SNOWTAMS slip into a new style

OPSGROUP Team 10 February, 2021



ICAO will be **updating the format of SNOWTAMs** later this year – the special issue Notams that deal with surface condition reports and contaminated runways. They have published updated guidance on how SNOWTAMs should be issued when the changes take effect on November 4, 2021.

Here's a summary of what's changing, what the new style SNOWTAM will look like, plus a handy chart to help you decode them...

The Friction Task Force

There is such a thing, and we can only assume they wear skintight suits and body surf down runways to measure the friction. Anyway, they make recommendations on global reporting formats and also how to assess runway surface conditions.

It is quite a big thing. A lot of accidents happen because **runway friction is not reported correctly**. Or rather, pilots don't understand it/choose to ignore it. Just ask (several) crews flying into UEEE/Yakutsk about it.

But if you check out the RCAM (Runway Condition Assessment Matrix) below, you will notice that offering a **braking action** is the preferred method nowadays. **Friction coefficients** are not so useful.



Friction Task Force Leader

What is a SNOWTAM?

It is a special series Notam that provides a surface condition report to let pilots know what is on the runway, how much of that is on the runway, and what they can expect their airplane to do (braking wise) on said runway.

So, it is something that basically **tells the pilot: "Watch out, slippery!"** in a rather complicated sort of way.

SNOWTAMS use metric units, and a bunch of codes for deciphering. More about that later on.

What are ICAO changing?

As of 4 November 2021, the **maximum validity of a SNOWTAM will be 8 hours**. Currently they are 24 hours and a lot can change in that time meaning you have to try and discover what is still valid and relevant and what is not.

With the new ones, if they don't say anything different after 8 hours then you can assume the runway surface condition is good and normal again. If anything changes, they will release a new one which will automatically replace the old one.

Each SNOWTAM will get its own serial number for identifying it.

What else is in the Guidance?

TTAAiiii CCCC MMYYGGgg (BBB)

Yep, that is written in it. It is an abbreviated heading demonstrating how certain things should be written. For example:

GG EADBZQZX EADNZQZX EADSZQZX

170540 EADDYNYX

SWEA0154 EADD 02170535

(SNOWTAM 0154

EADD

02170535 09L 6/6/6 NR/NR/NR NR/NR/NR DRY/DRY/DRY 02170515 09R 5/2/2 100/50/75 NR/06/06 WET/SLUSH/SLUSH 02170500 09C 2/2/2 75/75/50 06/12/12 SLUSH/SLUSH/SLUSH 40

DRIFTING SNOW. RWY 09R CHEMICALLY TREATED. RWY 09C CHEMICALLY TREATED.)

This is an example of how the **new style SNOWTAM will look**. Not a huge difference to the old ones, but here is a decode for you anyway.

- GG EAD etc etc is who produced it. Not super relevant for pilots.
- Snowtam **0154** is the serial number of the Snowtam
- **EADD** is where we get interested. That is the airport identifier. Issued on the 17th February at 0535
- Runway 09L
- It then gives the runway condition code for each runway third, as determined by the **RCAM** (runway condition assessment matrix). 6/6/6/ means dry/dry/dry.
- Next up is the percentage coverage. **NR** means less than 10% or dry. Hence the many NRs
- This SNOWTAM then moves onto 09R because frankly 09L was quite boring and dry.
- 09R is 5/2/2 (good, medium-poor, medium-poor according to RCAM). 100% covered, 50% covered, 50% covered) and NR/06/06 is the depth dry/ 6mm/6mm of wet/Slush/Slush
- Then it moves onto another runway.... blah blah blah

The last bit is another change – this gives you **"Situational Awareness"** – a free text (i.e. real human language) section reporting other important stuff you might want to know.

A decoding device

We aren't going to be there to decode for you, so here is a decoding device we made earlier (by copying the ICAO one and adding some nice colours).

You might also want to download something like the **SNOWTAM app** on your smartphone (just make sure whatever you use is correct against your company manuals).

| DECODING A SNOWTAM - WHERE IT IS TALKING ABOUT | | | |
|---|--|--|-----------------------------------|
| ITEM A RBCA - THE 4 LETTER ICAO IDENTIFIER FOR THE AIRPORT. Rebecca International | | | |
| ITEM B | 12161300 - THE DATE AND TIME. December (12) the 16th (16) at 1300z | | |
| ITEM C | 09L - THE RUNWAY. They always use the lower number. So you aren't going to see a 27R as well. This is the SNOWTAM way. | | |
| DECODING A SNOWTAM - WHAT IT IS TELLING YOU | | | |
| 3/2/6 - THE RUNWAY CONDITION FOR EACH THIRD. Check out RCAM below. | | | |
| RUNWAY CONDITION CODE | RUNWAY SURFACE DESCRIPTION | AIRPLANE DECELERATION OR DIRECTINAL CONTROL OBSERVATION | PILOT REPORT OF BRAKING ACTION |
| 6 | DRY | | |
| 5 | FROST WET - visible dampness or moisture up to and including 3mm Up to and including 3mm: SLUSH / DRY SNOW / WET SNOW | Braking deceleration normal for wheel braking effort applied AND directional control is normal | GOOD |
| 4 | OAT -15degC and lower: COMPACTED SNOW | Braking deceleration OR directional control is between Good and Medium | GOOD TO MEDIUM |
| 3 | WET (slippery when wet) DRY/WET SNOW ON TOP OF COMPACTED SNOW (any depth More than 3mm: DRY SNOW / WET SNOW OAT higher than -15degC: COMPACTED SNOW | Braking deceleration is noticeably reduced for the wheel braking effort OR directional control is noticeably reduced | MEDIUM |
| 2 | More than 3mm: STANDING WATER / SLUSH | Braking deceleration OR directional control is between Medium and Poor | MEDIUM TO POOR |
| 1 | ICE | Braking deceleration OR directional control is significantly reduced | POOR |
| 0 | WET ICE / WATER ON COMP SNOW DRY/WET SNOW ON ICE | Braking deceleration OR directional control is minimum or uncertain | LESS THAN POOR |
| DECODING A SNOWTAM - MORE WHAT IT IS TELLING YOU | | | |
| ITEM E | NR/25/75 - PERCENT COVERAGE. NR (<10% or dry), 25 (10-25%), 50 (26-50%), 75 (51-75%), 100 (76-100%) | | |
| ITEM F | 05/115/195 - DEPTH OF CONTAMINANT - 2 OR 3 DIGITS. 05 for 5mm. 115 for 115mm etc | | |
| ITEM G | SLUSH/SNOW/ICE - TYPE OF CONTAMINANT. For each third. | | |
| DECODING A SNOWTAM - SITUATIONAL AWARENESS STUFF | | | |
| ITEM H | 35 - RUNWAY WIDTH CONTAMINATED (if less than published width) | | |
| ITEM I | RWY 09L REDUCED TO 2000 - Info on runway length reduction will be written | | |
| ITEMS J-O | Other need to know info on the horrible weather conditions | | |
| ITEMS P-R | Conditions of other movement areas - Aprons and Taxiway | | |
| ITEM T | Some plain language remarks | | |

Why these changes?

Well, in order to **make SNOWTAMS better**, because they are fairly important. You might get some frosty toes if you step in a puddle of slushy snow, but you're going to get more than cold feet if you go skidding off the end of a runway.

SNOWTAMs are there to **make winter weather safer**. They give **critical information about the state of the runway**, and this should be plugged into whatever performance calculating device your airplane needs you to use so that you can see whether you will stop before, or after, the end of the runway.