

ICAO GRF - Global Reporting Format Implementation

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Runway Surface Condition Reporting

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'Runway Condition Report' (RCR) Concept

A large commercial airplane is parked on a runway covered in snow. Several ground support vehicles, including mobile staircases, are positioned around the aircraft, indicating it is being serviced or prepared for flight. The scene is set in a winter environment with a clear sky.

Runway Condition Reporting concept

The aerodrome operator is required to report to AIS/ATS on matters of operational significance affecting operations on the movement area with regard to the presence of:

- water
- snow
- slush
- ice
- frost
- anti-icing or de-icing liquid chemicals,
- snowbanks or drifts



Whenever water, snow, slush, ice, frost are present the ADR Operator assesses the runway surface condition and reports the information by means of the Rwy Condition Report (RCR).

(Ref. Draft EASA GM1 ADR.OPS.A.065(a))

(Ref. new ADR.OPS.A.060, new ADR.OPS.A.065)

The aerodrome operator shall report the runway surface condition over each third of the runway using a Runway Condition Report (RCR), including the RWYCC (0/6), the contaminant coverage and depth, and a description using the following terms:

COMPACTED SNOW

DRY

DRY SNOW

DRY SNOW ON TOP OF COMPACTED SNOW

DRY SNOW ON TOP OF ICE

FROST

ICE

SLIPPERY WET*

SLUSH

SPECIALLY PREPARED WINTER RWY

STANDING WATER

WATER ON TOP OF COMPACTED SNOW

WET

WET ICE

WET SNOW

WET SNOW ON TOP OF COMPACTED SNOW

WET SNOW ON TOP OF ICE

CHEMICALLY TREATED**

LOOSE SAND**

** situational awareness section of the RCR

* When a paved runway or portion thereof is 'slippery wet', the aerodrome operator shall issue a NOTAM to inform pilots describing the location of the affected area.

Runway Condition Report (RCR)

- The RCR is a comprehensive standardised report, relating to rwy surface condition and its effect on the aeroplane landing/take-off performance, made up of 2 sections
 - **Aeroplane Performance Calculation Section**
 - **Situational Awareness Section.**
- It is disseminated through
 - the **AIS & ATS** when the rwy is **contaminated** by standing water, snow, slush, ice or frost, or is wet associated with the presence of snow, slush, ice or frost.
 - the **ATS only** when the runway is **wet**, not associated with the presence of standing water, snow, slush, ice or frost.

Ref.: Draft EASA AMC2 ADR.OPS.A.065(a); Draft AMC1 ADR.OPS.A.065(a)

RCR - Aeroplane performance calculation section

Information to be included

- Aerodrome location indicator (mandatory)
- date and time of assessment (mandatory)
- lower runway designation number (mandatory)
- RWYCC for each runway third (mandatory)
- % coverage contaminant for rwy third (conditional)
- depth of loose contaminant for rwy third* (conditional)
- condition description for runway third (mandatory)
- width of runway (conditional) if less than published

N.B.: Friction measurements shall not be reported !

Aeroplane performance calculation section			
(AERODROME LOCATION INDICATOR)	M	A)	⊞
(DATE/TIME OF ASSESSMENT <i>(Time of completion of assessment in UTC)</i>)	M	B)	→
(LOWER RUNWAY DESIGNATION NUMBER)	M	C)	→
(RUNWAY CONDITION CODE (RWYCC) ON EACH RUNWAY THIRD) (From Runway Condition Assessment Matrix (RCAM) 0, 1, 2, 3, 4, 5 or 6)	M	D)	// →
(PER CENT COVERAGE CONTAMINANT FOR EACH RUNWAY THIRD)	C	E)	// →
DEPTH (mm) OF LOOSE CONTAMINANT FOR EACH RUNWAY THIRD)	C	F)	// →
(CONDITION DESCRIPTION OVER TOTAL RUNWAY LENGTH (Observed on each runway third, starting from threshold having the lower runway designation number)	M	G)	//
COMPACTED SNOW DRY DRY SNOW DRY SNOW ON TOP OF COMPACTED SNOW DRY SNOW ON TOP OF ICE FROST ICE SLIPPERY WET SLUSH SPECIALLY PREPARED WINTER RUNWAY STANDING WATER WATER ON TOP OF COMPACTED SNOW WET WET ICE WET SNOW WET SNOW ON TOP OF COMPACTED SNOW WET SNOW ON TOP OF ICE			→
(WIDTH OF RUNWAY TO WHICH THE RUNWAY CONDITIONS CODES APPLY, IF LESS THAN THE PUBLISHED WIDTH)	0	H)	⊞

Ref.: Draft EASA AMC2 ADR.OPS.A.065(a)

The 'aeroplane performance calculation section' is reported as a string of grouped information, separated by a space ' '.

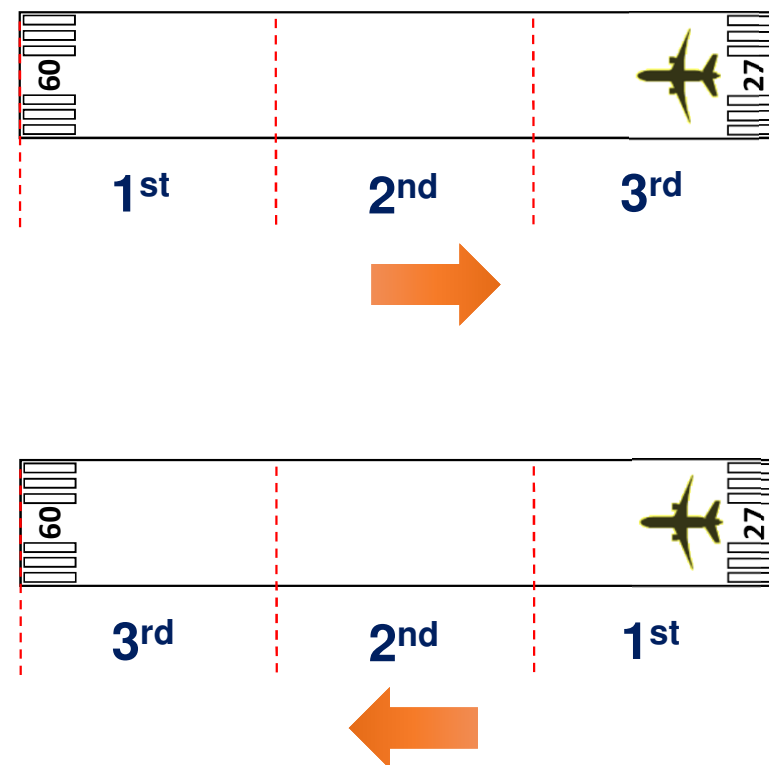
- Information related to each runway thirds (e.g. RWYCC, % coverage, contaminant depth and type) are separated by a '/'.

EADD_02170055_09L_5/5/5_100/100/100_NR/NR/NR_WET/WET/WET

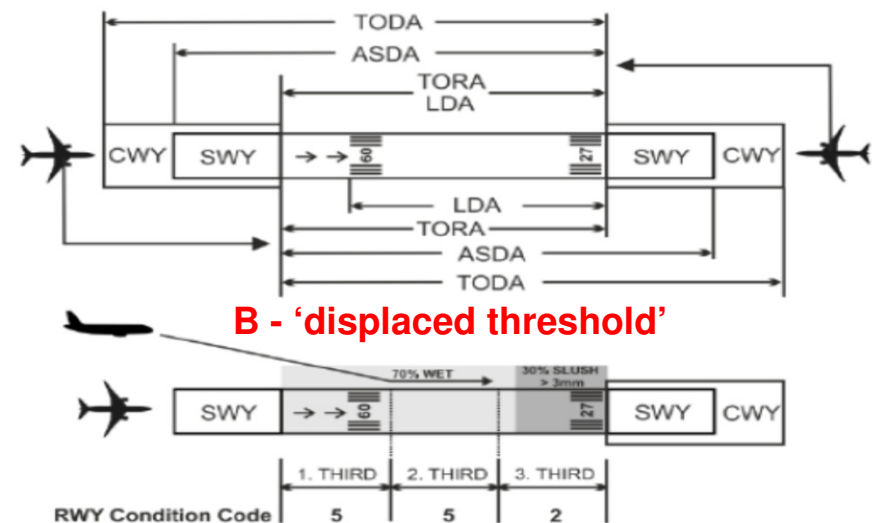
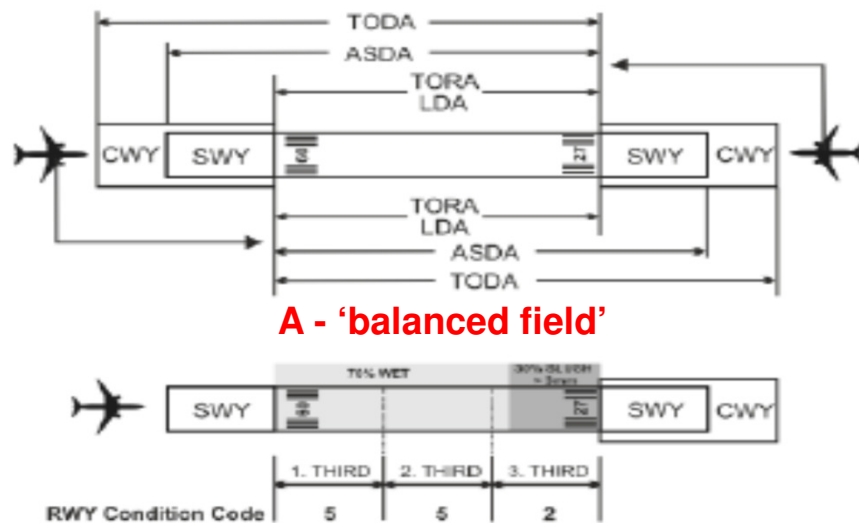
- Each string ends with a return and a two-line feed '< ≡ ≡', in order to distinguish the 'aeroplane performance calculation section' from
 - the following 'situational awareness section' or
 - the following 'performance calculation section' of another runway.

Ref.: Draft EASA GM2 ADR.OPS.A.065(a)

- As a general rule, the direction for listing the runway thirds on the Snowtam (information from aerodrome operator to AIS) is **always** as seen from the lower designation number.
- However, **when information is transmitted by ATS to flight crews**, the sections are referred to as the first, second or third part of the rwy as seen in the direction of landing or take-off.



The information reported in the RCR refers to the physical extent of the runway, notwithstanding the length of the declared distances (and position of the threshold).



This is an important concept for flight crew to understand, especially when landing on a runway with a significantly displaced threshold, performing an intersection take-off, or part of a runway is declared as a RESA but still available for take-off.

RCR - Reporting of contaminant coverage for rwy thirds

Contaminant coverage is ...

- reported as a number identifying the percentage coverage, included in an up-to-nine character group (separated by a '/' for each runway third);
- based upon an even distribution within rwy thirds (25/50/75/100); in case of uneven distribution info is given in the remark box of the situational awareness section;
- not reported ('NR') for any runway third that is dry or covered with < 10%; if **all thirds** have < **10%** contaminant coverage, **no report** (RCR) is generated.

Ref.: Draft EASA GM2 ADR.OPS.A.065(a)

Coverage < 10 %

Coverage 'NR'

Contaminant 'NR'

RWYCC: 6

Coverage ≥ 10 % and ≤ 25 %

Coverage reported as '25'

Contaminant reported (as per RCAM)

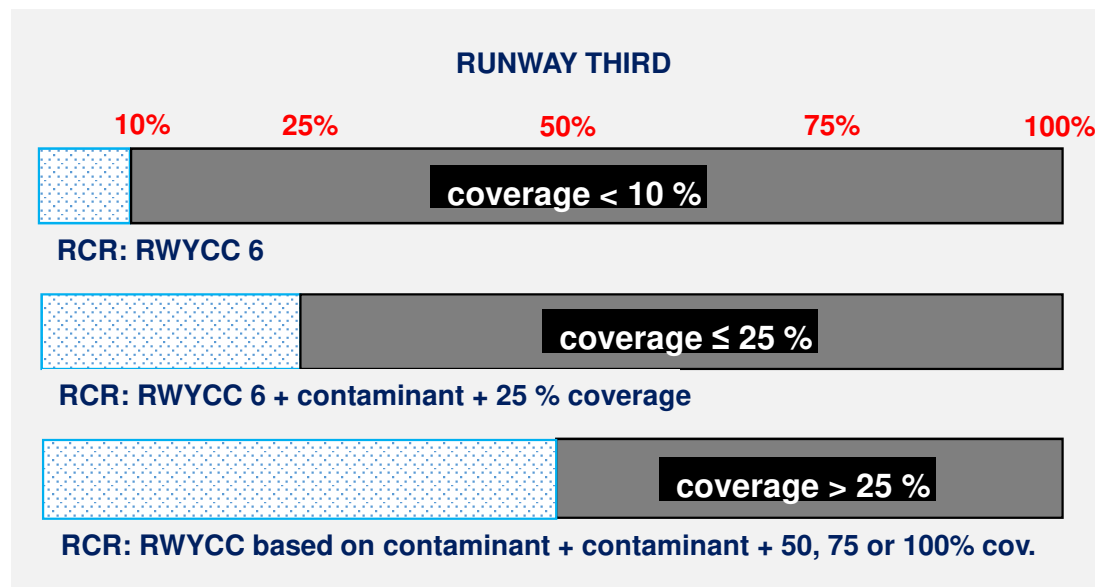
RWYCC: 6

Coverage > 25 %

Coverage reported as '50', '75' or '100'

Contaminant reported (as per RCAM)

RWYCC: according to contaminant



Assessed %	Reported %
10-25	25
26-50	50
51-75	75
76-100	100

RCR - Reporting of contaminant depth

Contaminant depth is ...

- expressed as a 2- or 3-digit number representing the assessed depth (mm) of the contaminant for each third (6- to 9-character group sep. by a '/' for each rwy third);
- to be reported for dry snow, wet snow, slush and standing water only (loose contaminants) for each rwy third; not reported ('NR') for other contaminant types;
- based upon an even distribution* within the runway thirds following an assessment.

* When depth of contaminants varies significantly within a rwy third, additional information is given in the plain-language remark of the RCR Situational Awareness Section. (Draft GM1 ADR.OPS.A.065(b);(c)).

Ref.: Draft EASA GM2 ADR.OPS.A.065(a)

Contaminant depth values to be reported

STANDING WATER

- minimum depth to be reported: 4 mm (04)
- above 4 mm, assessed value
- significant change: 3 mm

SLUSH, WET SNOW, DRY SNOW

- depth ≤ 3 mm to be reported as 3 mm (03)
- above 3 mm, assessed value
- significant change:
slush 3 mm, wet snow 5 mm, dry snow 20 mm

Table 2

Contaminant	Values to be reported	Significant change
STANDING WATER	04, then assessed value	3 mm
SLUSH	03, then assessed value	3 mm
WET SNOW	03, then assessed value	5 mm
DRY SNOW	03, then assessed value	20 mm

WET (water ≤ 3 mm), not to be reported (NR)

RCR - Situational awareness section

Information to be included

- reduced runway length * (conditional)
- drifting snow on the runway (conditional)
- loose sand on the runway (conditional)
- chemical treatment on the runway (conditional)
- snowbanks on the runway (conditional)
- snowbanks on the taxiway (conditional)
- snowbanks adjacent to the runway (conditional)
- taxiway conditions (conditional)
- apron conditions (conditional)
- plain-language remarks (optional)

Situational awareness section		
(REDUCED RUNWAY LENGTH, IF LESS THAN THE PUBLISHED LENGTH (m))	0	I) →
(DRIFTING SNOW ON THE RUNWAY)	0	J) →
(LOOSE SAND ON THE RUNWAY)	0	K) →
(CHEMICAL TREATMENT ON RUNWAY)	0	L) →
(SNOWBANKS ON THE RUNWAY) (If present, distance from runway centreline (m) followed by 'L', 'R' or 'LR' as applicable))	0	M) →
(SNOWBANKS ON A TAXIWAY)	0	N) →
(SNOWBANKS ADJACENT TO THE RUNWAY)	0	O) →
(TAXIWAY CONDITIONS)	0	P) →
(APRON CONDITIONS)	0	R) →
(MEASURED FRICTION COEFFICIENT)	0	S) →
(PLAIN-LANGUAGE REMARKS)	0	T))<=
NOTES:		

* when a NOTAM is published with a new set of declared distances affecting the landing distance avbl

Ref.: Draft EASA AMC2 ADR.OPS.A.065(a)

Dissemination of Aeronautical Information

New Snowtam Format

A large commercial airplane is parked on a snowy runway. Several snowplows are positioned around the aircraft, clearing the snow. The scene is set in a winter environment with a clear sky.

ICAO Reporting Formats

Annex 14 (Vol. I, 2.9.1) establishes the need to promulgate the runway surface conditions, through the appropriate AIS / ATS units; ICAO's methods of reporting / promulgating information are:

- a) Aeronautical Information Publications (AIPs)
- b) Aeronautical Information Circulars (AICs)
- c) Notice to Airmen (NOTAM)
- d) SNOWTAM
- e) AIREPs
- f) Automatic Terminal Information Services (ATIS)
- g) Air Traffic Control (ATC) communications.



The formats for a) to d) are described in Annex 15; the formats for e), f), g) are described in Doc 4444.

Source: ICAO Circular 355

The SNOWTAM Format

Information concerning the presence on the movement area of

- snow
- slush
- ice
- frost
- standing water or
- water associated with snow, slush, ice or frost

are disseminated through SNOWTAM and contains the information required by the SNOWTAM Format.

Ref.: new ADR.OPS.A.057(d) / Appendix 2 Reg. 139/2014.

HEADING

AEROPLANE PERFORMANCE CALCULATION SECTION

SITUATIONAL AWARENESS SECTION

COM heading	Priority indicator	(Addresses)	
(Date and time of filing)	(Originator's indicator)		
(Abbreviated heading)	(SWAA* SERIAL NUMBER)	(LOCATION INDICATOR)	(DATE-TIME OF ASSESSMENT)
S	W	*	*
(OPTIONAL GROUP)			
SNOWTAM (Serial Number)			
Aeroplane performance calculation section			
(AERODROME LOCATION INDICATOR)	M	A)	<=
(DATE/TIME OF ASSESSMENT (Time of completion of assessment in UTC))	M	B)	→
(LOWER RUNWAY DESIGNATION NUMBER)	M	C)	→
(RUNWAY CONDITION CODE (RWYCC) ON EACH RUNWAY THIRD) (From Runway Condition Assessment Matrix (RCAM) 0, 1, 2, 3, 4, 5 or 6)	M	D)	//
(PER CENT COVERAGE CONTAMINANT FOR EACH RUNWAY THIRD)	C	E)	//
DEPTH (mm) OF LOOSE CONTAMINANT FOR EACH RUNWAY THIRD	C	F)	//
(CONDITION DESCRIPTION OVER TOTAL RUNWAY LENGTH (Observed on each runway third, starting from threshold having the lower runway designation number))	M	G)	//
COMPACTED SNOW DRY DRY SNOW DRY SNOW ON TOP OF COMPACTED SNOW DRY SNOW ON TOP OF ICE FROST ICE SLIPPERY WET SLUSH SPECIALLY PREPARED WINTER RUNWAY STANDING WATER WATER ON TOP OF COMPACTED SNOW WET WET ICE WET SNOW WET SNOW ON TOP OF COMPACTED SNOW WET SNOW ON TOP OF ICE			
(WIDTH OF RUNWAY TO WHICH THE RUNWAY CONDITIONS CODES APPLY, IF LESS THAN THE PUBLISHED WIDTH)	O	H)	<=
Situational awareness section			
(REDUCED RUNWAY LENGTH, IF LESS THAN THE PUBLISHED LENGTH (m))	O	I)	→
(DRIFTING SNOW ON THE RUNWAY)	O	J)	→
(LOOSE SAND ON THE RUNWAY)	O	K)	→
(CHEMICAL TREATMENT ON RUNWAY)	O	L)	→
(SNOWBANKS ON THE RUNWAY) (If present, distance from runway centreline (m) followed by 'L', 'R' or 'LR' as applicable))	O	M)	→
(SNOWBANKS ON A TAXIWAY)	O	N)	→
(SNOWBANKS ADJACENT TO THE RUNWAY)	O	O)	→
(TAXIWAY CONDITIONS)	O	P)	→
(APRON CONDITIONS)	O	R)	→
(MEASURED FRICTION COEFFICIENT)	O	S)	→
(PLAIN-LANGUAGE REMARKS)	O	T)	> <=
NOTES:			

How to fill in the SNOWTAM format ... Heading

TT = data designator for SNOWTAM = SW;
AA = geographical designator for Member States, e.g. LI
iiii = SNOWTAM serial number in a four-digit group

DATE / TIME OF ASSESSMENT (MMYYGGgg)
MM = month, e.g. January = 01, December = 12;
YY = day of the month;
GGgg = time in hours (GG) and minutes (gg) UTC;

(COM heading)	(Priority indicator)	(Addresses)										≡	
	(Date and time of filing)			(Originator's indicator)							≡		
(Abbreviated heading)	(SWAA* SERIAL NUMBER)			(LOCATION INDICATOR)			DATE-TIME OF ASSESSMENT					(OPTIONAL GROUP)	
	S	W	*	*									≡
SNOWTAM →		(Serial number)											≡

AERODROME LOCATION INDICATOR
CCCC = four-letter aerodrome location
indicator

(BBB) = OPTIONAL GROUP for: Correction, in the case of an error, to a SNOGTAM message previously disseminated with the same serial number = COR. Brackets in (BBB) should be used to indicate that this group is optional.

Ref.: Draft EASA GM1 ADR.OPS.A.057(d)(4)c

Abbreviated heading ('TTAAiiii CCCC MMYYGg (BBB)')

Aeroplane performance calculation section

Aeroplane performance calculation section			
(AERODROME LOCATION INDICATOR)	M	(A)	
(DATE/TIME OF ASSESSMENT <i>(Time of completion of assessment in UTC)</i>)	M	(B)	
(LOWER RUNWAY DESIGNATION NUMBER)	M	(C)	
(RUNWAY CONDITION CODE (RWYCC) ON EACH RUNWAY THIRD) (From Runway Condition Assessment Matrix (RCAM) 0, 1, 2, 3, 4, 5 or 6)	M	(D)	//
(PER CENT COVERAGE CONTAMINANT FOR EACH RUNWAY THIRD)	C	(E)	//
DEPTH (mm) OF LOOSE CONTAMINANT FOR EACH RUNWAY THIRD	C	(F)	//
(CONDITION DESCRIPTION OVER TOTAL RUNWAY LENGTH (Observed on each runway third, starting from threshold having the lower runway designation number))	M	(G)	//
COMPACTED SNOW DRY DRY SNOW DRY SNOW ON TOP OF COMPACTED SNOW DRY SNOW ON TOP OF ICE FROST ICE SLIPPERY WET SLUSH SPECIALLY PREPARED WINTER RUNWAY STANDING WATER WATER ON TOP OF COMPACTED SNOW WET WET ICE WET SNOW WET SNOW ON TOP OF COMPACTED SNOW WET SNOW ON TOP OF ICE			
(WIDTH OF RUNWAY TO WHICH THE RUNWAY CONDITIONS CODES APPLY, IF LESS THAN THE PUBLISHED WIDTH)	O	(H)	

A) four-letter location indicator

B) eight-figure date/time group giving time of observation as month, day, hour and minute in UTC

C) (nn[L] or nn[C] or nn[R]). Only one rwy designator should be inserted for each rwy and always the lower number

D) RWYCC for each rwy third. Only one digit (0-6) is inserted for each third separated by an oblique stroke (n/n/n).

E) When provided, insert 25, 50, 75 100 for each rwy third, separated by an oblique stroke ([n]nn/[n]nn/[n]nn) [...] When the conditions are not reported [...] 'NR' for the appropriate rwy third

F) When provided, insert in mm for each rwy third, separated by an oblique stroke (nn/nn/nn or nnn/nnn/nnn) or 'NR'

H) The width in metres if less than the published rwy width.*

G) Any of the [...] condition descriptions for each rwy third, separated by an oblique stroke, should be inserted. When the conditions are not reported, [...] insertion of 'NR' for the appropriate rwy third(s).

* If the cleared width is not symmetrical, additional info is given in the plain-language remark of the situational awareness section.

Situational awareness section

Situational awareness section			
(REDUCED RUNWAY LENGTH, IF LESS THAN THE PUBLISHED LENGTH (m))	0	I)	I) Applicable rwy designator and available length in m [...] (e.g. RWY nn [L] or nn [C] or nn [R] REDUCED TO [n]nnn).
(DRIFTING SNOW ON THE RUNWAY)	0	J)	J) lower rwy design with a space 'DRIFTING SNOW' (RWY nn or RWY nn[L] or nn[C] or nn[R] DRIFTING SNOW).
(LOOSE SAND ON THE RUNWAY)	0	K)	K) lower rwy designator with a space 'LOOSE SAND' (RWY nn or RWY nn[L] or nn[C] or nn[R] LOOSE SAND).
(CHEMICAL TREATMENT ON RUNWAY)	0	L)	L) lower rwy designator with a space 'CHEMICALLY
(SNOWBANKS ON THE RUNWAY) (If present, distance from runway centreline (m) followed by 'L', 'R' or 'LR' as applicable))	0	M)	M) lower rwy des. with a space 'SNOWBANK' and a space 'L' or 'R' or both sides 'LR', followed by distance in m from cl separated by a space 'FM CL' (RWY nn or RWY nn[L] or nn[C] or nn[R] SNOWBANK Lnn or Rnn or LRnn FM CL)
(SNOWBANKS ON A TAXIWAY)	0	N)	N) twys des. with a space 'SNOWBANKS' (TWY [nn]n or TWYS [nn]n/[nn]n/[nn]n/ or ALL TWYS SNOWBANKS)
(SNOWBANKS ADJACENT TO THE RUNWAY)	0	O)	O) snowbanks penetrating the height profile in the snow plan, lower rwy designator and 'ADJ SNOWBANKS' (RWY nn or RWY nn[L] or nn[C] or nn[R] ADJ SNOWBANKS)
(TAXIWAY CONDITIONS)	0	P)	P) slippery/poor twy conditions, twy designator followed by a space 'POOR' (TWY [n or nn] POOR or TWYS [n or nn]/[n or nn]/... POOR or ALL TWYS POOR).
(APRON CONDITIONS)	0	R)	R) slippery/poor apron condition, apron designator followed by a space 'POOR' (APRON [nnnn] POOR or APRONS [nnnn]/[nnnn]/... POOR or ALL APRONS POOR).
(MEASURED FRICTION COEFFICIENT)	0	S)	
(PLAIN-LANGUAGE REMARKS)	0	T)	
NOTES:			

S) NR (not reported)

Example of Aeroplane performance calculation section - information string

Aeroplane performance calculation section			
(AERODROME LOCATION INDICATOR)	M	A)	EADD
(DATE/TIME OF ASSESSMENT <i>(Time of completion of assessment in UTC)</i>)	M	B)	02160055
(LOWER RUNWAY DESIGNATION NUMBER)	M	C)	09
(RUNWAY CONDITION CODE (RWYCC) ON EACH RUNWAY THIRD) (From Runway Condition Assessment Matrix (RCAM) 0, 1, 2, 3, 4, 5 or 6)	M	D)	5 / 2 / 2
(PER CENT COVERAGE CONTAMINANT FOR EACH RUNWAY THIRD)	C	E)	100/100/100
DEPTH (mm) OF LOOSE CONTAMINANT FOR EACH RUNWAY THIRD)	C	F)	NR/06/06
(CONDITION DESCRIPTION OVER TOTAL RUNWAY LENGTH (Observed on each runway third, starting from threshold having the lower runway designation number)	M	G)	WET/SLUSH/SLUSH

[Aeroplane performance calculation section]

EADD 02160055 09 5/2/2 100/100/100 NR/06/06 WET/SLUSH/SLUSH

[Situational awareness section]

RWY 09 SNOWBANK R30 FM CL. TWY B POOR. APRON NORTH POOR.

Ref.: Draft EASA GM3 ADR.OPS.A.065(a)

Things to know about the SNOWTAM ...

- New SNOWTAM issued whenever there is a new RCR
- Maximum validity of a SNOWTAM is **8 hours !**
- A SNOWTAM cancels a previous SNOWTAM
- In case of multiple rwys all runways are included in the SNOWTAM and items B to H repeated for each one
- Metric units used, unit of measurement not reported



A new RCR is required whenever a ‘significant change’ is observed in runway surface conditions.

Significant changes include any change:

- in the RWYCC
- in the contaminant type
- in reportable contaminant coverage (Table 1)
- in contaminant depth (Table 2)
- other information known to be significant.
(e.g. Special Air-Report of braking action)

Table 1

Assessed per cent	Reported per cent
10-25	25
26-50	50
51-75	75
76-100	100

Table 2

Contaminant	Valid values to be reported	Significant change
STANDING WATER	04, then assessed value	3 mm
SLUSH	03, then assessed value	3 mm
WET SNOW	03, then assessed value	5 mm
DRY SNOW	03, then assessed value	20 mm

Draft EASA AMC1 ADR.OPS.A.065(b);(c)

Significant change - Example

1st assessment: 3 mm slush on each runway third (100 % coverage)

- 1st RCR: 5/5/5 100/100/100 03/03/03 SLUSH/SLUSH/SLUSH

Subsequent assessment: depth of contamination increased to 5 mm (entire rwy)

(new RCR required, change in both 'RWYCC' and 'depth' above the 3 mm threshold)

- 2nd RCR: 2/2/2 100/100/100 05/05/05 SLUSH/SLUSH/SLUSH

Further assessment: depth of contamination increased to 7 mm (entire rwy)

(new RCR not required, change in depth < 3 mm)

Final assessment: depth increased to 10 mm

(new RCR required, change in depth from last RCR > 3 mm)

- 3rd RCR: 2/2/2 100/100/100 10/10/10 SLUSH/SLUSH/SLUSH

Information on alkali-organic runway de-/anti-icing substances

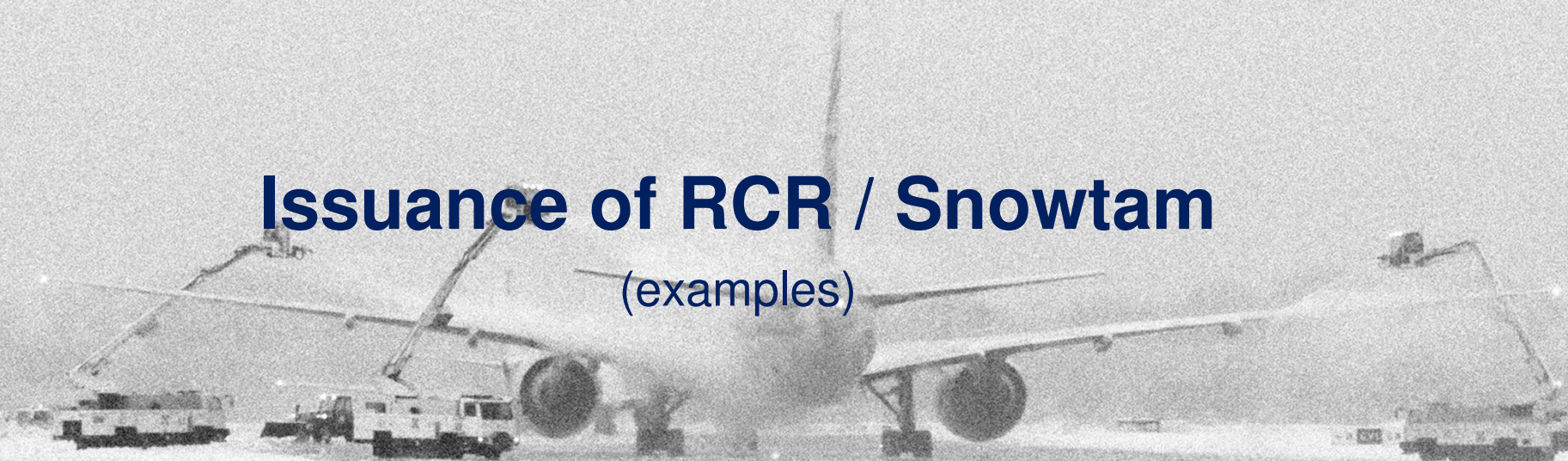
Aircraft brakes and open wheel bay are exposed to rwy de-/anti-icing substances during taxi, take-off, landing; alkali-organic salt creates a catalytic condition, leading to deterioration of carbon discs and reduction of brakes service life and efficiency.

- It is fundamental for aircraft operators to know the de-/anti-icing substances used, in order to assess the aircraft exposure and adjust the maintenance programme.
- Info is given in the **RCR or AIP** using key words: KAC (potassium acetate), KFOR (potassium formate), GAC (glycerine acetate), NAFO (sodium formate), NAAC (sodium acetate), EG (ethylene glycol), PG (propylene glycol), UREA, SAND.



Issuance of RCR / Snowtam

(examples)



Issuance of RCR / SNOWTAM - Ex. 1

Airport: **Milan Malpensa**

Date: **16 Feb**

Runway: **17L/35R** Time of assessment: **06:50**

Type of contaminant (17L): **water / water / wet snow**

Depth of contaminant (17L): **1 mm / 2 mm / 2 mm**

% Coverage (17L): **100/100/80**

Runway: **17R/35L** Time of assessment: **06:55**

Type of contaminant (17R): **water / slush / slush**

Depth of contaminant (17R): **0 mm / 6 mm / 6 mm**

% Coverage (17R): **90/100/70**

Additional info: OAT 1°C / No Braking Action Report avbl



Issuance of RCR / SNOWTAM - Ex. 1

INFORMATION STRING

SWLI0021 LIMC 02160655

(SNOWTAM 0021

LIMC

02160650 17L 5/5/5 100/100/100 NR/NR/03 WET/WET/WET SNOW

02160655 17R 5/2/2 100/100/75 NR/06/06 WET/SLUSH/SLUSH)

Rwy: 17L/35R, 16Feb 06:50
Contaminant 17L: water / water / wet snow
Depth 17L: 1 mm / 2 mm / 2 mm
% Coverage 17L: 100/100/80

Rwy: 17R/35L. 16 Feb 06:55
Contaminant 17R: water / slush / slush
Depth 17R: 0 mm / 6 mm / 6 mm
% Coverage 17R: 90/100/70

Issuance of RCR / SNOWTAM - Ex. 2

Airport: **Milan Malpensa**, date: **18 Feb**

Runway: **17L/35R** / Time of assessment: **08:00**

Type of contaminant (17L): **water / water / wet snow**

Depth of contaminant (17L): **1 mm / 2 mm / 2 mm**

% Coverage (17L): **100/100/100**

Runway: **17R/35L** / Time of assessment: **08:05**

Type of contaminant (17R): **water / slush / slush**

Depth of contaminant (17R): **2 mm / 6 mm / 6 mm**

% Coverage (17R): **100/100/70**

Additional info: OAT 0°C / Braking Action report 17L: **medium (07:56)**

Twy Y: poor surface conditions / snowbanks 30m from c/l west of 35L

17L	17R
WATER 2 mm 100 %	WATER 1 mm 100 %
SLUSH 6 mm 100 %	WATER 2 mm 100 %
SLUSH 6 mm 70 %	WET SNOW 2 mm 100 %
35L	35R

Issuance of RCR / SNOWTAM - Ex. 2

INFORMATION STRING

SWLI0022 LIMC 02180805

(SNOWTAM 0022

LIMC

RWYCC 3/3/3 due to
downgrade (in. 5/5/5)

02180800 17L 3/3/3 100/100/100 NR/NR/03 WET/WET/WET SNOW

02180805 17R 5/2/2 100/100/75 NR/06/06 WET/SLUSH/SLUSH

RWY 17R SNOWBANK R30 FM CL. TWY Y POOR.)

Rwy: 17L/35R, 18 Feb 08:00

Contaminant 17L: water / water / wet snow

Depth 17L: 1 mm / 2 mm / 2 mm

% Coverage 17L: 100/100/100

Rwy: 17R/35L, 18 Feb 08:05

Contaminant 17R: water / slush / slush

Depth 17R: 2 mm / 6 mm / 6 mm

% Coverage 17R: 100/100/70

OAT 0°C / braking action rep. 35R: 'medium' / Twy
Y 'poor' / 35L snowbanks 30 m from c/l west side

Issuance of RCR / SNOWTAM - Ex. 3

Airport: **Milan Malpensa**, date: **20 Feb**

Runway: **17L/35R** / Time of assessment: **10:30**

Type of contaminant (17L): **dry snow / comp snow / ice**

Depth of contaminant (17L): **4 mm / - mm / - mm**

% Coverage (17L): **100/100/100**

Runway: **17R/35L** / Time of assessment: **10:35**

Type of contaminant (17R): **ice / ice / ice**

Depth of contaminant (17R): **- mm / - mm / - mm**

% Coverage (17R): **100/100/70**

Additional info: OAT -5°C

Braking Action Report 35R: **'medium'** (10:25)

17L	17R
ICE - mm 100 %	DRY SNOW 4 mm 100 %
ICE - mm 100 %	COMPACT. SNOW (OAT -5°C) - mm 100 %
ICE - mm 70 %	ICE - mm 100 %
35L	35R

Issuance of RCR / SNOWTAM - Ex. 3

INFORMATION STRING

SWLI0024 LIMC 02201035

(SNOWTAM 0024

LIMC

no downgrade !

02201030 17L 3/3/1 100/100/100 04/NR/NR DRY SNOW/COMPACTED SNOW/ICE

02201035 17R 1/1/1 100/100/75 NR/NR/NR ICE/ICE/ICE

Rwy: 17L/35R, 20 Feb 10:30

Contaminant 17L: dry snow / compacted snow / ice

Depth 17L: 4 mm / - mm / - mm

% Coverage 17L: 100/100/100

Rwy: 17R/35L, 20 Feb 10:35

Contaminant 17R: ice / ice / ice

Depth 17R: - mm / - mm / - mm

% Coverage 17R: 100/100/70

OAT -5°C / Braking Action Report 35R 'medium'

Remark: for compacted snow with $OAT \leq -15^{\circ}C$ RWYCC = 4, with $OAT > -15^{\circ}C$ RWYCC = 3



Thanks for your attention

Info: grf@enac.gov.it