

CIVIL AVIATION ACT 1988

CIVIL AVIATION SAFETY REGULATIONS 1998

MANUAL OF STANDARDS AMENDMENT (No. 1) 2004

**MOS SUBPART 139.H — AERODROME RESCUE AND
FIRE FIGHTING SERVICES**

I, WILLIAM BRUCE BYRON, Director of Aviation Safety, on behalf of CASA, under regulation 139.712 of the *Civil Aviation Safety Regulations 1998* (CASR 1998) issue the following amendment of the Manual of Standards (MOS) — Subpart 139.H.

[signed Bruce Byron]

Bruce Byron
Director of Aviation Safety and
Chief Executive Officer

31 December 2004

1 Name of Instrument

1.1 This instrument is the Manual of Standards Amendment (No. 1) 2004.

2 Commencement

2.1 This instrument starts having effect on gazettal.

**3 Amendment of Manual of Standards (MOS) Subpart 139.H — Aerodrome
Rescue and Fire Fighting Services**

3.1 Schedule 1 amends Manual of Standards (MOS) — Subpart 139.H.

SCHEDULE 1 — AMENDMENT OF MANUAL OF STANDARDS (MOS) SUBPART 139.H — AERODROME RESCUE AND FIRE FIGHTING SERVICES

1 Paragraph 1.1.1.1

omit

ARFFS stated in this Part will be established by Civil Aviation Regulation 139.H, which reflects

insert

Aerodrome Rescue and Fire Fighting Services (ARFFS) reflects

2 Paragraph 1.1.1.2

substitute

1.1.1.2 Where there is a difference between a standard prescribed in SARPs and a standard prescribed in the Manual of Standards (MOS), the MOS standard prevails.

3 Paragraph 1.1.1.3

substitute

1.1.1.3 Subpart 139.H of the Civil Aviation Safety Regulations 1998 (CASRs) sets out general standards with which an ARFFS must comply. The MOS sets out the detailed requirements, as authorised by the CASRs.

4 Subparagraphs 1.1.2.1 (a) and (b)

substitute

- (a) the relevant CASRs; and
- (b) the MOS; and

5 Paragraph 1.1.2.4

after

scrutiny

insert

and disallowance

6 Paragraph 1.1.2.4

add at the end

Note: The *Legislative Instruments Act 2003* (LIA), which will come into operation on 1 January 2005, will replace the regime referred to in paragraph 1.1.2.4. Upon the commencement of

that Act, the MOS will be regarded as a legislative instrument under section 5 of the LIA. Different rules will apply in relation to tabling; publication in the *Gazette* will be replaced by registration in the Federal Register of Legislative Instruments).

Under section 5 of the LIA:

A legislative instrument is an instrument in writing:

- that is of a legislative character; and
- that is or was made in the exercise of a power delegated by the Parliament.

An instrument is taken to be of a legislative character if:

- it determines the law or alters the content of the law, rather than applying the law in a particular case; 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.

7 Paragraph 1.1.2.6

omit

8 Paragraph 1.1.2.7

after

providers

insert

and operators

9 Paragraph 1.1.2.8

omit

Regulations

insert

CASRs

10 Paragraph 1.1.3.1

omit

Notwithstanding the above, where

insert

Where

11 CASRs Paragraph 1.1.3.1

omit

Manual of Standards (MOS)

insert

MOS

12 Paragraph 1.1.5.1

omit

Manual of Standards (MOS)

insert

MOS

13 Paragraph 1.1.5.3

omit

intimated

insert

initiated

14 Subparagraph 1.1.6.1 (c)

omit

9002: 1944

15 Section 1.2, definition of Annex 14

omit

Organisation

insert

Organization

16 Chapter 1, section 1.2, definitions

insert the following definitions

Appliance	A fire service operational vehicle used in response to a fire, incident or accident.
Flotation Platform	Any device acceptable to CASA for the support of passengers and crew in the water.
Operational Vehicle	An ARFFS vehicle that responds airside in an emergency and is fitted with rotating beacon, emergency alerting device and operational radio.

17 Section 1.2, definition of Air transport operation

omit

remuneration or hire

insert

hire or reward

Note: The definition of *Air transport operation* in section 1.2 will also be removed from its present location to its correct position in alphabetic sequence (before the definition of *Annex 14*).

18 Section 1.2, definition of CARs

omit

Civil Aviation Regulations 1998

substitute

Civil Aviation Regulations 1988

19 Section 1.2, definition of CASR

omit

Civil Aviation Safety Regulation

substitute

Civil Aviation Safety Regulations 1998

20 Section 1.2, definition of ICAO

omit

Organisation

insert

Organization

21 Section 1.2, definition of Licensee

substitute

<i>Licensee</i>	The holder of an aerodrome licence issued under Part 9 of the <i>Civil Aviation Regulations 1988</i> or an aerodrome certificate granted under regulation 139.050 of the CASRs
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22 Section 1.2, definition of Representative

omit

the Authority

insert

CASA

23 Heading to Chapter 2 — CASR Reference

substitute

CASR References: Regulations 139.710, 139.755, 139.765, 139.795 and 139.800

24 Paragraph 2.1.1.2

substitute

2.1.1.2 Where there is a change in the size of aircraft using an aerodrome that, on applying the standard set out in Chapter 3, is seen to require a reduction or increase in the aerodrome category, the ARFFS provider must submit to CASA a Safety Case based on the standard set out in Chapter 3 in order to obtain approval of the necessary reduction or increase in the ARFFS.

25 Paragraph 2.1.4.1

omit

criteria Level 1 or Level 2

insert

Level 1 in accordance with paragraph 139.755 (2) (b)

26 Paragraph 2.1.4.1

omit

critical aircraft using the aerodrome within a period not exceeding 12 months

insert

aircraft using the aerodrome

27 Paragraph 2.2.1.3

omit

28 Heading to Chapter 3 — CASR Reference

substitute

CASR References: Regulations 139.712, 139.715 and 139.755

29 Paragraph 3.1.2.2

omit

ensue

insert

ensure

30 Paragraph 3.1.3.2

omit all words after and including

Chapter 25,

insert

CHAPTER 25 — INTERRUPTION OR CHANGE TO LEVEL OF
OPERATIONAL SERVICE AND CONTINGENCY PLANS

31 Heading to Chapter 4 — CASR Reference

substitute

CASR References: Regulations 139.795, 139.800 and 139.805

232 Paragraph 4.1.1.5

omit

ADR

insert

Australian Design Rules (ADR)

33 Heading to Chapter 5 — CASR Reference

substitute

CASR References: Regulations 139.795, 139.800 and 139.805

34 Heading to Chapter 6 — CASR Reference

substitute

CASR References: Regulations 139.710, 139.755, 139.771, 139.772 and 139.800

35 Paragraph 6.1.1.1

after

position

insert

at the aircraft or site of the incident or accident

36 Paragraph 6.1.4.2

omit

off aerodrome

insert

off-aerodrome

37 Paragraph 6.1.4.3

omit

On aerodrome

insert

On-aerodrome

38 Paragraph 6.1.4.4

omit

include

insert

require

39 Heading to Chapter 7 — CASR Reference

substitute

CASR References: Regulations 139.785 and 139.795

40 Paragraph 7.1.1.5

substitute

7.1.1.5 The ARFFS provider may, with CASA approval, substitute extra complementary agent in place of water capacity in accordance with the ICAO formula in Annex 14, Chapter 9.

41 Paragraph 7.1.2.3

omit

production

insert

discharge

42 Paragraph 7.1.3.1

substitute

7.1.3.1 A reserve supply of foam concentrate, complementary agent and expellant gas cylinders equivalent to 200% of the quantities of those agents to be provided in the rescue and fire fighting vehicles for the aerodrome category must be maintained on the aerodrome for vehicle replenishment purposes. If a delay greater than 7 days is reasonably anticipated in replenishing a reserve supply, the amount of reserve supply should be increased to provide for the anticipated delay.

43 Paragraph 7.1.3.3

substitute

7.1.3.3 Hydrants with a minimum flow of 30 l/s must be available for the refilling of emergency fire service vehicles. The hydrants must be easily accessible and identified in the ARFFS SOPs.

44 Heading to Chapter 8 — CASR Reference

substitute

CASR Reference: Regulation 139.825

45 Paragraph 8.1.1.1

before

regularly

insert

be

46 Paragraph 8.1.1.1

omit

operation

insert

operational

47 Paragraph 8.1.1.5

omit all words after

list.

insert

All testing must be carried out in accordance with AS, State or Federal Government requirements. If there is a conflict, whichever requirement is the most stringent must apply.

48 Heading to Chapter 9 — CASR References

substitute

CASR References: Paragraph 139.712 (f), regulations 139.770 and 139.775

49 Paragraph 9.1.1

add at the end

— Level 1

50 Paragraph 9.1.1.3

after

air

insert

transport

51 Paragraph 9.1.1.4

substitute

9.1.1.4 At aerodromes where the daily coverage is for less than 24 hours, the ARFFS must be fully operational for a minimum of 15 minutes before the first scheduled aircraft movement for the day, whether it is an arrival or departure. Also, the operational crew must remain on duty and in operational readiness for 15 minutes following the last aircraft movement for the day, whether it is an arrival or departure.

52 Heading to Chapter 10

substitute

CHAPTER 10: SAFETY HAZARD, RISK MANAGEMENT AND SAFETY HAZARD SYSTEMS

CASR References Paragraph 139.712 (f), regulations 139.765, 139.890, 139.895 and 139.900

53 Paragraph 10.1.1

substitute

Subsection 10.1.1 Standard: Operational Risk Assessment

54 After subsection 10.1.1

insert

Subsection 10.1.2 Standard: Safety Management System

10.1.2.1 A Safety Management System (SMS) defines the policies, procedures and practices for managing the safety of the provision of services and any changes in their provision.

10.1.2.2 Features of Safety Management System

The necessary features of an SMS are:

- (a) the service provider's safety policy and objectives;
- (b) the organisational and staff responsibilities for safety matters;
- (c) the establishment of the levels of safety that apply to the services, and the monitoring of the levels of safety achieved;
- (d) the process for internal safety reviews;
- (e) the process for the internal reporting and management of safety concerns and incidents;
- (f) the process for the identification, assessment, control and mitigation, of existing and potential safety hazards;
- (g) the definition of the interface arrangements between internal functional groups;
- (h) the processes for the management of change to existing services and systems.

55 Heading to Chapter 11 — CASR Reference

substitute

CASR Reference: Regulation 139.780

56 Heading to Chapter 12 — CASR Reference

substitute

CASR References: Regulations 139.850, 139.855, 139.890, 139.895 and 139.900

57 Paragraph 12.1.2.1

after

AFC

insert

and local competencies

58 Paragraph 12.1.2.2

omit

59 Heading to Chapter 13 — CASR References

substitute

CASR References: Subregulations 139.795 (4) and (5), regulations 139.800, 139.805 and 139.810

60 Heading to Chapter 14 — CASR Reference

substitute

CASR Reference: Regulation 139.815

61 Paragraph 14.1.3.1

substitute

14.1.3.1 At locations where transportation of hazardous freight is known to be undertaken:

- (a) the ARFFS personnel must be provided with suitable protective clothing, including breathing apparatus, to enable them to deal safely with any incident or accident that may occur; and
- (b) hazardous freight should be identified as per the requirements of CHAPTER 10: SAFETY HAZARD AND RISK MANAGEMENT; and
- (c) ARFFS staff must have the necessary qualifications as per the requirements of CHAPTER 18: COMPETENCY LEVELS.

62 Paragraph 14.1.4.1

omit

operate.

insert

operate, including:

63 Heading to Chapter 15 — CASR References

substitute

CASR References: Regulations 139.865 and 139.875

64 Paragraph 15.1.1.1

omit

Procedure

insert

Procedures

65 Heading to Chapter 16 — CASR Reference

substitute

CASR References: Regulations 139.850, 139.855, 139.890 and 139.900

66 Paragraph 16.1.1.1

after

and

insert

must be

67 Paragraph 16.1.2.1

omit

Civil Aviation Act

insert

Civil Aviation Act 1988

68 Section 16.1 (new Note)

after paragraph 16.1.2.2, insert

Note: This section forms part of the Safety Management System (also see Chapter 10).

69 Heading to Chapter 17 — CASR Reference

substitute

CASR References: Regulations 139.840 and 139.845

70 Heading to Chapter 18 — CASR Reference

substitute

CASR References: Subregulation 139.705 (2), regulations 139.712, 139.765, 139.773, 139.845 and 139.915

71 Paragraph 18.1.1.3

omit

programme to ensure that core competency

insert

in accordance with a program to ensure that core competencies

72 Paragraph 18.1.1.8

omit

Officers

insert

An officer

73 Paragraph 18.1.1.9

substitute

18.1.1.9 An officer in charge of an ARFFS at a Level 2 aerodrome, which has been established in accordance with CHAPTER 2: CRITERIA FOR ESTABLISHMENT OR DISESTABLISHMENT OF ARFFS, must hold:

- (a) if the aerodrome is categorised as category 6 or above — at least an ARFFS AFC Advanced Diploma; or
- (b) if the aerodrome is categorised as category 5 or below — at least an ARFFS AFC Diploma.

74 Paragraph 18.1.1.10

omit

crew

substitute

staff

75 Paragraph 18.1.1.10

omit

Modules, and

insert

Modules.

76 Paragraph 18.1.1.11

omit

a crew

substitute

staff

77 Paragraph 18.1.1.16

omit

prerequisite

insert

prerequisites

78 Heading to Chapter 19 — CASR Reference

substitute

CASR References: Subregulation 139.705 (2) and regulation 139.845

79 Subparagraph 19.1.1.1 (b)

omit

must have

insert

and which has

80 Paragraph 19.1.4.7

omit all words after

audit

insert

showing that it has rectified the items of non-compliance.

81 Heading to Chapter 20 — CASR Reference

substitute

CASR References: Regulations 139.705, 139.773, 139.835, 139.840, 139.845 and 139.915

82 Paragraph 20.1.1.3

substitute

20.1.1.3 A shift supervisor must not exercise responsibility for staff of operational fire fighters or for any activity unless he or she is qualified to do so and holds any required AFC diploma in accordance with the requirements set out in the AFC Training Modules in paragraphs 18.1.1.6 and 18.1.1.10.

83 Paragraph 20.1.2.1

omit

to use a

insert

use of a

84 Paragraph 20.1.2.1

omit

crew

insert

staff

85 Paragraph 20.1.2.1

omit

aircraft accident

insert

aircraft accident or incident

86 Paragraph 20.1.2.2

substitute

20.1.2.2 Aerodromes meeting Level 1 criteria (see Chapter 2 of this Manual) must ensure that the designated staffing levels are met to provide protection for all aircraft movements and property during each operational shift.

87 Paragraph 20.1.2.4

omit

Aerodromes

substitute

At aerodromes

88 Paragraph 20.1.2.4

omit

the schedule aircraft arrival and must

substitute

the scheduled aircraft arrival and staff must

89 Paragraph 20.1.2.6

omit

crew

substitute

staff

90 Subparagraph 20.1.3.2 (e)

omit

programme to ensure that core competency

insert

in accordance with a program to ensure that core competencies

91 Subparagraph 20.1.3.3 (a)

omit

appliance

substitute

vehicle monitor

92 Subparagraph 20.1.3.3 (d)

substitute

(d) Fire Station Communication Centre;

93 Subparagraph 20.1.3.3 (f)

omit

appliances

insert

vehicles

94 Sub-subparagraph 20.1.3.3 (h) (iv)

omit

branch's

insert

branches and

95 Subparagraph 20.1.3.3 (j)

omit

ICS

insert

Incident Command System (ICS)

96 Paragraph 20.1.3.7

omit

program.

insert

, in particular:

- (a) training must align with the vehicle requirements for the aerodrome category certification; and
- (b) all qualified staff must participate on a regular basis in realistic exercises representing a crash/accident/incident to simulate the category of the aerodrome.

97 Paragraph 20.1.3.9

omit

them

insert

these

98 Paragraph 20.1.3.11

omit

an

99 Note 2 after paragraph 20.1.3.14

omit

100 Heading to Chapter 21 — CASR Reference

substitute

CASR Reference: Regulation 139.840

101 Paragraph 21.1.1.1

substitute

21.1.1.1 Before beginning initial training, prospective candidates must pass a medical examination. CASA's Aviation Medical Certificate Class 2 is the minimum standard.

102 Subparagraph 21.1.3.1

substitute

21.1.3.1 A person must not act in any capacity for which the authority of the ARFFS Certificate of Competency as defined in this Manual is required if, by reason of having consumed, used or otherwise absorbed alcoholic liquor, a drug or pharmaceutical or medical preparation or other substance, the person's capacity so to act is impaired.

21.1.3.2 ARFFS staff must be aware that certain medications can affect their ability to operate fire vehicles and associated fire fighting equipment. Staff must seek medical advice on the effect of any such medication on the level of performance of ARFFS functions.

103 Heading to Chapter 22 — CASR Reference

substitute

CASR References: Regulations 139.715, 139.760, 139.772, 139.805, 139.820, 139.825, 139.830, 139.860, 139.885 and 139.895

104 Paragraph 22.1.1.1

omit

(where not provided)

105 Paragraph 22.1.1.3

omit

a FSCC

insert

an FSCC

106 Paragraph 22.1.2.1

omit

Fire Station Communication Centre (FSCC)

insert

FSCC

107 Paragraph 22.1.2.2

add at the end

Two-way activation of facilities is required.

108 Paragraph 22.1.4.3

omit all words after

provided

insert

and be linked with the FSCC alerting system. The FSCC must have facilities to monitor operational, emergency and UHF radio frequencies as nominated by the ARFFS provider and approved by CASA.

109 Paragraph 22.1.5.1

omit

radio's

insert

radios

110 Paragraph 22.1.5.2

omit

After (fire service) use areas for vehicle

insert

After fire service use, areas for vehicles

111 Paragraph 22.1.6.1

omit

appliances

insert

vehicles

112 Paragraph 22.1.6.1

after subparagraph (c), add

; (d) a breathing apparatus training facility.

113 Paragraph 22.1.6.2

omit

proved

insert

provided

114 Note after paragraph 22.1.6.2

omit

the Local, State and Federal Government's

insert

Local, State and Federal Government

115 Paragraph 22.1.7.1

substitute

22.1.7.1 If provided, inshore rescue boats must be housed under cover, and appropriate stowage facilities must be made available for wetsuits (and drysuits where applicable), personal flotation devices (PFD) and associated equipment. Suitable drying and stowage areas must be provided.

116 Paragraph 22.1.7.5

omit

floatform platforms/life rafts

insert

flotation platforms or life rafts

117 Paragraph 22.1.7.5

omit

manufacturers

insert

manufacturer's

118 Paragraph 22.1.8

omit

Vehicles

substitute

Vehicle

119 Subparagraph 22.1.8.1 (a)

omit

MOS

insert

this MOS

120 Heading to Chapter 23 — CASR Reference

substitute

CASR Reference: Regulation 139.895

121 Paragraph 23.1.1.1

omit

their provision of service

insert

the level of service provision

122 Paragraph 23.1.1.4

omit

defines

insert

defined

123 Subparagraphs 23.1.1.4 (a), (b) and (c)

omit

who (wherever occurring)

insert

that

124 Heading to Chapter 24 — CASR Reference

substitute

CASR References: Regulations 139.870 and 139.885

125 Paragraph 24.1.1

substitute

24.1.1 Standard: Vehicles, Electrical, Radio, Ancillary Equipment and BA Sets

126 Paragraph 24.1.1.1

substitute

24.1.1.1 A methodology must be in place, in relation to vehicles, electrical equipment, radio equipment, ancillary equipment and BA Sets, to ensure the integrity of systems and maintenance schedules for the provision of the ARFFS.

127 Heading to Chapter 25 — CASR Reference

substitute

CASR References: Regulations 139.855, 139.860, 139.870 and 139.910

128 Paragraph 25.1.1.1

substitute

25.1.1.1 Any proposed change to the level of service provision of ARFFS as defined in Chapters 2, 3, 4, 5, 6, 7, 9, 18 and 20 of this MOS must be approved by CASA before publication in ERSA.

129 Heading to Chapter 26 — CASR Reference

substitute

CASR References: Regulations 139.772, 139.885, 139.890 and 139.90

130 Subparagraph 26.1.1.2 (a)

omit

configuration. This

insert

configuration, that

131 Heading to Chapter 27 — CASR Reference

substitute

CASR Reference: Regulation 139.875

132 Paragraph 27.1.2.1

after

system (*first occurring*)

insert

must be available

133 Paragraph 27.1.2.2

substitute

27.1.2.2 Radio transmissions dealing with aircraft emergencies and operational incidents must be electronically recorded.

134 Heading to Chapter 28 — CASR Reference

substitute

CASR References: Regulations 139.865 and 139.875

135 Paragraph 28.1.1.1

omit

A recognised

insert

Recognised

136 Paragraph 28.1.1.1

omit

store

insert

store,

137 Paragraph 28.1.1.2

omit all words after

by

insert

the Australian Transport Safety Bureau, CASA, a coroner, the police force of a State or Territory and any other agency with authority to do so.

138 Paragraph 28.1.2

omit

Fire Station Communication Centre tape voice

Recordings

3 months

insert

Fire Station Communication Centre voice recordings

30 days

139 Heading to Chapter 29 — CASR Reference

substitute

CASR References: Regulations 139.880 and 139.905

140 Paragraph 29.1.1.2

omit

need to