Runway condition assessment

process

Nika Meheza MANZI

Deputy Regional Director
Western & Central African Office

Virtual / May 2021

Overview

- Stakeholder responsibilities
- Dissemination of information

Stakeholder responsibilities

- Aerodrome operators: assess the runway surface conditions, including contaminants, for each third of the runway length, and report them by means of a uniform runway condition report (RCR)
- Air traffic services (ATS): convey the information received via the RCR and/or special air-reports (AIREP) to end users (voice communications, ATIS, CPDLC)
- Aeronautical information services (AIS): provide the information received in the RCR to end users (SNOWTAM)
- Aircraft operators: utilize the information in conjunction with the performance data provided by the aircraft manufacturers to determine if landing or take-off operations can be conducted safely and provide runway braking action special air-reports (AIREP)
- Aircraft Manufacturers provide the necessary performance data in the aeroplane flight manual

Dissemination of information

- Through the AIS and ATS services: when the runway is wholly or partly contaminated by standing water, snow, slush, ice or frost, or is wet associated with the clearing or treatment of snow, slush, ice or frost.
- Through the ATS only: when the runway is wet, not associated with the presence of standing water, snow, slush, ice or frost.



Means of communication

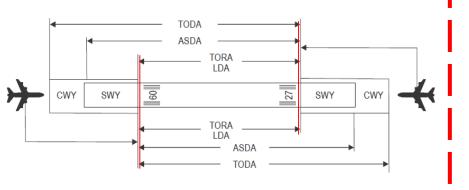
Means of communication are:

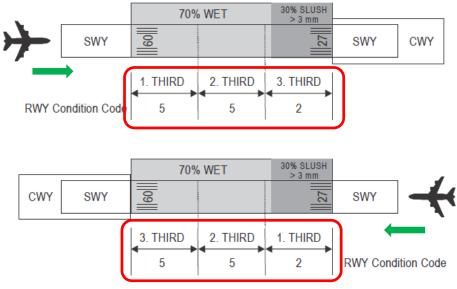
- ATC and ATIS
- SNOWTAM



Reporting of RWYCC from ATS to flight crew

Reporting of runway condition code from ATS to flight crew for runway thirds

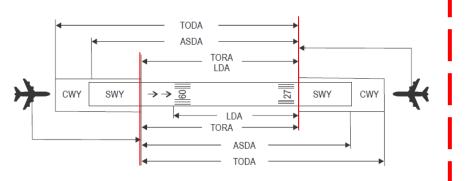


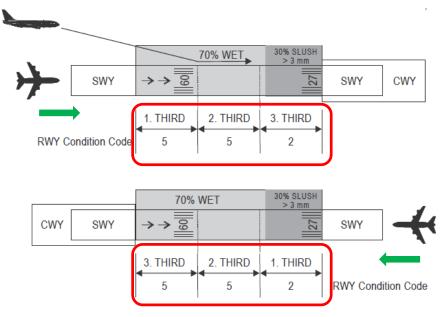


Reporting of RWYCC from ATS to flight crew

Reporting of runway condition code for runway thirds from ATS to flight crew

on a runway with displaced threshold





Reporting from flight crew to ATS

- The pilot-in-command shall / should report the runway braking action special air-report (AIREP) when the runway braking action encountered is not as good as reported.
- When receiving special air-reports by voice communications concerning braking action encountered that is not as good as that reported, air traffic service units shall forward them without delay to the appropriate aerodrome operator.



ATIS

In addition to normal operational and weather information, the following information should be mentioned about the runway condition whenever runway is not dry (RWYCC 6)

Performance section

- operational runway in use at time of the issuance;
- RWYCC for operational RWY for each third in the operational direction;
- condition description, coverage and depth (for loose contaminant);
- width of the operational RWY to which RWYCC apply if less than published;
- reduced length if less than published;

Situational awareness section

- loose sand;
- RWY exits, taxiways and apron if POOR; and
- any other remarkable information in short plain language.

SNOWTAM

(COM	(PRIORI INDICA		(ADDRE	SSES	S)																<≡
heading) (DATE AND TIME OF FILING)					(ORIGINATOR'S INDICATOR)													<≡				
(Abbreviated	INDICATOR						SESN	IENT		(OF	TION	AL (GROU	P)								
heading)	s w	* *						$oxed{oxed}$	$oxed{oxed}$													<≡(
SNOWTAM	-	(Serial r	umber)			<	Œ				-										
			Αe	eroplan	e per	forma	nce calcu	ılatio	n sec	tion												
(AERODRON	ME LOCAT	ION INDI	CATOR	R)												M	A)					<≡
(DATE/TIME	OF ASSES	SMENT	(Time o	of comp	letion	of ass	sessment i	in UT	C))							М	B)			_		▶
(LOWER RUNWAY DESIGNATION NUMBER)											M	C)			_		▶					
(RUNWAY C (From Runwa																М	D)		1.1	_		•
(PER CENT	COVERAG	E CONTA	MINA	NT FOR	REAC	H RUI	NWAY TH	IIRD)								С	E)		1 1	_	-	▶
(DEPTH (mm) OF LOO	SE CONT.	AMINA	NT FO	R EA	CH RU	JNWAY TI	HIRD)	,							С	F)		1 1	_		▶
(CONDITION (Observed or								wer n	unwaj	/ desi	gnatio	n nun	nber)			М	G)		1 1			
COMPA	ACTED SN	OW																				
DRY St																						
	T NO WON T NO WON			CTED S	SNOV	V																
FROST		01 01 10	_																			
ICE SLUSH																						
	ING WATE	R																				
WATER	ON TOP		PACTE	D SNO	W																	
WET IC	·=																					
WETS	_																			_		▶
WETS	NOW ON T			CTED	SNOV	N																
WETC	NOW ON T	OD OF K	· -														1	- 1				- 1

SNOWTAM

(WIDTH OF RUNWAY TO WHICH THE RUNWAY CONDITION CODES APPLY, IF LESS THAN PUBLISHED WIDTH)	0	H)	<==						
Situational awareness section									
(REDUCED RUNWAY LENGTH, IF LESS THAN PUBLISHED LENGTH (m))	0	I)	─						
(DRIFTING SNOW ON THE RUNWAY)	0	J)	→						
(LOOSE SAND ON THE RUNWAY)	0	K)	→						
(CHEMICAL TREATMENT ON THE RUNWAY)	0	L)	→						
(SNOWBANKS ON THE RUNWAY) (If present, distance from runway centre line (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:

- *Enter ICAO nationality letters as given in ICAO Doc 7910, Part 2 or otherwise applicable aerodrome identifier.
- Information on other runways, repeat from B to H.
- 3. Information in the situational awareness section repeated for each runway, taxiway and apron. Repeat as applicable when reported.
- Words in brackets () not to be transmitted.
- For letters A) to T) refer to the Instructions for the completion of the SNOWTAM Format, paragraph 1, item b).

SIGNATURE OF ORIGINATOR (not for transmission)

