilot for NVG aircraft operations; and
- (ii) be performed using NVGs; and
- (iii) include hovering tasks and an enroute segment or an area reconnaissance.
- (b) Instrument flight competency must be demonstrated to an appropriately authorised flight instructor or flight examiner, or person approved by the Director, within the limits stated in clause 3.5 for the demonstration of instrument flight competency.
- (c) The instrument flight time must include a simulated inadvertent IMC penetration and recovery to VMC flight.
- (d) The method of instrument flight competency may be specified in an air operator's exposition and must be recorded in accordance with those exposition procedures.
- (e) A person who does not meet the 120-day NVIS recent flight experience requirements as provided for in FAR 61.57, must not act as pilot-in-command of an aircraft conducting a NVG aircraft operation until that person completes a NVIS competency check under clause 3.9.

3.13 NVIS pilot competency check

- (a) A NVIS annual competency check must include a NVG helicopter operation that is representative of a typical NVG helicopter

- operation conducted by the pilot to satisfy the requirements of clause 3.7, and include as a minimum -
- (1) approach and departure from an unimproved landing area;
 - (2) procedures for utilising backup power to the NVGs;
 - (3) NVG unit failure for each of the flight crew members;
 - (4) standard emergency exercises from the NVIS Flight Training Syllabus;
 - (5) procedures for loss of visual reference (brownout/whiteout, etc) when visibility is inadvertently lost on departure or arrival to or over a landing area;
 - (6) procedures for coping with deteriorating in-flight visibility and/or picture quality;
 - (7) inadvertent IMC penetration, unusual attitude recovery and instrument recovery to VMC flight, maintaining controlled flight within the limits stated in clause 3.5 NVIS Pilot Prerequisites for the demonstration of instrument flight competency;
 - (8) completing one unaided approach to a lit area in the circuit.
- (b) The competency check must be conducted by -
- (1) a flight instructor or flight examiner who is current to perform NVIS flight operations in that same aircraft category and type; or
 - (2) a person approved by the Director to conduct NVIS competency checks.

3.15 NVIS Pilot Requalification Training

A pilot who holds a NVIS rating and has not operated an aircraft at night using NVIS for 12 months or more must not carry out such an operation unless the pilot has successfully completed the NVIS recurrent training programme acceptable to the Director.

3.17 NVIS crew member instructor

A NVIS crew member Instructor must have the following minimum experience -

- (1) hold a recognised NVIS qualified crew member or NVIS qualified pilot endorsement or certificate; and
- (2) meet the instructional experience, standards and qualification requirements in the operator's exposition for day and night (unaided) operations for the relevant crew member position; and
- (3) have logged at least 20 hours of NVG aircraft operation time inclusive of a recognised NVIS course.

3.19 NVIS crew member training prerequisites

To be eligible to be a crew member for a helicopter operation using NVIS, a person must -

- (1) meet the experience, competency, recency and qualification requirements as specified in the air operator's exposition for day and night (unaided) operations for the relevant crew member position and helicopter; and
- (2) meet any physical and medical standards specified in the operator's exposition.

3.21 NVIS crew member training

- (a) A crew member who is part of an aircraft operation at night using NVIS must have successfully completed an approved NVIS ground theory course that is conducted by an aviation training organisation certificated in accordance with Part 141 or as part of the air operator's training programme under Part 119, if authorised to do so under the certificate.
- (b) After completing an approved NVIS ground theory course, a crew member must have successfully completed an approved NVIS flight training acceptable to the Director, with a minimum of 2 hours flight time, conducted by an aviation training organisation certificated in accordance with Part 141 or by an air operator certificated in accordance with Part 119, if the certificate authorises NVIS flight training and checking.

3.23 Recognition of New Zealand Defence Force (NZDF) NVIS Qualifications

- (a) For the purposes of rule 61.939, a person specified in paragraphs (b) and (c) must comply with this clause.
- (b) A pilot who has a NZDF NVIS qualification may be certified for night flying using NVIS if-
 - (1) the pilot has completed the night flight training required under Part 61; and
 - (2) has successfully completed the NVIS recurrent training acceptable to the Director, conducted by a flight instructor who is certified for NVIS instruction and authorised under the authority of a Part 141 aviation training organisation certificate or a Part 119 air operator certificate to conduct the NVIS training.
- (c) A crew member, other than a flight crew member, who has a NZDF NVIS qualification may be qualified as a NVIS crew member if the crew member completes as a minimum the NVIS recurrent training acceptable to the Director, conducted by a NVIS crew member instructor authorised under the authority of a Part 141 aviation training organisation certificate or a Part 119 air operator certificate to conduct the NVIS training.

3.25 Recognition of Foreign Civil and Military NVIS Qualifications

- (a) For the purposes of rule 61.941, a person specified in paragraphs (b) and (c) must comply with this clause.
- (b) A pilot who holds a foreign military NVIS qualification or a civil NVIS qualification from an ICAO Contracting State must complete the night flight training required under Part 61 and the NVIS recurrent training acceptable to the Director, conducted by a flight instructor who is certified for NVIS instruction and authorised under the authority of a Part 141 aviation training organisation certificate, or a Part 119 air operator certificate to conduct the NVIS training.
- (c) A crew member who holds a foreign military NVIS qualification or a civil NVIS qualification from an ICAO Contracting State must complete the NVIS recurrent training acceptable to the Director,

conducted by a NVIS crew member instructor authorised under the authority of a Part 141 aviation training organisation certificate, or a Part 119 air operator certificate to conduct the NVIS training.

3.27 Operational procedures

For the purposes of rule 91.273(a)(6), a person operating an aircraft must ensure that the operational procedures for an aircraft being operated at night using NVIS must include the capabilities and limitations of the NVIS and personnel and any constraints of the operating environment.

3.29 Holder of air operator certificate must be authorised to carry out helicopter operations under Part 135

For the purposes of rule 91.273(a)(6), a holder of an air operator certificate who operates a helicopter at night using NVIS must –

- (1) establish operating procedures to ensure compliance with the applicable requirements of Parts 91 and 135; and
- (2) in accordance with rule 119.165(a), amend their exposition –
 - (i) to include those procedures that are acceptable to the Director;
 - (ii) to include any other procedures as may be required by the Director in the interest of aviation safety; and
- (3) be authorised in their operations specifications to perform the operation using NVIS in a helicopter that meets the requirements of this notice.

3.33 Director's approval is required before carrying out helicopter operations under Part 91

For the purposes of section 91.273(a)(6), a person must not conduct a helicopter operation at night using NVIS under Part 91 unless the –

- (1) the person complies with all the applicable requirements of this notice; and
- (2) the person is approved by the Director before conducting the helicopter operation.

Appendix—Procedures for using NVGs on helicopter night VFR operations



The following items, as a minimum, must be included in the operating procedures for NVG helicopter operations:

Airworthiness and Maintenance of NVIS Equipment

- (a) Aircraft pre-flight
- (b) NVIS pre-flight
- (c) MEL
- (d) Reporting of NVIS equipment defects

Crew Member Responsibilities

- (a) Pilot:
 - (1) Duties, responsibilities and authority
 - (2) Logging NVG flight operations
 - (3) Training and qualification
 - (4) Recency of experience.
- (b) NVIS Crew Member:
 - (1) Duties, responsibilities and authority
 - (2) Training and qualification
 - (3) Recency of experience.
- (c) NIS Flight Instructors:
 - (1) Experience and qualifications
 - (2) Duties, responsibilities and authority
 - (3) Recency of experience.

Flight Operations

(a) Pre-flight and departure:

- (1) Before takeoff NVIS check
- (2) NVG Goggle and de-goggle limitations. Transitions:
 - (i) Unaided to aided
 - (ii) aided to unaided
- (3) Area of operations
- (4) Route planning
- (5) Risk assessment procedures to be completed
- (6) NVIS flight operations ceiling and visibility requirements
- (7) Fuel requirements
- (8) Briefing of passengers
- (9) Equipment requirements.

(b) Enroute:

- (1) Minimum safe altitudes
- (2) Hostile terrain
- (3) Helicopter surface reference
- (4) Operating near other aircraft.

(c) Standard Flight Manoeuvres

(d) Arrival:

- (1) Landing area requirements
- (2) Reconnaissance

(3) Unimproved landing sites.

(4) Post Flight Procedures.

Crew Member Procedures

(a) Minimum Crew members.

(b) Pre-flight Brief:

(1) Required actions of each person, duties and responsibilities during each phase of flight

(2) Light discipline

(3) Sterile cockpit procedures

(4) Crew resource management

(5) Standardise terminology.

Emergency Procedures

(a) Inadvertent IMC

(b) NVIS equipment failure

(c) Aircraft emergencies.

(d) Reports and Forms

(e) Training Forms

(f) Recency of Experience Forms

(g) NVG Maintenance Logbook.