

AERONAUTICAL INFORMATION CIRCULAR 24/21

USER INFORMATION FOR THE IMPLEMENTATION OF THE CANADIAN RUNWAY SURFACE CONDITION NOTAM FORMAT 12 AUGUST 2021

(Replaces AIC 33/20 and AIC 37/20)

Introduction

This aeronautical information circular (AIC) replaces AIC 33/20 and AIC 37/20, as it combines the information regarding the new runway surface condition (RSC) NOTAM format and the associated phraseology accompanying the new format, including how to report the Canadian Runway Friction Index (CRFI) by runway thirds.

On 12 August 2021, in order to meet the important safety elements and intent of the International Civil Aviation Organization (ICAO) Global Reporting Format (GRF), Canada will transition to RSC NOTAM for reporting runway surface conditions. As RSC NOTAM will have a different format from SNOWTAM and "NOTAMJ," a description of how to interpret the information is being provided. Information for flight operations personnel is provided in Transport Canada AC 700-057 – *Global Reporting Format (GRF) for Runway Surface Conditions: Guidance for Flight Operations* which can be found at <<https://tc.canada.ca/en/aviation/reference-centre/advisory-circulars#700-series>>. Reporting requirements for airport and aerodrome operators are thoroughly described in the Transport Canada *Advisory Circular (AC) 300-019 – Global Reporting Format (GRF) for Runway Surface Condition Reporting* which can be found at <<https://tc.canada.ca/en/aviation/reference-centre/advisory-circulars#300-series>>.

Purpose

The purpose of this information is to improve understanding on the new RSC NOTAM format and the associated phraseology that will be used by air traffic services (ATS).

RSC NOTAM Dissemination and Format

RSC NOTAM will be disseminated in the following series:

- RSC NOTAM disseminated to international stakeholders, to the USA, and within Canada will be **Series S: INTL** (approximately 35 aerodromes)
- RSC NOTAM disseminated to the USA and within Canada will be **Series A: INTL-USA** (approximately 500 aerodromes)
- RSC NOTAM disseminated within Canada only will be **Series B: National** (approximately 300 aerodromes)

An aerodrome's NOTAM dissemination category determines which series the RSC NOTAM will be disseminated under. This information can be found in the aerodrome series table in *AIP Canada*, Part 1, General (GEN), Section 3.1.3.4, which can be found at:

<www.navcanada.ca>
Aeronautical Information
AIP Canada
AIP Canada – Current and Next Issues

All RSC NOTAM have Q-Code FAXX, traffic IV, purpose NBO, and scope of A. The validity period of the NOTAM is a maximum of either 8 hours or 24 hours depending on the reporting method and classification of the aerodrome (subject to the published aerodrome operating hours). Item B) of an RSC NOTAM will indicate the beginning of the RSC NOTAM duration period and Item C) will indicate the end of the RSC NOTAM duration period. If there are significant changes a new RSC NOTAM will be issued. As multiple runways are reported in a single RSC NOTAM, it is possible that the NOTAM will be disseminated in multi-parts.

Item E) of an RSC NOTAM contains three sections:

- RSC information;
- CRFI information; and
- Remarks.

Note that all runways at an aerodrome that have winter maintenance are reported in both the RSC and CRFI sections.

The RSC section contains the following information:

1. RSC Header, which includes the Runway (RWY) identifier:
 - a) RWY in use designator, when reporting by thirds (e.g., RSC 33), or
 - b) Full RWY designator when reporting by full runway length (e.g., RSC 07/25).
2. Runway condition code (RWYCC) for each runway third (only if reporting is by thirds).
3. Up to two runway surface descriptions, including percent coverage and, if applicable, the associated depth (per third if reporting by thirds, per runway if reporting by full runway length).
4. Cleared runway width (if reduced).
5. Snow drifts, windrows, and/or snowbanks on the runway (where applicable).
6. Other localized conditions (where applicable).
7. Any treatments applied to the runway (where applicable).
8. Conditions for the remaining width of the runway (where applicable).
9. Snowbanks adjacent to the runway (as applicable).
10. RWY remarks including if the RWYCC was upgraded or downgraded (where applicable).
11. The RSC validity time.

The validity period of the RSC report is in the format MMM DD HHMM – MMM DD HHMM. This is provided as multiple runways are presented in a single report with each runway potentially having a different validity period.

As decided by the aerodrome operator, this information can be reported by thirds or by full runway length. RWYCCs are reported on a scale from 0 to 6, where 0 represents the most slippery conditions and 6 represents the least slippery conditions (equivalent to a dry runway). RWYCCs are only reported on paved runways where the runway is reported by thirds.

When RWYCCs are reported, the code is assigned based on the predominant runway surface descriptions. If more than two runway surface descriptions are present on a runway third, the two most prevalent or severe conditions are reported. If the percent coverage on a runway third is less than or equal to 25%, the conditions are reported and a RWYCC of 6 is assigned. If the percent coverage on a runway third exceeds 25%, the RWYCC is based on the runway surface description with the higher coverage or the more slippery condition, as circumstances warrant. The final RWYCC is then confirmed, upgraded, or downgraded based on other information, including: CRFI measurements, braking action reports, and directional control observations.

Runway surface condition descriptions are reported with the associated percentage of coverage and, when applicable, the associated depth in inches. The following RSC descriptions are used:

COMPACTED SNOW	SLUSH ON TOP OF ICE
DRY	STANDING WATER
DRY SNOW	WATER ON TOP OF COMPACTED SNOW
DRY SNOW ON TOP OF COMPACTED SNOW	WET
DRY SNOW ON TOP OF ICE	WET ICE
FROST	WET SNOW
ICE	WET SNOW ON TOP OF COMPACTED SNOW
SLIPPERY WHEN WET	WET SNOW ON TOP OF ICE
SLUSH	

If an aerodrome has multiple runways, all runways are reported in a single RSC NOTAM. If multiple runways are reported, they are reported in the order of ascending pairs.

Example:

RSC 04...
 RSC 22...
 RSC 12...
 RSC 30...

The CRFI section contains the following information:

1. RWY identifier
2. Temperature
3. CRFI reading
4. Observation time of the CRFI reading

CRFI can be reported by thirds or by full runway length. Some circumstances require airports to report CRFI by thirds, and this requirement is not linked to the RSC reporting method. In other words, it is possible for CRFI to be reported by thirds, while the RSC is reported for full runway length and vice versa. When a CRFI measurement is not able to be taken for any reason, regardless of reporting method, it is annotated by the acronym "NR," which means "Not Reported." Refer to the *Canadian Aviation Regulations (CARs)* section 322.416 of the *Airport Winter Maintenance Standard* for further information on CRFI reporting.

The remarks section contains the following information:

1. Taxiway conditions reported in their own remarks section.
2. Apron conditions reported in their own remarks section.
3. General remarks reported in its own remarks section.

RSC NOTAM Example:

(S1017/20 NOTAMN

Q) CZZZ/QFAXX/IV/NBO/A/000/999/4519N07543W005

A) CYAA B) 2102121450 C) 2102122250

E) RSC 03/21 60 PCT 1/4IN DRY SNOW. 70FT WIDTH. REMAINING WIDTH 1/4IN DRY SNOW ON TOP OF COMPACTED SNOW. VALID FEB 12 1345 - FEB 12 2145.

RSC 05 3/5/3 30 PCT 1/8IN DRY SNOW, 50 PCT 1/8IN SLUSH, 40 PCT 1/8IN DRY SNOW. 175FT WIDTH. CHEMICALLY TREATED AT HHMM. REMAINING WIDTH 1/4IN DRY SNOW ON TOP OF COMPACTED SNOW. RWYCC DOWNGRADED, RWY MARKINGS OBSCURED. VALID FEB 12 1445 - FEB 12 2245.

RSC 23 3/5/3 40 PCT 1/8IN DRY SNOW, 50 PCT 1/8IN SLUSH, 30 PCT 1/8IN DRY SNOW. 175FT WIDTH. CHEMICALLY TREATED AT HHMM. REMAINING WIDTH 1/4IN DRY SNOW ON TOP OF COMPACTED SNOW. RWYCC DOWNGRADED, RWY MARKINGS OBSCURED. VALID FEB 12 1445 - FEB 12 2245.

RSC 15 5/5/5 30 PCT 1/8IN DRY SNOW, 30 PCT 1/8IN DRY SNOW, 30 PCT 1/8IN DRY SNOW. 190FT WIDTH. CHEMICALLY TREATED AT HHMM. REMAINING WIDTH 1/4IN DRY SNOW ON TOP OF COMPACTED SNOW. VALID FEB 12 1245 - FEB 12 2045.

RSC 33 5/5/5 30 PCT 1/8IN DRY SNOW, 30 PCT 1/8IN DRY SNOW, 30 PCT 1/8IN DRY SNOW. 190FT WIDTH. CHEMICALLY TREATED AT HHMM. REMAINING WIDTH 1/4IN DRY SNOW ON TOP OF COMPACTED SNOW. VALID FEB 12 1245 - FEB 12 2045.

ADDN NON-GRF/TALPA INFO:

CRFI 03/21 -8C .30 OBS AT 2102121345.

CRFI 05 -8C .32/NR/.30 OBS AT 2102121445.

CRFI 23 -8C .30/NR/.32 OBS AT 2102121445.

CRFI 15 -8C .39/.40/.40 OBS AT 2102121245.

CRFI 33 -8C .40/.40/.39 OBS AT 2102121245.

RMK: ALL TWY 1/8IN DRY SNOW, CHEMICALLY TREATED AT HHMM. TWY F, D BRAKING ACTION POOR.

RMK: ALL APN 1/8IN DRY SNOW, CHEMICALLY TREATED AT HHMM, BRAKING ACTION POOR.

RMK: CLEARING/SWEEPING IN PROGRESS.

ATS Phraseology for above RSC NOTAM Example

If Runway 03 is in use (reported by full runway length):

RUNWAY SURFACE CONDITION, RUNWAY ZERO-THREE-TWO-ONE, SIX-ZERO PERCENT ONE-QUARTER INCH DRY SNOW, SEVEN-ZERO FOOT WIDTH, REMAINING WIDTH ONE-QUARTER INCH DRY SNOW ON TOP OF COMPACTED SNOW, AT ONE-THREE-FOUR-FIVE.

FRICION INDEX RUNWAY ZERO-THREE-TWO-ONE, TEMPERATURE MINUS EIGHT, WAS DECIMAL THREE-ZERO AT ONE-THREE-FOUR-FIVE.

If Runway 05 is in use (reported by thirds):

RUNWAY SURFACE CONDITION, RUNWAY ZERO-FIVE, CONDITION CODE THREE-FIVE-THREE, THREE-ZERO PERCENT ONE-EIGHTH INCH DRY SNOW, FIVE-ZERO PERCENT ONE-EIGHTH INCH SLUSH, FOUR- ZERO PERCENT ONE-EIGHTH INCH DRY SNOW, ONE-SEVEN-FIVE FOOT WIDTH, CHEMICALLY TREATED AT ONE-FOUR-TWO-ZERO, REMAINING WIDTH ONE-QUARTER INCH DRY SNOW ON TOP OF COMPACTED SNOW, RUNWAY CONDITION CODE DOWNGRADED, RUNWAY MARKINGS OBSCURED, AT ONE-FOUR-FOUR-FIVE.

FRICION INDEX RUNWAY ZERO-FIVE, TEMPERATURE MINUS EIGHT, WAS DECIMAL THREE-TWO, NOT REPORTED, DECIMAL THREE-ZERO, AT ONE-FOUR-FOUR-FIVE.

The terminology used in an automatic terminal information service (ATIS) message for RSC will be the same as the phraseology seen above. In an ATIS message, the RSC information will appear after stating the landing/departing runway or determined runway.

Other Resources:

- **Canadian NOTAM Operating Procedures (CNOP):**
<<https://www.navcanada.ca/en/aeronautical-information/operational-guides.aspx>>
- **Advisory Circular 300-019:**
<<https://tc.canada.ca/en/aviation/reference-centre/advisory-circulars#300-series>>
- **Advisory Circular 700-057:**
<<https://tc.canada.ca/en/aviation/reference-centre/advisory-circulars#700-series>>
- **Aerodrome Standards – Division IV – Airport Winter Maintenance:**
<https://tc.canada.ca/en/corporate-services/acts-regulations/list-regulations/canadian-aviation-regulations-sor-96-433/standards/standard-322-airports-canadian-aviation-regulations-cars#322_401>
- **Transport Canada AIM - MAP 3.8 Runway Surface Condition (RSC) / RSC NOTAM:**
<<https://tc.canada.ca/en/aviation/publications/transport-canada-aeronautical-information-manual-tc-aim-tp-14371>>

Further Information

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