Australian Government
Civil Aviation Safety Authority

ACCEPTABLE MEANS OF COMPLIANCE AND GUIDANCE MATERIAL

Aerial work operations

Part 138 of CASR

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July 2025

Acknowledgement of Country

The Civil Aviation Safety Authority (CASA) respectfully acknowledges the Traditional Custodians of the lands on which our offices are located and their continuing connection to land, water and community, and pays respect to Elders past, present and emerging.

Inside front cover artwork: James Baban.

An Acceptable Means of Compliance (AMC) explains how one or more requirements of the Civil Aviation Safety Regulations 1998 (CASR) for the issue of a certificate, licence, approval or other authorisation, can be met by an individual or organisation applying to the Civil Aviation Safety Authority (CASA) for the authorisation.

AMC are non-binding advisory documents issued by CASA which may be used by persons and organisations to achieve compliance with CASR.

Applicants are not required to utilise an AMC to comply with a legislative requirement but if they do, CASA will issue the authorisation to which the AMC relates.

AMC do not articulate the only way compliance can be achieved. Individuals and operators may, on their own initiative, propose other ways of meeting the requirements of CASR; however, any such proposal will be subject to separate assessment by CASA to determine whether the proposed methods are likely to produce the required legislative outcome.

Guidance material (GM) is non-binding material issued by CASA which helps to illustrate the meaning of a requirement or specification in CASR. It provides explanations of the CASR and sometimes an amplification of the policy intention underpinning the applicable provision of CASR, rather than a means of complying with it. GM should be read in conjunction with the applicable provision of CASR and AMC. GM is identified by grey shaded text.

Contents

Audience

This acceptable means of compliance and guidance material (AMC and GM) applies to:

- current and future Aerial Work Certificate (AWC) holders who are, or wish to be authorised to conduct aerial work operations in an aircraft
- pilots operating aircraft for AWC holders conducting aerial work operations
- task specialists who are crew members on aircraft being operated in aerial work operations
- air crew members who are crew members on aircraft being operated in aerial work operations
- current and future operators conducting training and checking for aerial work operations including any Part 141 and Part 142 operators
- current and future aerodrome operators and designers of facilities where aerial work operations will be carried out.

Purpose

This AMC and GM provides advice in the form of Guidance Material (GM) and, where relevant, specify Acceptable Means of Compliance (AMC) for Part 138 of the *Civil Aviation Safety Regulations 1998* (CASR) and its associated Part 138 Manual of Standards (MOS). Collectively, these documents, and any supporting separate exemptions or directions, outline the requirements for aerial work operations in both aeroplane and rotorcraft (if Part 101 of CASR does not apply to those aircraft).

The intention is to translate the requirements of the regulations and the MOS into language that is easily understood, and where necessary, expand the information to ensure the intent of the legislation is clear.

It is recommended that this AMC and GM be read in conjunction with Part 138 of CASR and the Part 138 MOS to ensure maximum understanding. Any AMC outlined will allow an AWC holder to satisfy Civil Aviation Safety Authority (CASA) of the regulatory requirement if they choose to use and follow the AMC material. However, AWC holders may also propose alternative means of compliance to the AMC if they so desire. This alternative means will need to be assessed and found acceptable for the purpose by CASA.

For further information

For further information or to provide feedback on this AMC and GM, visit CASA's contact us page.

Status

This version of the AMC and GM is approved by the National Manager, Flight Standards Branch.

Note: Changes made in the current version are annotated with change bars.

Table 1: Status

Version	Date	Details
v2.6	July 2025	Numerous changes have been made relating to the mid-2025 introduction of a 4th kind of aerial work operation called a fireground personnel carriage operation: • added content to GM 138.010 definition of aerial work operation • added content to GM 138.125 related to training and checking requirements • added content to GM 138.140 related to safety management system requirements

Version	Date	Details
		• added content to GM 138.155 related to operations manual content. The opportunity was also taken to: • make minor editorial adjustments • update the content relating to subregulation 138.005(2) of CASR in the GM 138.005 entry • add content to GM 138.200 and GM 138.205 regarding the need for foreign registered aircraft operated in Australia under foreign issued restricted category special certificates of airworthiness to have a special flight authorisation under regulation 91.970 of CASR • remove incorrect old content from GM 138.200 relating to a direction in section 19 of CASA EX72/24 which has been repealed • add content relating to the serviceability of required equipment in GM 138.465 aligned with other AMC/GM documents.
v2.5	April 2025	The following changes have been made: • added new definitions to support new content • added information to GM 138.005 describing some circumstances where the conduct of a flight that meets the definition of an aerial work operation, using a foreign registered aircraft by an Australian operator, is not subject to Part 138 • added explanatory information about paragraph 138.012(c) of CASR (definition of significant change 138.012(c)) • various editorial amendments to standardise format and content (where appropriate) across Parts 121, 133, 135 and 138 in regard to fuelling safety procedures • added information on the exemption to regulation 138.180 • emphasised the safety issues associated with longer foreign registered aircraft usage approvals in the GM 138.200 entry • new CASA style template applied to this AMC/GM document.
v2.4	December 2023	Added a 4th AMC for 138.195 relating to operators listing in their operations manual the non-CASR, non-MOS legal instruments they rely upon when writing their exposition, and added a cross-referenced AMC to 138.155.
v2.3	September 2023	Added information about forms. Added information regarding the legal instruments which determine that training and checking events completed prior to the commencement of Part 138 are taken to have met certain new training and checking requirements. Added information to GM 138.015 regarding pilots simultaneously being the task specialist. Added information into GM 138.350 and GM 138.425 regarding the existence of a CASA TMI on aeroplane NVIS. Added information regarding approvals mentioned in CASA exemptions and directions instruments and how these relate to the significant change approval rules. Modified wording of the HOTC GM entries for increased clarity. Also added information to GM 138.305 about aerial work passengers and linking to AC 138-01 guidance.
v2.1	December 2021	Added references and entries related to recently made exemptions. Addition of new guidance material. Additional guidance relating to alternate key persons in GM 138.062 and GM 138.075.
v2.0	October 2021	Addition of new guidance material, clarification of policy matters and editorial changes.
v1.0	December 2020	Initial AMC and GM.

1 Reference material

1.1 Acronyms

The acronyms and abbreviations used in this AMC and GM are listed in the table below.

Table 2: Acronyms

Acronym	Description
AC	advisory circular
AMC	acceptable means of compliance
AMSA	Australian Maritime Safety Authority
AOC	Air Operator's Certificate
ATC	air traffic control
ATS	air traffic services
ATSB	Australian Transport Safety Bureau
AWC	aerial work certificate
AWK	aerial work
CAAP	Civil Aviation Advisory Publication
CAO	Civil Aviation Order
CAR	*Civil Aviation Regulations 1988*
CASA	Civil Aviation Safety Authority
CASR	*Civil Aviation Safety Regulations 1998*
CEO	Chief Executive Officer
CofA	Certificate of Airworthiness
ESO	emergency service operation
EVS	enhanced vision systems
FCM	flight crew member
GM	guidance material
HOO	Head of Operations
HUD	head-up display
HOTC	Head of Training and Checking
IFR	instrument flight rules
IIMC	inadvertent instrument meteorological conditions
MEL	minimum equipment list
MOS	Manual of Standards

Acronym	Description
MTOW	maximum take-off weight
NVIS	night vision imaging system
PED	portable electronic device
PIC	pilot in command
SM	Safety Manager
SMS	safety management system
SVS	synthetic vision systems
TMI	Temporary Management Instruction

1.2 Definitions

Terms that have specific meaning within this AMC and GM are defined in the table below. Where definitions from the civil aviation legislation have been reproduced for ease of reference, these are identified by 'grey shading'. Should there be a discrepancy between a definition given in this AMC and GM and the civil aviation legislation, the definition in the legislation prevails.

Table 3: Definitions

Term	Definition
aerial work operation	1. An aerial work operation means one or more of the following (and each of the following is a kind of aerial work operation): a. an external load operation; b. a dispensing operation; c. a task specialist operation; d. an operation of a kind prescribed by the Part 138 Manual of Standards for the purposes of this paragraph. **Note:** A *fireground personnel carriage operation* is prescribed to be a kind of aerial work operation in section 3.01AA of the Part 138 MOS. 2. Despite subregulation (1), an aerial work operation does not include the following: a. a medical transport operation; b. an external load operation involving winching a person, if the operation is conducted as part of an air transport operation; c. glider towing; d. a person undertaking a parachute descent; e. an aerial application operation (including any external load operation undertaken as part of that operation) to apply fire retardants (including water), or oil or chemical dispersants, if the operation is conducted by a person holding a civil aviation authorisation under Part 137 to undertake the operation; f. any other aerial application operation; g. any other operation of a kind prescribed by the Part 138 Manual of Standards for the purposes of this paragraph.

Term	Definition
	Note: Multiple operations are prescribed to not be an aerial work operation in section 3.01 of the Part 138 MOS. These operations include an aircraft towing a thing where the requirement in paragraph 91.210(2)(a) of CASR is met, the flight test of an experimental aircraft conducted under an experimental certificate, a maintenance test flight, a thing dropped by a person undertaking a parachute descent under Part 105 of CASR, and aerial spotting carried out in a weight-shift-controlled aeroplane type certificated in the primary category where the operation is administered by a sport aviation body.
Australian operator	means an operator whose principal place of business, or whose place of permanent residence, is in Australian territory.
Australian territory	means: a. the territory of Australia and of every external Territory; b. the territorial sea of Australia and of every external Territory; and c. the air space over any such territory or sea.
dispensing operation	means dropping or releasing any substance or object from an aircraft in flight and includes training for such an operation.
external load operation	means carrying or towing a load outside an aircraft in flight and includes training for such an operation.
fireground emergency organisation	means an authority mentioned in: a. paragraph 3.03 (f); or b. paragraph 3.03 (h) — but only to the extent that the authority mentioned engages in firefighting, or protecting or saving wildlife from an active fire. **Note:** The references to section 3.03 relate to section 3.03 of the Part 138 MOS.
fireground personnel carriage operation	means an operation: a. conducted by an aerial work certificate holder, for hire or reward, which is tasked by a fireground emergency organisation to carry passengers in a helicopter for the operation: i from a fire helibase in the vicinity of a relevant fireground to the fireground, or from one part of a relevant fireground to another part of the fireground, to carry out a relevant ground activity; or ii from a relevant fireground to a fire helibase in the vicinity of the fireground, after carrying out a relevant ground activity; and b. that involves carrying passengers in a helicopter, for the operation, in accordance with the task mentioned in paragraph (a); and c. unless an exemption under Part 11 of CASR is applicable to, and being used by, the holder — for which the holder meets the requirements stated in paragraphs 4.02(1)(f) and 5.02(1)(a), and Chapter 17A. Note 1 The passengers are aerial work passengers under section 2.02. *[sic - of the Part 138 MOS]* Note 2 An effect of this definition is that if any of the elements of the definition are not met, then the transport of the passengers is either a private operation but only if the aerial work certificate holder is not conducting the operation for hire or reward, or a Part 133 operation, with its attendant obligations, if the holder is conducting the operation for hire or reward. Note 3 Another effect of this definition is that a fireground personnel carriage operation cannot be conducted by a limited aerial work operator. **Explanatory Note (not part of the definition):**

Term	Definition
	The references in this definition to paragraphs and a Chapter are references to elements of the Part 138 MOS. The MOS is not specifically mentioned in the definition because the definition is contained in the MOS. This definition incorporates the use of multiple other defined terms, including *fireground emergency organisation*, *fire helibase*, *fireground* and *relevant ground activity*. These supporting definitions are also contained in the Part 138 MOS.
fire helibase	for a fireground personnel carriage operation, means a safe area: a. at which passengers, who are carried in a helicopter for the operation, assemble, to embark on a helicopter at the start of the operation; or b. to which passengers, who are carried in a helicopter for the operation, are returned, to disembark on completion of the operation.
foreign registered aircraft	means an aircraft registered: a. in a foreign country; or b. under a joint registration plan or an international registration plan.
limited aerial work operator	means an operator who conducts an aerial work operation that does not require an aerial work certificate. **Note:** See regulation 138.030 for which aerial work operations require an aerial work certificate. Section 1.04 of the Part 138 MOS contains a legal definition of this term. The phrasing above is intended to establish a plain language understanding.
operator	of an aircraft, means: a. if the operation of the aircraft is authorised by an AOC, a Part 141 certificate or an aerial work certificate—the holder of the AOC or certificate; or b. otherwise—the person, organisation or enterprise engaged in aircraft operations involving the aircraft.
relevant fireground	means one or more of the following, which is notified by a fireground emergency organisation to the operator for a flight that is a fireground personnel carriage operation to be, be within, or be in the vicinity of, a fireground: a. an area involved in active fire, including burning and burnt areas; b. an area immediately threatened by fire, including any adjoining property; c. an area where fire suppression is required or taking place; d. an area where any of the following are deployed for use in the area or a related area: i firefighters; ii firefighting appliances; iii firefighting equipment; e. an area where fire containment lines are constructed or proposed to be constructed; f. a road, or access point, under traffic management control, relating to any of the areas mentioned in paragraphs (a) to (e); g. a track, amenity, facility or structure.
relevant ground activity	for a fireground personnel carriage operation, means any activity by passengers, who are carried in a helicopter for the operation, at a relevant fireground, with or without equipment, for the purpose of saving or protecting persons, property or the environment, including, for that purpose, any of the following: a. attacking, stopping, slowing, blocking, redirecting, controlling, observing, or extinguishing the fire, or any similar activity; or

Term	Definition
	b. observing, rescuing, or humanely addressing in the most appropriate manner, the effects of the fire on domesticated animals or wildlife.

1.3 References

Legislation

Legislation is available on the Federal Register of Legislation website https://www.legislation.gov.au/

Table 4: Legislation references

Document	Title
Civil Aviation Act	Civil Aviation Act 1988 (the Act)
Civil Aviation Safety Regulations	Civil Aviation Safety Regulations 1998 (CASR)
Part 11 of CASR	Regulatory administrative procedures
Part 91 of CASR	General operating and flight rules
Part 91 MOS	Part 91 (General Operating and Flight Rules) Manual of Standards 2020
Part 92 of CASR	Consignment and carriage of dangerous goods by air
Regulation 92.025 of CASR	Compliance with Technical Instructions—operators
Part 119 of CASR	Australian air transport operators—certification and management
Part 121 of CASR	Australian air transport operations—larger aeroplanes
Part 121 MOS	Part 121 (Australian Air Transport Operations—Larger Aeroplanes) Manual of Standards 2020
Part 133 of CASR	Australian air transport operations—rotorcraft
Part 133 MOS	Part 133 (Australian Air Transport Operations—Rotorcraft) Manual of Standards 2020
Part 135 of CASR	Australian air transport operations—smaller aeroplanes
Part 135 MOS	Part 135 (Australian Air Transport Operations—Smaller Aeroplanes) Manual of Standards 2020
Part 138 of CASR	Aerial work operations
Part 138 MOS	Part 138 (Aerial Work Operations) Manual of Standards 2020
CASR Dictionary	Part 1, Part 2, Part 3 of the CASR Dictionary
CAO 48.1	Civil Aviation Order 48.1 Instrument 2019 **Note:** This CAO contains the flight crew member fatigue requirements.
CAO 100.7	Civil Aviation Order 100.7 Instrument 2015 **Note:** This CAO contains the weighing and related requirements for aircraft.

Document	Title
CASA 94/21	Training and Checking (CASR Part 138) Determination 2021 **Note:** This instrument does not apply to an operator accessing the training and checking deferrals under the now repealed CASA EX87/21 or the current CASA EX73/24.
CASA EX32/24	Flight Crew Licensing and Other Matters (Miscellaneous Exemptions) Instrument 2024
CASA EX56/23	Implementation of Drug and Alcohol Management Plans (Micro-businesses and DAMP Organisations) Exemption 2023
CASA EX67/24	Part 91 of CASR - Supplementary Exemptions and Directions Instrument 2024
CASA EX72/24	Part 138 and Part 91 of CASR - Supplementary Exemptions and Directions Instrument 2024
CASA EX73/24	Flight Operations Regulations - SMS, HFP&NTS and T&C Systems - Supplementary Exemptions and Directions Instrument 2024
CASA EX79/24	Transitional Training and Checking Requirements for Crew Members in Part 138 Operations – Exemption Instrument 2024
CASA EX92/22	Part 137 and Part 91 of CASR – Supplementary Exemptions and Directions Instrument 2022

Advisory material

CASA's advisory materials are available at https://www.casa.gov.au/publications-and-resources/guidance-materials

Table 5: Advisory material references

Document	Title
AC 1-01	Understanding the legislative framework
AC 1-02	Guide to the preparation of expositions and operations manuals
AC 1-03	Transitioning to the flight operations regulations
AC 11-03	Electronically formatted certifications, records and management systems
AC 11-04	Approvals under CASR Parts 91, 103, 119, 121, 129, 131, 132, 133, 135, 138 and 149 (including MOS)
AC 91-07	Cabin electronic flight bags
AC 91-13, 133-09 and 138-06	Night vision imaging - helicopters
AC 91-15	Guidelines for aircraft fuel requirements
AC 91-17	Electronic flight bags
AC 91-19, 121-04, 133-10, 135-12 and 138-10	Passenger safety information
AC 91-22	Aircraft checklists
AC 91-25	Fuel and oil safety

Document	Title
AC 91-28	Crew safety during turbulence
AC 91-29	Guidelines for helicopters - suitable places to take-off and land
AC 119-01	Safety management systems for air transport operations
AC 119-07 and 138-03	Management of change for air transport and aerial work operators
AC 119-11 and 138-02	Training and checking systems
AC 121-05, 133-04 and 135-08	Passenger, crew and baggage weights
AC 133-01	Performance class operations **Note:** An entry in this table previously indicated that information relating to performance class 3 operations over populous areas was contained in AC 133-03. CASA decided not to publish a separate AC on this topic and instead published this information in AC 133-01.
AC 133-02	Performance Class 2 with exposure operations
AC 138-01	Part 138 Core concepts
AC 138-05	Risk management for aerial work operators **Note:** This includes guidance for both aerial work certificate holders and those operators conducting aerial work operations without being required to hold an aerial work certificate.
AC 139.R-01	Guidelines for heliports - design and operation
CAAP 48-01	Fatigue management for flight crew members
Part 91 PEG	General operating and flight rules - plain English guide
Part 91 AMC/GM	Acceptable means of compliance and guidance material - general operating and flight rules
Part 119 AMC/GM	Acceptable means of compliance and guidance material - Australian air transport operators—certification and management
Part 121 AMC/GM	Acceptable means of compliance and guidance material - Australian air transport operations—larger aeroplanes
Part 133 AMC/GM	Acceptable means of compliance and guidance material - Australian air transport operations—rotorcraft
Part 135 AMC/GM	Acceptable means of compliance and guidance material - Australian air transport operations—smaller aeroplanes
	fixed wing firebombing
VFRG	Visual flight rules guide

1.4 Forms

CASA's forms are available at http://www.casa.gov.au/forms

Table 6: Forms

Form number	Title
	Application - Aerial work operations (CASR Part 138)
	Notification – Non-significant changes (CASR Parts 119, 131 and 138)

2 Subpart 138.A—Preliminary

There is a Part 11 direction in force in relation to aerial work certificate holders and drug and alcohol management plans (DAMP). It is recommended that operators review section 16 of CASA EX72/24.

There is a Part 11 direction in force in relation to crew members carrying out audits, checks, examinations etc. Operators and pilots are advised to review section 9 of CASA EX67/24.

AMC 138.005 Application of Part 138

Reserved.

GM 138.005 Application of Part 138

Part 138 does not apply to the conduct of an activity using a *foreign registered aircraft* (see the definition in the Act) that falls within the definition of *aerial work operation* (see the definition in the regulation 138.010 of CASR), due to section 7 of the *Civil Aviation Act 1988*, if the flight is wholly conducted outside *Australian territory* (see the definition in the Act), even if the flight is operated by an *Australian operator* (defined term in the CASR Dictionary).

Example

An Australian operator is contracted to conduct aerial firefighting using a foreign registered helicopter in a foreign country. This operation is not required to be conducted under Part 138 of CASR and is wholly regulated by the foreign country.

Part 138 does not apply to the conduct of an activity using a *foreign registered aircraft* (see the definition in the Act) that falls within the definition of *aerial work operation* (see the definition in the regulation 138.010 of CASR), even if the flight is operated by an *Australian operator* (defined term in the CASR Dictionary), where the flight takes off from an aerodrome inside Australian territory but doesn't start doing the aerial work activity until outside Australian territory and ceases the activity outside Australian territory before landing at an aerodrome inside Australian territory.

The basis for this guidance is that a flight can, in some circumstances, change between operational types in flight.

Example

A training flight is conducted by a rotorcraft medical transport crew as a private operation. While airborne, the flight is re-tasked to attend a roadside accident. From the point of re-tasking, the flight becomes an Australian air transport operation that is a medical transport operation.

Part 138 applies to the operation of an aircraft for an aerial work operation. The term 'aircraft' includes both aeroplanes and rotorcraft, so operators should carefully consider whether a provision in Part 138 applies broadly to 'aircraft' or applies specifically to 'aeroplanes' or 'rotorcraft'. For example, elements of the minimum height rules in the Part 138 MOS apply specifically to aeroplanes or rotorcraft.

Part 138 does not consider the commercial or non-commercial nature of an operation and is therefore applicable to all aerial work operations whether they are conducted for commercial purposes or not.

The definition of an 'aerial work operation' is given by regulation 138.010 and is further expanded for the purposes of paragraph 138.010(1)(d) in section 3.01AA of the Part 138 MOS. The definition

applies regardless of whether the person carrying out the operation holds an aerial work certificate (AWC) or not.

The definition of 'aerial work operator' is the holder of an AWC.

An operator who conducts aerial work operations without holding an AWC is taken to be a limited aerial work operator.

Note: Refer to GM 138.030 for an explanation on who must hold an aerial work certificate.

Only some of the aerial work regulations apply to limited aerial work operators. These particular rules include the phrase 'whether or not the operator holds an aerial work certificate'.

In the Part 138 MOS, all requirements apply to both AWC holders and limited aerial work operators unless otherwise stated.

An AWC issued under Part 138 does not permit the conduct of air transport operations, which are regulated by Parts 119, 121, 133 and 135.

Relationship with Part 91

All aerial work operations, whether or not the operation is required to be conducted by an AWC holder, are regulated by Part 138 in addition to Part 91, which prescribes the regulatory requirements that apply, by default, to all operations. Some Part 138 provisions take precedence over some Part 91 provisions. The table in regulation 91.035 lists these provisions.

The key reason for a Part 138 rule to differ from a Part 91 rule is when the specialised nature of aerial work operations makes it necessary to enable them to be conducted. Additionally, Part 138 rules aim to manage risks associated with aerial work operations to provide additional protection to crew and people on the ground. In considering the Part 138 requirements, an operator will need to consider the conditions and requirements of both the regulations and the MOS.

A non-aerial work flight must comply with the rules in Part 91. For example, after conducting an aerial work operation the aircraft needs to be flown to the home base, a maintenance base, or another aerodrome to be refuelled. That flight is not an aerial work operation and, therefore, is considered a Part 91 operation.

Relationship to Parts 141 and 142

Part 141 of CASR deals with the conduct of recreational, private and commercial pilot flight training, other than certain integrated training courses, and Part 142 of CASR deals with the conduct of integrated and multi-crew pilot flight training, contracted training and contracted checking.

In the conduct of some of these activities, Part 141 and Part 142 operators may also be required to conduct aerial work operations as an element of their Part 141 or 142 activity.

Examples

A Part 141 operator conducting actual mustering of cattle during the flight training elements of a pilot's training for the issue of an aerial mustering—helicopter or aeroplane endorsement to their low-level rating.

Note: This example does not include simulated aerial mustering operations with no cattle involved, where no aerial work operation is being carried out.

A Part 141 operator conducting an external load winching operation during the flight training elements of a pilot's training for the issue of a winch and rappelling operations endorsement to their low-level rating.

A Part 142 operator conducting an external load winching operation during the training and checking elements of a pilot's training and checking for the purposes of providing contracted training and checking for another operator.

As described above, all aerial work operations, regardless of whether the operation is required to be conducted by an AWC holder, are regulated by Part 138 in addition to Part 91. This is also the case with respect to the authority to conduct an aerial work operation. Therefore, if a Part 141 or Part 142 of CASR flying training operator intends to conduct aerial work operations, they must be appropriately authorised by Part 138 of CASR to do so.

This is further emphasised by subregulation 138.030(1) of CASR, which provides an offence if a person conducts an aerial work operation (other than an aerial work operation covered by subregulation 138.030(2) of CASR); and the person does not hold an AWC that authorises the person to conduct the operation.

It is highly unlikely a Part 141 or 142 operator would meet the criteria outlined in subregulation 138.030(2) of CASR. Therefore, the relevant Part 141 or Part 142 operator is required to hold (in addition to their Part 141 certificate or Part 142 AOC) an aerial work certificate that authorises the operator to conduct the aerial work operation.

Further to this, the aerial work operation must also be conducted in accordance with Part 138 of CASR's requirements for the conduct of the aerial work operation, including the requirements outlined in the Part 138 Manual of Standards (MOS).

For additional information, see further guidance material for regulation 138.030 of CASR.

Subregulation 138.005(2)

This subregulation provides relief from the requirements of Part 138 for search and rescue, police, national security or customs operations in circumstances where it is reasonable that the regulations should not apply.

For police, national security or customs operations this provision has potentially broad applicability for aerial work operations under Part 138 which are associated with these operations.

Such operations occur under the command of a Federal or State Police Force, or national security agency such as the Australian Border Force, where the command structure of that agency has deemed it reasonable and operationally necessary to exercise the functionality of subregulation 138.005(2) to permit the disapplication of a particular Part 138 provision, or a related Part 138 MOS requirement to allow the operation to occur in the public interest. Subregulation 138.005(2) does **NOT** enable the disapplication of regulations from other Parts, such as Part 91.

When the disapplication option outlined here is utilised, the operation remains an aerial work operation and all other aerial work rules continue to apply, meaning that, for example, the low flying alleviations built into Part 138 from the Part 91 minimum height rules continue to apply. However, to achieve this outcome the operator should be nuanced in their decision about which specific Part 138 regulation or MOS provisions are being disapplied. For example, rather than disapplying all of regulation 138.275 of CASR, which would have the flow-on effect of requiring compliance with the Part 91 minimum height rules, the operator should choose to disapply the individual Part 138 MOS Chapter 9 subsection or paragraph which is generating an adverse operational outcome.

Police, national security or customs agencies must only apply the subregulation 138.005(2) capability in circumstances when it is reasonable and safe to do so in an aerial work activity context.

For search and rescue operators who are not conducting police, national security or customs operations in the public interest, this provision should preferably only be used in circumstances where

the risk of not complying with a requirement in Part 138 is outweighed by an urgent and imminent threat to life.

Aircraft operators should note that, even when this subregulation is relied on, section 20A of the Civil Aviation Act 1988 (the Act) continues to apply in all circumstances.

This section of the Act states:

20A Reckless operation of aircraft

(1) A person must not operate an aircraft being reckless as to whether the manner of operation could endanger the life of another person.

(2) A person must not operate an aircraft being reckless as to whether the manner of operation could endanger the person or property of another person.

Search and rescue

The terms 'search' and 'rescue' are defined separately in subsection 1.07 (1) of the Part 138 MOS.

Broadly speaking, a search and rescue operation is an operation where the purpose is to find a person, provide for their initial medical needs, and deliver them to a place of safety as outlined above. In conducting a search and rescue operation an aircraft may be conducting one or more types of aerial work. For example, during the search the aircraft would be conducting a task specialist operation. If the flight dispensed stores after locating the person, such as dropping a life raft or supplies while airborne, it would also need to possess an authorisation to conduct a dispensing operation. If the person were to be recovered by winch, this flight would also be required to possess an authorisation to conduct an external load operation.

Difference between 'search and rescue' and 'medical transport'

In classifying a flight as either search and rescue or a medical transport operation, consideration needs to be given to the tasking authority and the primary purpose of tasking.

A medical transport operation is a defined term in the CASR Dictionary. If, however, a flight is commenced as a Part 138 operation (e.g. a search and rescue), it is accepted that, as part of a search and rescue function, the operator may end up conducting operations that are similar to medical transport. In these circumstances, reference back to the CASR definition is required, which considers what the primary purpose of the flight operation was when it commenced.

For example, a distress beacon has been activated and the Australian Maritime Safety Authority (AMSA) has tasked a helicopter operator to investigate the beacon. Despite the beacon broadcasting a location using the 406 MHz satellite detection network, technically the source of the beacon still has to be 'found', and this therefore requires a 'search'. This activity would be considered an aerial work operation. If persons were found that required 'rescue' and subsequent medical treatment, the flight would remain an aerial work operation.

However, if a car accident occurred and an injured person required transport to hospital, and a helicopter was tasked by an ambulance authority to provide transport from the accident scene to the hospital or to a road ambulance location for road transport to hospital, then this would be categorised as a medical transport operation since the person is a medical patient requiring transport.

Lastly, an Australian AWC is not recognised under the Chicago Convention (ICAO) and, therefore, is not automatically recognised by other countries. On the other hand a medical transport operation, as an air transport operation associated with an air transport AOC, is recognised by other countries. Therefore, any operators providing international patient transfer must hold an Australian air transport AOC authorising medical transport operations.

Subregulation 138.005(4) – rules that apply whether or not an AWC is held

Where an aerial work operation is conducted and an AWC is not required under regulation 138.030, the only Part 138 rules that apply to the operation are those that are expressed to apply whether an AWC is held or not, which will be stated in the relevant provision.

AMC 138.010 Definition of *aerial work operation* etc.

Reserved.

GM 138.010 Definition of *aerial work operation* etc.

The CASR Dictionary defines an aerial work operation by directing the reader to regulation 138.010 of CASR.

Subregulation 138.010(1) specifically names 3 kinds of aerial work operations, being external load operations, dispensing operations and task specialist operations, and then also enables the Part 138 MOS to prescribe additional kinds of operations to be aerial work operations. The relevant MOS content is in section 3.01AA of the Part 138 MOS and currently only lists a single additional kind of operation - a fireground personnel carriage operation.

Subregulation 138.010(5) specifically names multiple operations as **not** being aerial work operations and also enables the Part 138 MOS to add to the list of operations that are **not** aerial work operations. The relevant MOS content is in section 3.01 of the Part 138 MOS and multiple kinds of operations are currently listed. Readers are advised to review the subregulation and the MOS section to gain a complete picture of operations excluded from being aerial work operation. Some examples include but are not limited to:

- glider towing (which is not an external load operation and is regulated by Part 149 of CASR)
- parachuting operations (which are not dispensing operations and are regulated by Part 105 of CASR)
- post maintenance verification and calibration activities in-flight, in accordance with maintenance manual or aircraft flight manual procedures, do not constitute carrying out a specialised activity using an aircraft in flight as these activities are normal activities associated with the operation and continuing airworthiness requirements of the aircraft
- validation flights conducted under regulation 173.095 of CASR and Chapter 7 of the Part 173 MOS, which include validating instrument approach procedure designs and aerodrome lighting inspections (also see the exemption in section 24 of CASA EX67/24).

Subregulations 138.010(2), (3) and (4) of CASR contain the definitions of *external load operation*, *dispensing operation* and *task specialist operation*.

Subsection 1.04(6) of the Part 138 MOS defines *fireground personnel carriage operation*.

All these specific entries, and where necessary definitions, ensure that aviation activities clearly fit within one of the various categories of operations, such as an Australian air transport operation, aerial application operation under Part 137 of CASR or a private operation.

Importantly, when an operation is included within the definition of aerial work operation, it is automatically excluded from being an air transport operation, with the subsequent effect being that it cannot be an Australian air transport operation under Part 119 of CASR and therefore does not require the operator to hold an Australian air transport AOC under that Part.

Refer to regulation 138.030 of CASR to determine which aerial work operations can be conducted without an aerial work certificate (i.e. what the Part 138 MOS refers to as a ‘limited aerial work operation’).

Relationship between the 'air transport operation', 'aerial work operation' and 'fireground personnel carriage operation' definitions

The definition of *air transport operation* is underpinned by the definitions of *passenger transport operation*, *cargo transport operation*, *medical transport operation*, *aerial work operation*, and *balloon transport operation*, as well as the concept of 'hire or reward'. For guidance on the concept of 'hire or reward', see the GM 119.010 entry in the Part 119 AMC/GM document.

The definition of *aerial work operation* is discussed above. The definitions of *air transport operation*, *passenger transport operation*, *cargo transport operation* and *medical transport operation* are all found in the CASR Dictionary.

The definition of *aerial work operation* was expanded to include fireground personnel carriage operation in mid-2025. In practice, this new kind of aerial work is a passenger transport operation conducted using a helicopter for the hire or reward of the operator, but it has unique requirements not present in the Australian air transport operation rules in Parts 119 and 133 of CASR.

A fireground personnel carriage operation is the only kind of aerial work operation that relies on the concept of hire or reward, as this kind of operation was introduced to be a deliberately scope limited alternative to the carriage of fireground personnel for hire or reward under Part 133 of CASR.

Importantly, operators must be aware that, due to the definition of air transport operation specifically excluding aerial work operations, if an operator meets all the definitional elements within Part 138 of CASR for a fireground personnel carriage operation, they will automatically not be conducting an Australian air transport operation and must comply with all relevant requirements of Part 138, including holding an aerial work certificate. More detailed guidance relating to fireground personnel carriage operations can be found in AC 138-01. Operators must ensure they have a very clear understanding of the rules and their obligations.

For the avoidance of doubt, operators can elect to continue transporting passengers for hire or reward within and around a fireground under Parts 119 and 133 of CASR. Operators are not compelled to conduct these operations as a fireground personnel carriage operation in accordance with Part 138.

Rules relating to fireground personnel carriage operations

See AC 138-01 for an explanation of the new Part 138 rules, introduced in mid-2025, relating to fireground personnel carriage operations.

Overlapping with Part 137 of CASR

The dropping or releasing of any substance as a Part 138 dispensing operation overlaps with the dropping or spraying of material onto water or the ground as an aerial application operation under Part 137.

Part 137 only applies to aeroplanes conducting application operations as defined in Part 137. Post 2 December these operations will continue on as they do today.

Part 138 dispensing operations as defined in regulation 138.010 apply to both aeroplanes and rotorcraft. However, aeroplane operators may choose whether to conduct operations under the Part 138 dispensing rules or the Part 137 application rules.

From 2 December 2021, existing helicopter operators conducting agricultural operations as defined in CAO 20.21 automatically transitioned to Part 138 aerial work dispensing operations (subject to meeting the transition requirements).

Paragraphs 138.010(5)(e) and (f) have effect to ensure that an operation conducted in accordance with the Part 137 rules is not subject to the Part 138 aerial work dispensing rules.

If an operator is not conducting a Part 137 aerial application operation, and the operation otherwise meets the definition of a 'dispensing operation' (e.g. a spraying operation), then the Part 138 rules for dispensing apply, including in relevant circumstances the requirement to hold an aerial work certificate and to have procedures for the operation that comply with the Part 138 requirements. This

effectively is a similar legislative arrangement as operations conducted before 2 December 2021 under CAO 20.21 and Part 137.

Flight crew licensing in Part 138 for dispensing operations

There are separate implications for the flight crew licensing of pilots engaged in Part 138 dispensing operations. These are discussed in more detail below for regulation 138.475. However, in summary, pilots must be qualified for dispensing operations in accordance with Part 61. In the case of dispensing operations below 500 ft AGL, an aerial application rating will be required.

AMC 138.012 Definition of *significant change*

Reserved,

GM 138.012 Definition of *significant change*

There is a direction in force in relation to aerial work certificate holders and the approval required before conducting an NVIS operation for the first time in an aerial work operation. It is recommended that operators review section 23 of CASA EX72/24. The approval mentioned in this section of the exemption is taken to be a significant change due to it activating paragraph 138.012(d) of CASR. Operators are to apply for this approval by applying for a significant change via the Application - Aerial Work Operations (CASR Part 138) form available on CASA's website.

This regulation defines what a 'significant change' is for an aerial work operator.

All changes to an aerial work operator's operation must be made using the operator's change management process. One of the outputs of the change management process is a determination of whether a proposed change is significant for the purposes of Part 138, or whether it is not significant. Significant changes must be approved[1] by CASA before they are implemented by the operator. Other changes need not be pre-approved.

The definition of 'significant change' in regulation 138.012 consists of four paragraphs. Paragraph 138.012(a) provides a prescribed list of items that are always considered a significant change. For example, a change to the operator's key personnel should always be treated as a significant change (see further explanation of alternate key personnel below) because it is described in the list of items in paragraph 138.012(a). Similarly, a change to one of the four overarching kinds of aerial work operations that an operator is authorised to conduct under their AWC is a significant change.

For example, operators who wish to conduct the prescribed aerial work operation 'fireground personnel carriage operations' under Part 138 of CASR will need to apply to CASA for this authorisation to be added to their aerial work certificate using the form Application - Aerial Work Operations (CASR Part 138), as a significant change.

Part of the definition of *significant change* (paragraph 138.012(c)) refers to a change that does not maintain or improve or is not likely to maintain or improve aviation safety. This kind of change is a significant change that must be pre-approved. For most changes by an operator, it should be clear whether the change improves safety or at least maintains an acceptable level of safety. However, in other situations this is not so clear. For example, a change by an operator may be the result of changes in the civil aviation legislation to remove a requirement and/or apply what may be considered a lower standard. It is not CASA's intent that changes by an operator to reflect such changes in the law should be treated as a significant change requiring CASA pre-approval. While CASA considers that the definition of *significant change* treats such changes as not being a significant change, amendments to the regulations are planned to put this beyond doubt.

[1] Refer to regulation 138.062.

Part of the definition of 'significant change' (paragraph 138.012(d)) considers change that requires approval by CASA under 'these Regulations'. The term 'these Regulations' is defined in the CASR Dictionary and includes the provisions in CAR. The scope of this term also includes approval requirements mentioned in exemptions and directions, that is, if a legal direction instrument or a condition on an exemption requires the person to gain an approval from CASA, then that approval is considered to be a significant change due to the wording of paragraph 138.012(d) of CASR and needs to be the subject of an application for a significant change using the Application - Aerial Work Operations (CASR Part 138) form available on CASA's website.

If the organisation has applied for an approval under another part of the Regulations, this is also considered a significant change. For example, an organisation may apply under regulation 91.045 and subparagraph 91.600(2)(d)(ii) for approval to carry cargo in a location that obstructs or restricts access to an emergency exit. This application would be understood as meeting the definition of paragraph 138.012(d) and considered a significant change.

In the circumstance where the application for an approval is solely for the purpose of reissue or replacement of an instrument previously issued by CASA, and the conditions or other substantive content of the instrument remain unchanged, this is not considered a significant change.

If an item does not fit the descriptors in either paras 138.012(a), (b) or (d), paragraph 138.012(c) requires the organisation to consider the safety impact of the proposed change. If, in reviewing the proposed change the operator determines that the change does not or is not likely to maintain or improve aviation safety, then the change must be considered a significant change.

If a proposed change does not meet any of the elements described above, it would not be considered a significant change.

Subparagraph 138.012(a)(ii) of CASR states, inter alia, that a change in relation to the operator's key personnel is a significant change. Regulation 138.062 specifies when an application must be submitted to CASA for different kinds of significant changes. Subregulation 138.062(2) outlines that an operator must apply to CASA for approval of a change that is the permanent appointment, or the acting appointment (for a period of greater than 35 days), as any of the operator's key personnel of a person previously authorised to carry out the responsibilities of the position in a circumstance mentioned in subparagraph 138.155(1)(e)(iv) [sometimes colloquially referred to as an *alternate key person*].

Regulation 138.062 does not make it categorically clear whether or not the acting appointment of an alternate key person to fill a key person's position for a period of 35 days or less is a significant change. An alternate key person acting in the role for which they are previously authorised to carry out the responsibilities of the position for the same operator in a circumstance mentioned in subparagraph 138.155(1)(e)(iv) **is not considered to be a significant change** and therefore this change does not require any approval by CASA.

For further information, refer to Appendix E of AC 119-07 and 138-03 - Management of change for air transport and aerial work operators, which is specific to Part 138 operations.

AMC 138.015 Definition of *task specialist*

Reserved.

GM 138.015 Definition of *task specialist*

A task specialist is a crew member who carries out a function related to the aerial work operation in flight. Examples of a task specialist would include a camera operator in an aerial filming operation, or a shooter in an aerial culling operation. Additionally, in accordance with section 3.02 of the Part 138 MOS, flight crew members or air crew members can also be the task specialist for a flight. In relation to flight crew members, they can only be the task specialist where only flight crew are carried on the aircraft (see subsection 3.02(2) of the Part 138 MOS).

Where there is doubt as to whether someone is or is not a task specialist, the Part 138 MOS is able to prescribe a person to be either included or excluded from the definition of task specialist. Refer to section 3.02 of the Part 138 MOS.

In some cases, an operator may be considering whether to classify a person as a task specialist or an air crew member. In general, the distinction is that an air crew member has to have a safety-related role, whereas a task specialist might not.

In other cases, an operator may be considering whether to classify a person as a task specialist or an aerial work passenger. It is recommended that readers of this document review GM 138.305, GM 138.575 and GM 138.580 as they contain further information on these two kinds of persons that might be carried on an aircraft conducting an aerial work operation.

AMC 138.020 Issue of Manual of Standards for Part 138

Reserved.

GM 138.020 Issue of Manual of Standards for Part 138

This provision provides the authority for CASA to issue a MOS for Part 138.

A MOS is a document that supports CASR by providing detailed technical material, such as technical specifications or standards.

A MOS is a legislative instrument and is subject to registration and disallowance under the *Legislation Act 2003*. Part 11 sets out procedural requirements for the issue, amendment, or revocation of a MOS, including consultation requirements.

AMC 138.025 Approvals by CASA for Part 138

Reserved.

GM 138.025 Approvals by CASA for Part 138

General guidance on approvals under the flight operations regulations, which includes Part 138, is available in AC 11-04 Approvals under CASR Parts 91, 103, 119, 121, 129, 131, 132, 133, 135, 138 and 149 (including MOS).

Where a provision of Part 138, or the Part 138 MOS, makes explicit reference to a CASA approval issued under regulation 138.025, this regulation authorises CASA to issue that approval. All approvals granted by CASA under Part 138 are subject to the procedural requirements of Part 11. For all approvals, except the approvals mentioned in paragraphs 138.090(2)(a) and 138.100(3)(a) of CASR (relevant to the experience levels of the Head of Operations (HOO) or Head of Training and Checking (HOTC)), the approval can only be granted if it would not be likely to have an adverse effect on the safety of air navigation. For the approvals mentioned in paragraphs 138.090(2)(a) and 138.100(3)(a) of CASR, the approval can only be granted if this preserves a level of aviation safety that is at least acceptable.

For the purposes of paragraphs 11.030(1)(a) and (aa) of CASR, all applications for 138.025 approvals are to be made using the form titled Application - Aerial Work Operations (CASR Part 138).

All forms are available from CASA's website. Approval applicants are advised that under regulation 11.040 CASA may request additional information or documents as part of assessing an application. Additionally, when evaluating approval applications, CASA will appropriately consider the matters mentioned in regulations 11.050 and 11.055.

In addition to approvals of significant changes under regulation 138.064, there are multiple specific CASA approvals available under regulation 138.025. These approvals are also considered to be a significant change as stated in paragraph 138.012 (d). An exception applies in relation to the reissue or replacement of an instrument previously issued by CASA in which the conditions or other substantive content of the instrument are unchanged. If operators are unsure whether the substantive content of an instrument is unchanged, contact CASA for advice.

Since a 138.025 approval is taken to constitute a significant change under Part 138 due to paragraph 138.012(d), in accordance with paragraph 138.062(4)(c), an application for a 138.025 approval will need to be accompanied by a copy of the part of the operator's operations manual affected by the 138.025 approval (i.e. the significant change), clearly identifying the change.

3 Subpart 138.B—Certification

3.1 Division 138.B.1—Requirement for certification for certain operations

AMC 138.030 Requirement to hold aerial work certificate

Reserved.

GM 138.030 Requirement to hold aerial work certificate

Any person conducting any aerial work activity is considered to be conducting an aerial work operation regardless of whether they hold an AWC or not. Accordingly, the conduct of any aerial work operation is required to comply with the regulatory requirements applicable to their operation.

For example, if an individual is the pilot conducting aerial work operations over their own land and in their own aircraft, they are not required to hold an AWC. However, they must still ensure that their flying activities meet the requirements of certain sections of Part 138. In this case, they are considered to be a limited aerial work operator, and the activity is considered to be a limited aerial work operation.

An aerial work operation involving spotting or photography, where no renumeration is received by any person, does not require an AWC. Such an activity is considered to be a limited aerial work operation.

An aerial work operation conducted over land owned by the registered operator of the aircraft in certain circumstances is not required to hold an AWC. Such an activity is considered to be a limited aerial work operation.

3.2 Division 138.B.2—Aerial work certificates

AMC 138.035 Application for aerial work certificate

Reserved.

GM 138.035 Application for aerial work certificate

For the purposes of paragraphs 11.030(1)(a) and (aa) of CASR, all applications for an aerial work certificate are to be made using the form titled Application - Aerial Work Operations (CASR Part 138).

All forms are available from CASA's website. Applicants are advised that under regulation 11.040, CASA may request additional information or documents as part of assessing an application. Additionally, when evaluating approval applications, CASA will appropriately consider the matters mentioned in regulations 11.050 and 11.055.

AMC 138.040 Issue of aerial work certificate

Paragraph 138.040(1)(h) - CASA satisfaction regarding Head of Operations (HOO)

Note: This AMC is sourced from EX84/20 which expired on 31 May 2022 and exempted certain Chief Pilot applicants from compliance with elements of the pre-2 December 2021 version of CAO 82.0.

This acceptable means of compliance (AMC) applies to the HOO of an aerial work operator who is also the HOFO for an operator holding an AOC authorising aerial application operations in aeroplanes under Part 137 of CASR. This AMC also applies to an operator applying for these certificates, or a person proposed to be the Part 138 HOO or 137 HOFO.

This AMC does not apply to a person who is solely a Part 138 HOO and is not a Part 137 HOFO for the same operator.

If the conditions specified in the paragraph below are satisfied, then CASA, in assessing whether it is satisfied as to the qualifications and experience of the HOO, will NOT do any of the following:

- require an assessment of the person regarding whether they are suitable to carry out the responsibilities of a HOO
- require the person to pass an oral examination covering the regulatory requirements for the safe conduct of aerial work operations
- require the person to pass a flight planning, loading and performance examination based on the operator's most complex aircraft (assuming the HOO is qualified to pilot such an aircraft in the first place, or is required to be able to pilot such an aircraft by Part 138)
- require the person to conduct a flight as the PIC to demonstrate his or her suitability to be the HOO.

The AMC specified above is conditional on the person having conducted a course of training that must:

- on the basis of written evidence, have been:
  - conducted within the 24 months immediately prior to the person being proposed to be the HOO for the aerial work certificate holder; and
  - assessed by the person conducting the course as suitable to carry out the responsibilities of a HOO; and
- be conducted by a person who allows CASA to conduct an audit of the course to:
  - ensure maintenance of the course standards; and
  - assess whether the course provides the level of training required to preserve an acceptable level of aviation safety; and
- be:
  - the Chief Pilots Course conducted by Aerial Application Association of Australia (AAAA) at Brisbane from 5 to 7 November 2019; or
  - be a course of training, conducted by AAAA after 7 November 2019 that is substantially the same as the course mentioned above and includes:
    - » activities based on skill; and
    - » reading comprehensive material; and
    - » following successful completion of the activities and reading mentioned in paragraphs (a) and (b), attendance at a workshop and training session which includes multiple assessed exercises over a period of at least 3 days.

GM 138.040 Issue of aerial work certificate

This regulation outlines matters about which CASA must be satisfied to issue an AWC to an applicant, specifically that:

- the applicant's proposed operations manual complies with regulation 138.155
- the applicant can conduct the proposed operations safely and in accordance with their operations manual and legislative/regulatory requirements
- the Chief Executive Officer (CEO), other key personnel, and directors of a corporate applicant, each individually meet the requirements to be considered a fit and proper person
- each member of the key personnel meets the stipulated qualification and experience requirements.

AMC 138.045 Approval of manuals

Reserved.

GM 138.045 Approval of manuals

This regulation states that when CASA issues an AWC, the applicant's proposed operations manual is taken to have been approved. This establishes the baseline document for the operator's operations. Any changes to the operator's operations and operations manual will be assessed as being either a significant change, or a change that is not significant, in accordance with the operator's change management process.

AMC 138.050 Conditions of aerial work certificates

Reserved.

GM 138.050 Conditions of aerial work certificates

There are multiple exemptions in force in relation to this regulation and how it requires compliance with elements of regulations 138.085 (CEO responsibilities), 138.090 (qualifications and experience of a HOO), 138.100 (qualifications and experience of a HOTC) and 138.110 (qualification and experience of a Safety Manager). It is recommended that operators review sections 6 and 7 of CASA EX72/24. The approval mentioned in section 7 of the exemption is taken to be a significant change due to it activating paragraph 138.012(d) of CASR. Operators are to apply for this approval by applying for a significant change via the Application - Aerial Work Operations (CASR Part 138) form available on CASA's website.

All key personnel positions required by Part 138 have regulated responsibilities. Regulations relating to key personnel responsibilities are not offences and, therefore, do not carry a penalty. However, key personnel compliance with regulations relating to their responsibilities are conditions on the operator's certificate.

Single individual filling the Safety Manager (SM) and CEO or HOO positions

This regulation restricts operators from allowing the SM to be the same person as either the CEO or the HOO. There is no specific regulatory limitation on the HOTC and the SM being the same person.

The regulation does enable an approval to be granted by CASA for a single person to be CEO/SM or HOO/SM for more than seven consecutive days in unforeseen circumstances. It is more likely for this approval to be considered for small/non-complex operators than for large/complex operators.

Where the two roles of HOO and SM are combined by a single person taking on both roles, aspects of the management and functioning of the SMS may create a conflict of interest. Additionally, in smaller and less complex operations, the HOTC may already have been combined with the HOO. If this were the case, a single person could potentially be fulfilling the responsibilities of three key personnel roles simultaneously.

As an example of circumstances in which there could be a conflict of interest, consider a scenario in which the roles of HOO and SM were held by the same person and an audit or investigation found that the operational procedures were deficient. Then there is the potential for a conflict to exist between the interests of the HOO and those of the SM. Where such circumstances occur, it may be appropriate for an operator (depending on the size and complexity of the organisation) to have an independent, competent person review the investigation and recommendations. Another possibility would be for the operator to utilise an independent party, either directly employed or providing a contracted service, to conduct specialist activities, such as audits or investigations.

SM employment arrangements

There is no restriction on the SM being either a part-time employee, a contracted employee, or an employee who also holds another line role (noting the limitations around combining certain key personnel positions). For further details, see GM 138.070.

As outlined in GM 138.115 below, the SM has the day-to-day responsibility for the functioning of the safety management system (SMS), as distinct from the safe conduct of the flying operations. It is fundamental to the SMS concept that the SM retains a level of independence which enables them to provide advice to the CEO and other key personnel on safety management matters. This purpose may be compromised if the organisation relies entirely on a contracted employee, or a contracted company that infrequently visits the operator they are supporting. In such circumstances it may be more appropriate for the operator to appoint an employee that satisfies the regulatory experience requirements as the SM, but to also utilise contractors for specialised SMS activities, such as audits or investigations.

The size, scale and complexity of the operator and/or the operations being conducted will determine the suitability of part-time or contractor options. In all cases, the purpose is to achieve a sufficient level of assurance that the SM's responsibilities will be adequately fulfilled.

AMC 138.055 Compliance with conditions of aerial work certificates

Reserved.

GM 138.055 Compliance with conditions of aerial work certificates

There are multiple exemptions in force in relation to this regulation and how it requires compliance with elements of regulations 138.085 (CEO responsibilities), 138.090 (qualifications and experience of a HOO), 138.100 (qualifications and experience of a HOTC) and 138.110 (qualification and experience of a Safety Manager). It is recommended that operators review sections 6 and 7 of CASA EX72/24. The approval mentioned in section 7 of the exemption is taken to be a significant change due to it activating paragraph 138.012(d) of CASR. Operators are to apply for this approval by applying for a significant change via the Application - Aerial Work Operations (CASR Part 138) form available on CASA's website.

3.3 Division 138.B.3—Changes relating to aerial work operators

Part 138 refers to changes to an operator's organisation and operations as being either 'significant' or not. Regulation 138.012 defines a 'significant change'. Division 138.B.3 establishes requirements for changes made by the operator, including the requirement for all significant changes to be approved by CASA, before they are implemented by the operator. For guidance on the construction of a change management process, refer to AC 119-07 - Management of change for aviation organisations.

An operator may make changes that are not significant changes, without prior approval from CASA. However, an operator must have a means to ensure that notification of all changes, and a copy of the operations manual detailing such changes, are provided to CASA.

AMC 138.060 Changes of name etc.

Reserved.

GM 138.060 Changes of name etc.

A change to an aerial work operator's name (including any operating or trading name), contact details, or the address of the operational headquarters (if different to the mailing address) must be notified to CASA prior to the change occurring. The operator must consider such changes against the criteria for significant change. If a change is determined not to be a significant change, the operator is still required to notify CASA prior to the change occurring.

Note: A change in the address of a main operating base is a significant change (regulation 138.012).

AMC 138.062 CASA Application for approval of significant changes

Reserved.

GM 138.062 Application for approval of significant changes

The matters deemed to be significant changes are provided in regulation 138.012.

The concept of significant change means the matters for which an operator will have to:

- seek approval from CASA before making the change
- supply documented changes to their operations manual to CASA as part of their change approval process
- act in accordance with their own change management process as defined in their operations manual and the requirements of Division 138.B.3.

Key personnel changes

Some operators may have decided to initially obtain an aerial work certificate without having any standby or alternate key personnel that can perform the duties of a key person when they are absent from the position or cannot carry out the responsibilities. Standby or alternate key personnel are generally referred to in the Part 138 rules using language similar to 'a person previously authorised to

carry out the responsibilities of a key position'. Such individuals are required to be listed in the operations manual[2]. See GM 138.075 for additional information on these persons.

If an operator that does not currently have any alternate key personnel decides, after they have been issued an aerial work certificate, that they want to have standby or alternate key personnel, then the insertion of these persons into the operator's operations manual, as required by subparagraph 138.155(1)(e)(iv) of CASR, **would be a significant change** (see subparagraph 138.012(a)(iii) of CASR) and therefore require the approval of CASA (see regulation 138.062). Similarly, changing the specific individual who is the acting key person would require changing the name of the person in the operator's operations manual and this would be a significant change.

An alternate key person acting in the role for which they are previously authorised to carry out the responsibilities of the position for the same operator in a circumstance mentioned in subparagraph 138.155(1)(e)(iv), provided it is for a period of 35 days or less, **is not considered to be a significant change** and does not require any further approval by CASA.

Many small operators do not have the numbers of personnel within their company to provide alternate key personnel from within their own personnel. Under s28 of the Act, key personnel are required to be 'in the organisation'. Alternate key personnel that are normally employed by a different operator can be nominated as alternate key personnel, provided that the operator nominating them as alternate key personnel outlines in their operations manual how the alternate key person will be capable of fulfilling their responsibilities as a key person on short notice, particularly when they are normally familiar with a different operator's procedures and documentation suite. When conducting alternate key personnel duties, the person will need to have a direct relationship with the operator (whether by contract or other arrangement). Critically, the person must have the **time, and the ability,** to discharge their key personnel duties completely and comprehensively. It is highly unlikely that this can be satisfied if a key person is trying to conduct key persons duties for multiple operators at the same time. Also see the guidance provided in GM 138.012, 138.070 and 138.075.

Subregulations 138.062(2) and (3) describe the only circumstances in which an operator may change the nominated individual in a key personnel position without first receiving approval of the significant change. The change must be notified to CASA within the period specified in the regulation.

Multi-Part AC 119-07 and 138-03 - Management of change for air transport and aerial work operators provides guidance on the construction of a change management process.

An operator is to apply for approval of a significant change using the applicable form (see GM 138.025).

Operators must clearly identify the proposed change in their operations manual. Sending a new copy of the operations manual to CASA without annotation of the changes is not acceptable.

Within the timeframe that is specified in the change management section of the operator's operations manual and after CASA approval of the significant change:

- the operator would provide CASA with a new electronic copy of the entire document (operations manual or subset document)
- the changes would be marked by change bars or otherwise be clear
- the document would contain the amendments marked in the amendment page
- the document would advance to the next version number in accordance with the procedures specified in the change management section of the operator's operations manual.

[2] Refer to subparagraph 138.155(1)(e)(iv).

AMC 138.064 CASA Approval of significant changes

Reserved.

GM 138.064 Approval of significant changes

Reserved.

AMC 138.066 Changes must be made in accordance with process in operations manual

Reserved.

GM 138.066 Changes must be made in accordance with process in operations manual

This regulation requires an operator to conduct all change management in accordance with the process documented in their operations manual. Regulation 138.155 prescribes the required content of an operator's operations manual. One item that must be included is the process that an operator will follow when making significant changes as well as changes that are not significant. CASA recognises that the size and complexity of organisations varies greatly and, accordingly, it does not prescribe the actual process to be followed but does require an operations manual to describe the process applicable to the operator.

Further information is available in Multi-Part AC 119-07 and 138-03 - Management of change for air transport and aerial work operators.

AMC 138.068 CASA directions relating to operations manual or key personnel

Reserved.

GM 138.068 CASA directions relating to operations manual or key personnel

Under the provisions of this regulation and if satisfied that it is necessary in the interests of aviation safety, CASA may direct an operator to:

- remove, include, or vary information, procedures or instructions in their operations manual
- remove a person from a key personnel position.

In all cases, the regulation requires such a direction to:

- be issued in writing
- state the timeframe within which it must be complied with.

3.4 Division 138.B.4—Organisation and personnel

AMC 138.070 Organisation and personnel

Reserved.

GM 138.070 Organisation and personnel

Subregulation 138.070(1) requires the operator to maintain an organisational structure that effectively manages the operator's aerial work operations, considering the size, nature and complexity of the operations.

The operator must ensure there is a sufficient number of suitably qualified personnel employed by the company (either directly employed or contracted third party staff). This will assist the operator in ensuring that:

- tasks are conducted in accordance with the operator's operations manual
- operational task safety is not compromised due to a lack of resources
- only suitably experienced and qualified personnel carry out tasks
- assurance is provided that proposed services are undertaken with appropriate thought given to maintaining safety and considering the complexities of the task at hand.

Operating across multiple Parts

Part 138 prescribes matters only relevant to aerial work operations. If an organisation is additionally a Part 133, 135, 141 or 142 organisation, other key personnel may be required. Similarly, if the operator is a Part 145 approved maintenance organisation, other specified managers for maintenance activities are required.

Where a combination of Parts of CASR require the appointment of the same position, an operator should ensure the responsibilities and accountabilities documented in the exposition or operations manual address the requirements of all relevant Parts.

Key personnel

Division 138.B.4 of CASR sets out CASA's requirements for key personnel, including the responsibilities and accountabilities of each key person post. However, the identification of key personnel in separate regulations does not mean that every operator must provide a different person for each named post.

A single person could carry out the responsibilities of two key personnel if circumstances exist in which this is appropriate and feasible. It is not the intent of the regulations to mandate any additional structures, resources or processes more than those needed to fulfil the relevant responsibilities and accountabilities.

In assessing an organisational structure, CASA needs to be satisfied that the proposed structure is appropriate for the activities conducted and that the operator can effectively manage the operations safely.

Separation of key personnel responsibilities to different individuals may be required if an operator's size and rate of effort exceeds the ability of a combined CEO/HOO to manage effectively, or if a CEO is not qualified to be the HOO. In large organisations, the scope and size may prohibit a single individual from carrying out all the duties that might be required to meet the responsibilities of their position. In this instance, systems and teams may be needed to carry out the duties, while the key person directs, monitors and bears the regulatory responsibility.

Safety management system

Under regulation 138.085 the CEO, who is often referred to as the ‘accountable manager’, is ultimately accountable for the safety of the operation and for the SMS. When formalising the organisational structure, it is important to consider that the SM, as the designated key person, needs direct access to the CEO.

For small, non-complex operators there is no requirement for the SM to be employed on a full-time basis, i.e. the SM may be permanently employed, but in a manner that requires fewer hours per week than that of a full-time employee. Alternatively, the operator may enter into a contractual arrangement with an individual or another organisation for the provision of some SMS services, but cannot ’outsource’ the entire function. In this scenario, the operator is still required to nominate an individual as the key personnel position holder. Provided that the regulatory experience requirements are satisfied, and the regulatory responsibilities can be carried out, options for filling the role of SM include, but are not limited to:

- experienced line pilot
- a part-time employee
- a full or part-time contractor.

Regardless of the person filling the role of SM, it is important that the operator and the person understand the responsibilities associated with holding the position.

As the manager who is normally assigned day-to-day responsibility for the functioning of the SMS (as distinct from the safe functioning of the operation), the SM needs to work closely with the senior management team to meet the objectives of the SMS.

All management and supervisory positions, including the SM, are expected to show leadership and have included in their responsibilities/accountabilities a requirement to:

- actively support and promote the SMS
- ensure that they and their staff comply with the SMS processes and procedures
- ensure sufficient resources are made available to achieve the outcomes of the SMS
- continually monitor their area of responsibility, as outlined in the SMS manual
- ensure due processes and procedures needed for safe operations are in place.

Depending on the size, nature and complexity of operations, larger organisations may have additional safety responsibilities that are explicitly defined for particular senior management roles such as:

- General Manager/Chief Operating Officer
- Head of Ground Services
- Head of Operations for a particular aircraft type in the fleet.

Where this occurs, these additional positions should have a clear reporting mechanism that ensures any safety matters are reported to and managed by the SM.

AMC 138.075 Key personnel cannot carry out responsibilities

Reserved.

GM 138.075 Key personnel cannot carry out responsibilities

This regulation imposes a requirement for an operator to advise CASA of the inability of any of its key personnel to carry out their responsibilities if it will continue (or is likely to continue) beyond 35 days[3].

Operators should be aware that the time period begins from the first day of the inability of the key person to carry out their responsibilities. The requirement to advise CASA applies to both foreseen (for example, a planned holiday) and unforeseen (for example, sickness or injury) circumstances.

Subparagraph 138.155(1)(e)(v) of CASR requires an operations manual to include a description of how the operator will manage any absence of a key person, or the inability of a key person to carry out their responsibilities. The term ‘absence’ is not meant to be synonymous with the term ‘cannot carry out their responsibilities’.

Absence (of a key person) is not a defined term in the CASR Dictionary. CASA applies this term in accordance with its ordinary meaning, (i.e. not present, away or not in a certain place at a given time). An example of this might be a HOO who is also an FCM and is required by flight and duty limitations to have an off-duty period. If the HOO has a regular place of work, then they would be absent from this location during the off-duty period. However, provided that another person was assigned to carry out a duty to fulfil a relevant HOO responsibility, this would not mean that the HOO could not carry out their key person responsibilities.

The key person responsibilities mentioned in regulations 138.085, 138.095, 138.105 and 138.115 are not intended to be interpreted as requiring the key person to personally, or physically, carry out a task or duty. The responsibilities involve ensuring things are carried out, that systems are managed, and that the performance of tasks are monitored. It is normal and permissible for key personnel to assign others to carry out tasks or duties, provided the key person can monitor and oversee the performance of the duties.

If operators do not have the resources to ensure a key person, or an authorised alternate (see the subheading below on alternate key persons), is always present and on duty when operations are in progress, then the operator's operations manual should detail how the tasks and duties encompassed by each key persons' responsibilities are met during this period.

Example

Under paragraph 138.095(2)(d), the HOO is responsible for ensuring the proper allocation and deployment of the operator’s aircraft, and the operator’s personnel, for use in the operator’s aerial work operations.

This responsibility could be met by the operator having a process to allocate an appropriate aircraft and FCM to a particular aerial work flight. In practice, this could be done by a person using a rostering system that uses a variety of inputs such as FCM status and flight profiles. After consideration of the relevant factors, the person and system could produce an aircraft and crew assignment that meets legislative and operator requirements and is considered ‘proper’.

The HOO does not have to be the person carrying out the process or be present when the process occurs—the subregulation simply requires them to ensure it is done properly. Operators could design systems that function without the key person being in attendance and that still provide for effective oversight.

[3] CASA EX72/24 – Part 138 and Part 91 of CASR – Supplementary Exemptions and Directions Instrument 2024

One person conducting more than one key person's responsibilities

Some specific limitations exist on one individual sharing the CEO or HOO role, and the SM role. These limitations are in regulation 138.050, with guidance in the GM 138.050 entry.

Broader outcome based guidance on one person fulfilling the responsibilities and accountabilities of more than one key person position is located in the GM 138.070 entry.

Alternate key person

The regulations permit certain persons to act as an alternate in the role of a key person (these kinds of persons are colloquially referred to as *alternate key persons* or *standby key persons*. The decision to include alternate key persons in the operator's operations manual rests with the organisation. Refer to GM 138.062 in relation to these persons and whether a significant change approval is required.

Using alternate key personnel has the potential to be beneficial, as it can minimise the disruption to operations in several circumstances, such as:

- an unexpected illness of the primary person
- annual leave
- a change in the individual's circumstances leading to their inability to manage the duties and responsibilities of their position in the organisation
- sudden resignation / retirement.

Ideally, the operator would nominate a person who has the qualifications to hold the key person position, authorised by CASA to meet the circumstances of this regulation. The nomination of an alternate person follows the same process as the primary person. Likewise, any assessment of an alternate person will follow the process applicable to the primary person.

Any alternate key person must have received familiarisation training in relation to the substantive key person's responsibilities and accountabilities prior to carrying out the responsibilities of the position. The operator must have a means of demonstrating that this familiarisation training has been provided to alternate key persons.

Where an alternate person has been nominated, the operator's operations manual is to include the full name of each person authorised to act on behalf of each key person during any period of inability to carry out their responsibilities and describe how the alternate key person process is managed.[4]

In developing the content of the operations manual, the following should be considered for inclusion:

- when the alternate person can act in place of the primary person
- the method by which all personnel are expediently notified of the change of the position holder, and the period for which the change is in effect
- detailing who is responsible for notifying CASA of a change to the key position holder, as per the regulatory requirements and the means of providing the notification
- an auditable register that provides a chronological record of each occasion that the alternate key person holds responsibility and accountability for the position
- the method of communication and handover processes between the primary and the alternate key person.

The process must ensure that the alternate person does not discharge the duties and responsibilities of a key person until they formally assume the role, at which point they must perform all of the associated duties and assume full responsibility for the position. The nomination of an alternate person is achieved by the same method and assessment process as the primary person.

In the interests of safety, and to be satisfied that a temporary key person is suitable to carry out the responsibilities of the key position, CASA may issue a direction for the person to undertake an assessment, as per the requirements of the key position[5].

It is recommended that the operator maintain an auditable register, providing a chronological record of each occasion that the temporary/deputy key person holds responsibility and accountability for the position. The operator's procedures may also:

- detail who is responsible for notifying CASA
- describe a means for providing the notification.

Alternate key person not full time for an operator

Many small operators do not have the numbers of personnel within their company to provide alternate key personnel from within their own personnel. Part 138 has some flexibility in this regard and alternate key personnel that are normally employed by a different operator can be nominated as alternate key personnel, provided that the operator nominating them as alternate key personnel outlines in their operations manual how the alternate key person will be capable of fulfilling their responsibilities as a key person on short notice, particularly when they are normally familiar with a different operator's procedures and documentation suite.

When conducting alternate key personnel duties, the person will need to have a direct relationship with the operator (whether by contract or other arrangement). Critically, the person must have the **time, and the ability,** to discharge their key personnel duties completely and comprehensively. It is highly unlikely that this can be satisfied if a key person is trying to conduct key persons duties for multiple operators at the same time. Also see the guidance provided in GM 138.012, 138.062 and 138.070.

AMC 138.080 Familiarisation training for key personnel

Reserved.

GM 138.080 Familiarisation training for key personnel

An operator must describe the conduct of familiarisation training in their operations manual[6], including details of the training syllabus and how records of achievement are documented.

AMC 138.085 Responsibilities and accountabilities of chief executive officer

Reserved.

GM 138.085 Responsibilities and accountabilities of chief executive officer

There is an exemption in force in relation to this regulation for operators not required to have an SMS under regulation 138.140. It is recommended that operators review section 6 of CASA EX72/24.

[4] Refer to subparagraph 138.155(1)(e)(v).

[5] Refer to regulation 138.120.

[6] Refer to paragraph 138.155(1)(h).

The CEO of an aerial work operator has the overall responsibility and accountability for the operator's direction and continued operation. The regulation prescribes the accountabilities and responsibilities that ultimately rest with the CEO but does not indicate that the CEO must perform each of these functions personally.

Part 138 requires the CEO to ensure that the right mix of people with the appropriate experience and competence are always available for the operator to safely conduct authorised aerial work operations. Subparagraph 138.085(1)(a)(i) goes beyond the requirements of Parts 61, 64 and 66, which deal with licensing of personnel and describe competence and experience in relation to strictly technical matters.

Additionally, Part 138 does not regulate all personnel who may have an impact on safety. While Part 138 and other CASR Parts set some minimum requirements, the CEO must ensure that all employees, regardless of their roles, possess the skills and experience required to conduct safe operations.

The appropriate management structure for the safe conduct of an operator's aerial work operations will vary enormously across the scope of the industry. The management structure may also be affected by factors outside the scope of this regulation, such as contractual requirements. However, some management structure principles are common across the breadth of the aerial work sector:

- The HOO is typically a direct report of the CEO.
- The CEO is not permitted to also hold the role of SM (unless permitted by regulation 138.050).
- The HOTC (if required) would normally report directly to the HOO, with the option to report directly to the CEO.
- The SM (if required) should report directly to the CEO or be provided with the clear ability to directly access the CEO on safety matters.

AMC 138.090 Qualifications and experience of head of operations

Note: AMC 138.040 contains information regarding CASA satisfaction of the qualifications and experience of certain Head of Operations (HOO). The AMC specifies that CASA will not conduct certain actions if a particular training course has been completed, and the operator is both a Part 137 and Part 138 operator and the HOO is also the Part 137 HOFO.

GM 138.090 Qualifications and experience of head of operations

There is an exemption in force in relation to this regulation. It is recommended that operators review section 7 of CASA EX72/24. The approval mentioned in this section of the exemption is taken to be a significant change due to it activating paragraph 138.012(d) of CASR. Operators are to apply for this approval by applying for a significant change via the Application - Aerial Work Operations (CASR Part 138) form available on CASA's website.

The HOO must hold an amount of organisational and operational experience commensurate with the size and complexity of the organisation and its operations.

In some circumstances, any combination of the roles of CEO, HOO and HOTC (if applicable) can be filled by the same individual. Where this occurs, it will be necessary for the person fulfilling these combined roles to have a considerable amount of relevant aviation experience[7].

[7] Refer to regulation 138.070.

In nominating a candidate for the role of HOO, operators should provide CASA with relevant information supporting their contention that the candidate has sufficient safety and regulatory knowledge to satisfy the requirement in paragraph 138.090(1)(e).

Under regulation 138.120, CASA can require, by written notice, additional qualifications and experience to those required by regulation 138.090.

For an operator that has a diverse operation, there are scenarios where the HOO may not be qualified on every aircraft type or in every role/function performed under the aerial work certificate, such as:

- mixed categories – fixed and rotary wing
- mixed type rated aircraft (e.g. Cessna 210, Aero Commander AC690)
- different kinds of aerial work operations.

In this case the operator may elect to create a position within the management structure to support the HOO, where the incumbent is required to be a role or type specialist for that function. Such a position must be detailed in the operations manual. The specialist manager would report to the HOO and assist with the discharge of their responsibilities. This does not remove the accountability or responsibility for the HOO to manage the specialised operations.

In relation to paragraph 138.090(1)(a) and the requirement for the HOO to be qualified to pilot an aircraft in each kind of aerial work operation conducted by the operator, there are currently 4 kinds of aerial work operation specified under regulation 138.010. These are external load operations, dispensing operations, task specialist operations and fireground personnel carriage operations. Importantly, this requirement does not mean that the HOO must be qualified to conduct all the subtypes within each kind of the operator's aerial work operations. For example, if an operator is conducting Class B and Class C external load operations, and fireground personnel carriage operations, the HOO would need to be qualified to conduct fireground personnel carriage operations and 1 of, but not both, Class B external load operations and Class C external load operations.

In circumstances where an operator wishes to conduct a new 'kind of aerial work operation' for which the HOO has no qualification or experience the operator will need to provide training to the HOO and ensure they are qualified to conduct this kind of aerial work operation. This may mean using an external training provider or utilising a suitably qualified person to conduct the training in accordance with the operator's internal training requirements, as specified in the operator's operations manual.

The regulation also permits CASA to require assessment of the HOO candidate. However, CASA must give written notice to the individual if this assessment is required.

Prior to conducting an assessment, CASA will conduct a desktop review of any nomination. In some cases, CASA will not require any further information as the nominee may be well known due to significant experience, or possibly having had a recent assessment conducted which addresses key criteria for a HOO.

For example, an individual may be performing as HOO for an aerial work operation and elects to transfer to another operator. In this case, CASA may consider multiple matters, such as, but not limited to:

- how recently the individual has been assessed
- the performance of the individual in any previous assessment
- similarities or differences between the previous organisation and the new organisation that the individual has been nominated for
- the individual's performance as HOO in previous positions.

Any assessment will seek to confirm that the nominee has a suitable understanding of the role and the complexities of aircraft/operations applicable to the nominated position.

Flight assessments may be conducted in an aircraft or a flight simulator, as specified in the notice of assessment.

When a candidate's nomination has been refused, the operator and the candidate will be advised of the reasons in writing.

Foreign licensed HOO and foreign registered aircraft

Paragraph 138.090(1)(b) requires the HOO to hold the pilot type rating or class rating (within the meaning of Part 61) for the aircraft that is used to conduct the greatest proportion of the operator's aerial work operations. CASR Part 138, different to Part 119, does not expressly require the HOO to hold an Australian flight crew licence[8]. The bracketed '(within the meaning of Part 61)' has the effect of expanding, rather than narrowing, the meaning of the words relating to pilot type or class ratings in paragraph 138.090(1)(b).

As a result, a HOO that holds foreign pilot type or class ratings equivalent to the pilot type or class ratings that would otherwise be required by or under Part 61, providing the other requirements in paragraph 138.090(1)(b) relating to significant proportion etc. are met. For a person who seeks to convert a foreign licence or rating to an Australian licence or rating, see regulation 61.275 of CASR. A HOO with only a foreign licence and ratings will need to be able to demonstrate sufficient safety and regulatory knowledge of the operator's Australian aerial work operation to enable the operator to conduct the aerial work operations safely and in accordance with its operations manual and Australian civil aviation legislation as required by paragraph 138.090(1)(e).

In the case of a HOO applicant that only holds a foreign licence and rating, HOO candidates and aerial work certificate applicants and holders are advised that CASA will, as a matter of policy, conduct an assessment of the HOO candidate in accordance with subregulations 138.090(4) and (5). The HOO applicant will need to demonstrate that they possess the required safety and regulatory knowledge.

Australian registered aircraft require the pilot to be authorised 'under Part 61'. Consequently, where an operator operates a mixed fleet of Australian and foreign registered aircraft, a HOO who only holds a foreign licence and rating, may not be able to satisfy the requirements of paragraph 138.090(1)(b) if the Australian registered aircraft are used by the operator to conduct the greatest proportion of the operator's aerial work operations.

HOO not meeting the minimum experience requirements

The regulation makes provision for an operator to seek an approval under regulation 138.025 to appoint a candidate who does not meet an element of the minimum experience requirements. Such an application should demonstrate how the variation would preserve a level of aviation safety that is at least acceptable. In accordance with the guidance in the flight operations regulations approvals AC 11-04, an acceptable level of safety is one that is equivalent to the standard of safety established if the regulations were met without needing the approval.

HOO qualifications after appointment

For a HOO to effectively fulfil the responsibilities and duties required by CASR, they would normally maintain the qualifications that they held when initially appointed as HOO. Should a HOO lose currency/recency, the organisation should evaluate whether effective supervision is maintained by the individual continuing in the role. While there is no regulatory requirement for the HOO to "fly the line", it is acknowledged that first-hand experience is maintained by those individuals who do so. For the non-flying HOO, organisations would be expected to demonstrate that they have sufficient senior individuals involved in the daily flying operations who are part of the organisational structure, who can

[8] Regulation 119.135 requires a Part 119 HOFO to hold a commercial pilot licence or air transport pilot licence. Clause 36 of Part 2 of the CASR Dictionary defines a reference within the regulations to a particular kind of flight crew licence as meaning a flight crew licence of that kind that may be granted under Part 61 of CASR and which also includes a certificate of validation of an overseas flight crew licence that is equivalent to the mentioned kind of Part 61 licence.

provide supervision to junior members, and who also have the experience to identify items that need to be raised for attention at the HOO or CEO level.

Remotely located HOO

There are occasions in which an operator may nominate a HOO who will not be located at the operator's main base and intends to exercise the privileges of their HOO approval remotely. Experience has shown that, in the absence of onsite key personnel, the lack of direct guidance can result in non-compliance with statutory requirements.

The onsite presence of a HOO is important for an operator's day-to-day operations. The HOO can exert considerable influence on the safety of operations and the standard of operational matters and compliance. These objectives are difficult to achieve by a permanently remotely located HOO.

In any situation where the candidate has other commitments inside or outside aviation, the operator must consider whether the candidate has adequate time to discharge the duties and responsibilities of a HOO.

Part-time HOO

In some circumstances an organisation may seek to employ a person as HOO who also works in another flying operation, possibly as their HOO, or the person may work in a completely different industry. While there is no regulation that prevents this from occurring, organisations should be prepared to demonstrate how the resultant workload is being managed by the key person. Any such case would need to consider a number of factors including, but not limited to:

- the individual's total workload
- proposed number of hours worked per week (across all employment)
- method of ensuring suitable rest periods
- method of ensuring compliance with workplace and fatigue requirements
- method of confirming that the HOO is available when operations are being conducted and how they will supervise such operations.

If an organisation's HOO is engaged in employment duties for another organisation at certain times, then it should be considered that the key personnel position will be absent/vacant during these periods, and hence flying operations cannot be conducted. Organisations should also be aware that some HOO duties are required outside the hours of flying operations, i.e. consideration of other administrative duties is needed.

AMC 138.095 Responsibilities of head of operations

Paragraph 138.095(2)(e) - information and documentation

This acceptable means of compliance is in relation to the responsibility of the HOO under paragraph 138.095(2)(e) to ensure that the operator's personnel are provided with the information and documentation necessary to properly carry out their responsibilities.

The HOO is taken to have ensured that a member of the operator's personnel has been provided with the relevant information and documentation if the person is provided with access to a remotely hosted version of the information or documentation (whether Intranet or Internet) under the following conditions:

- this access is available at all locations and times that the person requires the access to perform their responsibilities; and
- the HOO is satisfied that the person is sufficiently competent to access the information and documentation using the electronic means.

Note: The HOO holds the risk of being non-compliant with the regulation if the remote access becomes unavailable, whether or not the reason for the unavailability is within the HOO's control. This is a risk of relying on an on-line service. A HOO might instead choose to download relevant documents from the remote location to avoid this risk.

GM 138.095 Responsibilities of head of operations

There is a direction in force in relation to aerial work certificate holders and HOO responsibilities for an operator that is not required to have a training and checking system. It is recommended that operators review section 21 of CASA EX72/24.

The HOO of an aerial work operator has overall responsibility for the flying operations of the operator. To enable the HOO to fulfil their duties and responsibilities, the operator should develop processes and systems and articulate these in the operations manual. While regulation 138.095 details some of the key responsibilities of the HOO, it does not require that the HOO perform each of these functions personally.

In a small operation, with a steep gradient of experience and expertise, it would be expected that the HOO would be involved in much of the detail of the responsibilities set out in the regulation. However, in a large operation with a larger number of senior staff, the HOO may be supported by senior or other staff in discharging their responsibilities.

Where an operator establishes multiple bases, there must be a system to manage day-to-day operational issues. Implementation of such a system must be documented in the operations manual. The HOO can be supported by other employees, including a senior base pilot at each additional base. In this case the operations manual would contain:

- a senior base pilot position description, outlining the duties and training requirements of the position and qualifications needed for appointment to the role
- an organisational chart showing reporting lines
- a method of regular communication between senior base pilots and the HOO
- the duties of the HOO, including a plan for oversight of each additional base e.g. regular visits.

Paragraph 138.095(2)(d) – proper allocation and deployment of aircraft and personnel

There are two facets to this regulation that require consideration:

- Can the aircraft chosen to conduct a task do so safely in all likely circumstances?
- Are the crew who will conduct this task sufficiently qualified and experienced to safely complete this task in all likely circumstances?

Insufficient crew or aircraft capability for the task can lead to compromises in safety or operational reliability, or both.

Matters that should be considered include whether:

- the aircraft is appropriate to task
- the aircraft has sufficient hours available until next service
- the operator is able to handle the possibility of this aircraft becoming unserviceable away from base
- adequate facilities are available at the destination
- sufficient qualified crew are available

- there are any duty hours limitations or fatigue issues associated with the proposed task
- suitable rest facilities are available (if needed).

Paragraph 138.095(2)(e) – operator's personnel to be provided with information and documentation

Matters that should be considered include:

- aircraft operational documentation and data, including the flight manual
- meteorological information for operational needs
- airways documentation
- flight planning information
- aerodrome documentation
- for fireground personnel carriage operations, written notification from the relevant fireground emergency organisation to the effect that each of the notification and acknowledgement requirements of the Part 138 MOS have been met
- documentation required for international operations (if any).

This responsibility includes the necessary infrastructure (including computers, telecommunications etc.) to obtain the information/data and for it to be updated.

AMC 138.100 Qualifications and experience of head of training and checking

Reserved.

GM 138.100 Qualifications and experience of head of training and checking

There is an exemption in force in relation to this regulation. It is recommended that operators review section 7 of CASA EX72/24. The approval mentioned in this section of the exemption is taken to be a significant change due to it activating paragraph 138.012(d) of CASR. Operators are to apply for this approval by applying for a significant change via the Application - Aerial Work Operations (CASR Part 138) form available on CASA's website.

If the organisation is required to have a training and checking system under regulation 138.125, they will require a head of training and checking (HOTC).

The HOTC must hold an amount of experience commensurate to the size and complexity of the organisation. Operators should note that they will need to provide CASA with relevant supporting information to show that the HOTC candidate has sufficient safety and regulatory knowledge in accordance with paragraph 138.100(2)(e).

The HOTC is required to be qualified to fly each kind of aerial work operation that the operator conducts. However, the regulation does not require a HOTC to possess every Part 61 rating or endorsement relevant to the operations being conducted by the operator.

In larger organisations the HOTC is often located in a head office location, and as such may be physically removed from the day-to-day conduct of the operator's flight operations. In considering whether the HOTC can adequately fulfil their responsibilities, one factor to consider is whether the HOTC is qualified to conduct all operations conducted by the organisation, or whether appropriately qualified additional staff are necessary to support the HOTC with subject matter expertise related to different aircraft or different operations. In all cases, the HOTC is required to possess a minimum

amount of training experience in accordance with this regulation, in addition to having sufficient aviation experience to supervise and manage the staff and functions of the organisation.

In relation to paragraph 138.100(2)(a) and the requirement for the HOTC to be qualified to fly each kind of aerial work operation conducted by the operator, there are currently 4 kinds of aerial work operation specified under regulation 138.010. These are external load operations, dispensing operations, task specialist operations and fireground personnel carriage operations. Importantly, this requirement does not mean that the HOTC must be qualified to conduct all the subtypes within each kind of the operator's aerial work operations. For example, if an operator is conducting Class B and Class C external load operations, and fireground personnel carriage operations, the HOTC would need to be qualified to fly fireground personnel carriage operations and 1 of, but not both, Class B external load operations and Class C external load operations.

In circumstances where an operator wishes to conduct a new 'kind of aerial work operation' for which the HOTC has no qualification or experience the operator will need to provide training to the HOTC and ensure they are qualified to fly this kind of aerial work operation. This may mean using an external training provider or utilising a suitably qualified person to conduct the training in accordance with the operator's internal training requirements, as specified in the operator's operations manual.

Under regulation 138.120 CASA can require, by written notice, additional qualifications and experience to those required by this regulation.

Foreign licensed HOTC and foreign registered aircraft

Paragraph 138.100(2)(b) requires the HOTC to hold the pilot type rating or class rating (within the meaning of Part 61) for the aircraft that is used to conduct the greatest proportion of the operator's aerial work operations. CASR Part 138, different to Part 119, does not expressly require the HOTC to hold an Australian flight crew licence[9]. The bracketed '(within the meaning of Part 61)' has the effect of expanding, rather than narrowing, the meaning of the words relating to pilot type or class ratings in paragraph 138.100(2)(b).

As a result, a HOTC that holds foreign pilot type or class ratings equivalent to the pilot type or class ratings that would otherwise be required by or under Part 61, providing the other requirements in paragraph 138.100(2)(b) relating to significant proportion etc. are met. For a person who seeks to convert a foreign licence or rating to an Australian licence or rating, see regulation 61.275 of CASR. A HOTC with only a foreign licence and ratings will need to be able to demonstrate sufficient safety and regulatory knowledge of the operator's Australian aerial work operation to enable the operator to conduct the aerial work operations safely and in accordance with its operations manual and Australian civil aviation legislation as required by paragraph 138.100(2)(e).

In the case of a HOTC applicant that only holds a foreign licence and rating, HOTC candidates and aerial work certificate applicants and holders are advised that CASA will, as a matter of policy, conduct an assessment of the HOTC candidate in accordance with subregulations 138.100(5) and (6). The HOO applicant will need to demonstrate that they possess the required safety and regulatory knowledge.

Australian registered aircraft require the pilot to be authorised 'under Part 61'. Consequently, where an operator operates a mixed fleet of Australian and foreign registered aircraft, a HOTC who only holds a foreign licence and rating may not be able to satisfy the requirements of paragraph 138.100(2)(b) if the Australian registered aircraft are used by the operator to conduct the greatest proportion of the operator's aerial work operations.

[9] Regulation 119.145 requires a Part 119 HOTC to hold a commercial pilot licence or air transport pilot licence. Clause 36 of Part 2 of the CASR Dictionary defines a reference within the regulations to a particular kind of flight crew licence as meaning a flight crew licence of that kind that may be granted under Part 61 of CASR and which also includes a certificate of validation of an overseas flight crew licence that is equivalent to the mentioned kind of Part 61 licence.

Assessment

The regulation permits CASA to direct a HOTC, or proposed HOTC, to undertake an assessment of their suitability to be a HOTC. CASA must give written notice to the individual if this assessment is required to be undertaken.

Prior to deciding whether an assessment is required to be undertaken, CASA will conduct a desktop review of any nomination. In considering whether CASA will require an assessment to be undertaken, CASA may consider multiple matters, such as, but not limited to:

- whether the individual has recently been assessed, and how recently such an assessment occurred
- the performance of the individual in any previous assessment
- if the individual has previously been a HOTC for a different organisation—the similarities or differences between the previous organisation and the new organisation that the candidate is nominated for
- the performance of the individual as HOTC in previous positions (if any).

Any assessment will seek to confirm that the nominee has a suitable understanding of the role, including the operator-specific complexities of aircraft/operations.

Flight assessments may be conducted in an aircraft or flight simulator, as specified in the notice of assessment.

When a candidate's nomination has been refused, the operator and the candidate will be advised of the reasons in writing.

HOTC qualifications after appointment

For a HOTC to properly perform the responsibilities and duties required by CASR, they would normally maintain the qualifications they held when initially appointed to the role. While there is no regulatory requirement for the HOTC to regularly conduct check and training activities, it is acknowledged that first-hand knowledge and experience is maintained by those who do.

It is recommended that operators specify in their operations manual whether the maintenance of currency and recency is a requirement for the HOTC. If the operator is considering not requiring currency / recency, then the operator would need to have evaluated how the HOTC continues to fulfil their responsibilities, including whether effective supervision is maintained by the individual continuing in the role. For a long-term, non-flying HOTC, a potential safety mitigator for operators to consider, is the maintenance of sufficient senior training and checking staff who are regularly involved in training operations, are part of the organisational structure, are assigned duties relating to the supervision of junior crew members and are regular contact with the HOTC.

AMC 138.105 Responsibilities of head of training and checking

Reserved.

GM 138.105 Responsibilities of head of training and checking

If the organisation is required to have a training and checking system under regulation 138.125, they will require a HOTC.

The role of the HOTC is to ensure compliance with the legislation relating to the conduct of training and checking for flight crew, including compliance with the requirements in the operations manual. This does not necessarily mean the HOTC has to be able to participate in training and checking

events. It does mean, though, that they need to be able to exercise administrative oversight of these activities, whether they are conducted by the aerial work operator itself or by a Part 142 organisation.

CASA must be satisfied that there are appropriate procedures to keep the HOTC informed of the conduct of training and checking activities, and that they are able to effectively exercise appropriate oversight.

The responsibilities of the HOTC of an aerial work operator align very closely with some of the responsibilities of the operator's CEO. As such, the HOTC is required to regularly report to the CEO regarding the operator's compliance with training and checking matters. A CEO may also choose to appoint the HOTC as the manager for other training activities, such as for task specialists and other safety critical personnel. In some organisations this will be beneficial, as it will promote the use of common training outcomes and standards across the organisation. In some circumstances, any combination of the roles of CEO, HOO and HOTC may be filled by the same individual.

The responsibilities detailed in regulation 138.105 rest with the HOTC, but there is no requirement for the HOTC to perform each of these functions personally. In a small operation with a steep gradient of experience and expertise, it would be expected that the HOTC would be involved in much of the detail of the regulation 138.105 responsibilities. However, in a large operation with a larger number of senior staff, the HOTC may be supported by senior or other staff in discharging their responsibilities.

For operators that are not continuously carrying out training and checking events, there may be no need for the HOTC to be on duty or available when training and checking is not taking place. However, the nominated HOTC would still need to fulfil the responsibilities outlined under the regulations, whether they were present or not. The operator has the responsibility for proposing any such arrangement to CASA in the operations manual.

Where an operator establishes multiple regularly used training locations, in order to meet the requirements of regulation 138.155, the operations manual should outline how day-to-day issues are managed across the various locations. The HOTC is responsible for all training operations, regardless of location, and to ensure that the HOTC's responsibilities are fulfilled, it may be necessary for the operator to appoint a person who conducts certain duties at these locations in support of the HOTC (sometimes called a senior check pilot or similar terms). In this case, it is recommended that the operations manual contain:

- a position description outlining the duties, qualifications and training / checking requirements of the supporting position
- an organisational chart showing reporting lines
- a method of regular communication between senior training and/or check pilots and the HOTC
- a description of how the HOTC will oversee the conduct of assigned duties by the supporting person, so that the HOTC remains assured that they have met their responsibilities.

For example, the HOTC could rely on compliance reports from a senior check pilot in giving their own compliance report to the HOO, but this does not remove the ultimate accountability and responsibility imposed on the HOTC by regulation 138.105.

Paragraph 138.105(3)(a) - ensure that the operator is compliant with the legislative requirements in respect of qualifications, training and checking of the operator's flight crew

A means must be provided for the HOTC to carry out the functions required to fulfil this responsibility. These may include, but are not limited to:

- receiving information and data from the SM and the SMS – for example, incident reporting and accident data and trending information (note: not all aerial work organisations are required to have an SMS)
- collecting and reviewing information obtained during internal audits of documentation such as training records

- ensuring that continual supervision of training and checking staff is maintained to monitor the standard of instruction provided
- receiving regular feedback and reports in relation to compliance matters from other staff assigned responsibility for particular flight training and checking activities
- maintaining communications with personnel located in different locations, and carrying out inspections to ensure standardisation of instruction
- receiving and reviewing feedback from checking staff regarding checking events
- reporting to the CEO and HOO in relation to matters such as those listed above.

Paragraph 138.105(3)(b) - ensure that the HOO is made aware of the compliance state of all crew qualifications, training and checking activities

To ensure the HOO receives reports on compliance requirements for personnel qualifications, currency and training, a means must be provided for the HOTC to carry out the functions required to fulfil this responsibility. These may include, but are not limited to:

- recommending upgrade training or recruitment action (when necessary) to meet training and checking qualification requirements for the conduct of a particular activity
- providing evidence of the content, completion and results of the training and checks required by the internal training and checking system and manual.

Paragraph 138.105(3)(c) - ensure that the training and checking of flight crew conducted by or for the operator is conducted in accordance with the operator's training and checking manual

To ensure training and checking activities are conducted in accordance with the operator's training and checking manual, a means must be provided for the HOTC to carry out the functions required to fulfil this responsibility. These may include, but are not limited to:

- ensuring training and checking personnel receive or have access to the applicable manual sections, and are familiar with their contents prior to conducting activities
- ensuring personnel are competent in the use of any software program that may be utilised as a tool for the training system
- providing training and guidance to personnel in the use of competency-based syllabuses, and providing supervision to confirm training is conducted in accordance with the syllabuses and standardised procedures of the organisation
- analysing data relating to matters such as repeated training events, time taken to achieve new qualifications / upgrades, and actual progress of trainees against the course schedule.

The HOTC must have the ability to make changes to the training system processes, where required, and initiate consequential amendments to the applicable manual parts.

Paragraph 138.105(3)(d) - using a Part 142 operator to conduct training or checking activities

An operator can elect to use a contracted Part 142 operator to conduct training or checking activities. In this case, the HOTC remains responsible for:

- ensuring that each individual engaged by a Part 142 operator conducting training or checking is authorised under Part 61 for those applicable activities
- informing the Part 142 operator, in writing, of any change in or to the operator's training and checking manual relating to the training and checking activities.

To ensure personnel conducting contracted training or contracted checking are authorised under Part 61, the operator's HOTC (and/or allocated staff) will require access to the contracted operator's manual and a means to view the tracking functions of licences/qualifications. A means must be provided for the HOTC to carry out the functions required to fulfil this responsibility. These may include, but are not limited to:

- providing a copy of each contracting operator's manual
- electronic access to the contractor's software systems
- use of auditing functions of the external contractor as a means of assurance
- establishing a reporting cycle and policy, which may be agreed to by each contracted operator for communications with the HOTC of each contracting operator (including the provision of written reports)
- ensuring records of the content and results of contracted training and checking are made and retained.

AMC 138.110 Experience of safety manager

Reserved.

GM 138.110 Experience of safety manager

There is an exemption in force in relation to this regulation. It is recommended that operators review section 7 of CASA EX72/24. The approval mentioned in this section of the exemption is taken to be a significant change due to it activating paragraph 138.012(d) of CASR. Operators are to apply for this approval by applying for a significant change via the Application - Aerial Work Operations (CASR Part 138) form available on CASA's website.

If the organisation is required to have a SMS under regulation 138.140, they will require a SM. The SM should understand aviation safety from a practical perspective and have the confidence in this understanding to communicate to the CEO on safety issues and appropriate rectification solutions. At times, the safety issue may involve key personnel, management staff or the CEO. As such, the SM is an independent role and should be filled by a person capable of managing difficult situations.

Ideally, the SM should possess operational experience in the conduct or management of flight operations and an adequate technical background to understand the systems that support company operations. The depth of these skills and knowledge required will depend on the size and complexity of the operator.

The SM should have a sound understanding of safety management principles acquired through a mix of both formal training and practical experience.

Regulation 138.120 – Additional qualification and experience requirements for key personnel, also applies to the position of SM. Therefore, CASA may stipulate additional qualifications and experience requirements for a particular SM, or for the person to undertake an examination, a training course, or to be interviewed by CASA.

For additional information on the experience and attributes of a SM, refer to:

- AC 119-01 - Safety management systems for air transport operations
- for general information on safety managers—CASA's Safety Manager Guide.

AMC 138.115 Responsibilities of safety manager

Reserved.

GM 138.115 Responsibilities of safety manager

The conditions on an AWC require the SM to be a person other than the CEO or HOO, unless a specific approval is held (refer to paragraph 138.050(1)(g)). Refer to GM 138.050 above for guidance on the potential management of conflicts of interest if the HOO, or the HOTC, and the SM are the same person.

The responsibilities of the SM of an Australian aerial work operator align very closely with some of the responsibilities of the operator's CEO. As such, the SM will be required to regularly report to the CEO regarding the operator's compliance with safety management matters. The SM must ensure that the operator's SMS meets requirements and is effective.

For additional information on the responsibilities of a SM, refer to:

- AC 119-01 - Safety management systems for air transport operations
- for general information on safety managers — CASA's Safety Manager Guide

AMC 138.120 Additional qualification and experience requirements for key personnel

Note: See AMC 138.040 regarding certain acceptable means of compliance for a HOO that would have the effect of CASA not requiring certain proposed HOOs to not undertake an examination (which could be either ground or airborne based).

Reserved.

GM 138.120 Additional qualification and experience requirements for key personnel

For operators with greater size or complexity, additional key personnel experience and qualifications may be required for the operator to be capable of conducting safe operations in accordance with its operations manual.

CASA may, by written notice, direct a person who is, or is proposed to be, holding a key personnel position to undertake an examination or training, or to be interviewed by CASA.

3.5 Division 138.B.5—Training and checking

There are exemptions in force in relation to the training and checking of crew members. These exemptions apply to certain operators. It is recommended that operators review Part 10 of CASA EX73/24.

For Part 138 operators, CASA announced in May 2024 that operators who were using the exemptions in Part 10 of the then CASA EX87/21 (now CASA EX73/24) to defer compliance with the new Part 138 training and checking requirements needed to submit documentation to CASA by the end of 31 August 2024 associated with their compliance with these requirements and implement their new procedures by the end of 28 February 2025, unless otherwise advised by CASA.

For these Part 138 operators, the exemption CASA EX79/24 provides a mix of permanent recognition of prior training events and temporary recognition of prior checking events.

There is a Part 11 direction in force in relation to crew members carrying out audits, checks, examinations etc. Operators and pilots are advised to review section 9 of CASA EX67/24.

AMC 138.125 Operators who are required to have a training and checking system

Reserved.

GM 138.125 Operators who are required to have a training and checking system

There is an exemption in force in relation to this regulation. It is recommended that operators review sections 8 and 9 of CASA EX72/24.

There is also a direction in force in relation to aerial work certificate holders and training and checking systems. It is recommended that operators review section 17 of CASA EX72/24. The approval mentioned in this section of the exemption is taken to be a significant change due to it activating paragraph 138.012(d) of CASR. Operators are to apply for this approval by applying for a significant change via the Application - Aerial Work Operations (CASR Part 138) form available on CASA's website.

In addition to this regulation, Chapter 4 of the Part 138 MOS prescribes further operational circumstances that require the implementation of a training and checking system.

Notes:

1. For operators to whom this regulation is not applicable, it is worth noting that they are still required to train new or inexperienced flight crew members (regulation 138.480) and task specialists (regulation 138.580), as well as assessing the competence of all flight crew members (regulation 138.485) as per the requirements of Subparts 138.N and 138.P and the Part 138 MOS.
2. An operator to whom regulation 138.125 does not apply is still required to have a description of, and the procedures for, the training and competency assessment of crew for their operations in their operations manual.
3. An AWC holder who conducts training and checking of aircrew members is required to have a training and checking system (paragraph 4.02(1)(c) of the Part 138 MOS).
4. Paragraph 4.02(1)(e) of the Part 138 MOS requires operators who conduct fireground personnel carriage operations to have a training and checking system. As such these operators are also required to nominate a HOTC (refer GM 138.105).

If an AWC (Part 138) holder also has an Australian air transport AOC (Part 119), the operator can choose to integrate the two training and checking systems. The requirements of all relevant CASR Parts must be met. The HOTC for such a training and checking system may be the same person if the regulatory requirements for both Parts are met by that person.

Noting the requirements of regs 138.120 and 119.165, CASA would require increased experience for a person who is the HOTC for both air transport and aerial work operations.

There is no legislative requirement for an operator to combine a Part 119 and Part 138 training and checking system. Regardless of whether the operator combines these functions or keeps them separated, the structure of the system and the responsibilities of either HOTC need to be clearly defined in the operator's exposition and operations manual.

For further information on training and checking including contracted training and checking, refer to AC 138-02 - Training and checking systems

AMC 138.130 Requirements for flight crew

Reserved.

GM 138.130 Requirements for flight crew

This regulation is applicable to all operators who are required by regulation 138.125 to establish a training and checking system. The regulation has certain requirements specifying the content of the training and checking system with regards to flight crew members. Nothing in the regulation prevents the operator from customising these components to suit the nature of their specific operations.

Subregulation 138.130(2) is intended to provide legal certainty that in the circumstance where an aerial work operator also holds a Part 141 or Part 142 authorisation, the requirements of regulation 138.130 do not apply to the training or checking events conducted as part of the operator's Part 141 or Part 142 activities.

Training and checking activities may be conducted in-house or may be conducted under contract with a third party. When making use of a third party, operators should remember that they remain responsible for ensuring that the training meets their requirements.

Equally, an operator may elect to outline in their training and checking manual how they will comply with the requirements of both Part 61 and Part 138, as well as potentially the requirements of Part 119 and the other operational Parts 121, 133 or 135, where applicable.

Division 138.N and P contains details of specific training requirements for Part 138 operators who are required to have training and checking systems.

For more information, refer to Multi-Part AC 119-11 and 138-02 - Training and checking systems.

AMC 138.135 Requirements for other operational safety-critical personnel

Reserved.

GM 138.135 Requirements for other operational safety-critical personnel

The definition of operational safety-critical personnel is broad, and the intent is for operators to assure themselves that when a person interacts with their aircraft or operation that this interaction will not result in a degradation of safety. For aerial work operations, this may include ground crew, air crew members, and task specialists.

As with training and checking for flight crew, this regulation stipulates what components must be in an operator's training and checking system, not the content of these components. This provides flexibility for operators to structure the system to be appropriate for the size, complexity, and nature of their operation.

If an operator is not required to have a formal training and checking system[10], they are still obliged to train and assess competency of air crew members and task specialists. The difference with a formal training and checking system is that the regulations stipulate what the components of the system must be, whereas other training and assessment requirements only stipulate that it must be done, and that there is a documented procedure in the operator's operations manual.[11]

[10] Refer to regulation 138.125.

[11] Refer to paragraph 138.155(1)(h).

For more information, refer to Multi-Part AC 119-11 and 138-02 - Training and checking systems.

3.6 Division 138.B.6—Safety management system

There are exemptions in force in relation to safety management systems for aerial work certificate holders. These exemptions apply to certain operators. It is recommended that operators review Parts 4 and 5 of CASA EX73/24.

Note: CASA has amended the existing general exemption relating to SMS in CASA EX73/24 Part 4 to enable operators who held a charter AOC immediately before 2 December 2021 and who conducted the carriage of passengers within, and in the vicinity of, a fireground, to be included in the Part 138 SMS deferral.

There is a direction in force in relation to aerial work certificate holders and the management of safety information. It is recommended that operators review section 22 of CASA EX72/24.

AMC 138.140 Operators who are required to have a safety management system

Reserved.

GM 138.140 Operators who are required to have a safety management system

There is also a direction in force in relation to aerial work certificate holders and safety management systems. It is recommended that operators review section 18 of CASA EX72/24. The approval mentioned in this section of the exemption is taken to be a significant change due to it activating paragraph 138.012(d) of CASR. Operators are to apply for this approval by applying for a significant change via the Application - Aerial Work Operations (CASR Part 138) form available on CASA's website.

In addition to this regulation, the Part 138 MOS can prescribe further operational circumstances requiring the provision of a SMS or provide relief. Refer to Chapter 5 of the MOS.

Notes:

1. Paragraph 5.02(1)(a) requires operators who conduct fireground personnel carriage operations to have an SMS. As such these operators are also required to nominate and appoint a safety manager to their organisation (refer GM 138.110 and 138.115).
2. Operators should refer to section 19 of CASA EX73/24 which refers to the aerial work SMS deferral general exemption ending on a date specified in writing by CASA.[12]
3. For operators to whom this regulation is not applicable, it is worth noting that they are still required to have a description of their safety policy in their operations manual.[13] For more information on developing a safety management system, refer to AC 119-01 - Safety management systems for air transport operations.

[12] As of publishing v2.6 of this AMC/GM, no such date had yet been specified by CASA.

[13] Refer to paragraph 138.155(1)(l).

AMC 138.145 Safety management system requirements

Reserved.

GM 138.145 Safety management system requirements

If an AWC (Part 138) holder also has an Australian air transport AOC (Part 119), the operator can choose to integrate the two SMSs. The requirements of all relevant CASR Parts must be met. The SM for such a safety management system may be the same person if the regulatory requirements for both Parts are met by that person.

There is no legislative requirement for an operator to combine a Part 119 and Part 138 SMS. Regardless of whether the operator combines these functions or keeps them separated, the structure of the system and the responsibilities of the SM need to be clearly defined in the operator's exposition and operations manual.

For more information on developing a safety management system, refer to AC 119-01 - Safety management systems for air transport operations.

When conducting a flight in geographical areas experiencing armed conflict, pilots and operators will need to access resources and information relating to flights in these areas to fulfil their safety risk management responsibilities. See also GM 91.215 in relation to the responsibilities of the pilot in command (PIC). CASA has published information relating to flights in conflict zones on our website that provides further links to internationally available information.

3.7 Division 138.B.7—Personnel fatigue management

AMC 138.150 Operators who are required to have a crew fatigue management system

Reserved.

GM 138.150 Operators who are required to have a crew fatigue management system

The MOS content for this regulation is contained in Chapter 6 of the Part 138 MOS.

CAO 48.1 contains the fatigue requirements for aerial work certificate holders and persons conducting aerial work operations without an aerial work certificate.

3.8 Division 138.B.8—Operations manuals

AMC 138.155 Contents of operations manual

AMC 1 - use of CASA published sample operations manuals

The content of the Sample Operations Manual (Mustering) is an acceptable means of compliance provided the operator that fits into the design scope of the sample manual as detailed in 'Part 138 Guide to Sample Operations Manual (Mustering)', Chapter 'Background' and all relevant content required by the Sample to be included by the operator is added, completed or adjusted as appropriate to the content:

Note: The SOM (Mustering) is based around 'Sample Aviation', a fictitious operator conducting mustering operations under a Part 138 Aerial work certificate. Its key personnel are a CEO and a Head of Operations. The operator is not a corporation, does not operate foreign registered aircraft, and does not have an SMS. The sample organisation operates a geographically dispersed fleet of R22 helicopters and has up to 10 regular, safety-sensitive employees likely to be rostered on a given day.

The content of the Sample Exposition / Operations Manual (CASR Parts 133, 135, 138) is an acceptable means of compliance where the procedures are tailored to reflect the uniqueness of the particular operation provided the operator fits into the design scope of the sample manual as detailed in the 'Guide to CASA Flight Operations Sample Exposition / Operations Manual' and all relevant content required by the Sample to be included by the operator is added, completed or adjusted as appropriate to the content.

AMC 2 - listing certain legal instruments relied upon by an operator in their operations manual

Paragraph 138.155(1)(h) of CASR requires the operator's operations manual to include details of each plan, process, procedure, program and system implemented by the operator to safely conduct and manage their aerial work operations in compliance with the civil aviation legislation.

Note: The civil aviation legislation includes the Act, regulations and legislative instruments made under the Act or regulations, and Chapter 7 of the Criminal Code, insofar as that Chapter applies to conduct in relation to matters listed in the definition of civil aviation legislation in the Act.

As an acceptable means of compliance, AMC 4 within AMC 138.195 also applies to the acceptable interpretations of the requirement mentioned above.

GM 138.155 Content of operations manual

An operations manual is a document, that may consist of multiple volumes, which describes how an organisation will conduct its operations safely. It sets out (for CASA, the operator and its personnel involved in the operation) how to comply with all applicable legislative requirements and manage the safety of the operation, as well as details of each plan, process, procedure, program and system implemented.

If structured as a set of documents, the operations manual might include a 'principal/primary document' that contains all the information applicable to common operator activities. Separate volumes can be established for specific aspects of certain activities, and the associated systems and procedures applicable to those activities. These separate volumes form part of the operations manual.

The operations manual comprises the principal document and all other operator-nominated volumes or manuals. Where the operations manual is comprised of other volumes/documents, the principal document must reference the other volumes and state that they are part of the operations manual.

In developing the operations manual content, the operator should refer specifically to the list of items in the regulation to ensure completeness.

For example, paragraph 138.155(1)(e) stipulates further requirements for key personnel in addition to those in Division 138.B.4.

Note, for subparagraph 138.155(1)(e)(v) operators need to consider the particular key personnel situation in regard to their operational circumstances. This includes circumstances where there is a nominated deputy and circumstances where there is no nominated deputy to take over the key personnel role and how operations will be impacted by the absence or unavailability of the key person in question.

In this second situation, circumstances such as how operations currently underway will be safely concluded and how future operations will be safely managed, where the key personnel position responsibilities are relevant to that operation, need to be considered.

Operators should note the safety implications of this situation are exacerbated when a single individual carries out more than one key personnel role for the operator. In such situations where that individual is no longer able to carry out their responsibilities, operations are highly likely to need to be suspended until the key personnel roles can be filled by an appropriately experienced and trained nominated individual or individuals.

Refer also to the GM for regulation 138.075 for more information on this topic.

For the requirements under paragraph 138.155(1)(m) relating to significant changes, operators should also refer to regulation 138.062.

Part 138 MOS operations manual content requirements

At times, the Part 138 MOS specifically requires an operator to include certain procedures or content in their operations manual. These occasions include the following:

- subsection 1.04(4) - legally links the MOS requirements for operations manual content to the relevant underpinning legislative authority enabling the MOS to include these requirements
- subsection 1.04(6) - in the definition of risk assessor
- subparagraph 1.06(3)(c)(iii) - in the definition of suitable forced landing area, in relation to areas of water where search and rescue capabilities exist
- subparagraph 2.02(1)(a)(ii) - regarding underpinning requirements for a person to be classified as an aerial work passenger
- subsection 7.02(1) - regarding the minimum distances a rotorcraft must be from an object during the take-off, take-off and initial climb, approach and landing, and baulked landing climb, phases of flight
- subsection 7.03(2), paragraph 11.02(1)(b) and paragraph 11.04(1)(b) - regarding prescribed single-engine aeroplane (PSEA) procedures
- subparagraph 9.04(2)(d)(i) - regarding ESO operating site (defined term in the Part 138 MOS) risk assessment and management procedures
- paragraph 9.08(3)(a) - regarding training and proficiency requirements for radar observers (if used as a kind of crew member by the operator) during aeroplane IFR flights below the minimum height over the sea
- section 9.17 - regarding rotorcraft IFR flights that are SAR operations involving an auto-hover using transition mode capability over the sea
- subsection 11.06(2) - regarding carriage of aerial work passengers
- subsection 12.10(7) - regarding de-goggling off NVIS
- paragraph 13.06(2)(a) - regarding risk assessment and mitigation processes
- subsection 15.06(7) - regarding hover entry and exit Class D external load operations
- paragraph 15.09(4)(b) - regarding Class C or Class E external load applications for approval
- subsection 15.12(2) - regarding class E external loads
- subparagraph 16.02(b)(ii) and paragraph 16.03(2)(c) - regarding dispensing operations
- subsection 17.05(2) - regarding aerial shooting PIC experience
- subparagraph 17.06(3)(b)(i) - regarding aerial shooter training course
- paragraph 17.07(2)(a) - regarding firearm discharge trial

- paragraph 17.07(11A)(f) - regarding police aerial shooting training operations
- paragraph 17.08(2)(b) - regarding aerial shooting crew communication procedures
- paragraph 17.08(2)(b) - regarding aerial shooting crew communication procedures
- paragraph 21.03(3)(a) - regarding weight and balance documents
- subsection 22.07(2A) - regarding crew communication procedures in a particular circumstance
- Chapters 23, 24 and 25 - regarding training and checking content

Fireground personnel carriage operations - operations manual content

This guidance is provided to support the introduction of fireground personnel carriage operations as a new kind of aerial work operation.

Due to the requirements of paragraphs 138.155(1)(g) and (h) of CASR, operators choosing to add fireground personnel carriage operations to their AWC must ensure their operations manual contains the plans, processes, procedures and systems necessary to safely conduct and manage these operations.

Operators already carrying aerial work passengers during other kinds of aerial work operations, who choose to add fireground personnel carriage operations to their AWC, need only consider how to vary their existing aerial work passenger procedures for their introduction fireground personnel carriage operations in the new content.

Amongst other MOS operations manual requirements that may be relevant, any operations manual content must meet the requirements of:

- subsection 11.06(2) regarding the carriage of the fireground personnel as aerial work passengers
- section 13.06 regarding pre-operational risk procedures for risk assessment and mitigation processes, flight risk management plans and post flight risk review procedures
- the pre-flight aerial work passenger requirements set out in section 17A.02
- the procedures for record keeping set out in section 17A.04.

Notes:

1. Operators are reminded that although the fireground emergency organisation is the entity responsible for informing prospective aerial work passengers of the increased risks associated with fireground personnel carriage operations compared to Part 133 operations, if the operator proposes to conduct activities with elevated risks compared to normal passenger transport, such as operations within the avoid area of the HV envelope or low flying, then operators will need to inform relevant fireground emergency organisations of this intent so that the relevant risk information session includes appropriate information.
2. If the operator does not inform relevant fireground emergency organisations of this intent so that the relevant risk information session includes appropriate information, then the operator is unlikely to be able to comply with their obligations under subsection 17A.02(1) of the Part 138 MOS.

Due to the requirements in paragraph 138.155(1)(h) of CASR and depending on the way operators propose to conduct fireground personnel carriage operations. Operators must include operations manual content relating to the following matters, when they are permitted to be carried out during their operations:

- additional procedures for OEI accountability for operations at fire helibases when they are populous areas generally (note that a fire helibase could be a populous area, operators are recommended to read the guidance published by CASA in AC 138-01)
- policy and procedures for risk mitigation for operations in the avoid area of the HV envelope
- policy, processes and risk assessment procedures for operations below the minimum heights of Part 91 of CASR
- policy and procedures for rotors turning loading and unloading of aerial work passengers in these operations (noting the higher potential for such operations during aerial work operations)
- policy and procedures for combining other low risk aerial work operations (such as fire spotting) with a fireground personnel carriage operation.

CASA also recommends operations manual content is included for:

- policy and procedures for pilot determinations of go/no-go decisions for fireground personnel carriage operations
- policy and procedures for avoidance of operations in degraded visibility environments and inadvertent IMC avoidance
- procedures for reversion to a Part 133 operation if the passengers are being carried for hire or reward, if this becomes necessary due to an inability to fully comply with the Part 138 MOS requirements for fireground personnel carriage operations (note that an operator will need to hold an Australian air transport AOC authorising passenger transport operations in the relevant helicopter to conduct a Part 133 operation).

Further guidance on the content of an aerial work operations manual

Please review AC 1-02 - Guide to the development of expositions and operations manuals. Annex A to AC 1-02 lists subject matter headings that can be used as a checklist to ensure that each subject is addressed in the operator's operations manual for Part 138, as well as some guidance on content.

AMC 138.157 Compliance with operations manual by operator

Reserved.

GM 138.157 Compliance with operations manual by operator

This regulation outlines the responsibility of the operator regarding compliance with its operations manual. It is important to understand that even when something is not addressed in the legislation, or if the operations manual goes beyond what the legislation requires, the operator is still required to comply with the matter(s) specified in the operator's operations manual.

AMC 138.160 Compliance with operations manual by personnel

Reserved.

GM 138.160 Compliance with operations manual by personnel

The operator's personnel are required to comply with the operator's operations manual, as it applies to them. Both the member of the operator's personnel and the operator commit an offence if the member of the operator's personnel does not meet the requirements of the operations manual as they apply to the member.

AMC 138.165 Providing personnel with operations manual

Reserved.

GM 138.165 Providing personnel with operations manual

The operator is required to make its operations manual available to all applicable personnel. This can be in an electronic format.

Operators should note the definition of ‘personnel’ in the CASR Dictionary, which is quite broad. Personnel, whether directly employed or employed under contract (either direct contract or through a contract to another company), are required to be provided with the parts of the operator’s operations manual relevant to their duties.

3.9 Division 138.B.9—Records and documents

AMC 138.170 Personnel training and checking records

Reserved.

GM 138.170 Personnel training and checking records

This regulation requires an operator to make specified training and checking records for their personnel.

AMC 138.175 Availability of records

Reserved.

GM 138.175 Availability of records

This regulation requires an operator to make records made under regulation 138.175 available to the person to whom the records relate, at the person's request. It also requires the operator to provide copies of the records to another aerial work operator if such a request is authorised in writing by the person to whom the records relate. This is to provide transparency as to the contents of records between employees and employers.

AMC 138.180 Copies of flight crew licences and medical certificates

Reserved.

GM 138.180 Copies of flight crew licences and medical certificates

This regulation requires an operator to hold copies of a flight crew member’s licence and medical certificate.

There is an exemption and direction in force which allows operators to only hold a record of a flight crew members medical certificate, flight crew licence, ratings and endorsements that are required to operate the operator's aircraft. A direction extends this requirement to operators of foreign aircraft and the foreign licence equivalent. These records are required to be kept for the period the flight crew

member exercises the privileges of their licence for the operator. It is recommended that operators review section 9C of CASA EX72/24.

AMC 138.185 Retention periods for personnel records

Reserved.

GM 138.185 Retention periods for personnel records

There is a direction in force in relation to certain aerial work certificate holders and the retention of historical flight crew member records. It is recommended that operators review section 24 of CASA EX72/24.

This regulation prescribes the minimum retention periods for personnel records.

The retention periods applicable to these records are only applicable from the commencement of this regulation. Where an operator chooses to access provisions in the Civil Aviation Legislation Amendment (Flight Operations—Consequential Amendments and Transitional Provisions) Regulations 2021 then the operator should retain the applicable record which would have been made prior to the commencement of regulation 138.240. For example, if an operator sought to access the provisions of regulation 202.418, the operator should at least retain the record relating to 'old' training and checking event. Regulation 202.418 provides for an operator to use a training and checking event under the previous regulations to meet the requirements of these regulations. Operators would be expected to have access to these recent records for the old event as it is not too distant and should have been retained under the provisions of the previous regulations.

3.10 Division 138.B.10—Miscellaneous

AMC 138.195 Reference library

AMC 1 - in relation to electronic copies

It is an acceptable means of compliance if electronic copies are used for the documents required by this regulation.

AMC 2 - in relation to civil aviation legislation

This acceptable means of compliance is in relation to the use by an operator of access to the Federal Register of Legislation (FRL) website as the method of maintaining a reference library of the civil aviation legislation that is relevant to the operator's aerial work operations.

Access to the FRL website is taken to be a readily available electronic copy provided that:

- this access is available at all locations and times that the operator's personnel require the access to perform their duties; and
- the operator is satisfied that the personnel are sufficiently competent to access the relevant legislation using the electronic means.

Note: The operator holds the risk of being non-compliant with the regulation if the website access becomes unavailable, whether or not the reason for the unavailability is within the operator's control. This is a risk of relying on an on-line service. An operator might instead choose to download relevant documents from the FRL website to avoid this risk, however these documents may not be current after downloading. This risk could be minimised by limiting the time such a document could be used.

AMC 3 - in relation to the AIP

This acceptable means of compliance is in relation to the use by an operator of access to online versions of the AIP as the method of maintaining a reference library of these documents if required by subparagraph 138.195(2)(a)(iii) of CASR.

Access to the relevant websites for the specific AIP is taken to be a readily available electronic copy provided that:

- this access is available at all locations and times that the operator's personnel require the access to perform their duties; and
- the operator is satisfied that the personnel are sufficiently competent to access the relevant legislation using the electronic means.

Note: The operator holds the risk of being non-compliant with the regulation if the website access becomes unavailable, whether or not the reason for the unavailability is within the operator's control. This is a risk of relying on an on-line service. An operator might instead choose to download relevant documents from the relevant website to avoid this risk however these documents may not be current after downloading. This risk could be minimised by limiting the time such a document could be used.

AMC 4 - listing certain legal instruments relied upon by an operator in their operations manual

This AMC relates to exemptions and other non-CASR, non-MOS legislative instruments that an operator is relying upon when writing their operations manual. Legislative instruments can be colloquially described as those instruments that apply to multiple operators and are generally applicable.

For subparagraph 138.195(2)(a)(ii) of CASR, which requires the operator to include in its reference library the civil aviation legislation (which is defined in the Act to include legislative instruments) relevant to the operator’s aerial work operations, it is an acceptable means of compliance if an operator lists in their operations manual the exemptions and other non-CASR, non-MOS legislative instruments that are relied upon to write the operations manual and other required manuals (such as training and checking manual and safety management system manuals).

Note: The operator and its personnel, to fulfil their legislated obligations and responsibilities to generally comply with the civil aviation legislation need to know what legal requirements their manual suite is based upon. This is the intent of listing the generally applicable exemptions and other instruments relied upon by the operator when designing their processes and procedures.

GM 138.195 Reference library

The HOO is responsible for ensuring that flight crew members are provided with the information and documentation necessary for them to carry out their responsibilities[14].

The certificate holder is responsible for maintaining the library, including any distribution records so that the operator's system for notifying personnel of updates, in accordance with paragraph 138.195(2)(d), can function in an appropriate manner.

AMC 138.200 Maximum period for use of foreign registered aircraft in Australian territory

Reserved.

GM 138.200 Maximum period for use of foreign registered aircraft in Australian territory

This regulation relates to the use of a foreign-registered aircraft by a single operator. The 90-day and 12-month periods are not collectively applied for multiple operators using a single foreign registered aircraft. The further guidance below explains the concept of aircraft availability and this concept envisages the possibility that a single aircraft could be 'available for use' on different dates for different operators.

Operators are reminded that the operation of a foreign registered aircraft under a foreign issued restricted category special certificate of airworthiness in Australia requires CASA to have granted a special flight authorisation under regulation 91.970 of CASR. Refer to the GM 91.970 entry in the Part 91 AMC/GM document for more information.

This regulation contains the words "…the operator **uses** [added emphasis] a particular foreign registered aircraft to conduct aerial work operations…". CASA advises that the word "use" has been legally interpreted to have very wide meaning. In the context of this regulation, an operator will be taken to "use" the aircraft in the carrying on of their business, even by just making it available for the operation. The operation or availability of the aircraft as an integral part of the business is a use that need not be a "hands on" active use of the aircraft all the time. In summary, availability of an aircraft for an operation will be treated by CASA as use of an aircraft for regulation 138.200.

The Australian civil aviation legislation relating to airworthiness (Part 42, CAR Parts 4/4A/4B/4C/4D, and subordinate legal instruments) applies to Australian aircraft and does not apply to foreign registered aircraft. Foreign registered aeroplanes or rotorcraft operated by an aerial work operator would be regulated for their operation by CASA, but would be regulated for their maintenance by the national aviation authority (NAA) of the State of the aircraft's registration. This circumstance, whereby oversight is split between CASA and the other NAA, results in neither party having a holistic and completely transparent view of the aircraft, its maintenance and its operation. To manage the safety risks of these split responsibilities and lack of transparency, the time such an arrangement can be tolerated by the safety rules is limited. When this period of split responsibility is extended, it has an adverse effect on safety oversight which in turn negatively impacts on the safety of air navigation.

Similarly, leases and other commercial agreements in relation to foreign aircraft operations have the potential to lead to the situation where the country of aircraft registration has limited ability to conduct adequate control and supervision of the aircraft, its operation and its maintenance.

Unlike the previous regulatory regime whereby commercial aerial work operations required an AOC, and thus when using a foreign registered aircraft also required CASA to establish an agreement under

[14] Refer to paragraph 138.095(2)(e).

section 28A of the Act with the NAA of the State of registry of the aircraft, there is no mandatory provision in Part 138 requiring the establishment of such an agreement between CASA and the foreign NAA.

This regulation limits the use of any singular foreign registered aircraft, in any aerial work operation conducted by an aerial work operator (which means an aerial work certificate holder), to a total of 90 consecutive days in a 12-month period beginning on the day the foreign registered aircraft first becomes available (i.e., begins to be in "use") to conduct aerial work operations for the operator in Australian territory.

The underlying intent of this regulation is to provide for the short-term use (i.e., up to the standard 90-day limit stated in the regulation) of a foreign registered aeroplane or rotorcraft during circumstances such as the operator's normal Australian registered aircraft undergoing repair or maintenance, or where the operator needs to add capacity for peak periods, or where the operator is using an aircraft in Australia for a specific operating season before it returns overseas, or to allow an aircraft to be trialled in the operation. **It is not intended that an aerial work operator use a foreign registered aircraft for a lengthy period of time using short term approvals.**

Options for operators relating to the use of foreign registered aircraft beyond the 90-day period include:

- placing the foreign registered aeroplane or rotorcraft on the Australian Part 47 register, thus placing the airworthiness of the aircraft under solely Australian oversight

  or

- applying for an approval under regulation 138.025 for the purposes of regulation 138.200 (this approval power is subject to regulation 11.055)

  or

- CASA entering into an article 83 bis agreement with the State of registry, so that the aircraft is treated as if it were an Australian registered aircraft.

If an operator applies for an approval for a period of time longer than 90 days, then CASA would be unlikely to issue the approval without first establishing an agreement with identical effect to that required under section 28A of the Act. To establish this agreement, the operator making application for the approval is likely to be directed by CASA (under regulation 11.040) to provide the relevant information that could support the establishment of such an agreement (see section 28A of the Act for the kinds of information required).

Any application for an approval envisaging an enduring need for a number of days greater than 90 is required to provide reasons why the aircraft **cannot** be placed on the Australian register[15]. In particular, information outlining the number of days an aircraft might be used within Australia and within each other country where operations are intended to be conducted would be of benefit to CASA in gaining an understanding of the reasons behind not placing the aircraft on the Australian register. This information will assist CASA in determining under paragraph 11.055(1A)(e) whether granting the approval would be likely, or not be likely, to have an adverse effect on the safety of air navigation.

To illustrate application of the 90 consecutive days, consider the following example:

Sample Aviation applies for approval of a significant change seeking the addition of a foreign registered aircraft to their existing aerial work certificate.

The aircraft is subsequently ferried to Australia and then undergoes maintenance work to refit its role equipment following the transit.

[15] Paragraph11.030(1)(aa) of CASR states that if information required by an application form is not provided then the application is taken to not be made. The effect for the operator will be that CASA will request you provide that information before any assessment commences.

On 1 March 2023 the aircraft is available to conduct operations and a crew is assigned for duty.

Accordingly, 1 March 2023 is considered the day that the aircraft is first available and the period of 90 consecutive days will be reached on 29 May 2023.

It does not matter whether Sample Aviation conducts only a single day of flight operations or 90 days of flight operations, the period of 90 consecutive days will be reached on 29 May 2023 as this is 90 days from the day the aircraft was first available.

After 29 May 2023, if Sample Aviation wishes to conduct any further operations with this foreign registered aircraft prior to 1 March 2024, they must obtain an approval under regulation 138.025 for the operation.

4 Subpart 138.C—General

4.1 Division 138.C.1—General flight limitations

AMC 138.205 Permitted categories of aircraft for aerial work operations

Reserved.

GM 138.205 Permitted categories of aircraft for aerial work operations

Aircraft certification is the whole process of assessing an aircraft type against its type design and the aircraft's condition for safe operation, which culminates in issue of a Certificate of Airworthiness (CofA) for an individual aircraft. Type Certification is a part-process of aircraft certification which leads to issue of a Type Certificate or equivalent document.

The obligation for Contracting States of the International Civil Aviation Organisation (ICAO), of which Australia is a member, to issue CofAs, is laid down in Part II, Section 3 of ICAO Annex 8, "Airworthiness of Aircraft".

Aircraft are categorised in two discrete areas — operational and airworthiness.

Operational categories refer to the way the aircraft is to be operated, i.e. Air Transport, Aerial Work or Flying Training.

An aircraft airworthiness category is essentially a homogeneous grouping of aircraft types and models of generally similar characteristics, based on the proposed or intended use of the aircraft, and their operating limitations.

Standard CofA may be issued in the following categories:

- transport
- normal
- utility
- acrobatic
- commuter
- manned free balloons
- special class.

The regulation provides that Part 138 operations may only be conducted in an aircraft that is type certificated in the following categories:

- transport
- commuter
- normal
- restricted
- utility.

The regulation further provides that Part 138 operations may only carry aerial work passengers when the aircraft is type certificated in the following categories:

- transport

- commuter
- normal.

As such, fireground personnel carriage operations must be in a helicopter type certificated in either the normal or transport categories, as commuter category is specific to aeroplane certification requirements.

Operators are reminded that a task specialist - see GM 138.015, GM 138.575 and GM 138.580 - is a crew member and can therefore be carried on a restricted or utility category aircraft. For certain operations, it might be appropriate for an operator to classify a person as a task specialist, which would require meeting the task specialist training and checking requirements. Note that the training and checking requirements for task specialists are entirely intended to be appropriate to the complexity and risk to aviation safety related to the exact role being performed by the task specialist.

Operators are also reminded that the operation of a foreign registered aircraft under a foreign issued restricted category special certificate of airworthiness in Australia requires CASA to have granted a special flight authorisation under regulation 91.970 of CASR. Refer to the GM 91.970 entry in the Part 91 AMC/GM document for more information.

Additional information on aircraft categories is available in AC 21.1(1) - Aircraft airworthiness certification categories and designations explained.

4.2 Division 138.C.2—Operational documents

There is an exemption in force in relation to the pilot in command requirements under regulation 91.105 relating to the carriage of licence and medical documents on a flight. It is recommended that operators and pilots in command review section 10 of CASA EX72/24.

AMC 138.210 Compliance with flight manual

Reserved.

GM 138.210 Compliance with flight manual

There is a Part 11 direction in force in relation to this regulation. The specific wording of this regulation mistakenly limits flight manual compliance to 'during a flight' (see the definition of flight in the Act) even though multiple flight manual requirements apply before a flight technically begins and after a flight ends. It is recommended that persons conducting aerial work operations review section 15 of CASA EX72/24.

The operator and pilot in command are required to ensure that the aircraft is operated in accordance with all the requirements and limitations set out in the *aircraft flight manual instructions* (defined term – see below) that relate to the operation of the aircraft. This regulation does not provide CASA the ability to give any concession to a limitation or procedure that is set out in the flight manual.

The definition of *aircraft flight manual instructions* is:

> ***aircraft flight manual instructions***, for an aircraft, means the following documents and information provided by the aircraft's manufacturer or issued in accordance with a Part 21 approval:
> (a) the aircraft's flight manual;
> (b) checklists of normal, abnormal and emergency procedures for the aircraft;
> (c) any operating limitation, instructions, markings and placards relating to the aircraft.

Reference to a flight manual includes reference to an aircraft flight manual, a rotorcraft flight manual, a flight crew operation manual, a pilot operations handbook, or another document that contains

operating limits and requirements for safe operation of the aircraft. Refer to the definition of 'flight manual' in the CASR Dictionary.

Section 2.3 of AC 21-34 Aircraft flight manuals describes these different kinds of flight manual requirements as either "approved", as in required to be approved by the national aviation authority (NAA) that provides the initial certification of a new aircraft type, or "unapproved", as in advisory content from the manufacturer that is not required to be approved by the NAA.

The wording of regulation 138.210 only requires compliance with mandatory flight manual elements. This is due to the use of the words 'requirement or limitation'.

AC 91-22 - Aircraft checklists contains information on aircraft checklists in the context of this regulation and similar regulations in Parts 91, 121, 133 and 135.

Should it become apparent that there is a conflict between the flight manual and the operator's procedures, the flight manual is to take precedence.

Exception

Chapter 8 of the Part 138 MOS provides the ability for a transport category rotorcraft to operate within the avoid area of the HV curve chart to conduct an emergency service operation (ESO), external load operations and fireground personnel carriage operations. This is required for transport category rotorcraft where the avoid area of the HV curve is a limitation.

AMC 138.215 Availability of checklists

Reserved.

GM 138.215 Availability of checklists

An aircraft checklist relevant to the flight and covering normal, abnormal, and emergency procedures must be made available to all crew members before they begin to carry out any duties for a flight.

Operators can elect to use the checklists directly from the flight manual, or alternatively may prefer to use a checklist extract developed by the operator. The checklist can be presented in a physical format (paper / laminated cards) or electronic format (EFB, aircraft electronic checklist). Information on the use of EFBs is available in AC 91-07 - Cabin electronic flight bags and AC 91-17 - Electronic flight bags.

In the case of paper checklists, these should be in a sturdy useable format, easily accessible to the crew and suitable for use in day and night operations. Regardless of the presentation medium, consideration needs to be given to text size, format, page layout and page indexing to ensure suitability for use during flight.

The operations manual must detail a suitable mechanism for ensuring checklists are kept up-to-date with manufacturer's documentation.

For more information, refer to AC 91-22 - Aircraft checklists.

4.3 Division 138.C.3—Flight related documents

There is an exemption in force in relation to the pilot in command requirements under regulation 91.105 relating to the carriage of licence and medical documents on a flight. It is recommended that operators and pilots in command review section 10 of CASA EX72/24.

AMC 138.220 Electronic documents

Reserved.

GM 138.220 Electronic documents

General guidance on electronic certifications, record keeping and management systems is available in AC 11-03 - Electronically formatted certifications, records and management systems. Specific guidance on the use of electronic flight bags is available AC 91-17 - Electronic flight bags and AC 91-07 - Cabin electronic flight bags.

This regulation confirms that the requirements relating to the carriage of flight related documents may be satisfied by using an electronic format. Where electronic documents are stored on and/or downloaded from a 'cloud' or any other repository, the operator and the PIC must ensure that a copy of the current electronic document is stored on the applicable device such that the material is accessible while the device is in 'flight mode'.

AMC 138.225 Availability of parts of operations manual

Reserved.

GM 138.225 Availability of parts of operations manual

Reserved.

4.4 Division 138.C.4—Reporting and recording defects and incidents etc.

AMC 138.230 Procedures for reporting and recording defects etc.

An acceptable means of compliance would be for an operator's procedures to require all reporting of defects and incidents to be recorded by requiring flight crew members to enter the information in the aircraft maintenance release or flight technical log, as applicable.

The matters requiring an entry are listed in the regulation, and an acceptable means of compliance would be for the operator to provide these and other examples in their operations manual.

GM 138.230 Procedures for reporting and recording defects etc.

The regulation requires operators to have procedures in their operations manual for the flight crew member to fulfil their responsibilities regarding the recording of the matters referred to in the regulation. The regulation does not specify where the information is to be recorded; however, a suitable place could be the maintenance release or flight technical log, whichever is in use.

The operations manual should also detail exactly what a defect is, in addition to how the reporting and recording of it is to be achieved.

The requirements of this regulation apply to any item of operational or emergency equipment fitted to the aircraft regardless of whether it is required by the approved design for the aircraft or the regulations for the flight.

AMC 138.235 Reporting and recording incidents

Reserved.

GM 138.235 Reporting and recording incidents

The operator's operations manual must include procedures for reporting and recording incidents that have the potential to be, or are a hazard to, the safe operation of the aircraft. The operator should provide guidance in the operations manual as to what matters should be reported, as well as how they are to be recorded.

Note: Regulation 91.675 also requires the PIC to report hazards to air navigation.

This regulation does not replace any reporting obligations that may be imposed by other authorities, such as Airservices Australia, ATSB, Australian Border Force, AMSA or other agencies as applicable to the particular occurrence.

4.5 Division 138.C.5—Search and rescue services and emergency and survival equipment

There is a direction in force in relation to aerial work certificate holders and survival equipment procedures. It is recommended that operators review section 20 of CASA EX72/24.

Note: There are no regulations currently in this Division of the CASR. The Division has been reserved for any potential future use, which would only occur following appropriate consultation.

4.6 Division 138.C.6—Miscellaneous requirements

Note: There are no regulations currently in this Division of the CASR. The Division has been reserved for any potential future use, which would only occur following appropriate consultation.

5 Subpart 138.D—Operational procedures

5.1 Division 138.D.1—Operational control

Note: There are no regulations currently in this Division of the CASR. The Division has been reserved for any potential future use, which would only occur following appropriate consultation.

5.2 Division 138.D.2—Flight preparation

AMC 138.265 Flight preparation requirements

Reserved.

GM 138.265 Flight preparation requirements

An operator's operations manual must include procedures that ensure that the flight of an aircraft is compliant with the flight preparation requirements for both weather and alternates.

The diverse nature of possible Part 138 operations means that each operator must tailor their procedures to suit their individual requirements. In the simplest owner-operator case, the procedure would normally require the PIC to follow a flight preparation process that includes obtaining and interpreting weather forecasts and using this data to determine fuel and alternate requirements.

In larger or more complex operations, these duties may be assigned to operational personnel who would follow a standardised procedure to provide the flight crew with an operational plan after assessing the weather and alternate requirements. In this case, the operations manual would need to include a mechanism for the PIC to verify that the preparation has met the regulatory requirements.

Chapters 7 and 8 of the Part 91 MOS set out the requirements for flight preparation weather and alternates applicable to operations under Part 138.

5.3 Division 138.D.3—Flight planning

AMC 138.270 Availability of flight planning information

Reserved.

GM 138.270 Availability of flight planning information

An operator must ensure that the PIC and any person with responsibilities for flight planning, inflight replanning or operational control has access to the required flight planning information.

This may include access to a dedicated flight planning facility, or make use of suitable “deployable” electronic equipment such as laptops, tablets, EFBs etc. Information on the use of EFBs is available in AC 91-07 - Cabin electronic flight bags and AC 91-17 - Electronic flight bags.

The operations manual should contain specific procedures for personnel on accessing and using flight planning information when flight planning at:

- the operator's base of operations
- all satellite locations
- ad-hoc facilities.

Subregulation 138.270(2) requires that for all personnel (PIC, flight planning staff, external providers) involved in flight planning activities, the operator's procedures must describe how this process is accessed and how the relevant information is distributed to the applicable personnel such as the PIC, operational support areas etc.

5.4 Division 138.D.4—Flight rules

AMC 138.275 Minimum height rules

Paragraph 9.03(4)(c) of the Part 138 MOS - public notice requirements

This acceptable means of compliance is in relation to the responsibility of the operator and pilot in command to give public notice, by the most appropriate method for the circumstances, of an intended operation that will occur below 300 feet above the highest obstacle **and** over any point on ground or water vertically below the aircraft that is within 150 m of a person, or of a vessel, a vehicle, or a structure, or of any livestock, not associated with the operation, likely to be adversely affected by the aircraft's noise (i.e. in close proximity).

Where public notice is required to be given, the following concepts and processes are considered to meet the appropriate method requirement:

- newspaper advertisements
- radio announcements
- television features and announcements
- handbills or brochures or similar methods that are likely to succeed in providing information to the public.

Note: Electronic means that achieve equivalent outcomes are also acceptable.

GM 138.275 Minimum height rules

Part 138 provides alleviations to the minimum height rules contained in Part 91 for certain situations and activities. These alleviations are conditional on the requirements in Chapter 9 of the Part 138 MOS being met, or where the flight occurs in the circumstances described in subregulations 91.265(4), 91.267(3), 91.277(3) and 91.305(3) of CASR.

Therefore, under Part 138, there is no longer a requirement for a general or specific low flying permission, as was the case under regulation 157 of CAR. In some cases where an aerial work zone (AWZ) is required, CASA's approval of the AWZ risk assessment (AWZ-RA) may also be required. Guidance on this topic can be found in AC 138-05 *Aerial Work Risk Management*.

The circumstances mentioned in these Part 91 subregulations, which are repeated by necessity in the Part 138 MOS, describe situations when it is permissible, under Part 91, to operate below the relevant minimum height requirement. For example, if the aircraft is taking of or landing at an aerodrome. Outside of these circumstances, Chapter 9 of the Part MOS describes the risk management

requirements and safety conditions for situations when an aerial work operation is required to operate at less than a minimum height limitation of Part 91.

It should be noted that the alleviations to the minimum height rules are only applicable during the conduct of the aerial work operation. This means that, while positioning to conduct the aerial work operation, the flight is required to comply with the minimum height requirements in Part 91.

The situations and activities with alleviations in Chapter 9 of the Part 138 MOS are:

- close proximity to an object in an area that is not a populous area or a public gathering
- rotorcraft — IFR flight and VFR flight at night, below minimum height
- aircraft IFR flight below minimum height over the sea in IMC or at night
- rotorcraft IFR flight that is a SAR operation involving an auto-hover using transition mode capability over the sea
- aircraft flight over populous areas and public gatherings.

Many of these situations are highly specialised aerial work operations, which will require considerable additional risk mitigation, operator procedural control, crew training and specialised equipment fit to be carried out by an operator.

However, the ability to operate in close proximity to an object in an area that is not a populous area, or a public gathering, is a situation very commonly needed for the conduct of many aerial work activities.

Section 9.03 of the Part 138 MOS

Section 9.03 of the Part 138 MOS outlines the requirements which must be complied with to disapply the requirements of regulation 91.267 which would otherwise prevent the close proximity operations mentioned above.

> **Note:** The reference is specific to operating in close proximity to an object and not to low flying, as paragraph 91.267(3)(h) does not limit a pilot with a Part 61 of CASR low-level rating to a minimum height, provided they do not operate in close proximity to objects and persons etc.

In this regard, regulation 138.500 of CASR requires the pilot in command of an Australian aircraft conducting aerial work operations to be authorised under Part 61 to carry out the duties in relation to the flight, so a low-level rating will be required for these operations. If the aircraft is foreign registered, authorised by the aircrafts state of the registry to conduct the duties assigned by the operator.

The concept of public notice

In consideration of the potential third party risk associated with close proximity operations, subsection 9.03(4) requires the operator and the pilot in command to give public notice of the intended operation by the most appropriate method for the circumstances of the operation.

In general terms, public notice means the process by which certain information is made available to the general public. In this case, persons, vessel occupants, vehicle occupants, building occupants or the owners of livestock that are not associated with the operation, and which may be put at risk or impacted adversely by the operation.

This notice **is not required** for operations where the person, vessel, vehicle, structure or livestock **are associated with** the operation. For example, livestock being mustered for the owner of the livestock, or a vessel which has engaged an operator to conduct aerial filming of the vessel underway would be considered associated with the operation.

The public notice requirements of subsection 9.03(4) **do not apply** for operations that are emergency service operations (ESO) being carried out to save life or property from harm or destruction, or to an operation where the operator knows the vessel, vehicle or structure is unoccupied, or that no livestock will be adversely impacted by the operation.

The operator and the pilot in command are each to ensure the aircraft is operated in a manner so it can avoid endangering third parties or things during the close proximity operation. This outcome should be a resultant of the correct application of the hazard treatment processes of the operator's risk assessment procedures for such operations.

5.5 Division 138.D.5—Take-offs and landings

AMC 138.280 Procedures for safety at aerodromes

Reserved.

GM 138.280 Procedures for safety at aerodromes

An operator should ensure that all personnel whose duties include working in the vicinity of an aircraft are appropriately trained to perform their duties safely. Further training shall be provided for those personnel who are also responsible for the movement of persons not employed by the operator, i.e. passengers.

Although this regulation has the term 'aerodrome' in the title, the intent is to ensure the safety of persons in the vicinity of aircraft. The circumstances in which this responsibility rests with the operator are listed in the regulation.

Further explanation of what is considered to be an aerodrome is available in GM 91.410.

In designing their procedures for this regulation, operators should remember that persons around an aircraft may be unfamiliar with aerodrome environments and aviation operations, and that they must be provided with clear and easy-to-follow directions.

All (aerial work) passengers, while airside, must be marshalled and supervised.

To ensure movements of persons around aircraft are properly controlled, procedures for the escort of persons on the aerodrome should be included in the operations manual. The operator should also develop procedures to ensure aircraft are parked in a place that prevents persons from being exposed to hazardous conditions, such as propellers or tail rotors.

Operators of aircraft permitted to refuel with persons on board and/or with engines still running (hot fuelling) should detail the method of supervision of persons while the aircraft is being refuelled. Refer to regulation 138.300 (Hot fuelling) and Division 91.D.6 (Fuel requirements) for more information.

Operations at large airports can often be associated with jet blast, rotorwash, noise and airside servicing equipment which require consideration in operational procedures.

Night operations at remote aerodromes without adequate apron lighting may also present hazards that should be considered.

Persons transiting to or from an aircraft can be distracted by mobile phone or other personal electronic device (PED) use. This reduces situational awareness and could put persons at greater risk. Operators should include procedures for the use of PEDs while transiting to and from aircraft.

Refer to AC 139.R-01 - Guidelines for heliports - design and operation for information relating to heliport design and operation.

5.6 Division 138.D.6—Fuel requirements

AMC 138.285 Fuel procedures

Reserved.

GM 138.285 Fuel procedures

Ensuring that flight crew members and other operational safety-critical personnel, (if any, follow a procedure for conducting flight planning will assist in ensuring all the variables associated with fuel calculations are addressed. This regulation requires an operator to include such procedures in its operations manual.

Further guidance on operational fuel requirements can be found in AC 91-15 - Guidelines for aircraft fuel requirements.

Operators are also recommended to read Annex C to AC 1-02 - Guidance - Fuel policy and associated fuel elements as this Annex contains significant guidance about exposition and operations manual fuel policy content.

Aerial work certificate holders that were using an operational variation, prior to the commencement of Part 91 on 2 December 2021, under the auspices of section 8 of *CASA 29/18 — Civil Aviation (Fuel Requirements) Instrument 2018*, and that intend to continue using the same operational variation after 2 December 2021, do not need to submit any additional documentation to CASA. The operator is taken to have already submitted the required documentation to CASA required under subsection 19.07(5) of the Part 91 MOS.

AMC 138.290 Oil requirements

Reserved.

GM 138.290 Oil requirements

Reserved.

AMC 138.300 Hot fuelling

Reserved.

GM 138.300 Hot fuelling

The regulation requires the procedures for hot fuelling, and circumstances in which hot fuelling can be carried out, to be set out in either the AFM or the operations manual, or both, in order to conduct hot fuelling. If there is no content in either the AFM or the operations manual, then this regulation would not apply to the operator and therefore the operator would have to comply with regulations 91.495, 91.500 and 91.505, which are otherwise 'turned off' due to item 8 of the table in regulation 91.035.

For clarity, any operations manual content developed for the purposes of this regulation cannot override any requirements in the AFM.

Refer to AC 91-25 -Fuel and oil safety, for more information.

AMC 138.302 Fuelling safety procedures

Reserved.

GM 138.302 Fuelling safety procedures

Regulation 138.300 of CASR takes precedence over regulations 91.495, 91.500 and 91.505 of CASR during an aerial work operation.

Regulation 138.302 of CASR takes precedence over regulation 91.510 of CASR during an aerial work operation conducted by an aerial work certificate holder,

There is an exemption in force in relation to regulation 138.302 and regulation 91.510 of CASR that effectively permits operators to comply with regulation 138.302 instead of regulation 91.510 during certain private operations conducted by an aerial work certificate holder. It is recommended that operators review section 11 of CASA EX72/24.

Fuelling means both refuelling and de-fuelling.

Regulation 138.302 of CASR requires an aerial work operator's manual to include procedures:

- ensuring the aircraft is fuelled safely
- for the safety of aerial work passengers and certain crew members who embark, disembark or are on board the aircraft during fuelling (this requirement is complemented by the requirements of regulation 138.305 of CASR)
- ensuring that before an engine of the aircraft is started, any effects of radio emissions from low-risk electronic devices are corrected, where the operator permits the use of such devices on the aircraft during fuelling.

The operator's obligations under regulation 138.155 of CASR to include details of each plan, process, procedure, program and system implemented by the operator to safely conduct and manage their aerial work operations in compliance with the civil aviation legislation means that operator's need to consider the inclusion of operations manual procedures to address the requirements of the following regulations (which apply to aerial work operations):

- 91.465 Contaminated, degraded or inappropriate fuels
- 91.470 Fire hazards
- 91.480 Fuelling aircraft - electrical bonding
- 91.485 Equipment or electronic devices operating near aircraft
- 91.490 Fuelling turbine-engine aircraft - low risk electronic devices
- 91.515 Fuelling aircraft if fuel vapour detected.

The operator's procedures are recommended to require crew members to conduct a briefing when the aircraft is being fuelled with aerial work passengers on board or embarking/disembarking (refer to Multi-Part AC 91-19, AC 121-04, AC 133-10, AC 135-12 and 138-10 - Passenger safety information).

The operator's procedures are recommended to outline any safety requirements for ground personnel working around an aircraft during fuelling. Consideration should be given to the inclusion of safe distances from fuelling equipment, including bonding cables and fuelling vent zones, and procedures for fuel spills. Furthermore, these procedures should detail what actions should be undertaken by personnel in an emergency situation, including an emergency evacuation of an aircraft.

Refer to AC 91-25 - Fuel and oil safety, for more information.

5.7 Division 138.D.7—Carriage of passengers or cargo

AMC 138.305 Carriage of passengers—general

Subsection 11.06(1) of the Part 138 Manual of Standards – description of types of aerial work passengers

The information in the sections of Appendix A to AC 138-01 titled "Sample operations manual clause" are an acceptable means of compliance for the operator's description, in relation to an aerial work passenger carried in relation to a mustering operation or firefighting operation (as applicable to the sample in the AC), of how the aerial work passenger is a person mentioned in section 2.02 of the Part 138 MOS.

Paragraph 11.06(2)(b) of the Part 138 Manual of Standards – description of types of aerial work passengers

The information in the section of Appendix A to AC 138-01 titled "Sample aerial work passenger briefing clauses" is an acceptable means of compliance for the operator's procedures, in relation to an aerial work passenger carried in relation to a mustering operation or firefighting operation, that describe how the requirements of regulation 91.565 will be complied with by the pilot in command of the flight.

GM 138.305 Carriage of passengers—general

There is an exemption in force in relation to regulation 91.565 during an emergency service operation conducted by an aerial work certificate holder, and the pilot in command's responsibilities relating to providing passengers with a safety briefing. It is recommended that operators and pilots in command review section 12 of CASA EX72/24.

The MOS content for this regulation is contained in Chapter 11 of the Part 138 MOS.

The carriage of passengers is a new addition to the regulatory scheme for aerial work operations, giving legal effect to the pre-2 December 2021 Aviation Ruling 3/2004. To ensure that this new scheme is properly regulated, Part 138 introduces the 'aerial work passenger' concept. There are requirements that come with the right to carry such passengers.

The critical first step in accessing the ability to carry aerial work passengers is to identify the relevant aerial work operation. The carriage of an aerial work passenger can only be undertaken when a Part 138 operation is to be conducted. Importantly, the carriage of an aerial work passenger cannot be used as the basis to classify an operation as a Part 138 operation. If the primary purpose of the flight is the carriage of a passenger, the operation would be an air transport operation. An exception applies for marine pilot transfer operations which are classified by CASA as task specialist operations – see AC 138-01 - Part 138 core concepts. Carriage of an aerial work passenger is not an aerial work purpose in and of itself.

There are multiple specific classes of aerial work passenger in section 2.02 of the Part 138 MOS. There are 2 broad classes listed in subsection 2.02(1) and 4 specific kinds of persons listed in subsection 2.02(2). The list of specific kinds of persons was included in the MOS in response to industry feedback during Part 138 consultation activities.

For the 'other persons' class in paragraph 2.02(1)(a), the key criterion is that the person must be present for a purpose, other than mere convenience or enjoyment, that is reasonably and closely associated with the purpose of the operator's aerial work operations. Examples of an aerial work passenger would include:

- a person exiting or entering a helicopter whilst in the hover for the purpose of an external load operation that is a Class D external load hover exit/entry (see section 15.06 of the Part 138 MOS)
- a journalist conducting a live broadcast

- a rigger being positioned into a remote site in preparation for an external load operation
- a ringer to identify hazards in the area of a mustering operation, and to open and close gates as part of the mustering operation.

Since an aerial work passenger is not part of the crew, they do not require any training to be inducted into the organisation. This is what distinguishes an aerial work passenger from a task specialist. However, an aerial work passenger must be given a passenger briefing prior to the flight that complies with section 20.06 of the Part 91 MOS and there are other requirements to provide appropriate protection to these passengers.

As an aerial work passenger is not part of the crew, additional risk mitigation in the form of aircraft performance is required in certain circumstances. The operator's operations manual will also need to outline when they will carry an aerial work passenger and how that passenger is essential to the aerial work operation. Consequently, the carriage of aerial work passengers is only permissible if the operator holds an AWC.

Section 2.02 of the Part 138 MOS defines the classes of aerial work passenger. Chapter 11 of the Part 138 MOS provides conditions that must be complied with when conducting aerial work operations involving the carriage of such passengers. There is additional guidance in AC 138-01, including sample operations manual clauses in Appendix A to the AC that could be adapted by operators for operations not encompassed in the scope of the sample clauses.

There are also some special rules in sections 9.03 to 9.23 of the Part 138 MOS that apply in certain higher risk situations. Operators should review these sections to check whether those situations apply to their operations – if they do, operators will need procedures to ensure compliance with the applicable rules.

AMC 138.320 Procedures for the carriage of restricted persons

Reserved.

GM 138.320 Procedures for the carriage of restricted persons

Carriage of restricted persons includes the carriage of deportees and other persons in custody. Restricted persons carried in an aerial work operation are aerial work passengers and need to be connected to the aerial work operation.

This regulation requires the operations manual to state whether the operator will carry restricted persons as part of their aerial work operations.

Where an operator states that they will carry restricted persons, operators need to consider specifying procedures in their operations manual[16] on how this will be accomplished.

As a minimum, the following procedures for carrying a restricted person on an aircraft are recommended to be considered by operators:

- procedures for dealing with notice from the Immigration Department that the carriage of a restricted person is required
- the aircraft type and cabin configuration
- the total number of passengers carried on board
- security arrangements for restricted person and escort
- communication of requirements to points of arrival

[16] Refer to paragraph 138.155(1)(h).

- limits on number of restricted persons to be carried on a flight
- provision of information to the aircraft crew
- actions to be taken by crew in event of in-flight incident involving restricted persons.

In developing their procedures, operators should also consider any applicable requirements of the *Aviation Transport Security Regulations 2005*.

5.8 Division 138.D.8—Instruments, indicators, equipment and systems

AMC 138.340 Head-up displays, enhanced vision systems and synthetic vision systems

Reserved.

GM 138.340 Head-up displays, enhanced vision systems and synthetic vision systems

Irrespective of whether an operator has gained operational credit for the use of HUD/EVS/SVS equipment, the regulation requires an operator to have procedures in place for this equipment (if fitted) to describe its use under the IFR or VFR at night.

These procedures will mitigate the risk of untrained flight crew using these systems, especially during component failure scenarios.

AMC 138.345 Survival equipment procedures

Reserved.

GM 138.345 Survival equipment procedures

The regulation applies to a flight in a remote area or when a life raft is required to be carried. The Part 91 MOS provides the definition of a ‘remote area'. The regulation requires the operations manual to include procedures for determining the survival equipment and pyrotechnic signalling devices required for the flight.

The onus is on the operator to assess the environments, locations, and circumstances in which they are operating and to decide what survival equipment is appropriate to be carried. The operations manual procedures should outline the factors and risks the operator will take into account when determining the specific items of survival and signalling equipment required to be carried on different kinds of flights or to different locations, or any other permutation assessed as relevant to the individual operator.

The relevant outcome-based provisions are in section 22.08 of the Part 138 MOS.

Appendix 1 of Annex 2 to the Chicago Convention, Rules of the Air, also contains some valuable information regarding pyrotechnic signalling devices. Certain signals have an internationally standardised meaning; for example, the following signals, when used either together or separately, mean that grave and imminent danger threatens, and immediate assistance is requested:

- rockets or shells throwing red lights, fired one at a time at short intervals

- a parachute flare showing a red light.

AMC 138.350 NVIS flights

Reserved.

GM 138.350 NVIS flights

There is a direction in force in relation to aerial work certificate holders and the approval required before conducting an NVIS operation for the first time in an aerial work operation. It is recommended that operators review section 23 of CASA EX72/24. The approval mentioned in this section of the exemption is taken to be a significant change due to it activating paragraph 138.012(d) of CASR. Operators are to apply for this approval by applying for a significant change via the Application - Aerial Work Operations (CASR Part 138) form available on CASA's website.

The legal interrelationship between CASR Parts 91, 133 and 138 results in a significant amount of duplicated NVIS content across the Part 91, 133 and 138 MOS's. This duplication requires a solid understanding of when the rules contained in a particular MOS apply to a particular kind of flight that where NVIS is used. Multi-Part AC 91-13, 133-09 and 138-06 contains guidance regarding the use of NVIS and section 2.3 of the AC is a detailed description of the application of the rules within the 3 MOS's.

The MOS content for this regulation is contained in Chapter 12 of the Part 138 MOS.

This regulation requires the operations manual to include procedures relating to the use of an NVIS for a flight under the IFR, or VFR at night, in accordance with the requirements prescribed by the Part 138 MOS.

For clarity, procedures should be tailored to the criticality and complexity of the specific role being performed. For example, if an observer on a search operation uses an NVIS as an aid to conduct a visual search without having any aircraft safety-related role, then procedures could be relatively simple. However, an air crew member using an NVIS to clear a rotorcraft landing into a confined area would be conducting a safety-critical role and, therefore, the associated training and operational procedures would need to be comprehensive.

Subsection 16.05(2) of the Part 138 MOS outlines requirements for the use of aeroplanes in NVIS firebombing, including a requirement to obtain an approval from CASA. Operators should be aware that CASA has issued Temporary Management Instruction (TMI) 05/2019 on this topic.

5.9 Division 138.D.9—Miscellaneous

There is a direction in force in relation to aerial work certificate holders and survival equipment procedures. It is recommended that operators review section 20 of CASA EX72/24.

AMC 138.370 Operator must conduct risk assessments

Reserved.

GM 138.370 Operator must conduct risk assessments

This regulation allows the Part 138 MOS to prescribe risk criteria that must be met before conducting an aerial work operation, as well as specify risk assessment and mitigation processes that an operator must follow. The regulation applies to both AWC holders and limited AWK operators.

Chapter 13 of the Part 138 MOS sets out the required components for risk assessments but leaves the actual processes and content of risk assessments for the operator to define relative to the operation in question. Risk assessments are scalable according to the nature, size, and complexity of the operation.

A risk assessment is performed to determine the magnitude of risk and to establish whether measures are needed to contain it within defined limits. Risk assessment does not represent an end in itself, but should inform mitigating actions that help limit risks to an acceptable or tolerable level. It is based on the evaluation of the following criteria:

- the severity/consequences of a hazard
- the likelihood of its occurrence
- tolerability of its effects.

Risk assessments are an integral part of aerial work operations, and pilots constantly assess risks. This regulation and its associated MOS provisions formalise the requirement for the operator and crew members to conduct risk assessments. Applicable personnel are to be trained by the operator on the operator's risk assessment processes for the various aerial work tasks that are being conducted.

CASA provides additional material on the conduct of risk assessments in the Safety management system kit - Booklet 3 - Safety Risk Management.

AMC 138.375 Wearing of seatbelts and other restraint devices

Reserved.

GM 138.375 Wearing of seatbelts and other restraint devices

Chapter 14 of the Part 138 MOS specifies requirements relating to seatbelts and restraint devices for all operators that conduct aerial work operations. Compliance with the requirements in the Part 138 MOS supersedes the requirement for the operator to comply with regulations 91.540, 91.550, 91.555, and 91.560.

AMC 138.380 Procedures in relation to frost etc.

Reserved.

GM 138.380 Procedures in relation to frost etc.

The basic requirements for flight in icing conditions and the responsibilities of the PIC are set out in regulations 91.705 and 91.710. These remain applicable to all Part 138 operations.

This regulation requires an operator to describe the following procedures in the operations manual:

- inspection of the aircraft prior to flight if frost or icing conditions exist
- removal and prevention of ice and frost prior to flight, and
- the use of aircraft equipment during flight in icing conditions.

If applicable, an operations manual must include policy, procedures and training relating to airframe and engine icing that are consistent with the relevant flight manual. Under no circumstances should the policy, procedure and training be less limiting than the flight manual limitations and guidance.

In Australia, ground icing is not often experienced; however, it is not uncommon for ice (in the form of hoar frost) to affect aircraft parked overnight in temperatures below zero degrees.

For operators who do not intend to conduct operations from aerodromes that are regularly exposed to ground icing, the operations manual should include a section that gives clear instructions for the operating crew to follow when ground icing conditions do occur. These instructions should, as a minimum, include:

- a statement that precludes aircraft operations when ground icing is present, e.g. 'Operations will not be conducted during icing conditions that could cause contamination to the external surfaces of an aircraft while the aircraft is on the ground'
- advice on conditions that will allow operations to commence
- precautions that must be taken prior to operations commencing.

Operators with operations in colder climates will need to evaluate and document appropriate company processes applicable to the removal of ice and snow. The successful treatment of ice and snow deposits on aircraft on the ground is an absolute necessity to the safety of winter operations.

The PIC has the responsibility to ensure compliance with the 'Clean Aircraft' concept. The ground de-icing crew share this responsibility by providing an aircraft that complies with the 'Clean Aircraft' concept.

Additional information is available in AC 138-04 - Aircraft ground de-icing and anti-icing operations[17].

AMC 138.385 Procedures in relation to polar operations

Reserved.

GM 138.385 Procedures in relation to polar operations

This regulation requires operators that conduct flights to or from an aerodrome within a polar region to include relevant procedures in their operations manual. A polar region is a defined term in the CASR Dictionary and is the area:

- north of 78° N

  or

- south of 60° S.

When developing the operations manual, the operator may also consider the applicability of the following for inclusion:

- suitability of the weather at any destination or nominated alternate and the ability to:
  - provide for the physiological needs of the AWK passengers and crew members for the duration of the stay at the diversion airport until safe evacuation
  - safely extract passengers and crew members from any diversion airport.
- Fuel freeze strategy and monitoring – Considerations to determine an alternate fuel freeze point temperature based on actual measurements of uploaded fuel in lieu of using the standard minimum fuel freeze temperatures for specific types of fuel used. In considering this item, the operator should have procedures established that require coordination between maintenance,

[17] At the time of publication of this document, this AC is under development. Once published, it will be available from the CASA website.

dispatch, and assigned flight crew members to convey the determined fuel freeze temperature of the fuel load on board the aircraft.

- Voice communications – Review of the required communications facilities (voice / data link) available for all portions of the flight route. Possible options include using HF voice, HF data link, satellite communication (SATCOM) voice, or SATCOM data link. Because of the limitations of VHF and satellite-based voice communications, ATC communications will probably require high frequency (HF) voice over portions of these routes. It is recognised that SATCOM may not be available for short periods during flight over the poles. Communication capability with HF radios may also be affected during periods of solar flare activity. The operator should consider predicted solar flare activity and its effect on communications for each flight that is dispatched for operations into these areas.
- Minimum Equipment List (MEL) considerations – The MEL may need amendment to cater for polar operations. Specific consideration is applicable to:
  - fuel quantity indicating system, including the fuel tank temperature indicating system
  - engines
  - automation systems (if fitted)
  - communication systems relied on by the flight crewmember to satisfy the requirement for communication capability
  - an expanded medical/survival kit.
- Training for flight crewmembers and operational support staff roles applicable to all parts of the polar operation.

The regulation requires the operations manual to detail processes and procedures for managing crew and passenger exposure to cosmic radiation during solar flare activity. In complying with the regulation, the operator could:

- specify a cosmic radiation exposure limit
- maintain records of the total cosmic radiation dose received by any crew who are conducting longer term operations in the polar region.

When considering cosmic radiation in the aviation environment, the basic principle is that every reasonable effort should be made to minimise exposure to cosmic radiation, staying as far below the recommend dose limits as is practical and consistent with the activity.

In aviation, radiation from natural sources is considered occupational exposure because of the high levels of galactic cosmic radiation at commercial cruise altitudes. In its 2000 report, the United Nations Scientific Committee on the Effects of Atomic Radiation (UNSCEAR) ranked aircrews as the fourth most exposed group of employees, with an average annual effective dose of three millisieverts (mSv).

Less radiation is received in lower-latitude flight because of the greater amount of radiation shielding provided by the Earth's magnetic field. This shielding is greatest near the equator and gradually decreases to zero as one goes north or south. Galactic cosmic radiation levels over the polar regions are about twice those over the geomagnetic equator at the same altitudes. Because solar particle peak energies are much lower than galactic particle peak energies, solar cosmic radiation dose rates are negligible near the geomagnetic equator. A map of high-latitude areas of concern is available on the FAA website.

The solar radiation alert system developed by the FAA's Civil Aerospace Medical Institute (CAMI), with data provided by the Space Weather Prediction Center of the National Oceanic and Atmospheric Administration (NOAA), alerts users of the beginning of a disturbance on the sun that can lead to high-dose rates of ionizing radiation in the earth's atmosphere. Solar radiation alerts are sent worldwide to subscribers to the NOAA Weather Wire Service (NWWS). A message is sent at the beginning and end of an alert, along with status updates during the alert period. A test message is sent daily if no alert is ongoing. Responding to an alert by flying at a lower altitude can significantly

reduce radiation exposure in high-latitude areas of concern. The latest space-weather-related NWWS messages are found on the Space Weather Prediction Center website.

The Australian Bureau of Meteorology also provides information on Space Weather advisories, and this can be found on the Space Weather Advisories (bom.gov.au) website.

Managing exposure

The internationally accepted recommendation is that that the occupational exposure limit for ionizing radiation is a five-year average effective dose of 20 mSv per year, with no more than 50 mSv in a single year. Radiation exposure as part of a medical or dental procedure is not subject to recommended limits. It is important to note that these limits are not thresholds beyond which the dose is intolerable, but instead are upper limits of acceptability based on the current risk coefficients and the desire to limit doses such that the health risks associated with exposure do not exceed those of what is normally considered a safe industry.

A number of web-based calculators are available for the calculation of radiation exposure.

For analysis purposes, the FAA provides applications CARI-6 and CARI-6M, which can be used to estimate the effective dose of galactic cosmic radiation.

No current programs and/or websites/applications are currently available for use in estimating the effective dose received from a solar particle event. The dose of ionizing radiation that an individual might receive during a solar particle event cannot be estimated in advance. Research is ongoing on how best to estimate flight doses based on satellite and ground-level measurements made during an event.

- CARI-6 – This web application calculates the effective dose of galactic cosmic radiation received by an individual (adult) on an aircraft flying a great-circle route between any two airports in the world. The web application takes into account changes in altitude and geographic location during the course of a flight, as derived from the flight profile entered by the user. Based on the date of the flight, appropriate databases are used to account for effects of changes in the Earth's magnetic field and solar activity on galactic radiation levels. The web application also calculates the effective dose rate from galactic cosmic radiation at any location in the atmosphere at altitudes up to 60,000 feet. CARI-6 can be found on the FAA website.
- CARI-6M – This web application does not require a great-circle route between origin and destination airports; it allows the user to specify the flight path by entering the altitude and geographic coordinates of waypoints. CARI-6M can be found on the FAA website.

5.10 Division 138.D.10—Rules for external load operations

AMC 138.400 Certain night operations prohibited unless operation is an emergency service operation or approved by CASA

Reserved.

GM 138.400 Certain night operations prohibited unless operation is an emergency service operation or approved by CASA

The regulation requires an external load operation at night to be an ESO, or alternatively the operator must hold an approval from CASA issued under regulation 138.025 for this purpose. This regulation applies to all AWK operations regardless of whether or not the operator holds an AWC authorising the operation.

AMC 138.410 Manual of Standards may prescribe requirements for external load operations

Reserved.

GM 138.410 Manual of Standards may prescribe requirements for external load operations

Definitions for the different classes of external load can be found in Division 2 of Chapter 1 of the Part 138 MOS.

The MOS content for this regulation is contained in Chapters 13 and 15 of the Part 138 MOS.

In considering the operations manual content for an operator conducting an external load operation, the operations manual should contain detailed external load instructions, procedures and requirements. Some of the matters that operators may wish to consider covering as part of their operations manual content include:

- specifications and descriptions of the external load equipment that must be used for the operation
- instructions on installing and checking the serviceability of the external load equipment on the aircraft
- normal and emergency procedures for the operation, including, procedures for normal and emergency external load picking up and dropping
- the minimum experience requirements for relevant flight crew members (FCMs)
- the training requirements and competency checking procedures for relevant FCMs
- instructions for ground personnel (if any) involved in the operation
- a description of the operational routes permitted for operations, including minimum heights and distances from persons, populous areas, public gatherings, buildings and other structures, and vessels
- a description of any operational restrictions (if any) with which FCMs must comply during the operation
- the operator's risk assessment procedures.

Carrying a load in the form of a person

In relation to the usages within the Class D external load rules of the term *person*, this term does not include a deceased person or human remains.

A Class D external load, where a human is carried external to the protection offered by the airframe, is an aerial work task with elevated risk exposure and therefore any operator conducting Class D external load operations will require comprehensive operational, risk management and training procedures for the specific tasks that they conduct.

> **Note:** Regulation 138.500 requires the pilot in command to have specific qualifications and experience, as outlined in section 23.08 of the Part 138 MOS.

Adding a new kind of Class D external load operation constitutes a mandatory significant change to the operator's operation in accordance with subparagraph 138.012(a)(vii) of CASR.

Some examples of different 'adding a Class D external load operation' are:

Example 1

An operator applies for an aerial work certificate and includes procedures for conducting Class A external load operations. When the aerial work certificate is granted and includes that external load operations can be conducted, this is limited to Class A external load operations.

The operator later desires to add Class B external load operations. Starting to conduct Class A, B, C or E external load operations are not listed as a mandatory significant change under CASR 138.012. Assuming the other elements of the significant change definition are not triggered, adding the Class B external load operation is not a significant change.

The operator adds the Class B external load procedures (and training/checking as required) to their operations manual and notifies CASA of the non-significant change in accordance with their change management procedures.

Example 2

An operator applies for an aerial work certificate and includes procedures for conducting Class A external load operations. When the aerial work certificate is granted and includes that external load operations can be conducted, this is limited to Class A external load operations.

The operator later desires to add Class D belly hook external load operations. Starting to conduct any kind of Class D external load operation is as a mandatory significant change under CASR 138.012.

The operator applies to CASA for the significant change. Assuming it is approved (noting this is not the same as being granted an approval that is a legal instrument), the operator can commence doing that kind of Class D external load (belly hook) but cannot do other kinds of Class D external load (winch, rappelling, hover exit / hover entry) without further significant change applications.

Example 3

An operator holds an aerial work certificate authorising external load operations and has procedures for conducting Class D external load (belly hook) operations.

The operator later desires to add Class D (hover entry / hover exit) external load operations. Starting to conduct a new kind of Class D external load operation is a mandatory significant change under CASR 138.012.

The operator applies to CASA for the significant change. Assuming it is approved (noting this is not the same as being granted an approval that is a legal instrument), the operator can commence doing that new kind of Class D external load (hover entry / hover exit) in addition to their existing Class D (belly hook) external load operations. They cannot do the other kinds of Class D external load (winch, rappelling) without further significant change applications.

Classes of person who may be picked up or set down

The following persons are the only persons who may be picked-up or set-down, and the picking up and setting down must be in accordance with the relevant section of the MOS:

- air crew members
- task specialists
- aerial work passengers.

However, it should be noted, except as prescribed, aerial work passengers cannot be a class D external load in all circumstances, for example winching operations in single engine or low

performance multi-engine rotorcraft. See the section below for the conditions under which air crew members or task specialists can be winched in single-engine rotorcraft or non-HOGE multi-engine rotorcraft.

Winching operations

For class D external load winching operations, the following considerations apply:

- the operator's operational risk assessment and mitigation process must indicate that the operation meets at least an acceptable level of safety, this will be verified by the operator's chapter 13 risk assessment procedures
- unless the operation is an ESO, if aerial work passengers are to be winched, the rotorcraft must be capable of hovering out of ground effect with one engine inoperative during the winching operation
- for a day VFR operation that is not an ESO, the rotorcraft need not be capable of hovering out of ground effect with one engine inoperative (this means that a single engine rotorcraft or non-HOGE multi-engine rotorcraft can be used), provided:
  - the requirements of paragraphs 9.05 (b), (c), (d) and (e) of the MOS are met
  - the rotorcraft has a mass that does not exceed 90% of the MTOW HOGE permitted by the AFM for the most limiting mass of the operation
  - unless subsection (2A) applies the operation is not over water
  - **only essential crew members** including task specialists are carried or to be winched
- for an operation which is an ESO, or training for an ESO, additional elevations and requirements are prescribed in paragraphs 15.06(2)(d) and (e) to ensure the flexibility and the safety of winching operations in these circumstances
- effective radio or visual communication processes must be in place for the winching operation.

Operators conducting winching operations should ensure these requirements as applicable to their operations are covered procedurally within their operations manuals.

Belly hook or platform

Division 1 of Chapter 15 of the Part 138 MOS covers carrying a person as an external load operation. Subsections 15.06(3) and (4) cover operations as a sling load or carrying a person on a platform attached to the aircraft (such as the platforms used to conduct power line maintenance from a rotorcraft). Subparagraph 15.06(3)(e)(iii) outlines that, except for water rescue operations, only air crew and task specialists (not aerial work passengers) can be carried on a belly hook (sling) or platform. This effectively limits platform operations to the carriage of persons who are crew members. In water rescue operations, air crew members, task specialists and aerial work passengers (in the form of the person being rescued) may be carried via the belly hook. Refer to section 1.04 of the Part 138 MOS for the definition of *water rescue operation*.

All crew must have an effective means of communication. Although visual communication is acceptable for the purpose of the regulation, for these kinds of operations it is generally expected that there would be a radiocommunications system. If this were inoperative, the operation would not commence or would cease if already in progress. Hand signals would normally only be used if the radiocommunication system fails, and these emergency hand signals should be confirmed with the crew prior to commencing operations.

While there are no legislative requirements regarding pilot minimums or training for Class D external load platform operations, this is an activity with substantial risk, particularly for the linesman on the platform, and requires a high level of pilot competence. Operators should consider their own operational environment in setting minimums for this activity in their company.

Rappelling

Rappelling is a highly specialised task and, as such, Subsection 15.06 (6) of the Part 138 MOS requires that it only be conducted by ESO personnel in an ESO, or training for an ESO.

An operator must have detailed procedures in their operations manual for such operations and associated training, including specific risk assessment and management procedures. It is also expected that the HOO (or another nominated senior pilot) will have extensive experience in conducting rappelling operations, as well as the ability to impart this knowledge to other pilots and the rappelling crew. Operators should also have a senior air crew member experienced in rappelling operations.

Hover exit / hover entry

> **Note**: In the paragraph below hover exit includes both emplaning and deplaning in the hover.

Operators will need procedures for the task, training and risk assessments in their approved operations manual. The Part 138 MOS also requires the air crew member, task specialist or aerial work passenger to have received hover exit training in accordance with the operator's operations manual.

Operations involving hover exit onto or off of a raised platform, such as a powerline transmission tower, are more specialised. As such, they require further specific procedures, training, and risk assessment. As these operations also require specialised safety harnesses with a means of safely attaching to the tower before releasing from the rotorcraft, with quick releases and break-away connectors, the procedures for use and the standards for these will also need to be included in the operator's operations manual.

Can single-engine rotorcraft be used during external load operations?

Single-engine rotorcraft can be used provided that the single-engine rotorcraft meets certain technical and operational requirements. The operator needs to carefully read the rules contained in Division 1 of Chapter 15 of the Part 138 MOS, including where the rules in that Division of the MOS require compliance with many elements of the rules in section 9.05 of the Part 138 MOS.

For example, if a person was to be carried on a belly hook in a single-engine rotorcraft, the conditions for this to occur include:

- turbine engine
- control of the aircraft to be able to be maintained in the event of a failure of the hydraulic system
- redundant means of controlling fuel flow to the engine
- a usage monitoring system
- a hook certified for the carriage of humans.

Examples of how these requirements may be applied in practice include:

- a Bell Longranger rotorcraft fitted with an aftermarket usage monitoring system would meet these requirements
- similarly, a Robinson R66 rotorcraft would also meet these requirements.

Operators should familiarise themselves with the 'Note' following paragraph 9.05(e) of the Part 138 MOS which was included in the MOS to remove any doubt regarding the suitability of the R66.

However, some single-engine/single-hydraulic rotorcraft would not meet the hydraulic failure related requirement (which is specified in paragraph 9.05(d) of the Part 138 MOS) due to the prohibition on hovering these aircraft hydraulics off in the aircraft flight manual. These rotorcraft would be required to be fitted with dual hydraulics to meet this capability requirement.

5.11 Division 138.D.11—Rules for dispensing operations

AMC 138.425 Manual of Standards may prescribe requirements for dispensing operations

Reserved.

GM 138.425 Manual of Standards may prescribe requirements for dispensing operations

The MOS content for this regulation is contained in Chapters 13 and 16 of the Part 138 MOS.

In considering the operations manual content for an operator conducting a dispensing operation, the operations manual should contain detailed dispensing instructions, procedures, and requirements. Some of the matters that operators may wish to consider covering as part of their operations manual content include:

- specifications and descriptions of the dispensing equipment that must be used for the operation
- instructions on installing and checking the serviceability of the dispensing equipment on the aircraft
- normal and emergency procedures for the operation of dispensing equipment
- the minimum experience requirements for relevant FCMs
- the training requirements and competency checking procedures for relevant FCMs
- instructions for ground personnel (if any) involved in the operation
- a description of the operational routes permitted for operations, including minimum heights and distances from persons, populous areas, public gatherings, buildings and other structures, and vessels
- a description of any operational restrictions (if any) with which FCMs must comply during the operation
- the operator's risk assessment procedures.

Subsection 16.05(2) of the Part 138 MOS outlines requirements for the use of aeroplanes in NVIS firebombing, including a requirement to obtain an approval from CASA. Operators should be aware that CASA has issued Temporary Management Instruction (TMI) 05/2019 on this topic.

For carriage of dangerous goods, refer to Part 92 of CASR.

5.12 Division 138.D.12—Rules for task specialist operations

AMC 138.430 Manual of Standards may prescribe additional requirements for task specialist operations

Reserved.

GM 138.430 Manual of Standards may prescribe additional requirements for task specialist operations

The definition of task specialist can be found in regulation 138.015.

Further requirements for task specialist operations, in particular aerial mustering and marine pilot transfer operations, can be found in Chapter 17 of the Part 138 MOS.

In considering the operations manual content for an operator conducting a task specialist operation, the operations manual should contain detailed instructions, procedures, and requirements. Some of the matters that operators may wish to consider covering as part of their operations manual content include:

- specifications and descriptions of any equipment that must be used for the operation
- instructions on installing and checking the serviceability of any equipment on the aircraft
- normal and emergency procedures for the operation and associated equipment
- the minimum experience requirements for relevant FCMs
- the training requirements and competency checking procedures for relevant FCMs
- instructions for ground personnel (if any) involved in the operation
- a description of the permitted operational routes for operations, including minimum heights and distances from persons, populous areas, public gatherings, buildings and other structures, and vessels
- a description of any operational restrictions (if any) with which FCMs must comply during the operation
- the operator's risk assessment procedures.

AMC 138.432 Possessing and discharging firearms

Paragraph 17.04(a) of the Part 138 Manual of Standards – possession and carriage of a firearm

The information in this section outlines acceptable means of compliance for the operator's written procedures for the safe on-board storage of the firearm and ammunition during the operation.

Note: The safe carriage of ammunition in connection with agricultural, horticultural, forestry, ice jam control, landslide clearance, pollution control activities or pest management activities is regulated by the provisions within Part 1;1.1.5 General Exceptions of the ICAO Technical Instructions for the Safe Transport of Dangerous Goods by Air (ICAO-TIs), or industry equivalent IATA Dangerous Goods Regulations. The ICAO-TIs are enacted into Australian legislation with Part 92.

The information in this section also encompasses the requirements of regulation 92.040 and subregulation 92.025(2) regarding the carriage of ammunition.

The written procedures must include the following information:

- that live ammunition (when not loaded in the firearm) must be stored in a container, or containers, that:
  - can withstand the normal conditions of air transport; and
  - are appropriately identified as dangerous goods, meaning the containers or packaging are marked with the UN number and/or proper shipping name and labelled with the applicable hazard division label diamond (e.g. Division 1.4S diamond); and
  - during the aerial work operation, any spare ammunition can be secured, including during take-off and landing, to minimise the possibility of ammunition spilling in the event of an incident or accident; and

> **Note:** The method of securely closing the container must be robust enough to withstand a reasonably high amount of force, noting the intent is to prevent ammunition spilling during an accident.

- the ammunition container(s) must be stowed and secured in the aircraft in a manner that will prevent any movement in flight which would change their orientation (i.e. restrained to hard points inside the aircraft that are within easy reach of the shooter or securely stowed in an internal compartment within the cabin); and
- the loading of the ammunition onto the aircraft must be supervised by the operator; and
- the dangerous goods (i.e. ammunition) must be:
  - under the control of trained personnel (i.e. the task specialist) during the time when they are in use on the aircraft; and
  - the ammunition is to be inspected for damage or leakage prior to loading; and
  - the ammunition may only be carried with the approval of the operator; and
  - the pilot in command is to be notified of the location where the ammunition is loaded on board the aircraft and, in the event of a crew change, this information must be passed on to the next crew; and
- all personnel must report any dangerous goods accident or dangerous goods incident (as defined within regulation 92.010) that occurs while undertaking company operations to CASA (in writing) within 2 working days of the event occurring, including those that occur during positioning flights requiring the carriage of ammunition for this operation (as per regulation 92.065); and
- for the carriage of ammunition as dangerous goods, pilots and other crew members must ensure that the ammunition:
  - does not include ammunition with explosive or incendiary projectiles; and
  - is limited to the quantities required for the operation being conducted; and
  - is limited to ammunition classified in:
    - » Division 1.4S (UN 0012 and UN 0014 only); or
    - » Division 1.4E (UN 0471 Articles, explosive, n.o.s. (bird scaring cartridges only)); or
    - » Division 1.4G (UN 0431 Articles, pyrotechnic (Bird scaring cartridges only) or UN 0312 Cartridges, signal (Bird scaring cartridges only)).

GM 138.432 Possessing and discharging firearms

This regulation allows the Part 138 MOS to prescribe requirements related to possessing and discharging firearms in flight. Subregulation 138.432 (4) states that the regulation applies despite

regulations 91.160, 91.165 and 91.190. This means the Part 91 provisions do not apply if the Part 138 MOS requirements are met.

Subsection 17.03(2) of the Part 138 MOS outlines the operator and the pilot in command of an aircraft in an aerial work operation must each ensure that a firearm is not possessed or carried on the aircraft, or discharged by any person while on the aircraft, unless the applicable requirements of Division 3 of Chapter 17 are complied with. These applicable requirements are outlined in sections 17.04, 17.05, 17.06, 17.07 and 17.07.

Section 17.06 outlines the requirements for the task specialist to discharge the firearm and specially outlines that the task specialist must:

- be authorised to carry, otherwise possess and discharge the firearm by a law of the Commonwealth, the State or the Territory
- have successfully completed a training course about the on-board storage, carrying, otherwise possessing, and discharging, of a firearm for the particular task specialist operation in the category of aircraft (aeroplane or helicopter) to be used in the operation.

This training must be based on a written syllabus and conducted either by:

- the operator, in accordance with a firearms possession and use training program set out in the operator's operations manual

  or

- an aerial platform shooting training organisation whose course is accredited for this purpose by an authority of a State or Territory.

Notes:

1. 'Accredited' in this sense is not limited to accreditation by the Australian Skills Quality Authority (ASQA) or the relevant State vocational training accreditation agencies (see the ASQA website).
2. Rather, when the word 'accredited' is used within paragraph 17.06(3)(b)(ii) of the Part 138 MOS, it is intended to mean a course which has been accepted as suitable by an authority of a State or Territory (such as the Parks and Wildlife authority, or the relevant police service, or other similar agency) for the training of the authority's personnel, or the training of the authority's contractors.
3. For the avoidance of doubt, the operator, during a CASA surveillance event, would need to be able to obtain evidence of this acceptance by the relevant authority.
4. An acceptance of a training course by such authorities cannot override the training course minimum requirements specified in section 17.06 of the Part 138 MOS.

Discharge of firearm during training

Section 17.06 and this required training course are both applicable requirements of Division 3 of Chapter 17, as outlined in subsection 17.03(2). As the training course must include training about the discharging of the firearm, any discharging of the firearm during this training is authorised under the applicable requirements outlined in subsection 17.03(2) and may be carried out as part of the training.

Subsection 17.07(3) of the Part 138 MOS requires that a person discharging a firearm from an aircraft be a task specialist, i.e. they cannot be an aerial work passenger. An operator will therefore need to ensure that these kinds of persons meet the requirements of the Division 138.P.2 regulations and Chapter 25 of the Part 138 MOS.

Division 3 of Chapter 17 of the Part 138 MOS applies to all operators that conduct aerial work operations, regardless of whether the operator holds an AWC. However, operators without an AWC

will not have an approved operations manual; accordingly, they will be unable to conduct the required training for any personnel. To ensure compliance with the regulatory requirements, a limited AWK operator will therefore need to send their shooters to an accredited aerial platform shooting training organisation, or an AWC holder approved to conduct such training, and use an organisation approved to conduct the relevant AWK pilot training to train pilots involved in these activities.

Ammunition

Ammunition is classified as dangerous goods. The carriage of ammunition on board an aircraft must therefore be in accordance with the requirements of Part 92 of CASR - Consignment and carriage of dangerous goods by air.

6 Subpart 138.F—Performance

There is an exemption in force in relation to Subpart 138.F and Subpart 91.F of CASR. The exemption effectively permits the use of the Part 138 performance requirements instead of the Part 91 performance requirements during a private operation conducted by an aerial work certificate holder in a large aeroplane or a rotorcraft. It is recommended that operators review section 13 of CASA EX72/24.

AMC 138.435 Take-off performance

Reserved.

GM 138.435 Take-off performance

The regulation enables the Part 138 MOS to prescribe requirements for take-off performance.

Chapter 18 of the Part 138 MOS contains three divisions in relation to this topic:

- Division 1 is applicable to large aeroplanes and requires compliance with Chapter 9 of the Part 121 MOS.
- Division 2 is applicable to rotorcraft (AWC holders only).
- Division 3 is applicable to all aircraft to which Divisions 1 and 2 do not apply.

Additional information is available on rotorcraft performance requirements in AC 133-01 - Performance class operations.

Obstacle assessment areas for aeroplanes required to comply with Chapter 9 of the Part 121 MOS

Operators of these aeroplanes are advised to also read the AMC/GM associated with regulations 121.395 and 121.420 in the Part 121 AMC/GM document, since those AMC and/or GM entries are associated with Chapter 9 of the Part 121 MOS.

For the purposes of applying the correct take-off performance requirements, where an aeroplane is modified by an STC that increases the MTOW to being greater than 5,700kg, the aeroplane operation must be in accordance with Chapter 9 of the Part 121 Manual of Standards irrespective of the actual take-off weight of the aeroplane.

Example

If a Model B200 Super King Air (Normal Category) is modified by an STC that increased the MTOW to >5,700kg, the performance data and performance requirements that apply are those of the increased MTOW as contained in Part 121 Manual of Standards Chapter 9.

One element of determining whether the performance requirements can be met, is the identification of the obstacle assessment area after take-off. This obstacle assessment area begins at the end of the take-off distance available at the aerodrome or, if a turn is scheduled before the end of the take-off distance available, the end of the take-off distance required for the take-off (see the definition of D in subsection 9.04(5) of the Part 121 MOS).

The width at the beginning of the obstacle assessment area is set by subsection 9.04(2) of the Part 121 MOS, or, if the transitional provision in subsection 9.04(5A) of the Part 121 MOS is being used, by subsection 12A of the old CAO 20.7.1B.

This width is not the same as the beginning width of an obstacle limitation surface (OLS) calculated by the operator of a certified aerodrome in accordance with the requirements of CASR Part 139. In a

case where the OLS width is less than the Part 121 obstacle assessment width, the operator and pilot in command are required to determine any obstacles outside the OLS width but within the Part 121 obstacle assessment width. This activity would be conducted in a similar manner to how an operator would determine the presence of obstacles which are relevant to an operation at an uncertified aerodrome.

For code 3 or 4 runways, the minimum OLS width is normally 180m, with some runways grandfathered at 90m. Below are some examples of the initial width of a Part 121 obstacle assessment area for potential Part 138 aeroplanes which have a wingspan less than 60m and therefore fit within paragraphs 9.04(2)(b) of the Part 121 MOS:

- A King Air 350 turboprop aeroplane has a wingspan of 17.65m. Its initial obstacle assessment width would be [(0.5 x 17.65) + 60] x 2 = 137.65m.
- A Challenger 604 business jet has a wingspan of 19.61m. Its initial obstacle assessment width would be [(0.5 x 19.61) + 60] x 2 = 139.61m.
- An ATR turboprop aircraft has a wingspan of 27.05m. Its initial obstacle assessment width would be [(0.5 x 27.05) + 60] x 2 = 147.05m.
- The Dash 8-400 turboprop has a wingspan of 28.4m. Its initial obstacle assessment width would be [(0.5 x 28.4) + 60] x 2 = 148.04m.

AMC 138.440 Landing performance

Reserved.

GM 138.440 Landing performance

The regulation enables the Part 138 MOS to prescribe requirements for landing performance.

Chapter 18 of the Part 138 MOS contains three divisions in relation to this topic:

- Division 1 is applicable to large aeroplanes.
- Division 2 is applicable to rotorcraft (AWC holders only).
- Division 3 is applicable to all aircraft to which Divisions 1 and 2 do not apply.

As with the take-off performance requirements, where an aeroplane is modified by an STC to increase the MTOW to greater than 5,700kg, the landing performance requirements are to be in accordance with Part 121 Manual of Standards chapter 9 irrespective of the actual take-off or landing weight of the aeroplane.

Additional information is available on rotorcraft performance requirements in AC 133-01 - Performance class operations.

7 Subpart 138.J—Weight and balance

There is an exemption in force in relation to Subpart 138.J and Subpart 91.J of CASR. The exemption effectively permits operators to use the Part 138 weight and balance requirements instead of the Part 91 weight and balance requirements during a private operation conducted by an aerial work certificate holder. It is recommended that operators review section 14 of CASA EX72/24.

AMC 138.450 Loading of aircraft

Reserved.

GM 138.450 Loading of aircraft

This regulation requires the operator and the PIC to ensure the aircraft is flown within weight and balance limits, as specified in the aircraft flight manual, throughout all stages of the flight.

Aircraft loading requirements prescribed by Subpart 138.J replace those prescribed by Subpart 91.J.

Section 5 of CAO 100.7 sets out requirements for aircraft load data sheets and loading systems. For further information, refer to Multi-Part AC 121-05, 133-04 and 135-08 - Passenger, crew and baggage weights.

AMC 138.460 Weight and balance documents

Reserved.

GM 138.460 Weight and balance documents

The MOS content for this regulation is contained in Chapter 21 of the Part 138 MOS.

8 Subpart 138.K—Equipment

AMC 138.465 Requirements relating to equipment

Reserved.

GM 138.465 Requirements relating to equipment

Operations under Part 138 require compliance with Subpart 91.K and the associated Part 91 MOS provisions. Refer to the Part 91 AMC/GM document.

The regulation empowers the Part 138 MOS to prescribe additional equipment to that specified in Part 91. Chapter 22 of the Part 138 MOS contains requirements applicable to a number of matters including:

- approval of equipment
- visibility and accessibility of equipment
- flight with inoperative equipment
- marine pilot transfers – usage monitoring system
- search lights and intercommunication system for aerial work operations at night
- survival equipment.

Visibility of installed equipment (section 22.04 of the Part 138 MOS)

Cockpits designed specifically for single-pilot operations need to be carefully assessed for adequacy of instrument visibly, interpretation and useability when being considered for use in training (including line training) and checking or testing operations, particularly in degraded visual cue operational situations.

Operators who operate aircraft with cockpits configured for single-pilot operations should conduct a risk assessment and if necessary, an in-flight assessment of the readability of analogue or EFIS based attitude and performance instrumentation critical for flight path management, before considering the use of the aircraft in line supervision, training, checking, or testing operations which require additional flight path monitoring by a second pilot.

In cases were adequate attitude and performance instrument readability from the non-command or training pilot seat is **not available or marginal**, training, check or PICUS flights may need to be limited to the VFR with the availability of an adequate visual cue environment to avoid the potential for hazardous flight path management issues arising.

Any risk assessment and/or flight assessment must ensure all information presented by the attitude and performance instrument package in the aircraft (including EFIS trend lines or other trend indicators) is able to be utilised by the training or check pilot or flight examiner operating from the non-command or training pilot seat for flight path monitoring.

Refer Part 138 MOS section 22.04 - Visibility and accessibility of pilot-operated equipment.

Serviceability of equipment (section 22.05 of the Part 138 MOS)

Any aircraft equipment required by the Part 138 MOS must be serviceable unless:

- a provision in the Part 138 MOS allows otherwise

  or

- the defect has been approved as a permissible unserviceability.

Note: CASA advises operators that it will not be using this permissible unserviceability provision to vary operational MOS equipment requirements. This provision was originally inserted arising from MELs under the pre 2 December 2021 rules being legally categorised as a group of permissible unserviceabilities. However, as MELs are now legally enabled by Subpart 91.Y of CASR, this provision within section 22.05 relating to permissible unserviceabilities is no longer needed and is intended to be deleted at a future Part 138 MOS amendment opportunity.

An aircraft MEL must not allow an aircraft to be dispatched with any equipment required by the MOS unserviceable unless the MOS permits the operation of the aircraft with the equipment unserviceable. Any conditions and/or time limits provided in the MOS for operating with certain equipment unserviceable should be provided for in the aircraft MEL and be the equivalent of, or more restrictive than the master minimum equipment list (MMEL) or the MOS requirements.

Usage monitoring system (UMS)

The UMS should fulfil at least the requirements of this subsection. The following data should be recorded:

- date and time of recording, or a reliable means of establishing these parameters
- amount of flight hours recorded during the day plus total flight time
- N1 (gas producer RPM) cycle count
- N2 (power turbine RPM) cycle count (if the engine features a free turbine)
- turbine temperature exceedance: value, duration
- power-shaft torque exceedance: value, duration (if a torque sensor is fitted)
- engine shafts speed exceedance: value, duration.

Data storage of the above parameters, if applicable, should cover the maximum flight time in a day, and not less than 5 flight hours, with an appropriate sampling interval for each parameter.

The system should include a comprehensive self-test function with a malfunction indicator and a detection of power-off or sensor input disconnection.

A means should be available for the download and analysis of the recorded parameters. Download frequency should be sufficient to ensure data are not lost through overwriting.

The analysis of parameters gathered by the UMS, the analysis methodology and the frequency of such analysis should be described in the operator's exposition UMS management procedures, and any subsequent maintenance actions generated by that analysis must be described in the aircraft's maintenance documentation.

The data should be stored in an acceptable form and accessible to CASA for at least 24 months.

Where a Full Authority Digital Engine Control (FADEC) system is already being used to record some of the parameters described in this subsection, it is not intended that recording of those parameters are duplicated with an alternative device.

For rotorcraft which do not have installed UMS, off-the-shelf products such as an airborne image recording system (AIRS) with the capability to record, store and which permit the download and analysis of the parameters outlined above (as applicable to the rotorcraft), may be suitable for this task.

Where an AIRS is used to meet the UMS requirements, operators need to be aware of the limitations relating to such devices that are contained in Part IIIB Protection of CVR (Cockpit Voice Recording) Information of the Civil Aviation Act. To be able to use an AIRS to satisfy the UMS requirements

without contravening this Part of the Civil Aviation Act, the images recorded of the flight deck would need to be limited to images of the instrument panel only. Any images of persons on the flight deck would need to be limited to transient images only (for example, a hand adjusting the QNH on an altimeter). Any recording of ambient flight deck sounds would need to be disabled (if the AIRS has this function) so that the information recorded does not constitute CVR information[18].

Any UMS to be utilised in aerial work operations, must remain, a reliable, accurate, comprehensive and continuously operating system and paragraph 22.06 of the Part 138 MOS requires the data to be downloaded and safely stored by the operator for use in managing the aircraft's continuing airworthiness requirements.

[18] Note that the phrase CVR information is defined in section 32AN of the Act, and that the term CVR or cockpit voice recording is also defined in section 32AO of the Act. Note that the definition of CVR is used solely within Part IIIB of the Act and this definition does not legally apply to the mentions of CVR in the regulations and manuals of standards.

9 Subpart 138.N—Flight crew

For operators with crew members who were trained and checked prior to the commencement of Parts 91, 121, 133, 135 and 138 of CASR on 2 December 2021, where the operator did not take advantage of the exemption contained in Part 10 of the now repealed CASA EX87/21 or contemporary CASA EX73/24, CASA has issued training and checking determination instruments to ensure that the previously completed training and checking of crew members is legally taken to be equivalent to the new training and checking event requirements. For Part 138, the relevant instrument is CASA 94/21.

There are exemptions in in force in relation to the training and checking of crew members. These exemptions apply to certain operators. It is recommended that operators review Part 10 of CASA EX73/24.

In May 2024, CASA announced that operators who were using the exemptions in Part 10 of the then CASA EX87/21 (now CASA EX73/24) to defer compliance with the new Part 138 training and checking requirements needed to submit documentation to CASA by the end of 31 August 2024 associated with their compliance with these requirements and implement their new procedures by the end of 28 February 2025, unless otherwise advised by CASA.

For these operators, the exemption CASA EX79/24 provides a mix of permanent recognition of prior training events and temporary recognition of prior checking events.

Exemptions are also in force relating to Miscellaneous dropping operations. These exemptions apply to the pilot in command for certain types of dropping operations from an aircraft in flight below 500 ft, that do not include an operation involving spraying or broadcasting any substance. It is recommended that pilots and operators review Part 16 of CASA EX32/24.

There is a Part 11 direction in force in relation to crew members carrying out audits, checks, examinations etc. Operators and pilots are advised to review section 9 of CASA EX67/24.

AMC 138.475 Composition, number, qualifications and training

Reserved.

GM 138.475 Composition, number, qualifications and training

Chapter 23 of the Part 138 MOS specifies requirements for flight crew member training and checking.

Before commencing duty in an aerial work operation, the FCM is required to complete training and an initial proficiency check of competency carrying out the operator's standard procedures, such as duties associated with the operation and relevant operating aircraft. Competency is required to be periodically re-checked in accordance with the Part 138 MOS.

A FCM is also required to demonstrate general emergency competency at least once every 12 months. If life rafts are required to be carried, a check in ditching procedures and the use of life rafts at least once every three years is required. Initial life jacket, life raft and underwater escape training and checking (where these are required) must be done as practical in-water activities. However, except for recurrent training and checking in underwater escape, recurrent training and checking does not need to include in-water practical training and checking.

For any training or competency assessment that an individual is to rely upon for the issue or revalidation of a Part 61 qualification, the person conducting the training and assessment must meet the relevant Part 61 requirements.

For more information on training and checking, refer to Multi-Part AC 119-11 and 138-02 - Training and checking systems.

The guidance above for regulation 138.010 references the overlap between Part 137 aerial application operations (in aeroplanes) and Part 138 dispensing operations. The requirement to hold an aerial application rating for operations under both Parts is in Part 61 (Flight crew licensing). Part 61

operates independently of both Part 138 and Part 137 and applies to 'aircraft' (rather than aeroplanes as is the case for Part 137).

The privileges of an aerial application rating are outlined in regulation 61.1090 as: 'The holder of a pilot licence with an aerial application rating is authorised to conduct aerial application operations below 500 ft AGL. There is no change to the Part 61 requirements post 2 December 2021.

AMC 138.480 Training for new or inexperienced flight crew members

Reserved.

GM 138.480 Training for new or inexperienced flight crew members

This regulation requires each operator's operations manual to specify what training, induction, and qualification items must be completed prior to any new or inexperienced FCM being assigned to duty on an aircraft.

This does not prevent a new FCM from being assigned to conduct a duty under training on an aircraft as part of an induction program. The operations manual would be expected to clearly outline what ground events must be conducted prior to flight events, and what flight training events would be conducted prior to an FCM being released for line duties (e.g. a duty that is not part of the training and checking sequence of events).

AMC 138.485 Competence

Reserved.

GM 138.485 Competence

This regulation requires an operator to conduct an assessment in accordance with its operations manual as to whether an FCM is competent to perform the duty assigned to them regardless of whether the operator has a training and checking system.

These regulations are not meant to be a one-size-fits-all set of regulations, and it is imperative that operators formulate their own specific set of equal or better standards after thorough assessment of their operational characteristics.

Part 61 and its respective MOS stipulate minimum competency standards for holders of pilot licences and ratings. An operator is required to ensure that the competence of their flight crew operating under Part 138 is at least at this level.

An operator's training and checking system, if required, will have mechanisms for training and checking to the required competencies for each flight crew member in relation to the duty they are to perform.

The operator can elect to include role-based competencies that are above the standard flight crew licensing standards.

AMC 138.490 Assignment to duty of pilot in command

An acceptable means of compliance for this requirement would be for the assignment of the PIC to be annotated on the crew member roster, the published crew list and crew declaration forms for the flight.

GM 138.490 Assignment to duty of pilot in command

This regulation sets out the requirement for the operator to have a procedure in place that determines who the PIC for the flight is before commencement.

In the event that an operator plans to change the PIC during a flight, the operations manual must provide detail on how this is achieved and how the change in command is recorded. There can only ever be one person filling the position of PIC at a given point in time, and flight records/logs should clearly show when a change of PIC takes place.

AMC 138.500 Qualification as pilot in command

Reserved.

GM 138.500 Qualification as pilot in command

Sections 17.02 and 23.08 of the Part 138 MOS specify additional qualifications and experience required for particular aerial work tasks.

An operations manual must contain a process for determining compliance with the Part 61 requirements for a particular aerial work operation. There should be a list of items for a particular flight or operation. This list should include, but is not limited to, the following matters:

- PPL, CPL or ATPL for the aircraft category (refer to regulation 138.475)
- class or type rating
- flight review appropriate to the aircraft class or type in the type of operation contemplated
- low-level rating and flight review
- sling, winch, or mustering endorsement on a low-level rating
- aerial application rating with appropriate endorsements and proficiency check
- instrument rating and proficiency check
- NVIS rating and proficiency check
- night VFR rating and flight review
- any recency requirements for the above matters.

AMC 138.505 Training and checking to be conducted by certain persons

Section 23.10 of the Part 138 Manual of Standards – Requirements for individuals conducting training and checking

This AMC applies to a circumstance where an aerial work certificate holder elects to conduct training and/or checking events in a foreign country using a foreign training organisation.

For this kind of operator, it is an acceptable means of compliance with the requirements of section 23.10 if:

- the national aviation authority of the foreign State (the NAA) has approved the training organisation to conduct the required training and/or checking; and

- the training organisation has a system under which successful completion of the competency checking is certified on the training organisation's relevant checking form by an employee of the training organisation who is also a delegate of the NAA for certifying flight crew competency of the kind checked; and
- the operator's operations manual includes the details of the training organisation's syllabus and completion standards for the training and/or checking event(s); and
- the foreign State is one recognised by CASA for the purposes of foreign flight simulators under regulation 61.010.

Note:

1. At the time of issuing v2.6 of this AMC/GM document, the foreign States of Canada, Hong Kong (Special Administrative Region of China), New Zealand, the United States of America, Belgium, Czech Republic, Denmark, Finland, France, Germany, Ireland, Italy, the Netherlands, Norway, Portugal, Spain, Sweden and Switzerland are specifically listed as being within the definition of recognised foreign State in regulation 61.010.

2. At the time of issuing v2.6 of this AMC/GM document, the foreign States of Austria, Bulgaria, Croatia, Cyprus, Estonia, Greece, Hungary, Iceland, Latvia, Liechtenstein, Lithuania, Luxembourg, Malta, Poland, Romania, Slovakia, Slovenia and the United Kingdom were prescribed for the purposes of the definition of recognised foreign State in regulation 61.010 by CASA 69/20 — Prescription and Approval of Recognised Foreign States Instrument 2020.

3. At the time of issuing v2.6 of this AMC/GM document, the foreign State of Japan was prescribed for the purposes of the definition of recognised foreign State in regulation 61.010 by CASA 11/25 — Prescription of Japan as a Recognised Foreign State Instrument 2025.

4. At the time of issuing v2.6 of this AMC/GM document, the foreign State of Singapore was prescribed for the purposes of the definition of recognised foreign State in regulation 61.010 by CASA 38/22 — Prescription and Approval of Singapore as a Recognised Foreign State Instrument 2022.

GM 138.505 Training and checking to be conducted by certain persons

Nomination of training / checking personnel

The regulation and Division 3 of Chapter 23 of the Part 138 MOS set out the requirements for an individual to conduct training and checking activities. One of the requirements is that an individual must be nominated in writing unless one of the exceptions listed in the MOS is applicable to the person intended to be used to conduct the training or checking activity[19].

If a nomination is required to be made, it must be made by an entry in the operator's operations manual, or a document provided by the operator to CASA, and state that the individual meets the requirements[20].

The intent of this provision is that, regardless of which notification method is used, either document is considered to be part of an operator's operations manual. However, to remove any confusion on the submission format, the MOS makes it clear that the operator may elect to use a simple nomination form rather than requiring submission of the complete operations manual.

19 Paragraph 23.10(2)(d) and subsection 23.10(4) of the Part 138 MOS

20 Subsection 23.10(3) of the Part 138 MOS

As with any change for an operator, the nomination of an individual to training and checking duties should be considered against the definition of significant change[21] and the operator's management of change procedure. For most nominations this would NOT be considered as a significant change.

Note: Operators should particularly review paragraphs 138.012 (c) and (d).

For example, an operator could maintain a list of the authorised training and checking individuals. When a change to the nominated individuals occurred, the new list could be attached to the significant change / non-significant change CASA form[22]. As with any change notification, the change to the document should be clearly identified.

Example Form

Table 7: Sample Aviation –Training and Checking Personnel – Part 138 Operations

Name	ARN	Aircraft type	Authorised duties
Hawk	456712	B200	Flight crew line training and line checks
Goose	123456	B200	All training and checking duties
Finch	562389	B200 Eurocopter AS350	General emergency training
Sparrow	987654	All	Flight crew proficiency checks Part 61 Flight Examiner duties
Bird	563489	All	Air crew member training and checking duties

21 regulation 138.012

22 The significant change form is the Application - Aerial Work Operations (CASR Part 138) form. The non-significant change form is the Notification - Non-significant changes (CASR Parts 119, 131 and 138) form. Refer also to Multi-Part AC 119-07 and 138-03 – Management of change for air transport and aerial work operators

10 Subpart 138.P—Air crew members and task specialists

For operators with crew members who were trained and checked prior to the commencement of Parts 91, 121, 133, 135 and 138 of CASR on 2 December 2021, where the operator did not take advantage of the exemption contained in Part 10 of the now repealed CASA EX87/21 or contemporary CASA EX73/24, CASA has issued training and checking determination instruments to ensure that the previously completed training and checking of crew members is legally taken to be equivalent to the new training and checking event requirements. For Part 138, the relevant instrument is CASA 94/21.

There are exemptions in in force in relation to the training and checking of crew members. These exemptions apply to certain operators. It is recommended that operators review Part 10 of CASA EX73/24.

In May 2024, CASA announced that operators who were using the exemptions in Part 10 of the then CASA EX87/21 (now CASA EX73/24) to defer compliance with the new Part 138 training and checking requirements needed to submit documentation to CASA by the end of 31 August 2024 associated with their compliance with these requirements and implement their new procedures by the end of 28 February 2025, unless otherwise advised by CASA.

For these operators, the exemption CASA EX79/24 provides a mix of permanent recognition of prior training events and temporary recognition of prior checking events.

There is a Part 11 direction in force in relation to crew members carrying out audits, checks, examinations etc. Operators and pilots are advised to review section 9 of CASA EX67/24.

10.1 Division 138.P.1—Air crew members

AMC 138.535 Application of Division 138.P.1

Reserved.

GM 138.535 Application of Division 138.P.1

This Division applies to air crew, if carried, and does not include flight crew members as defined in the CASR Dictionary.

AMC 138.540 Composition, number, qualifications and training

Reserved.

GM 138.540 Composition, number, qualifications and training

Chapter 24 of the Part 138 MOS specifies air crew member training and checking requirements.

Before commencing duty in an aerial work operation, an air crew member is required to complete training and an initial proficiency check of competency carrying out the operator's standard procedures, such as duties associated with the operation and relevant operating aircraft. Competency is required to be periodically re-checked in accordance with the Part 138 MOS.

An air crew member is also required to demonstrate general emergency competency at least once every 12 months. If life rafts are required to be carried, a check in ditching procedures and the use of life rafts at least once every three years is required. Initial life jacket, life raft and underwater escape training and checking (where these are required) must be done as practical in-water activities.

However, except for recurrent training and checking in underwater escape, recurrent training and checking does not need to include in-water practical training and checking.

AMC 138.550 Training and checking to be conducted by certain persons

Reserved.

GM 138.550 Training and checking to be conducted by certain persons

Nomination of training / checking personnel

The regulation and Chapter 24 of the Part 138 MOS set out the requirements for an individual to conduct training and checking activities. One of the requirements is that an individual must be nominated in writing[23]. The nomination must be made by an entry in the operator's operations manual, or a document provided by the operator to CASA, and state that the individual meets the requirements[24].

The intent of this provision is that, regardless of which notification method is used, either document is part of an operator's operations manual. However, to remove any confusion on the submission format, the MOS makes it clear that the operator may elect to use a simple nomination form rather than requiring submission of the complete operations manual.

As with any change for an operator, the nomination of an individual to training and checking duties should be considered against the definition of significant change[25] and the operator's management of change procedure. For most nominations this would NOT be considered as a significant change.

Note: Operators should particularly review paragraph 138.012 (c) and (d).

For example, an operator could maintain a list of the authorised training and checking individuals. When a change to the nominated individuals occurred, the new list could be attached to the significant change / non-significant change CASA form[26]. As with any change notification, the change to the document should be clearly identified.

Example Form

Table 8: Sample Aviation –Training and Checking Personnel – Part 138 Operations

Name	ARN	Aircraft type	Authorised duties
Hawk	456712	B200	Flight crew line training and line checks
Goose	123456	B200	All training and checking duties
Finch	562389	B200 Eurocopter AS350	General emergency training

23 paragraph 24.03(2)(d) of the Part 138 MOS

24 subsection 24.03(3) of the Part 138 MOS

25 regulation 138.012

26 Refer also to Multi-Part AC 119-07 and 138-03 – Management of change for air transport and aerial work operators

Sparrow	987654	All	Flight crew proficiency checks Part 61 Flight Examiner duties
Bird	563489	All	Air crew member training and checking duties

10.2 Division 138.P.2—Task specialists

AMC 138.575 Application of Division 138.P.2

Reserved.

GM 138.575 Application of Division 138.P.2

A task specialist is a crew member who carries out a function related to the aerial work operation in flight. Examples of a task specialist would include a camera operator in an aerial filming operation, or a shooter in an aerial culling operation. A task specialist does not have a safety-related role for the flight of the aircraft, as distinct from an air crew member.

Where there is doubt as to whether someone is or is not a task specialist, the Part 138 MOS may prescribe a person to be either included or excluded from the definition of task specialist. Refer to section 3.02 of the Part 138 MOS.

AMC 138.580 Qualifications and training

Reserved.

GM 138.580 Qualifications and training

Chapter 25 of the Part 138 MOS provides operators with scalable, outcome-based training and checking requirements appropriate to the size and complexity of their operations.

Where an aerial work operator carries a task specialist, the operator's operations manual will need to describe how they train that person to ensure that they are competent in carrying out the normal, abnormal, and emergency procedures relevant to the task specialist role.

The operator will also need to describe who will conduct the training and checking of the task specialist, and what the minimum qualifications are for a person to fulfil the role of a task specialist trainer and/or checking person

In the simplest of operations, it may be possible to conduct the training and checking as part of a pre-flight briefing by the PIC, provided the pilot is satisfied that the briefing can adequately cover the relevant procedures and the task specialist is competent to carry them out.

AMC 138.590 Training and checking to be conducted by certain persons

Reserved.

GM 138.590 Training and checking to be conducted by certain persons

Reserved.