

## Replacement Explanatory Statement

### Acts Interpretation Act 1901

### Civil Aviation Safety Regulations 1998

### Part 138 (Aerial Work Operations) Manual of Standards 2020

#### Purpose

The *Part 138 (Aerial Work Operations) Manual of Standards 2020* (the **MOS**) sets out the operational, procedural and safety risk management standards for the conduct of aerial work operations in aeroplanes and rotorcraft.

#### Legislation

The *Civil Aviation Act 1988* (the **Act**) established the regulatory framework for maintaining, enhancing and promoting the safety of civil aviation, with particular emphasis on preventing aviation accidents and incidents.

Subsection 98 (1) of the Act provides, in part, that the Governor-General may make regulations, not inconsistent with the Act, prescribing matters required or permitted by the Act to be prescribed, or necessary or convenient to be prescribed, for carrying out or giving effect to the Act. The *Civil Aviation Regulations 1988* (**CAR**) and the *Civil Aviation Safety Regulations 1998* (**CASR**) are made under the Act.

The *Civil Aviation Safety Amendment (Part 138) Regulations 2018* (**Part 138 of CASR**) were registered on 18 December 2018, and amended by the *Civil Aviation Legislation Amendment (Flight Operations—Miscellaneous Amendments) Regulations 2020* registered on 6 October 2020. Part 138 of CASR commences on 2 December 2021). Under regulation 138.020 of CASR, the Civil Aviation Safety Authority (**CASA**) may issue a Manual of Standards for Part 138 of CASR that prescribes matters required or permitted by Part 138, or necessary or convenient for carrying out or giving effect to Part 138. This power is complemented by other provisions, throughout Part 138, which empower CASA to prescribe specific matters in the MOS.

Section 4 of the *Acts Interpretation Act 1901* (the **AIA**) as applied by section 13 of the *Legislation Act 2003* (the **LA**) provides, among other things, that if an Act, including a regulation, is enacted and at a time after its enactment (the **start time**) the Act will confer power to make an instrument, that power may be exercised before the start time as if the relevant commencement had occurred. However, in general terms, the exercise of this power does not confer a power or right to impose an obligation on a person before the relevant commencement. Using section 4 of the AIA, the MOS is made under regulation 138.020 of CASR, a regulation that will not commence until 2 December 2021.

For convenience in this MOS, unless a contrary intention appears, mention of a provision with the prefix “91.” or “138.” is a reference to that provision in Part 91 or Part 138 of CASR.

#### Background

Part 138 established a regulatory model that is designed to do the following:

- provide more transparent and accessible aviation safety requirements by consolidating the rules for aerial work operations
- incorporate the provisions of various pre-existing aerial work-related exemptions to reduce, for both CASA and industry, the time and costs of their administration, and ensure nationally consistent standards for aerial work operations
- introduce aerial work certificates to remove the requirement for some operators to obtain and maintain an Air Operators Certificate (an **AOC**)

- simplify the many and varied aerial work purposes into 3 broad classes of aerial work operations, namely, external load operations, dispensing operations and task-specialist operations
- address the regulatory treatment of aerial work operations that are part of emergency services operations (*ESOs*) conducted at the request of, or tasked by, governmental agencies and organisations
- provide requirements for the safe carriage of flight crew, air crew, task specialists and certain passengers on aerial work flights
- provide safety management system (*SMS*) requirements for complex operations
- provide training and checking system requirements for complex operations
- provide aircraft performance requirements according to risks of the operation.

The MOS is issued to prescribe matters required, or permitted, to be prescribed by Part 138 of CASR, or matters that are necessary or convenient to be prescribed for carrying out or giving effect to Part 138 and thereby achieve the new regulatory model for aerial work operations described above.

The standards in the MOS will apply, from 2 December 2021, to relevant operators conducting aerial work operations in the form of task specialist operations, external load operations and dispensing operations. The MOS does not apply to medical transport operations, air transport operations, glider towing, parachuting, or aerial application operations under Part 137 of CASR.

Aerial work operations are highly varied and can be complex. They require considerable care and skill in being carried out safely. The MOS is being made well in advance of the 2 December 2021 commencement date to provide a long, preparatory lead-in period for relevant operators to become familiar with the new rules, their operational implications (as well as various continuities) and their organisational, procedural and documentary requirements.

### **The Part 138 MOS**

Part 91 prescribes the general operating and flight rules for Australian aircraft, and is fundamental for all aviation operations. However, certain requirements in Part 91, which would otherwise disallow aerial work operations, must be disappplied or ‘turned off’ if an operator is to conduct aerial work operations under Part 138. The primary task of Part 138 is to outline a separate set of safety risk management processes, risk mitigations and operational circumstances, which must be applied by the operator and the crew members for flight in aerial work operations. The MOS, therefore, sets out detailed requirements and safety standards for the conduct of aerial work operations in order to manage the risk of deviating from the general flight rules of Part 91.

The MOS is detailed and prescribes technical and procedural safety standards and requirements for a wide range of matters pertaining to many different aspects of aerial work operations.

As far as possible in the context of the matters to be addressed, the MOS has been drafted in as plain a style of English presentation as the nature of the material will allow, to ensure that the document is, and is usable as, a practical manual for aerial work operators.

This Explanatory Statement provides a note on, or reference to, every Chapter, Division and section of the MOS, to explain the purpose and operation of the instrument as required by section 15J of the LA but it is not a repeat of the MOS or in any sense a reader’s substitute for the MOS. It provides a general explanation of the purpose and operation of the MOS.

In support of the MOS, and before it commences on 2 December 2021, CASA will publish on its website a suite of freely accessible guidance materials in the form of individual Part 138 Advisory Circulars, offering further practical guidance on many discrete issues dealt with in the

MOS. This guidance will further explain the technical requirements of the MOS and, using plain language, will clarify acceptable means of compliance with the MOS. This material will, therefore, complement the explanations of the purpose and operation of the MOS given in this Explanatory Statement.

The following provides an overview of the structure and content of the 25 Chapters of the Part 138 MOS:

- Chapter 1 provides the name, commencement, authority, and scope of the MOS. It also provides definitions for the MOS
- Chapter 2 provides for the prescription for classes of external load and classes of aerial work passengers
- Chapter 3 provides for the prescription of certain bodies and organisations either included in or excluded from definitions for Part 138
- Chapter 4 provides for training and checking systems
- Chapter 5 provides a placeholder for future provisions that may be required for SMS
- Chapter 6 provides for personnel fatigue management
- Chapter 7 provides for operations manuals
- Chapter 8 provides the requirements for operational documents
- Chapter 9 provides the requirements for minimum height in flight
- Chapter 10 is reserved as a placeholder for future provisions that may be required. Its particular location here is of no intended significance
- Chapter 11 provides the requirements for the carriage of aerial work passengers or aerial work cargo in certain scenarios
- Chapter 12 provides the requirements for use of night vision imaging systems (*NVIS*)
- Chapter 13 provides the requirements for aerial work operation risk assessments including aerial work zone risk assessments (*AWZ-RAs*), the criteria for risk assessments and prescriptions for the conduct of risk assessments
- Chapter 14 provides the requirements for seatbelts and other restraint devices used during aerial work operations
- Chapter 15 provides rules for external load operations
- Chapter 16 provides requirements for dispensing operations
- Chapter 17 provides requirements for task specialist operations, including, in particular, the carriage and use of firearms
- Chapter 18 provides the take-off and landing performance requirements for large aeroplanes
- Chapter 19 is reserved as a placeholder for future provisions that may be required. Its particular location here is of no intended significance
- Chapter 20 is reserved as a placeholder for future provisions that may be required. Its particular location here is of no intended significance
- Chapter 21 provides requirements for weight and balance documents
- Chapter 22 provides requirements for equipment fitted to or carried on an aircraft
- Chapter 23 provides requirements for flight crew training and checking
- Chapter 24 provides the requirements for air crew member training and checking
- Chapter 25 provides the requirements for task specialist training and checking.

More details on the MOS provisions are set out in Appendix 2 of this Explanatory Statement.

### ***Legislation Act 2003***

Under subsection 8 (4) of the LA, an instrument is a legislative instrument if it is made under a power delegated by the Parliament, and any provision determines the law or alters the content of the law, and it has the direct or indirect effect of affecting a privilege or interest, imposing an obligation, creating a right, or varying or removing an obligation or right. The MOS satisfies these requirements. Under paragraphs 98 (5A) (a) and (5AA) (a) of the Act, an instrument made

under regulations is a legislative instrument if it is issued in relation to matters affecting the safe navigation and operation of aircraft, and is expressed to apply to classes of persons. On each of these criteria, the MOS is a legislative instrument subject to registration, and tabling and disallowance in the Parliament, under sections 15G, and 38 and 42, of the LA.

### **Incorporations by reference**

Under paragraph 15J (2) (c) of the LA and subsection 98 (5D) of the Act, the MOS applies, adopts or incorporates matters contained in the following instruments:

- Part 11 of CASR
- Part 21 of CASR
- Part 61 of CASR
- Part 91 of CASR
- *Civil Aviation Order 48.1 Instrument 2019*
- *Civil Aviation Order 82.6 (Night vision imaging system — helicopters) 2007*
- Part 91 Manual of Standards
- Part 121 Manual of Standards
- Part 133 Manual of Standards
- Part 135 Manual of Standards.

All of this material is embodied in legislative instruments which, of their nature, are registered on the Federal Register of Legislation and apply as in force from time to time (see also section 10 of the AIA and section 13 of the LA).

Under subsection 98 (5D) of the Act, a non-legislative instrument may be incorporated into a legislative instrument made under the Act, as that non-legislative instrument exists or is in force at a particular time or from time to time (including a non-legislative instrument that does not exist when the legislative instrument is made).

The following lists the instruments and documents incorporated by reference into the MOS, relevantly describes them, indicates the manner of their incorporation, and identifies how they may be obtained.

<b>Document</b>	<b>Description</b>	<b>Manner of incorporation</b>	<b>Source</b>
Part 11 of CASR	<p>Part 11 sets out administrative provisions for authorisations, including approvals.</p> <p>Under various sections of the MOS, certain operators must obtain CASA's written approval for various matters, for example, the operator's aerial work zone risk assessment (AWZ-RA).</p>	As in force or existing from time to time.	This document is available for free on the Federal Register of Legislation (FRL).

<b>Document</b>	<b>Description</b>	<b>Manner of incorporation</b>	<b>Source</b>
Part 21 of CASR	<p>Part 21 sets out the certification and airworthiness requirements and approval processes for aircraft and aircraft equipment.</p> <p>Equipment required for aerial work operations must, generally, be compliant with the requirements of, or approved under, Part 21 of CASR.</p>	As in force or existing from time to time.	This document is available for free on the Federal Register of Legislation
Part 61 of CASR	<p>Part 61 sets out the requirements and standards for the issue of flight crew licences and ratings, and their privileges.</p> <p>Various provisions of the MOS call up the Part 61 requirements.</p>	As in force or existing from time to time.	This document is available for free on the Federal Register of Legislation.
Part 91 of CASR	<p>Part 91 sets out the general operating and flight rules for Australian aircraft.</p> <p>The MOS implements various legislated disapplications of the Part 91 requirements that are not suitable for aerial work operations.</p>	As in force or existing from time to time.	This document is available for free on the Federal Register of Legislation.
<i>Civil Aviation Order 48.1 Instrument 2019</i>	<p>CAO 48.1 sets the standards for the management of fatigue and fatigue risk for AOC holders.</p> <p>The MOS requires the provisions of CAO 48.1 to be observed by aerial work certificate holders and pilots.</p>	As in force or existing from time to time.	This document is available for free on the Federal Register of Legislation.

<b>Document</b>	<b>Description</b>	<b>Manner of incorporation</b>	<b>Source</b>
<i>Civil Aviation Order 82.6 (Night vision imaging system — helicopters) 2007</i>	<p>CAO 82.6 sets the operational and airworthiness standards and approval requirements for the use of NVIS in helicopter aerial work operations by AOC holders.</p> <p>The MOS requires the provisions of CAO 82.6 to be observed by aerial work certificate holders and pilots.</p>	As in force or existing from time to time.	This document is available for free on the Federal Register of Legislation.
Part 91 Manual of Standards	The Part 91 MOS will prescribe matters relating to general operating and flight rules permitted under Part 91 to be prescribed in the MOS.	As in force or existing from time to time.	This document will be made available for free on the Federal Register of Legislation.
Part 121 Manual of Standards	<p>The Part 121 MOS will prescribe matters relating to larger aeroplanes conducting air transport operations.</p> <p>The MOS provides that the requirements relating to take-off performance and landing performance for certain aerial work operations in such aircraft are the requirements specified in Chapter 9 of the Part 121 Manual of Standards.</p>	As in force or existing from time to time.	This document will be made available for free on the Federal Register of Legislation.
Part 133 Manual of Standards	<p>The Part 133 MOS will prescribe matters relating to use of rotorcraft for air transport operations.</p> <p>The MOS provides that the requirements relating to take-off performance and landing performance for certain aerial work operations in such aircraft are the requirements specified in Chapter 11 of the Part 133 Manual of Standards.</p>	As in force or existing from time to time.	This document will be made available for free on the Federal Register of Legislation.

Document	Description	Manner of incorporation	Source
Part 135 Manual of Standards	<p>The Part 135 MOS will prescribe matters relating to use of smaller aeroplanes for air transport operations.</p> <p>The MOS provides that, for operators of prescribed single-engine aeroplanes (PSEA), their operations manuals must include the procedures for PSEA operations that are specified in the Part 135 Manual of Standards for the purposes of subregulation 135.240 (3) of CASR</p>	As in force or existing from time to time.	This document will be made available for free on the Federal Register of Legislation.

### Consultation

CASA has developed the Part 138 MOS over a lengthy period of time through the collaborative efforts of CASA subject matter experts and industry participants.

In 2018, the Aviation Safety Advisory Panel (**ASAP**, the successor consultation forum to the Standards Consultative Committee) convened a joint CASA/industry technical working group (**TWG**) to evaluate the new Part 138 regulations and the MOS. The TWG met on 5 occasions between October 2018 and March 2020 to review drafts of the Part 138 regulations (and draft amendments to the regulations) and the draft MOS as it evolved. During a TWG meeting on 12 March 2020, the TWG recommended that the Part 138 MOS be released for public consultation.

CASA engaged in public consultation on the proposals, in April-June 2020, through the release of a Summary of Proposed Changes and a consultation draft of the Part 138 MOS outlining the proposed MOS standards. The consultation received 114 submissions, of which 82 respondents identified as current aerial work AOC holders, one identified as an aerial work operator without an AOC and 15 identified as pilots conducting aerial work operations. The feedback received from public consultation broadly reflected that previously provided by the TWG. Contributors suggested, for example, reducing the complexity of some of the Part 138 regulations and MOS provisions, simplifying aircraft performance standards and clarifying aerial work passenger standards. Following the public consultation, there were 5 further TWG meetings in September and October 2020.

In the course of these public and TWG consultations, CASA considered all comments received and ultimately made a number of amendments to the draft MOS, in parallel with amendments to the Part 138 regulations (for the latter, see the *Civil Aviation Legislation Amendment (Flight Operations—Miscellaneous Amendments) Regulations 2020*).

### Regulation Impact Statement

A Regulation Impact Statement (**RIS**) was prepared by CASA for the new Part 138 regulations and this RIS also covered the MOS which the regulations empowered. The RIS was assessed by the Office of Best Practice Regulation (**OBPR**) as compliant with the Best Practice Regulation requirements and contained a level of analysis commensurate with the likely impacts

(OBPR id: 24505). A copy of the RIS was included in the Explanatory Statement for the new Part 138 regulations (<https://www.legislation.gov.au/Details/F2018L01789/Download>).

**Statement of Compatibility with Human Rights**

A Statement of Compatibility with Human Rights is at Appendix 1. This concludes that the MOS is compatible with human rights and, to the extent that it may also limit human rights in some particular respects, those limitations are reasonable, necessary and proportionate to promote the right to life and to ensure the safety of aviation operations.

**Commencement and making**

The MOS commences immediately after the commencement of Part 138 of CASR which commences on 2 December 2021. The empowerment for the MOS, contained in Part 138, in particular in regulation 138.020, had not commenced when the MOS was made. However, this is permitted under section 4 of the AIA which authorises the anticipatory making of a subordinate instrument in these circumstances, provided the instrument does not commence until (or after) the delayed empowering instrument has itself commenced.

The MOS has been made by the Director of Aviation Safety, on behalf of CASA, in accordance with subsection 73 (2) of the Act.



## Statement of Compatibility with Human Rights

*Prepared in accordance with Part 3 of the Human Rights (Parliamentary Scrutiny) Act 2011*

### Part 138 (Aerial Work Operations) Manual of Standards 2020

This legislative instrument is compatible with the human rights and freedoms recognised or declared in the international instruments listed in section 3 of the *Human Rights (Parliamentary Scrutiny) Act 2011*.

#### Overview of the Disallowable Legislative Instrument

The *Civil Aviation Safety Amendment (Part 138) Regulations 2018* (the **Regulations**) amends the *Civil Aviation Safety Regulations 1998 (CASR)* to introduce a new Part 138 under which a Manual of Standards is empowered to prescribe standards for aerial work operations.

Regulation 138.020 of CASR (as contained in the Regulations registered on 18 December 2018, and as amended by the *Civil Aviation Legislation Amendment (Flight Operations—Miscellaneous Amendments) Regulations 2020* registered on 6 October 2020) commences on 2 December 2021. Under it, CASA may issue a Manual of Standards for Part 138 of CASR that prescribes matters required or permitted by Part 138, or necessary or convenient for carrying out or giving effect to Part 138. This power is complemented by other provisions, throughout Part 138, which empower CASA to prescribe specific matters in the MOS.

The *Part 138 (Aerial Work Operations) Manual of Standards 2020* (the **MOS**) sets out the operational, procedural and safety risk management standards for the conduct of aerial work operations in aeroplanes and rotorcraft.

The standards in the MOS will apply to relevant operators conducting aerial work operations in the form of task specialist operations, or that are part of emergency service operations, or that are external load operations or dispensing operations. The MOS does not apply to medical transport operations, air transport operations, glider towing, parachuting, or aerial application operations under Part 137 of CASR,

Aerial work operations are varied and complex. They require considerable care and skill in being carried out safely. The MOS is being made well in advance of the 2 December 2021 commencement date to provide a long, preparatory lead-in period for relevant operators to become familiar with the new rules, their operational implications (as well as various continuities) and their organisational, procedural and documentary requirements.

The MOS is detailed and prescribes technical and procedural safety standards and requirements for a wide range of matters affecting the different kinds of aerial work operations. The following provides a summary overview of its structure and content:

- Chapter 1 provides the name, commencement, authority, and scope of the MOS. It also provides definitions for the MOS
- Chapter 2 provides for the prescription for classes of external load and classes of aerial work passengers
- Chapter 3 provides for the prescription of certain bodies and organisations either included in or excluded from definitions for Part 138
- Chapter 4 provides for training and checking systems
- Chapter 5 provides a placeholder for future provisions that may be required for SMS
- Chapter 6 provides for personnel fatigue management

- Chapter 7 provides for operations manuals
- Chapter 8 provides the requirements for operational documents
- Chapter 9 provides the requirements for minimum height in flight
- Chapter 10 is reserved as a placeholder for future provisions that may be required. Its particular location here is of no intended significance
- Chapter 11 provides the requirements for the carriage of aerial work passengers or aerial work cargo in certain scenarios
- Chapter 12 provides the requirements for use of night vision imaging systems (*NVIS*)
- Chapter 13 provides the requirements for aerial work operation risk assessments including aerial work zone risk assessments (*AWZ-RAs*), the criteria for risk assessments and prescriptions for the conduct of risk assessments
- Chapter 14 provides the requirements for seatbelts and other restraint devices used during aerial work operations
- Chapter 15 provides rules for external load operations
- Chapter 16 provides requirements for dispensing operations
- Chapter 17 provides requirements for task specialist operations, including, in particular, the carriage and use of firearms
- Chapter 18 provides the take-off and landing performance requirements for large aeroplanes
- Chapter 19 is reserved as a placeholder for future provisions that may be required. Its particular location here is of no intended significance
- Chapter 20 is reserved as a placeholder for future provisions that may be required. Its particular location here is of no intended significance
- Chapter 21 provides requirements for weight and balance documents
- Chapter 22 provides requirements for equipment fitted to or carried on an aircraft
- Chapter 23 provides requirements for flight crew training and checking
- Chapter 24 provides the requirements for air crew member training and checking
- Chapter 25 provides the requirements for task specialist training and checking.

### **Human rights implications**

The MOS may engage the following human rights:

- the right to life under Article 6, and the right to privacy and reputation under Article 17, of the International Covenant on Civil and Political Rights (the *ICCPR*)
- the right to work under Article 6 (1), and the right to safe and healthy working conditions under Article 7, of the ICESCR.

### ***Right to life under the ICCPR***

Article 6 of the ICCPR protects the right to life. The MOS may engage this right. This engagement is in the context of CASA's statutory purpose. The aim of CASA and its regulatory framework, including Part 138 of CASR and its related MOS, is to uphold aviation safety by prescribing the conduct of individuals and organisations involved in civil aviation operations, including in the conduct of aerial work operations. It is, therefore, a threshold requirement for all CASA legislative instruments that they preserve, promote or enhance aviation safety.

Insofar as the MOS is crafted and intended, as far as practicable, to promote and enhance aviation safety standards in the conduct of aerial work operations, it promotes the right to life under Article 6 of the ICCPR by legislating for safer conditions that will minimise the risk of accidents and prevent accidental death. The expected safety benefits of this will apply to flight crew members, air crew members, task specialists, marine pilots, emergency service personnel, persons rescued in search and rescue or emergency service flights and other permitted passengers.

### ***Right to safe and healthy working conditions under the ICESCR***

Article 7 of the ICESCR protects the right to enjoyment of just and favourable conditions of work, including safe and healthy working conditions. The MOS may engage this right, in the context described above. By setting and consolidating appropriate safety standards for aerial work operations, the MOS promotes the right to safe and healthy working conditions for all personnel conducting, or involved in, such operations.

Examples include requirements for operators to conduct formal risk assessments, mitigation processes and flight planning for aerial work operations, obligations to ensure that aerial work aircraft, systems and equipment are appropriate and safe, and requirements that each flight crew member, air crew member and task specialist has the experience, training and competency necessary to safely conduct aerial work operations.

### ***Right to privacy and reputation***

The MOS may engage the right to privacy. Article 17 of the ICCPR provides that no one shall be subjected to arbitrary or unlawful interference with their privacy, family, home or correspondence, or to unlawful attacks on their honour and reputation. It further provides that everyone has the right to the protection of the law against such interference or attack.

Section 17.05 of the MOS requires a task specialist for operations involving the discharge of firearms from an aircraft during flight to have successfully completed a training course about carrying, otherwise possessing, and discharging, firearms while onboard an aircraft. This training must be documented in records that the operator or other training organisation must retain in safe custody for at least 3 years after the training course was completed. This requirement involves collecting, storing and recording personal information.

However, there is nothing arbitrary about this collection of information. Aerial shooting is a potentially highly hazardous activity and strict controls are necessary to protect the safety of persons in the aircraft and on the ground. Thorough training is particularly important. The requirement to compile and retain relevant records is necessary to enable CASA, in conducting safety audits, to confirm compliance with the MOS training requirements and is a reasonable, necessary and proportionate measure to help to achieve this safety outcome.

The protections afforded by the *Privacy Act 1988* continue to apply to such collected information. This Act embodies the protections that the Australian Parliament currently regards as suitable for the protection of such personal information in Australia.

To the extent that the MOS may limit the privacy-related rights in Article 17 of the ICCPR, those limitations are, therefore, reasonable, necessary and proportionate to ensure the safety of civil aviation, consistent with the objects of the *Civil Aviation Act 1988* (the *Act*), CASR and, in particular, Part 138 of CASR in relation to the safe operation of aerial work operations.

### ***Right to work***

The MOS may engage this right. The right to work is protected under Article 6 (1) of the ICESCR and includes the right of everyone to the opportunity to gain their living by work which they freely choose or accept.

The right to work may be engaged by prescribing requirements for qualifications, training and aeronautical experience, as appropriate, for flight crew members, air crew members and task specialists. The right is also impacted by the fatigue risk management requirements of *CAO 48.1 Instrument 2019*, and the safety requirements for the use of night vision imaging systems under CAO 82.6, as both applied by the MOS.

The right may be engaged by Chapter 17 of the MOS which prescribes the authorisation, training and experience requirements for task specialists to be able to possess, carry and use firearms in an aerial work operation.

This same right may be engaged by Chapter 23 (Flight crew training and checking), which prescribe the training and checking that flight crew members must successfully complete before conducting a flight. Chapter 23 also prescribes the qualifications that a pilot in command must have in order to conduct certain aerial work operations and the requirements for individuals conducting training and checking for an operator.

This same right may be engaged by Chapter 24 (air crew member training and checking), which prescribes the training and checking requirements that an air crew member must meet in order to undertake an aerial work operation, and the requirements for individuals conducting training and checking for an operator.

Further, this same right may be engaged by Chapter 25 (task specialist – competency checks), which prescribes the requirements that a task specialist must meet prior to conducting a flight, including training and competency checking requirements.

These various requirements may, theoretically, impede the right to work. The right of relevant persons to the opportunity to gain their living by work is recognised and that right would be lost if the person fails to obtain the qualifications and competence necessary to safely carry out their aviation safety responsibilities.

Despite the potential engagement with the right to work outlined above, in the interests of aviation safety, it is necessary that persons performing the relevant functions hold the highest reasonable standard of competency and proficiency, and that they are sufficiently trained, qualified and experienced to achieve the safety outcome of their position. The limitations embody safe-use criteria that are necessary to preserve life in face of the risks associated with aerial work operations. They therefore contribute to the interests of aviation safety. Therefore, in the circumstances, the requirements themselves are a reasonable, necessary and proportionate requirement under aviation safety law to ensure aviation safety.

Accordingly, any potential limitation on the right to work is itself necessary, reasonable and proportionate in achieving the aim of protecting and improving aviation safety consistent with the objects of the Act, CASR and, in particular, Part 138 of CASR in relation to the safe operation of aerial work operations.

## **Conclusion**

The MOS is a legislative instrument that is compatible with human rights and, to the extent that it may also limit human rights, those limitations are reasonable, necessary and proportionate to ensure the safety of aviation operations in aerial work operations.

## DETAILS OF THE PART 138 (AERIAL WORK OPERATIONS) MANUAL OF STANDARDS 2020

### CHAPTER 1 — PRELIMINARY AND DEFINITIONS

#### Division 1 Preliminary

Section 1.01 provides for the naming of the *Part 138 (Aerial Work Operations) Manual of Standards 2020* (the **MOS**).

Section 1.02 provides that the commencement of the MOS is immediately after the commencement of Part 138 of CASR. Part 138 of CASR was created within the *Civil Aviation Safety Amendment (Part 138) Regulations 2018* which was registered on 18 December 2018, but does not to commence until 2 December 2021. Thus, the empowerment for the MOS in regulation 138.020 had not commenced when the MOS was made. However, this is permitted under section 4 of the *Acts Interpretation Act 1901*, which authorises the anticipatory making of a subordinate instrument in these circumstances, provided the instrument does not commence until (or after) the delayed empowering instrument has itself commenced.

Section 1.03 provides that the MOS only applies to an operator who is an aerial work certificate holder, unless the provision is expressed to apply to an operator in an aerial work operation whether or not the operator is such a holder.

To this end, in the interests of clarity and precision in the MOS, a provision in the MOS is taken to be expressed to apply to an operator whether or not the operator is an aerial work certificate holder if the provision is expressed to apply to both an aerial work certificate holder and a limited aerial work operator. The latter is a defined term within the MOS and is used specifically to categorise operators who do not hold aerial work certificates.

A limited aerial work operator means an operator who conducts a limited aerial work operation. Such an operation is defined as an operation described in subregulation 138.030 (2) and for which the operator is not required by subregulation 138.030 (1) to be an aerial work certificate holder. These definitions are contained in subsection 1.04 (6) where a Note also explains that the effect of the definitions. The effect is that a limited aerial work operation is either or both of the following:

- (a) spotting or photography where no remuneration is received by any of the following for the operation:
  - (i) the pilot;
  - (ii) for a registered aircraft — the registered operator;
  - (iii) for an unregistered aircraft — the aircraft owner;
  - (iv) a person or organisation on whose behalf the operation is conducted;
- (b) an operation that is:
  - (i) for a registered aircraft — conducted over land owned or occupied by the registered operator; and
  - (ii) otherwise — conducted over land owned or occupied by the aircraft owner; and
  - (iii) not conducted over a populous area or public gathering; and
  - (iv) not an external load operation involving the carriage of a person as an external load.

## **Division 2 Definitions — general**

Section 1.04 provides definitions of key words, phrases and abbreviations used in the MOS.

Subsection 1.04 (1) provides that words and phrases used in the MOS have the same meaning as in Part 138 of CASR.

Subsection 1.04 (2) provides that unless a contrary intention appears, a mention in the MOS of a provision with the prefix “91.” or “138.” is a reference to that provision in Part 91 or Part 138 of CASR.

Subsection 1.04 (3) provides that a reference in the MOS to an emergency services operation (an *ESO*) is a reference to an aerial work operation that is part of an ESO.

Subsection 1.04 (4) provides that unless a contrary intention appears, mention in the MOS of anything that must be in accordance with procedures (however described) in an operations manual is to be taken as requiring the operations manual to contain the procedures as if they had been prescribed for paragraph 138.020 (b).

Subsection 1.04 (5) provides that a reference in the MOS to any document that is applied, adopted or incorporated is a reference to the document as it exists or is in force from time to time, unless a contrary intention is expressly stated by the reference being to a specifically dated version of the document. In this first version of the MOS there are no such specifically dated incorporations.

Subsection 1.04 (6) provides definitions of key words, phrases and abbreviations used in the MOS.

## **Division 3 Definitions — AWZ**

Section 1.05 provides the definition of an *aerial work zone* (an *AWZ*) used in the MOS.

## **Division 4 Definition of suitable forced landing area**

Section 1.06 provides the definition of a *suitable forced landing area* used in the MOS.

## **Division 5 Definition of SAR, search, and rescue**

Section 1.07 provides the definitions of words related to search and rescue used in the MOS.

## **CHAPTER 2 — PRESCRIPTIONS FOR CLASSES OF EXTERNAL LOAD AND CLASSES OF AERIAL WORK PASSENGERS**

Section 2.01 prescribes the classes of external load operations, as defined in subsection 1.04 (6) of the MOS.

Section 2.02 provides the classes of persons that are prescribed for the definition of *aerial work passenger* in the CASR dictionary.

## **CHAPTER 3 — OTHER PRESCRIBED BODIES AND ORGANISATIONS INCLUDED IN, OR EXCLUDED FROM, DEFINITIONS FOR PART 138 OF CASR**

Section 3.01 is reserved as a placeholder that clearly indicates to the aviation industry the legislative location of any future prescription, after appropriate consultation, of particular kinds of operations as not falling within the definition of an *aerial work operation*.

Section 3.02 prescribes when crew members are task specialists.

Section 3.03 lists the public authorities that are prescribed for paragraph (b) of the definition of *emergency service operation* in the CASR Dictionary (that is, public authorities who may conduct, or request the conduct of, such an operation).

## **CHAPTER 4 — TRAINING AND CHECKING SYSTEM**

Section 4.01 provides that Chapter 4 only applies to an aerial work certificate holder.

Section 4.02 specifies the aerial work operations that require aerial work certificate holders who conduct such operations to have a training and checking system.

## **CHAPTER 5 — SAFETY MANAGEMENT SYSTEM**

This Chapter, which would only apply to an aerial work certificate holder, is reserved to create a place for future rules about safety management systems. Subsection 5.02 (1) is reserved as a placeholder that clearly indicates to the aviation industry the legislative location of any future prescription, after appropriate consultation, of particular kinds of aerial work operations, additional to those mentioned in paragraphs 138.140 (1) (a) and (b) of CASR, as requiring a safety management system (*SMS*). Subsections 5.02 (2) and (3), are reserved as placeholders that clearly indicate to the aviation industry the legislative location of any future prescription, after appropriate consultation, of circumstances in which an aeroplane or a rotorcraft in an operation is not required to have an SMS.

## **CHAPTER 6 — PERSONNEL FATIGUE MANAGEMENT**

Section 6.01 provides that Chapter 6 applies to both an aerial work certificate holder and a limited aerial work operator.

Under section 6.02, for external load, dispensing or task specialist operations, an aerial work certificate holder must comply, and ensure that flight crew members comply, with *Civil Aviation Order 48.1 Instrument 2019* as if the holder were an AOC holder. *CAO 48.1 Instrument 2019* is a codification of current fatigue risk management rules.

A limited aerial work operator must ensure that a pilot in a limited aerial work operation also complies with the pilot-specific requirements of the CAO.

## **CHAPTER 7 — OPERATIONS MANUAL**

Section 7.01 provides that Chapter 7 only applies to an aerial work certificate holder.

Section 7.02 provides that if the aircraft flight manual does not mention the minimum distances a rotorcraft must be from an object during the take-off, take-off and initial climb, approach and landing, and baulked landing climb, phases of flight, the appropriate substitute distances are the distances that the operator includes in the operations manual for this purpose.

Section 7.03 provides that aerial work operations must not be conducted in a prescribed single-engine aeroplane (*PSEA*) unless the operator's operations manual includes the procedures for PSEA operations that are specified in the Part 135 Manual of Standards. This is a from time to time incorporation.

## **CHAPTER 8 — OPERATIONAL DOCUMENTS**

Section 8.01 provides that Chapter 8 applies to both aerial work certificate holders and limited aerial work operators. Section 8.02 provides that for certain aircraft, in certain kinds of aerial work operation, operational limitations set out in the aircraft flight manual (*AFM*) do not need to be complied with in certain circumstances. Section 8.03 sets out the technical circumstances.

## **CHAPTER 9 – FLIGHT RULES – MINIMUM HEIGHT**

### **Division 1 Preliminary**

Division 1 sets out the minimum height rules in Part 91 of CASR that do not apply in certain circumstances. (Regulations 91.265, 91.267, 91.277 and 91.305, respectively, set out the default minimum height rules for operations over populous areas or public gatherings, for operations over areas other than populous areas, for VFR flights and for IFR flights, respectively.)

Section 9.01 provides that Chapter 9 applies to both aerial work certificate holders and limited aerial work operators.

Section 9.02 provides that certain minimum height rules set out in Part 91 of CASR do not apply to a pilot in command of an aircraft for a flight involving an aerial work operation in certain circumstances.

### **Division 2 Close proximity to an object in an area that is not a populous area or a public gathering**

Section 9.03 provides the requirements for certain aerial work operations in which the aircraft is flown in close proximity to a person, vessel, vehicle, structure or any livestock in an area that is not a populous area or a public gathering.

### **Division 3 Rotorcraft — IFR flights and VFR flights by night**

This Division provides the requirements for an aerial work operation to descend below the minimum height that might otherwise apply under Part 91 of CASR.

Section 9.04 sets out the circumstances in which the pilot in command of a rotorcraft may fly below minimum height in an IFR flight, or in a VFR flight at night, and the requirements that must be complied with for such a flight.

Section 9.05 provides the requirements that must be complied with for certain aerial work operations when no suitable forced landing area is available.



## **Division 4 Aircraft IFR flight below minimum height over the sea**

This Division provides the requirements for aircraft IFR flights below minimum height over the sea. Section 9.06 specifies certain flights in order to disapply minimum height rules for IFR flights contained in regulation 91.305 of CASR. Section 9.06 requires the flight to comply with the other requirements set out in Division 4, which relate to:

- distance and obstacles (section 9.07)
- crew experience and the number of minimum crew that must be met for the flight (section 9.08)
- the persons who may be carried during the flight (section 9.09)
- the operating requirements that must be complied with for flights below 1 500 ft above sea level (section 9.10)
- radar and equipment requirements (section 9.11)
- visibility requirements (section 9.12)
- minimum altitude requirements that must be complied with (section 9.13).

## **Division 5 Rotorcraft IFR flight that is a SAR operation involving an auto-hover using transition mode capability over the sea**

This Division provides the requirements for rotorcraft IFR flight that is a search and rescue (**SAR**) operation involving an auto-hover using transition mode capability over the sea.

Section 9.14 specifies the aerial work operations to which Division 5 applies, and provides that the minimum height rules contained in regulations 91.267, 91.277 and 91.305 do not apply to the flight if certain requirements are met.

Relevantly, section 9.14 requires the flight to comply with the other requirements set out in Division 5, which relate to:

- the operating crew (section 9.15)
- the rotorcraft requirements (section 9.16)
- the flight and obstacles (section 9.17)
- the effect of weather on persons carried (section 9.18)
- the requirements for descent (section 9.19)
- use of the automatic flight control system (section 9.20)
- use of the flight director (section 9.21).

## **Division 6 Aircraft flight over populous areas etc. and other areas**

This Division provides the requirements for aircraft flight over populous areas or public gatherings. Section 9.22 provides the requirements for *aeroplane* flight over populous areas or public gatherings, and section 9.23 provides the requirements for *rotorcraft* flight.

## **CHAPTER 10 — RESERVED**

Chapter 10 is reserved for future use. Chapter 10 is a general placeholder that clearly indicates to the aviation industry the legislative location of any future developments and requirements in relation to aerial work operations, for which prescriptions may be made without disturbing the numbering within other Chapters or the MOS as a whole. As such, its location here is of no particular significance. Any such developments and requirements would first be the subject of appropriate aviation industry consultation.

## **CHAPTER 11 — CARRIAGE OF AERIAL WORK PASSENGERS OR AERIAL WORK CARGO**

Chapter 11 deals with the carriage of aerial work passengers and aerial work cargo and sets out the requirements that must be satisfied in order for aerial work passengers to be permitted to be carried in certain circumstances.

Section 11.01 provides that Chapter 11 applies only to an aerial work certificate holder since only an aerial work certificate holder may carry aerial work passengers.

Section 11.01 also provides that for the carriage of aerial work passengers or aerial work cargo in an NVIS operation, an aerial work certificate holder must comply with CAO 82.6 as if the aerial work certificate holder were an AOC holder. The provisions of CAO 82.6 take priority over the other provisions of the Chapter to the extent of direct inconsistency. CAO 82.6 is a codification of requirements for NVIS operations. Directions instrument CASA 288/07 prevents the use of NVIS in private operations.

Chapter 11 provides requirements relating to:

- the carriage of 1 to 9 aerial work passengers in IFR flights (section 11.02)
- the carriage of 1 or 2 aerial work passengers in VFR flights at night (section 11.03)
- the carriage of 3 to 9 aerial work passengers in VFR flights at night (section 11.04)
- the carriage of 10 or more aerial work passengers (section 11.05)
- requirements for aerial work passengers (section 11.06).

## **CHAPTER 12 — NIGHT VISION IMAGING SYSTEMS**

Section 12.01 provides that Chapter 12 applies to aerial work certificate holders and limited aerial work operators.

Section 12.02 provides that the use of NVIS for a flight of an aircraft in an aerial work operation must be in accordance with the requirements in CAO 82.6.

## **CHAPTER 13 — RISK ASSESSMENTS (INCLUDING FOR AWZ-RA)**

Chapter 13 provides the risk criteria and risk assessment and mitigation processes that must be undertaken in aerial work operations.

### **Division 1 Risk — general**

Section 13.01 provides that Chapter 13 applies to aerial work certificate holders and limited aerial work operators.

Section 13.02 sets out the risk criteria that an operator must meet to conduct an aerial work operation. The risk criteria must be reviewed in conducting risk assessments.

Section 13.03 requires an operator to ensure that risk assessment and mitigation processes, in accordance with Chapter 13, have been undertaken before conducting an aerial work operation.

Section 13.04 sets out the risk assessment matters that must be considered in assessing the risks of the operation. The matters must be considered in the context of the nature, size and complexity of the operation.

Section 13.05 sets out the risk assessment and mitigation processes that must be undertaken by a limited aerial work operator.

Section 13.06 sets out the risk assessment and mitigation processes that must be undertaken by an aerial work certificate holder. Such an operator's operations manual must contain pre-operational risk procedures.

Section 13.07 specifies what the pre-operational risk procedures must include.

## **Division 2    AWZ-RA — risk and related requirements**

Section 13.08 provides that Division 2 sets out the risk assessment and mitigation processes for an aerial work certificate holder's aerial work zone risk assessment (***AWZ-RA***). Only an aerial work certificate holder may conduct aerial work operations over an AWZ.

Section 13.09 sets out rules in relation to the preparation of an AWZ-RA.

## **CHAPTER 14 — SEATBELTS AND OTHER RESTRAINT DEVICES**

Section 14.01 provides that Chapter 14 applies to aerial work certificate holders and limited aerial work operators.

Section 14.02 provides the circumstances in which a seatbelt must be worn by each person on an aircraft during an aerial work operation.

Section 14.03 provides, for an aerial work certificate holder only, the circumstances in which a safety harness or restraint strap may be worn instead of a seatbelt and the requirements for the use of safety harnesses or restraint straps. Section 14.03 only applies to an aerial work certificate holder.

## **CHAPTER 15 — RULES FOR EXTERNAL LOAD OPERATIONS**

### **Division 1    Class D external loads**

Section 15.01 provides that, unless it provides otherwise, Chapter 15 applies only to aerial work certificate holders. A Note following section 15.01 states that by virtue of subparagraph 138.030 (2) (b) (iii), only an aerial work certificate holder may conduct a Class D external load operation. A Class D external load is a load that is a person carried external to the rotorcraft.

Section 15.02 prescribes the classes of persons who may be carried as external loads on or in a part of an aircraft that is not normally specified in the aircraft flight manual (***AFM***) as being for the carriage of crew members or aerial work passengers in an aerial work operation. A Note following section 15.02 states that some AFM Supplements may provide, as part of a winching equipment supplement, for the carriage of a person on, for example, additional steps or footholds installed on a rotorcraft.

Section 15.03 sets out requirements regarding the use of appropriate restraint equipment or rescue harnesses or devices for an aerial work operation in which a person mentioned in section 15.02 is carried as an external load.

Section 15.04 requires, for an operation mentioned in section 15.02, that all external load equipment, fittings, lines, safety harnesses, restraint straps and rescue harnesses be compliant with the requirements of, or approved under, Part 21 of CASR.

Section 15.05 prescribes the classes of persons who may be picked-up or set-down in an external load operation.

Section 15.06 sets out the operational requirements for an operation by an aerial work certificate holder in which a person is picked-up or set-down by an aircraft in flight. Section 15.06 prescribes operational requirements for Class D external load operations involving:

- winching a person (subsection 15.06 (2))
- the suspension of a person from a belly hook or carriage on a platform attached to the rotorcraft (subsections 15.06 (3) – (5))
- rappelling, in which a person exits or enters an aircraft in flight using a rope or ladder attached to the rotorcraft (subsection 15.06 (6))
- hover exit and entry, in which a person emplanes or deplanes while the rotorcraft is in flight or partially in flight (subsection 15.06 (7)).

## **Division 2 General requirements**

Section 15.07 provides that Division 2 prescribes requirements relating to the flight of an aircraft involving an external load operation, including for prescribed classes of such flights.

Section 15.08 prescribes the requirements that must be met by an aerial work certificate holder for an external load operation conducted at night over water, including a night search and rescue operation involving an auto-hover over water.

Section 15.09 provides the external load operations which require approval to conduct the operation. Section 15.09 applies to both aerial work certificate holders and limited aerial work operators.

Section 15.10 provides that an aerial work certificate holder must not conduct an external load operation in an AWZ over a populous area unless the aircraft's certificate of airworthiness permits it to operate over a populous area. A Note following section 15.10 explains that, under regulation 138.030 of CASR, a limited aerial work operator is not permitted to conduct an external load operation over an AWZ that is over a populous area.

Section 15.11 specifies equipment with which a rotorcraft of an aerial work certificate holder conducting an external load operation at night over water must be equipped, including equipment in accordance with Chapter 22 and CAO 82.6. A Note following section 15.11 explains that, under sections 9.03, 9.06 and 9.14 of the MOS, a limited aerial work operator is not permitted to conduct an external load operation at night over water.

Section 15.12 prescribes additional requirements relating to the flight of an aeroplane in a Class E external load operation by an aerial work certificate holder (this is a load carried by an aeroplane in an external load operation).

Section 15.13 sets out the requirement that towed and long loads must be jettisonable. Section 15.13 applies to both aerial work certificate holders and limited aerial work operators.

## **CHAPTER 16 — REQUIREMENTS FOR DISPENSING OPERATIONS**

Chapter 16 sets out the requirements for dispensing operations.

Section 16.01 provides that Chapter 16 applies to both aerial work certificate holders and limited aerial work operators.

Section 16.02 provides that a dispensing operation must be conducted in visual meteorological conditions (VMC), except in specified circumstances. A Note following section 16.02 explains that, under paragraph 138.010 (5) (e) of CASR, an aerial application operation under regulation 137.010 of CASR is not a dispensing operation.

Section 16.03 prescribes requirements for dispensing operations, whether over land or water.

## **CHAPTER 17 — REQUIREMENTS FOR TASK SPECIALIST OPERATIONS**

### **Division 1 Preliminary**

Section 17.01 provides that Chapter 17 applies to task specialist operations conducted by both aerial work certificate holders and limited aerial work operators.

### **Division 2 Aerial mustering operations**

Section 17.02 sets out the qualifications and experience that a pilot in command must have in order to conduct a task specialist operation that involves aerial mustering below 500 ft above ground level.

### **Division 3 Firearms and aerial work operations**

Section 17.03 requires both the operator and the pilot in command of the aircraft in an aerial work operation to ensure that a firearm is not possessed or carried on the aircraft, or discharged by any person while on the aircraft, unless the applicable requirements of Division 3 are complied with.

Section 17.04 sets out the requirements that must be complied with for a person to possess or carry a firearm on an aircraft where there is no intent or likelihood of the firearm being discharged.

Section 17.05 provides the training and experience requirements the pilot in command of the aircraft must meet in order to pilot an aircraft engaged in aerial platform shooting.

Section 17.06 provides the authorisation, training, competency and recent experience requirements that a task specialist must meet in order to carry, otherwise possess, and discharge, a firearm for a particular task specialist operation.

Section 17.07 provides the firearm requirements that must be met before a firearm can be used in an aerial shooting operation, for example, in relation to the conduct of a trial run, the effects of ejection of empty cartridge cases and the noise level of the firearm when fired.

Section 17.08 provides that an operation under Division 4 must not be conducted unless it is possible at all times during the operation for the pilot in command and the task specialist to audibly communicate with each other. A Note explains that communication may be face to face or through a serviceable handsfree intercom, but it must be possible and audible at all times. If communication ceases to be possible during the operation, the operation must cease immediately.

## **Division 4 Marine pilot transfer**

Section 17.09 provides requirements for the conduct of a task specialist operation that is a marine pilot transfer operated at a distance greater than 10 nautical miles from land.

## **CHAPTER 18 – PERFORMANCE – TAKE-OFF AND LANDING – AIRCRAFT**

### **Division 1 Take-off and landing performance – large aeroplanes – all aerial work operations**

Subsection 18.01 (1) provides that Chapter 18 applies to aerial work certificate holders and limited aerial work operators.

Subsection 18.01 (2) further provides that Chapter 18 applies only in relation to the operation of large aeroplanes that are either:

- a propeller-driven, multi-engine aeroplane with a maximum take-off weight (*MTOW*) of more than 5 700 kg; or
- a jet-driven, multi-engine aeroplane with an MTOW of more than 2 722 kg.

Section 18.02 provides that the prescribed requirements relating to take-off performance and landing performance for a flight of a large aeroplane under subsection 18.01 (2) are the requirements specified in Chapter 9 of the Part 121 Manual of Standards, which is thereby incorporated as in force from time to time.

### **Division 2 Take-off and landing performance – rotorcraft – aerial work certificate holders only**

Subsection 18.03 (1) provides that Division 2 only applies to an aerial work certificate holder.

Subsection 18.03 (2) further provides that Division 2 applies only in relation to the operation by a relevant operator of any of the following rotorcraft:

- a multi-engine rotorcraft required to be operated with one engine inoperative (*OEI*) accountability in accordance with this MOS; or
- a single-engine rotorcraft operated with OEI accountability as defined in subsection 1.04 (6).

Section 18.04 prescribes the requirements for take-off performance and landing performance for a flight of a rotorcraft to which Division 2 applies.

### **Division 3 Take-off and landing performance – other aircraft – all aerial work operations**

Section 18.05 provides that Division 3 applies to aerial work certificate holders and limited aerial work operators, and applies only in relation to the operation of an aircraft to which Division 1 or Division 2 does *not* apply.

Section 18.06 prescribes the requirements for take-off performance and landing performance for a flight of an aircraft to which Division 3 applies. These requirements are, first, the requirements specified in Chapters 24 and 25 of the Part 91 Manual of Standards as if the contents of each of the Chapters were incorporated into this section, with appropriate adjustments; and, secondly, the AFM. The incorporation of material from a legislative instrument is as in force from time to time.

## **CHAPTER 19 — RESERVED**

Chapter 19 is reserved for future use. Chapter 19 is a general placeholder that clearly indicates to the aviation industry the legislative location of any future developments and requirements in relation to aerial work operations, for which prescriptions may be made without disturbing the numbering within other Chapters or the MOS as a whole. As such, its location here is of no particular significance. Any such developments and requirements would first be the subject of appropriate aviation industry consultation.

## **CHAPTER 20 — RESERVED**

Chapter 20 is reserved for future use. Chapter 20 is a general placeholder that clearly indicates to the aviation industry the legislative location of any future developments and requirements in relation to aerial work operations, for which prescriptions may be made without disturbing the numbering within other Chapters or the MOS as a whole. As such, its location here is of no particular significance. Any such developments and requirements would first be the subject of appropriate aviation industry consultation.

## **CHAPTER 21 — WEIGHT AND BALANCE**

Section 21.01 provides that Chapter 21 only applies to an aerial work certificate holder.

Section 21.02 requires the operator to ensure that, when the flight of an aircraft begins, the aircraft is carrying completed weight and balance documents and copies are available to CASA if requested.

Section 21.03 prescribes the weight and balance documents that are required for a relevant aircraft involved in aerial work operations, and requirements in relation to those documents.

## **CHAPTER 22 — REQUIREMENTS RELATING TO EQUIPMENT**

Section 22.01 provides that unless otherwise stated, Chapter 22 applies to both aerial work certificate holders and limited aerial work operators.

Section 22.02 provides that the purpose of Chapter 22 is to prescribe requirements for the purposes of subregulation 138.465 (2) of CASR in relation to equipment.

Section 22.03 requires that before a registered aircraft begins a flight, any equipment that is required to be fitted to, or carried on, the aircraft under Chapter 22 must be compliant with the requirements of, or approved under, Part 21 of CASR.

Similarly, for a foreign-registered aircraft, the equipment fitted to, or carried on, the aircraft must have been approved by the NAA of the aircraft's State of registry before the aircraft begins a flight in Australian airspace. The section also contains rules in respect of equipment fitted to or carried on an aircraft although *not* required by Chapter 22 to be so fitted or carried.

Section 22.04 deals with the visibility and accessibility of equipment required to be fitted to, or carried on, an aircraft for a flight under Chapter 22.

Section 22.05 provides for circumstances in which an aircraft may begin a flight with equipment inoperative, despite a requirement under Chapter 22 that the equipment be fitted to, or carried on, the aircraft for the flight.

Section 22.06 provides the requirements for a usage monitoring system for the flight of a single-engine rotorcraft conducting an aerial work operation that is the transfer of a marine pilot. To provide relevant operators with a lead-in preparatory period for this change-over, section 22.06 will have effect only from the beginning of 2 December 2023.

Section 22.07 provides the searchlights and intercommunication system requirements for a flight of a rotorcraft involving an aerial work operation that is a search and rescue operation at night involving winching and rappelling.

Section 22.08 provides the requirements for an aerial work operation to carry survival and signalling equipment, except in certain circumstances (for example, where the operation is in continuous radio contact with the air traffic service (the ATS) or the operator, or there is continuous, ground-based monitoring of the flight through an automatic tracking system fitted to the aircraft).

## **CHAPTER 23 — FLIGHT CREW TRAINING AND CHECKING**

### **Division 1 Flight crew training and checking events**

Section 23.01 provides that Division 1 applies only to an aerial work certificate holder. Division 1 prescribes the requirements relating to training and checking that must be completed by a flight crew member (*FCM*) of an operator, for a flight.

Section 23.02 sets out the general emergency training and competency requirements that must be met before an FCM acts as an FCM for a flight.

Section 23.03 sets out the conversion training and proficiency check requirements that must be met before an FCM acts as an FCM for a flight without the direct supervision of a person who meets the qualification requirements under regulation 138.505.

Section 23.04 requires an FCM to complete the relevant differences training for a flight in accordance with paragraph 61.200 (e) of CASR. A Note explains that the intent of this requirement is to place an obligation on the operator to ensure that the FCM has completed any differences training required by Part 61.

Section 23.05 sets out the recurrent training and checking requirements an FCM must meet for a flight of the operator's aircraft, including the intervals in which an FCM must complete recurrent training and checking.

Section 23.06 sets out the remedial training and checking requirements if an FCM fails an operator proficiency check for an aerial work operation, for an operator, in a specific kind of aircraft.

### **Division 2 Qualification as pilot in command**

Section 23.07 provides that Division 2 applies to both aerial work certificate holders and limited aerial work operators. Division 2 prescribes the qualifications and experience a pilot in command must have for a flight for an operator.

Section 23.08 prescribes the specific qualifications and experience required by the pilot in command of a Class D external load in the form of a person suspended from a belly hook. The requirements include successful completion of an approved training program for proficiency in sling load operations requiring the carriage of persons, and a certificate of relevant proficiency



issued by an approved person. The requirements for a person to become an *approved person* are also prescribed. The section also prescribes the qualifications and experience required by the pilot in command for an aerial work operation that is a marine pilot transfer.

### **Division 3 Individuals who conduct training and checking**

Section 23.09 provides that Division 3 only applies to an aerial work certificate holder. Division 3 prescribes the requirements for an individual who conducts certain training or checking.

Section 23.10 prescribes the requirements for individuals conducting training and checking.

Section 23.11 provides that CASA may test a trainer or checker nominated by the operator to be a training and check pilot for the operator's training and checking system, in order to be satisfied of the individual's competency to perform the role of a relevant trainer or checker.

## **CHAPTER 24 — AIR CREW MEMBER TRAINING AND CHECKING**

Section 24.01 provides that Chapter 24 applies in relation to the training and checking of an air crew member of an aerial work certificate holder and a limited aerial work operator. Further, section 24.01 specifies that an air crew member may only be trained and checked by an aerial work certificate holder to whom subregulation 138.125 (1) applies (that is a holder who, under regulation 138.125, is required to have a training and checking system).

Section 24.02 provides that sections 23.02, 23.03, 23.05 and 23.06 of the MOS apply to the operator for an air crew member, as if references in those provisions to an FCM were references to an air crew member, except that in paragraph 23.04 (1) (b) mention of 6 months is taken to be 12 months. The effect of this is to impose the appropriate and analogous training and checking requirements on an aircrew member.

Section 24.03 prescribes the experience, entry control, training and recency requirements for individuals to be eligible to conduct training and checking for an air crew member.

Section 24.04 provides that CASA may test a trainer or checker nominated by the operator, in order to be satisfied of the individual's competency to perform the role of a relevant trainer or checker.

## **CHAPTER 25 — TASK SPECIALIST TRAINING AND CHECKING**

Section 25.01 provides that Chapter 25 applies to both aerial work certificate holders and limited aerial work operators, unless provided otherwise.

Section 25.02 requires an operator to ensure that, before performing unsupervised duties on a flight, a task specialist is competent in carrying out the operator's normal, abnormal and emergency procedures for the aircraft and the operation that are relevant to the task specialist's duties for the flight.

For an aerial work certificate holder, section 25.03 requires a person who conducts the training or checking of task specialists to have met the minimum experience and entry control requirements for a task specialist trainer, or a task specialist checker, or a task specialist trainer and checker, as set out in the operator's operations manual.

Section 25.04 applies only to a limited aerial work operator, and requires that the training and checking undertaken by a task specialist for a limited aerial work operation must be such as to satisfy the pilot in command of the aircraft for the operation that, when combined with a pre-flight briefing by the pilot, the task specialist is competent to carry out all relevant procedures for the flight.