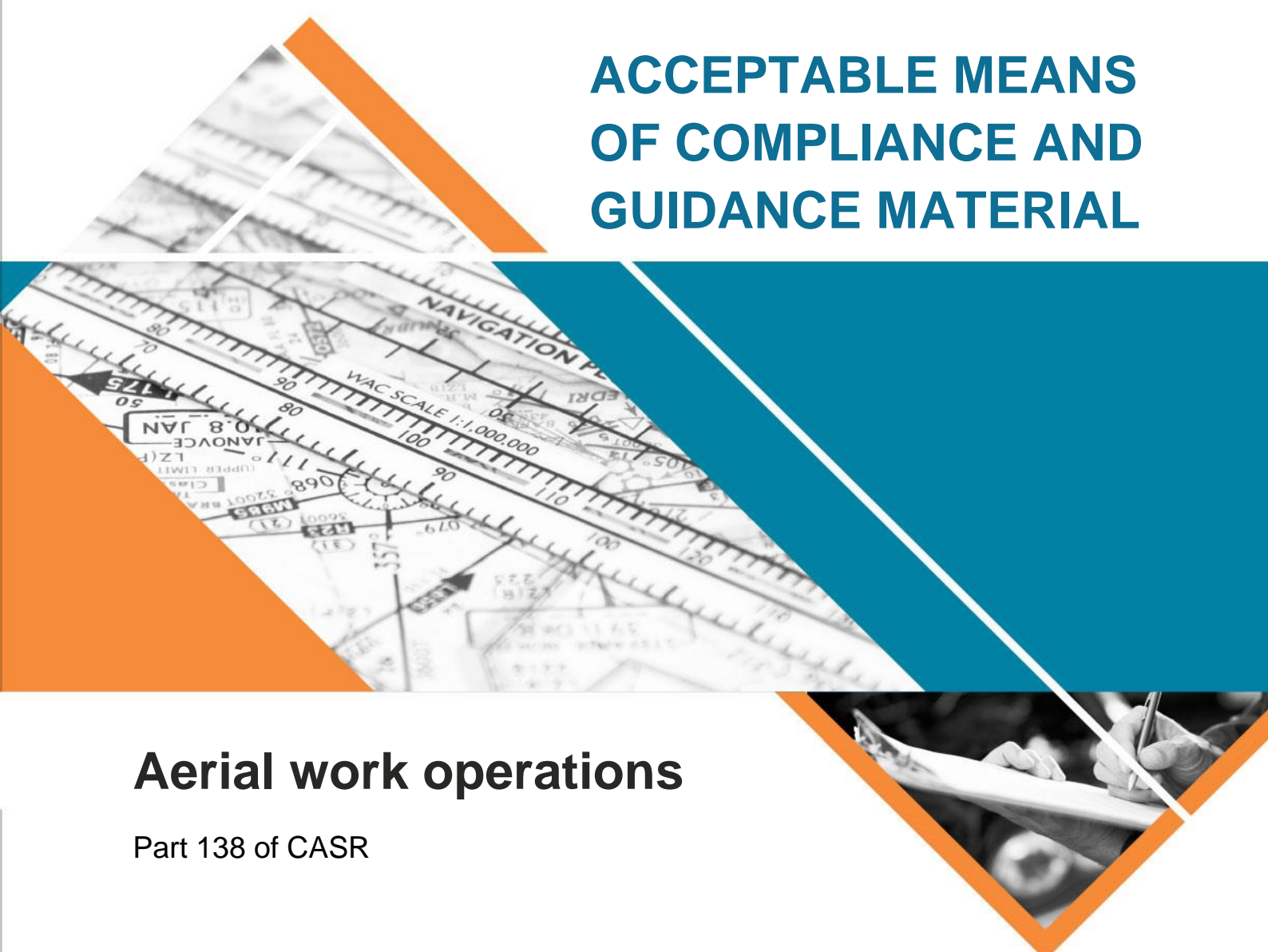




ACCEPTABLE MEANS OF COMPLIANCE AND GUIDANCE MATERIAL



Aerial work operations

Part 138 of CASR

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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

1	Reference material	5
1.1	Acronyms	5
1.2	Definitions	6
1.3	References	6
2	Subpart 138.A—Preliminary	9
3	Subpart 138.B—Certification	16
3.1	Division 138.B.1—Requirement for certification for certain operations	16
3.2	Division 138.B.2—Aerial work certificates	16
3.3	Division 138.B.3—Changes relating to aerial work operators	19
3.4	Division 138.B.4—Organisation and personnel	21
3.5	Division 138.B.5—Training and checking	37
3.6	Division 138.B.6—Safety management system	39
3.7	Division 138.B.7—Personnel fatigue management	40
3.8	Division 138.B.8—Operations manuals	40
3.9	Division 138.B.9—Records and documents	41
3.10	Division 138.B.10—Miscellaneous	43
4	Subpart 138.C—General	46
4.1	Division 138.C.1—General flight limitations	46
4.2	Division 138.C.2—Operational documents	47
4.3	Division 138.C.3—Flight related documents	49
4.4	Division 138.C.4—Reporting and recording defects and incidents etc.	49
4.5	Division 138.C.5—Search and rescue services and emergency and survival equipment	50
4.6	Division 138.C.6—Miscellaneous requirements	50
5	Subpart 138.D—Operational procedures	51
5.1	Division 138.D.1—Operational control	51
5.2	Division 138.D.2—Flight preparation	51
5.3	Division 138.D.3—Flight planning	51
5.4	Division 138.D.4—Flight rules	52
5.5	Division 138.D.5—Take-offs and landings	52
5.6	Division 138.D.6—Fuel requirements	53
5.7	Division 138.D.7—Carriage of passengers or cargo	55

5.8	Division 138.D.8—Instruments, indicators, equipment and systems	57
5.9	Division 138.D.9—Miscellaneous	58
5.10	Division 138.D.10—Rules for external load operations	63
5.11	Division 138.D.11—Rules for dispensing operations	65
5.12	Division 138.D.12—Rules for task specialist operations	66
6	Subpart 138.F—Performance	69
7	Subpart 138.J—Weight and balance	70
8	Subpart 138.K—Equipment	71
9	Subpart 138.N—Flight crew	72
10	Subpart 138.P—Air crew members and task specialists	77
10.1	Division 138.P.1—Air crew members	77
10.2	Division 138.P.2—Task specialists	79

Status

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

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

Version	Date	Details
v2.2	December 2021	Added references to additional exemptions incorporated into EX86/21 by EX151/21. Added reference to the exemption and transitional approvals arising from CASA EX161/21. Added more advisory material to the References section.
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.

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	<i>Civil Aviation Regulations 1988</i>
CASA	Civil Aviation Safety Authority
CASR	<i>Civil Aviation Safety Regulations 1998</i>
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
MEL	minimum equipment list
MOS	Manual of Standards
MTOW	maximum take-off weight
NVIS	night vision imaging system
PED	portable electronic device

Acronym	Description
PIC	pilot in command
SM	Safety Manager
SMS	safety management system
SVS	synthetic vision systems

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.

Term	Definition
aerial work operation	Refer to regulation 138.010 .
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. Note: This definition is from the CASR Dictionary.

1.3 References

Legislation

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

Document	Title
Civil Aviation Act	Civil Aviation Act 1988 (the Act)
Civil Aviation Safety Regulations	Civil Aviation Safety Regulations 1998 (CASR)
Part 91 of CASR	General operating and flight rules
Part 91 MOS	Part 91 (General operating and flight rules) Manual of Standards 2020
Part 119 of CASR	Australian air transport operators—certification and management
Part 121 of CASR	Australian air transport operations—larger aeroplanes

Document	Title
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
CASA EX81/21	Part 91 of CASR - Supplementary Exemptions and Directions Instrument 2021
CASA EX86/21	Part 138 and Part 91 of CASR - Supplementary Exemptions and Directions Instrument 2021
CASA EX87/21	Flight Operations Regulations - SMS, HFP&NTS and T&C Systems - Supplementary Exemptions and Directions Instrument 2021
CASA EX161/21	Miscellaneous Flight Operations Exemptions and Approvals (Transitional) Instrument 2021

Advisory material

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

Document	Title
AC 1-01	Understanding the legislative framework
AC 1-02	Guide to the preparation of expositions and operations manuals
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
AC 91-28	Crew safety during turbulence
AC 121-05, 133-04 and 135-08	Passenger, crew and baggage weights
AC 133-01	Performance class operations
AC 133-02	Performance Class 2 with exposure operations
AC 133-03	Performance Class 3 operations over populous areas
AC 138-01	Part 138 Core concepts

Document	Title
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.
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
Part 138 AMC/GM	Acceptable means of compliance and guidance material - Aerial work operations
VFRG	Visual flight rules guide

Other material

International Civil Aviation Organization (ICAO) documents are available for purchase from <http://store1.icao.int/>

Document	Title
AIP	Australian Aeronautical Information Publication
ATSB AR-2008-044(1)	A pilot's guide to staying safe in the vicinity of non-controlled aerodromes

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 EX86/21.

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 EX81/21.

AMC 138.005 Application of Part 138

Reserved

GM 138.005 Application of Part 138

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. 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.

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.

This is a relief provision of last resort and should 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.

Subregulation 138.010 (5) provides that some operations are not considered to be aerial work operations. Some operations are specifically mentioned in the subregulation but additional kinds of operations are specified in section 3.01 of the Part 138 MOS.

Glider towing is not an external load operation and is regulated by Part 149.

Parachuting operations are not a dispensing operation and are regulated by Part 105.

Refer to regulation 138.030 for guidance on limited aerial work operations (that is, aerial work operations conducted without an aerial work certificate).

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 will automatically transition 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.

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 EX86/21.

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

All changes to an aerial work operator's operations 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 approved¹ 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 three overarching kinds of aerial work operations that an operator is authorised to conduct under their AWC is a significant change.

Part of the definition of 'significant change' (paragraph 130.012(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.

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

¹ Refer to regulation 138.062.

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 138-03 - Management of change for aviation organisations](#), 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. 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 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 many 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

This regulation authorises CASA to issue approvals under Part 138 where a provision of Part 138 or the Part 138 MOS makes reference to a CASA approval. All approvals granted by CASA under Part 138 are subject to the procedural requirements of Part 11. This requires CASA to have regard to the safety of air navigation.

Approvals applicable to the experience levels of the Head of Operations (HOO) and Head of Training and Checking (HOTC) will only be granted if this preserves a level of aviation safety that is at least acceptable.²

² Refer to subregulation 11.055(1B).

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 remuneration 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

Reserved

AMC 138.040 Issue of aerial work certificate

Reserved

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 EX86/21.

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.

Notably, this regulation restricts operators from allowing the Safety Manager (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 provide for the issuance of an approval for CEO/SM or HOO/SM to be combined in unforeseen circumstances where the combination will be for more than seven consecutive days and authorises CASA to issue an

approval for such an arrangement. It is more likely for this approval to be considered for small/non-complex operators than for large/complex operators.

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.

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.

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 EX86/21.

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

Operators are able to gain approval for an individual to perform the duties of a key person when they are absent or unavailable. Approval of such a person is a significant change. However, the operator also gains flexibility to continue operations without significant disruption in the case of absence of a key person. The individual is often a deputy to the key person or is known as an alternate, i.e. alternate/standby HOO etc. Such an individual is

required to be listed in the operations manual.³ 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 aviation organisations](#) 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.

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.

AMC 138.064 CASA Approval of significant changes

Reserved

³ Refer to subparagraph 138.155(1)(e)(iv).

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 aviation organisations](#).

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*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 sets out CASA's requirements for key personnel. The listing of key personnel in this subsection does not mean that every operator has to provide a different person for each named post. The section details the responsibilities and accountabilities of each key person post, not the individual post holder. This means that one 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 regulation to mandate any additional structures, resources or processes in excess of those needed to fulfil the requirement. 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.

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.

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

There is an exemption in force in relation to subregulation 138.075 (1) that changes the number of days in the subregulation from 30 to 35 days to align with similar regulations in other CASR parts. It is recommended that operators review section 5 of CASA EX86/21.

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 beyond 35 days⁴. It does not refer to their physical presence at the operator's base or office.

An operator must advise CASA of any extended period of absence of any key personnel. Operators should be aware that the time period begins from the first day of absence.

The requirement to advise CASA applies to both foreseen (planned holidays or absences) and unforeseen (sickness or injury) circumstances.

As part of the required content of the operations manual, the operator must include a description of how they plan to manage any temporary absence, or the inability of a key person to carry out their responsibilities⁵.

The operations manual must include the full name of each person authorised to act on behalf of each key person during any period of temporary absence⁶.

The operator's procedures should also specify that the operator will 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.

Each temporary key person must have received familiarisation training in relation to the key person's responsibilities and accountabilities prior to carrying out the responsibilities of the position. The operator must provide a means to demonstrate that familiarisation training has been provided to temporary position holders⁷.

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 position⁸.

Restrictions around sharing of key personnel responsibilities can be found in regulation 138.050.

Alternate key person

The regulations permit additional personnel to act in the role of a key person. The decision to nominate alternate key persons rests with the organisation. Nominating alternate key

⁴ CASA EX86/21 – Part 138 and Part 91 of CASR – Supplementary Exemptions and Directions Instrument 2021

⁵ Refer to subparagraph 138.155(1)(e)(v).

⁶ Refer to subparagraph 138.155(1)(e)(iv).

⁷ Refer to regulation 138.080.

⁸ Refer to regulation 138.120.

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
- duty away from home base for a short period of time
- 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.

Where an alternate person has been nominated, the operator's operations manual is to describe how the changeover between the primary and alternate person is managed.⁹ This will 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.

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
- ensuring that CASA is notified of the change, as per the regulatory requirements
- the method of communication and handover processes between the primary and the alternate key person.

The nomination of an alternate person is achieved by the same method and assessment process as the primary person.

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, 138.062 and 138.070.

AMC 138.080 Familiarisation training for key personnel

Reserved

⁹ Refer to subparagraph 138.155(1)(e)(v).

GM 138.080 Familiarisation training for key personnel

An operator must describe the conduct of familiarisation training in their operations manual¹⁰, 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 EX86/21.

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.

¹⁰ Refer to paragraph 138.155(1)(h).

AMC 138.090 Qualifications and experience of head of operations

Reserved

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 EX86/21.

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 experience¹¹.

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.

It is important to note that a kind of aerial work is defined as one of the three overarching aerial work purposes, namely external loads, dispensing, and task specialist operations. As such, the HOO is not required to be qualified to conduct all of the operator's aerial work operations. For example, the HOO may be qualified to conduct Class B external load operations, but not Class C external load operations.

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

¹¹ Refer to regulation 138.070.

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 a number of 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.

When 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.

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 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

Reserved

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 EX86/21.

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
- 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 EX86/21.

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. Provided sufficient levels of qualified staff are available, it would not be necessary for the HOTC to hold every qualification available in the organisation. In all cases, the HOTC will still need to hold a relevant training/checking qualification, besides having sufficient aviation experience to supervise and manage the staff and functions of the organisation.

It is important to note that a kind of aerial work is defined as one of the three overarching aerial work purposes, namely: external load operations, dispensing operations, and task specialist operations. While the HOTC must be qualified to fly each *kind* of aerial work operation that the operator conducts, they are not required to be qualified to conduct all the operator's aerial work operations. For example, the HOTC may be qualified to conduct Class B external load operations, but not Class C external load operations. Such circumstances would require the appointment of a specialist for the conduct of activities that the HOTC is not qualified for/experienced in.

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

Assessment

The regulation permits CASA to require assessment of the (proposed) HOTC; 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 HOTC.

For example, an individual may be performing as HOTC for another aerial work operation and elects to transfer. In this case, CASA may consider a number of 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 candidate is nominated for
- performance as HOTC in previous positions.

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. Should a HOTC 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 a HOTC to regularly conduct check and training activities, it is acknowledged that first-hand knowledge and experience is maintained by those who do so. For a non-flying HOTC, organisations would be expected to demonstrate that they have sufficient senior training and checking staff in supporting roles. These staff members should be involved in regular training operations that are part of the organisational structure, supervising junior members and identifying items that need to be raised for attention at the HOTC level.

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 training locations, there must be a system to manage day-to-day issues across the various locations. Implementation of such a system must be documented in the operator's operations manual. The approved HOTC is responsible for all training operations, regardless of location. This may require the HOTC to be supported by other employees, including appointing a senior training and/or check pilot for each fleet and/or training location. In this case, the operations manual would contain:

- a senior training and/or check pilot position description, outlining the duties and training requirements of the position and qualifications needed for appointment
- an organisational chart showing reporting lines
- a method of regular communication between senior training and/or check pilots and the HOTC
- the duties of the HOTC, including a plan for oversight of the senior training and/or check pilot(s).

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 EX86/21.

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

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 EX87/21.

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 EX81/21.

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 EX86/21.

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 EX86/21.

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).

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.

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 [AC 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 system¹², 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.¹³

For more information, refer to [AC 138-02 - Training and checking systems](#).

¹² Refer to regulation 138.125.

¹³ Refer to paragraph 138.155(1)(h).

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 EX87/21.

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 EX86/21.

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 EX86/21.

In addition to this regulation, the Part 138 MOS has the ability to prescribe further operational circumstances requiring the provision of a SMS or provide relief. Refer to Chapter 5 of the MOS (currently reserved).

Note: 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.¹⁴ For more information on developing a safety management system, refer to AC 119-01 - Safety management systems for air transport operations.

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 training and checking 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](#).

¹⁴ Refer to paragraph 138.155(1)(l).

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

Reserved

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.

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

Further guidance on the content of an aerial work operations manual is contained in [AC 1-02 - Guide to the development of expositions and operations manuals](#).

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.

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 EX86/21.

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

Reserved

GM 138.195 Reference library

A reference library is permitted to be kept electronically; however, it must remain readily available to all of the operator's personnel and be kept up-to-date.

The HOO is responsible for ensuring that flight crew members are provided with the information and documentation necessary for them to carry out their responsibilities¹⁵.

The certificate holder is responsible for maintaining the library, including any distribution records.

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

There is an exemption in force, solely for transitional purposes, in relation to certain aerial work certificate holders and the use of a foreign-registered aircraft in Australian territory. It is recommended that operators review section 14A of CASA EX86/21. This exemption only lasts until 30 April 2022.

There is a direction in force in relation to aerial work certificate holders and the use of foreign registered aircraft. It is recommended that operators review section 19 of CASA EX86/21.

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.

Under *CASA EX86/21 – Part 138 and Part 91 of CASR – Supplementary Exemptions and Directions Instrument 2021*, an operator is directed to obtain an approval from CASA to operate a foreign aircraft. The CASA approval requirement means that commencing, or ceasing, the use of a foreign aircraft will be taken to be a significant change, and therefore will be governed by the Part 138 operations manual change rules.

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

¹⁵ Refer to paragraph 138.095(2)(e).

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. When this period of split responsibility is extended, it can have an adverse effect 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 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 under foreign registration without an agreement being in place with the State of registry for the oversight of the aircraft. When foreign registered aircraft are only used up to the consecutive 90 day period in accordance with this regulation, then such an agreement is not required due to the short-term nature of the aircraft use.

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 recommended to provide reasons why the aircraft cannot be placed on the Australian register. 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.

There is no specific limit on the number of days that could be approved, noting that no limit beyond 12-months would be practically necessary due to the wording of the regulation.

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.

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 manner in which 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.

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.

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 EX86/21.

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 EX86/21.

Transitional regulation 202.416A, item 20 of the table (which can be found here - [Civil Aviation Legislation Amendment \(Flight Operations—Consequential Amendments and Transitional Provisions\) Regulations 2021](#)), contains a provision that deems an existing CAR 232 flight check approval to be an exemption, where necessary, from the requirements of this regulation. CASA recommends operators read this regulation to determine its applicability to their operation.

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) or external load operation. 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).

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 EX86/21.

AMC 138.220 Electronic documents

Reserved

GM 138.220 Electronic documents

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 EX86/21.

Division reserved

4.6 Division 138.C.6—Miscellaneous requirements

Division reserved

5 Subpart 138.D—Operational procedures

5.1 Division 138.D.1—Operational control

Division reserved

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.

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

Reserved

GM 138.275 Minimum height rules

Alleviation is provided in relation to the minimum height rules in Part 91, provided that the requirements in Chapter 9 of the Part 138 MOS are met. There is no longer a requirement for a general or specific low flying permit. 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.

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.

5.6 Division 138.D.6—Fuel requirements

AMC 138.285 Fuel procedures

Reserved

GM 138.285 Fuel procedures

This regulation requires an aerial work certificate holder's operations manual to contain procedures that ensure compliance with the fuel requirements of Chapter 19 of the Part 91 MOS.

Further guidance on operational fuel requirements can be found in [AC 91-15 - Guidelines for aircraft fuel requirements](#).

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 the AFM or the operations manual. During aerial work operations, this regulation replaces the requirements of regulation 91.505.

AMC 138.302 Fuelling safety procedures

Reserved

GM 138.302 Fuelling safety procedures

Regulation 138.302 takes precedence over regulation 91.510 during an aerial work operation.

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 a private operation conducted by an aerial work certificate holder. It is recommended that operators review section 11 of CASA EX86/21.

Fuelling means both refuelling and de-fuelling.

This regulation provides that an operator's operations manual must include procedures to ensure that fuelling operations are safe. The procedures are specifically required to cover situations where persons embark, disembark or remain onboard the aircraft during fuelling, and where low-risk electronic devices are permitted to be used in the aircraft cabin during fuelling.

The operator's procedures should require crew members to conduct a briefing when the aircraft is being refuelled with aerial work passengers on board or embarking/disembarking (refer to [AC 91-19 - Passenger safety information](#)).

The operator's procedures should also 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 ground personnel in an emergency situation, including an emergency evacuation of an aircraft.

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 EX86/21.

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. Carriage of an aerial work passenger is not an aerial work purpose in and of itself.

There are a number of specific classes of aerial work passenger in section 2.02 of the Part 138 MOS.

The widest class is the 'other persons' class in paragraph 2.02(1)(a). A key criterion of what constitutes an aerial work passenger for this class is that carriage of the passenger should not be considered to be the primary purpose of the flight. Instead, their carriage is incidental to, but still operationally necessary for, the aerial work operation. If the primary purpose of the flight is the carriage of a passenger, the operation would be an air transport operation. Examples of an aerial work passenger would include:

- 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

The 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, the operations manual should provide procedures¹⁶ on how this will be accomplished.

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.

As a minimum, procedures for carrying a restricted person on an aircraft should consider the following:

¹⁶ Refer to paragraph 138.155(1)(h).

- 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
- 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 EX86/21.

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.

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 EX86/21.

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 operations¹⁷.

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

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

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, 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 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 on the basis of 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

Section 5 and schedule 1 of the CASA EX161/21 instrument collectively grant the approval required by this regulation to conduct night winching to certain operators conducting certain operations under the pre-1 December 2021 rules. It is recommended that operators review section 5 and schedule 1 of CASA EX161/21.

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

Section 5 and schedule 1 of the CASA EX161/21 instrument collectively grant the approval required by subsection 15.09(3) of the Part 138 MOS to certain operators that held certain AOC authorisations under the pre-1 December 2021 rules. It is recommended that operators review section 5 and schedule 1 of CASA EX161/21.

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:

- a. specifications and descriptions of the external load equipment that must be used for the operation
- b. instructions on installing and checking the serviceability of the external load equipment on the aircraft
- c. normal and emergency procedures for the operation, including, procedures for normal and emergency external load picking up and dropping
- d. the minimum experience requirements for relevant flight crew members (FCMs)
- e. the training requirements and competency checking procedures for relevant FCMs
- f. instructions for ground personnel (if any) involved in the operation
- g. 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
- h. a description of any operational restrictions (if any) with which FCMs must comply during the operation
- i. the operator's risk assessment procedures.

Carrying a load in the form of a person

A Class D external load, where a human is carried external to the protection offered by the airframe, is considered to be a high risk aerial work task and, as such, 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.

Belly hook or platform

Division 1 of Chapter 15 of the Part 138 MOS covers carrying a person on a sling load and carrying a person on a platform attached to the aircraft, such as the platforms used to conduct power line maintenance from a rotorcraft. Only air crew and task specialists (not aerial work passengers) can be carried on a belly hook (sling) or platform.

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/entry

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

Under Part 138 operators do not require specific approvals for hover exit/entry. They will, however, 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.

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:

- a. specifications and descriptions of the dispensing equipment that must be used for the operation

- b. instructions on installing and checking the serviceability of the dispensing equipment on the aircraft
- c. normal and emergency procedures for the operation of dispensing equipment
- d. the minimum experience requirements for relevant FCMs
- e. the training requirements and competency checking procedures for relevant FCMs
- f. instructions for ground personnel (if any) involved in the operation
- g. 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
- h. a description of any operational restrictions (if any) with which FCMs must comply during the operation
- i. the operator's risk assessment procedures.

For carriage of dangerous goods, refer to Part 92.

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:

- a. specifications and descriptions of any equipment that must be used for the operation
- b. instructions on installing and checking the serviceability of any equipment on the aircraft
- c. normal and emergency procedures for the operation and associated equipment
- d. the minimum experience requirements for relevant FCMs
- e. the training requirements and competency checking procedures for relevant FCMs
- f. instructions for ground personnel (if any) involved in the operation
- g. 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
- h. a description of any operational restrictions (if any) with which FCMs must comply during the operation
- i. 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:
 - are capable of withstanding the normal conditions of air transport; and
 - are appropriately identified as dangerous goods, meaning the containers or packaging is 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 is able to 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:
 - o Division 1.4S (UN 0012 and UN 0014 only); or
 - o Division 1.4E (UN 0471 Articles, explosive, n.o.s. (bird scaring cartridges only)); or
 - o 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.

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

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.

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 EX86/21.

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.
- 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](#).

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.

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 EX86/21.

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.

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.

9 Subpart 138.N—Flight crew

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 EX87/21.

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 EX81/21.

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 [AC 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: Advisory Circular AC 60-02 v2.2 states that CASA currently recognises the flight simulator qualification certificates of countries listed under the definition of *recognised foreign State* in regulation 61.010. At the time of issuing v2.1 of this AMC/GM document, those countries were 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, Switzerland and the United Kingdom.

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 writing¹⁸. 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 requirements¹⁹.

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.

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 change²⁰ 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 form²¹. As with any change notification, the change to the document should be clearly identified.

¹⁸ paragraph 23.10(2)(d) of the Part 138 MOS

¹⁹ subsection 23.10(3) of the Part 138 MOS

²⁰ regulation 138.012

²¹ Refer also to AC 119-07,138-03 – [Management of change for aviation organisations](#)

EXAMPLE FORM**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

10 Subpart 138.P—Air crew members and task specialists

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 EX87/21.

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 EX81/21.

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 writing²². 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 requirements²³.

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.

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 change²⁴ 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 form²⁵. As with any change notification, the change to the document should be clearly identified.

EXAMPLE FORM

SAMPLE AVIATION –Training and Checking Personnel – Part 138 Operations

Name	ARN	Aircraft type	Authorised duties
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Sparrow	987654	All	Flight crew proficiency checks Part 61 Flight Examiner duties
Bird	563489	All	Air crew member training and checking duties

22 paragraph 24.03(2)(d) of the Part 138 MOS

23 subsection 24.03(3) of the Part 138 MOS

24 regulation 138.012

25 Refer also to AC 119-07,138-03 – [Management of change for aviation organisations](#)

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