



Australian Government

Civil Aviation Safety Authority

I, PHILIPPA JILLIAN SPENCE, Director of Aviation Safety, on behalf of CASA, make this instrument under regulations 139.005 and 201.025 of the *Civil Aviation Safety Regulations 1998*.

Pip Spence
Director of Aviation Safety

October 2023

Part 139 Manual of Standards (Global Reporting Format and Miscellaneous Amendments) Instrument 2023

1 Name of instrument

This instrument is the *Part 139 Manual of Standards (Global Reporting Format and Miscellaneous Amendments) Instrument 2023*.

2 Commencement

- (1) This instrument commences on the day after it is registered.
- (2) The amendments in Schedule 1 take effect on commencement.
- (3) Despite subsection (1), an aerodrome operator for any of the following
 - (a) a controlled aerodrome; or
 - (b) an aerodrome where scheduled air transport operations in accordance with Part 121 of CASR are conducted;

must comply with each requirement that arises under an amendment in Schedule 2 by not later than 13 June 2024;

Note 13 June 2024 coincides with the publication of the AIP on an Aeronautical Information Regulation and Control (AIRAC) effective date.

- (4) Despite subsection (1), an aerodrome operator for an aerodrome other than one mentioned in subsection (3) must comply with each requirement that arises under an amendment in Schedule 2 by not later than 28 November 2024;

Note 28 November 2024 coincides with the publication of the AIP on an Aeronautical Information Regulation and Control (AIRAC) effective date.

3 Amendment of the *Part 139 (Aerodromes) Manual of Standards 2019*

Schedule 1 and Schedule 2 amend the *Part 139 (Aerodromes) Manual of Standards 2019*.

Schedule 1 Amendments

- [1] The Notes in the provisions or tables mentioned in the following Table:

Provisions or tables			
Subsection 3.01(2)	Table 7.15(1)	Subsection 8.85(10)	Subsection 9.41(4)
Subsection 5.12(13)	Subsection 7.21(9)	Subsection 8.112(1)	Subsection 9.41(13)
Subsection 5.12(14)	Subsection 7.22(3)	Section 8.116	Subsection 9.42(20)
Subsection 6.09(2)	Subsection 7.23(1)	Section 8.118	Subsection 9.124(2)
Subsection 6.39(1)	Subsection 7.24(3)	Subsection 9.02(2)	Subsection 9.135(2)
Table 6.53(1)-1	Subsection 8.49(2)	Subsection 9.09(1)	Subsection 18.02(2)
Table 6.53(1)-2	Subsection 8.85(6)	Subsection 9.39(7)	Subsection 22.01(5)
Subsection 6.59(1)			

omit

1.06 (wherever occurring)

insert

1.07

[2] Subsection 3.01 (2), definitions

insert

runway starter extension means an additional length of pavement that:

- (a) is immediately before the runway threshold; and
- (b) increases the distance available for take-off; but
- (c) must not be used for landing.

[3] After subsection 3.01 (2)

insert

- (3) In addition to any relevant definitions contained in subsection (2), the following definitions apply for applicable provisions in relation to runway surface conditions:

contaminant means matter present on the surface of a runway that meets one or more of the following runway surface condition descriptors:

- (a) **compacted snow**, being snow that has been compacted into a solid mass such that aeroplane tyres, at operating pressures and loadings, will run on the surface without significant further compaction, or rutting of the surface;
- (b) **dry snow**, being snow from which a snowball cannot readily be made;
- (c) **frost**, being frost that consists of ice crystals formed from airborne moisture on a surface whose temperature is below freezing;

Note 1 Frost differs from ice in that the frost crystals grow independently and, therefore, have a more granular texture.

Note 2 Below freezing refers to air temperature equal to or less than the freezing point of water (0 degree Celsius).

Note 3 Under certain conditions frost can cause the surface to become very slippery and it is then reported appropriately as reduced braking action.

- (d) **ice**, being water that has frozen, or compacted snow that has transitioned into ice, in cold and dry conditions;
- (e) **slush**, being snow that is so water-saturated that it will splatter if stepped on forcefully, or from which water will drain when a handful is picked up;
- (f) **standing water**, being water of a depth greater than 3 mm;

Note By convention, running water of a depth greater than 3 mm is reported as standing water.

- (g) **wet ice**, being ice with water on top of it, or ice that is melting;

Note Freezing precipitation can lead to runway conditions associated with wet ice in relation to aeroplane performance. Wet ice can cause the surface to become very slippery. It is then reported appropriately as reduced braking action in line with procedures in AC 139-22 v1.0 Global reporting format – Runway surface condition.

- (h) **wet snow**, being snow that contains enough water content to be able to make a well-compacted, solid snowball, and from which water will not squeeze out.

Note A runway is contaminated when one or more contaminants are present on the surface of the runway.

runway condition assessment matrix or **RCAM** means a matrix for assessing the runway condition code from a set of observed runway surface conditions and the pilot in command's report on braking action.

runway condition code or **RWYCC** is the number used in a runway condition report to describe the runway surface condition.

Note The runway condition code allows the flight crew to make an operational aeroplane performance calculation. Procedures for the determination of the runway condition code are described in the AC 139-22 v1.0 Global reporting format – Runway surface condition.

runway condition report or **RCR** means a comprehensive standardised report relating to runway surface conditions, and their effect on aeroplane landing and take-off performance.

runway surface condition descriptors: see **contaminant**.

slippery wet runway means a wet runway where the surface friction characteristics of a significant portion of the runway show that the runway is degraded.

Note These definitions are for use in relation to Global reporting Format.

[4] **Paragraph 8.16(2)(e)**

omit

less

insert

more

[5] **Paragraph 9.18(1)(c)**

repeal and substitute

- (c) unless CASA approves otherwise, the VASIS;

[6] **Subsection 9.18(2)**

repeal and substitute

- (2) For paragraph 9.18(1)(c), CASA may only approve otherwise if:

- (a) the VASIS is provided for temporary use only; and
- (b) the approval is supported by a safety assessment; and
- (c) the approval is in writing with appropriate conditions (if any).

[7] Paragraph 11.07(1)(c)

repeal and substitute

- (f) carrying out works when the aerodrome is closed to aircraft operations;
- (g) the use of surface vehicles and equipment, including in accordance with sections 11.14, 14.03 and 14.06, as applicable.

[8] Section 11.14

repeal and substitute

11.14 Airside vehicle control

If surface vehicles operate on or near the movement area of an aerodrome, the aerodrome manual must contain the procedures for such operations, including procedures:

- (a) for traffic movement (including speed limits) and enforcing traffic rules; and
- (b) for establishing a method of instructing and testing drivers in relation to the traffic rules; and
- (c) requiring the driver of the surface vehicle to read back to ATC the safety-related parts of any ATC clearances or instructions transmitted to the driver by voice.

Note See also section 14.06.

[9] Subsection 14.03 (4)

repeal and substitute

- (4) Subject to subsections (7) and (8), an airside vehicle operating on a runway strip, a runway, a taxiway strip or a taxiway must be equipped for communications as follows:
 - (a) for a non-controlled aerodrome or an aerodrome where ATC is not in operation — at least a VHF receiver capable of monitoring the CTAF or ATC frequencies, as applicable.
 - (b) for a controlled aerodrome where ATC is in operation — a VHF radio capable of two-way communications with ATC.

[10] Subsection 14.03 (8)

repeal and substitute

- (8) Subsection (4) does not apply to an airside vehicle or equipment if the vehicle or equipment is under escort by another vehicle that is equipped in accordance with subsection (4).

[11] After subsection 14.05

insert

14.06 Surface vehicle control and communications

- (1) The driver of a vehicle operating, or intending to operate, on the manoeuvring area of a controlled aerodrome must:

- (a) comply with any clearances and instructions issued by an air traffic controller; and
 - (b) read back to an air traffic controller the safety-related parts of any clearance or instruction which the controller has transmitted by voice.
- (2) Without affecting subsection (1), the following parts of a clearance or instruction must always be read back to the air traffic controller:
- (a) any route specified in a clearance or instruction;
 - (b) any clearance to, any conditional clearance to, or any instruction to, operate on, enter, stop on, wait on, hold short of, cross, or vacate, any runway or taxiway;
 - (c) any radio frequency instructions.

Schedule 2 Amendments

[1] Paragraph 11.03 (1) (b)

repeal and substitute

- (b) both:
 - (i) conducting particular inspections, including the items to be inspected or checked; and
 - (ii) making changes to the RWYCC and runway surface contaminant types;

[2] Paragraph 11.05 (1) (d)

repeal and substitute

- (d) at controlled aerodromes — ATC of any hazards that may adversely affect aviation safety;
- (e) ATC, AIS and pilots of relevant RWYCC and runway surface descriptions.

[3] Paragraph 12.01 (1) (a)

repeal and substitute

- (a) when aeroplane operations are scheduled, otherwise anticipated, or ongoing, and there has been a severe wind event, a severe storm, or a period of heavy or prolonged rainfall;

Note 1 If pooling or ponding of water, or poor drainage, is observed on a runway, remedial maintenance must be undertaken as soon as possible: see subsection 18.03.

Note 2 Aerodrome personnel are not expected to carry out an aerodrome serviceability inspection if weather events create a work, health and safety hazard, for example, if lightning in the area requires the movement area to be vacated.

[4] Paragraph 12.01 (1) (d), including the Note

repeal and substitute

- (d) when requested by ATC (where applicable);
- (e) when aeroplane operations are scheduled, otherwise anticipated, or ongoing, and meteorological conditions may have caused:
 - (i) the RWYCC to change; or
 - (ii) a runway surface contaminant type to be present, or to have changed.

Note CASA recommends that an additional aerodrome serviceability inspection should be carried out if a pilot or ARFFS provider reports a hazard.

[5] Subsection 12.01 (2)

repeal and substitute

- (2) Without affecting the requirements under subsection (1), for an aerodrome with scheduled air transport operations:
- (a) at least 2 aerodrome serviceability inspections must be carried out each week, with at least 48 hours between any 2 inspections; and
 - (b) at least 1 aerodrome serviceability inspection must be carried out on each day that an air transport movement is scheduled; and
 - (c) at least 2 aerodrome serviceability inspections must be carried out on each day that an international air transport movement is scheduled for a Code 3 or a Code 4 runway if at least 6 hours elapse between each air transport movement.

[6] After subsection 12.01 (2)

insert

- (2A) An aerodrome serviceability inspection carried out to satisfy a requirement of a paragraph of subsection (2) may be used to satisfy a requirement of another paragraph of section (2).

[7] Subsection 12.03 (3), the heading

repeal and substitute

Surface conditions of a movement area

Note For additional inspection requirements, see also section 12.05, Global reporting format and aerodrome serviceability inspection requirements.

[8] Section 12.04, the heading

repeal and substitute

12.04 Reporting reportable occurrences

Note For additional matters to report in relation to aerodrome runway conditions, see also section 12.05, Global reporting format and aerodrome serviceability inspection requirements, for additional matters to report in relation to aerodrome runway conditions.

[9] After subsection 12.04

insert

12.05 Global reporting format and aerodrome serviceability inspection requirements

- (1) Without affecting any other requirements under Chapter 12, the aerodrome operator of a certified aerodrome with an operational sealed runway (an **operational runway**) must comply with each requirement mentioned in this section for the runway.
- (2) An aerodrome serviceability inspection carried out for Chapter 12 must specifically check for visible dampness, standing water, snow, slush, ice, or frost on an operational runway.

Note In this section, snow, slush, ice, and frost of various kinds are described as “Other contaminants”, to distinguish them from contamination by dampness or water.

Using runway surface description to determine the RWYCC

- (3) The aerodrome operator must use the applicable runway surface description mentioned in Table 12.05(3) to determine the applicable RWYCC for an operational runway.

Table 12.05(3) — RWYCC

Using a runway surface description to assign a RWYCC	
For a runway surface description of: Column 1	the applicable RWYCC is: Column 2
DRY	6
WET (The runway surface is covered by any visible dampness or water up to and including 3 mm depth)	5
WET (“slippery wet” runway)	3
STANDING WATER	2

Note This RWYCC assignment table is in PANS-Aerodromes and includes WET and DRY conditions.

Wet or standing water (but not slippery wet) — reporting

- (4) When aeroplane operations are scheduled, otherwise anticipated, or ongoing, the aerodrome operator must report an operational runway that is wet or has standing water, as soon as possible in an RCR.
- (5) The RCR must include:
 - (a) the relevant runway number; and
 - (b) subject to paragraph (c), for each identified one third length of the runway, the applicable RWYCC and runway surface description in accordance with Table 12.05(5); and
 - (c) if 25% or less, of a one third length of the runway has standing water on it — a RWYCC of 5 (WET) for the one third length; and
 - (d) if the depth of any standing water on the runway is reasonably ascertainable — a report of the depth of that standing water.
- (6) The RCR must be made to the relevant persons in accordance with Table 12.05(5).
- (7) Despite subsection (4), if an agreement exists between the aerodrome operator and ATC for ATC to assess and report the runway or a portion of it when WET or DRY, the aerodrome operator does not need to make the RCR to ATC.

Table 12.05(5) — Wet or standing water reports

For a runway surface description of: Column 1	the applicable RWYCC is: Column 2	and the report must be made to: Column 3
WET	5	(a) ATC (if available); or (b) if the ATC is not available — pilots, but only where the aerodrome operator has available UNICOM, or

		CA/GRS, or another direct means of communication.
STANDING WATER	2	(a) the NOTAM Office, and ATC (if available); and (b) if the ATC is not available — pilots, but only where the aerodrome operator has available UNICOM, or CA/GRS, or another direct means of communication.

Note UNICOM or CA/GRS services can be used to report an RCR if they are operating at the time of the runway surface condition. Direct means of communication can mean, for example, when the aerodrome operator is also the aircraft operator such as for certain mining companies, or when the aerodrome reporting officer can communicate directly with pilots via VHF radio.

Slippery wet — reporting

- (8) When aeroplane operations are scheduled, otherwise anticipated, or ongoing, the aerodrome operator must report an operational runway, as soon as possible in an RCR, if:
- (a) it is slippery wet; or
 - (b) the aerodrome operator has received at least 2 pilot reports of MEDIUM runway braking action for the runway, or a portion of it; or
 - (c) the aerodrome operator has received at least 2 ATC reports of MEDIUM runway braking action for the runway, or a portion of it.

Note Pilot reports of runway braking action as MEDIUM, meaning a slippery wet runway surface, are based on pilot observations that braking deceleration is noticeably reduced for the wheel braking effort applied, or that directional control is noticeably reduced.

- (9) The RCR must include:
- (a) the relevant runway number; and
 - (b) for each identified one third length of the runway:
 - (i) the applicable RWYCC and runway surface description in accordance with Table 12.05 (9); and
 - (ii) the applicable percentage extent of the slippery wet surface.
- (10) The RCR must be made to the relevant persons in accordance with Table 12.05(9).

Table 12.05(9) — Slippery wet reports

For a runway surface description of:	the applicable RWYCC is:	and the report must be made to:
Column 1	Column 2	Column 3
SLIPPERY WET	3	(a) the NOTAM Office, and ATC (if available); and (b) if the ATC is not available — pilots, but only where the

		aerodrome operator has available UNICOM, or CA/GRS, or another direct means of communication.
--	--	---

Other contaminants — using runway surface description to determine the RWYCC

- (11) For other contaminants, the aerodrome operator must use the runway surface description mentioned in Table 12.05(11) to determine the applicable RWYCC for an operational runway.

Table 12.05(11) – Other contaminants – RWYCC

Using a runway surface description to assign a RWYCC for other contaminants	
For a runway surface description of:	the applicable RWYCC is:
Column 1	Column 2
FROST SLUSH (up to and including 3 mm depth) DRY SNOW (up to and including 3 mm depth) WET SNOW (up to and including 3 mm depth)	5
COMPACTED SNOW (Outside air temperature minus 15 degrees Celsius and below)	4
DRY SNOW (more than 3 mm depth) WET SNOW (more than 3 mm depth) DRY SNOW ON TOP OF COMPACTED SNOW (any depth) WET SNOW ON TOP OF COMPACTED SNOW (any depth) COMPACTED SNOW (outside air temperature above minus 15 degrees Celsius)	3
SLUSH (more than 3 mm deep)	2
ICE	1
WET ICE WATER ON TOP OF COMPACTED SNOW DRY SNOW OR WET SNOW ON TOP OF ICE	0

Note This RWYCC assignment table is in PANS-Aerodromes and includes SNOW and ICE conditions.

Other contaminants — reporting

- (12) When aeroplane operations are scheduled, otherwise anticipated, or ongoing, the aerodrome operator must report an operational runway that has other contaminants, as soon as possible in an RCR.
- (13) The RCR must include:
- (a) the relevant runway number; and
 - (b) subject to paragraph (c), for each identified one third length of the runway, the applicable RWYCC and runway surface description in accordance with Table 12.05(11).
 - (c) if 25% or less, of a one third length of the runway has other contaminants on it — a RWYCC of 5 (WET) for the one third length; and
 - (d) if the depth of any other contaminants on the runway is reasonably ascertainable — a report of the depth of the contaminants.
- (14) The RCR must be made to:
- (a) the NOTAM Office, and ATC (if available); and
 - (b) if the ATC is not available — but only where the aerodrome operator has available UNICOM, or CA/GRS, or another direct means of communication.

[10] Paragraph 13.03 (c)

omit

inspection

insert

inspection, including in relation to runway surface conditions,

[11] Paragraph 13.03 (d)

omit

aerodrome

insert

aerodrome, including in relation to runway surface conditions,

[12] Subsection 18.02 (2), Note (2)

repeal and substitute

Note 2 Guidance on evaluating the runway surface friction characteristics is provided in ICAO Document, Assessment, Measurement and Reporting of Runway Surface Conditions (Cir 355). For ICAO documents see section 1.07.

[13] After subsection 18.02 (2)

insert

- (2A) The aerodrome operator must ensure that any person using a friction measuring device mentioned in subsection (2) is demonstrably competent in the use of the device.

Note Competence may be demonstrated through appropriate training or experience.

[14] After section 18.02

insert

18.03 Water pooling or ponding

If pooling or ponding of water, or poor drainage is observed on a runway in the course of an aerodrome serviceability inspection under paragraph 12.01 (1) (a), the aerodrome operator must ensure that remedial maintenance is undertaken as soon as possible.

Note 1 Under paragraph 12.01 (1) (a), the operator of a certified aerodrome must carry out an aerodrome serviceability inspection if there has been a severe wind event, a severe storm, or a period of heavy rainfall.

Note 2 For section 18.03, it is not generally the case that runways or parts of runway surfaces need to be overlaid, re-surfaced or replaced, but maintenance action should be taken to address the formation of depressions or surface irregularities that allow water to pool, pond, or not drain.

CONSULTATION DRAFT