

Reduced Runway Length Operations during Construction/ Work in Progress – ATIS and Radiotelephony Messages

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Synopsis

EUROCONTROL had been requested by IATA to raise awareness about an FAA InFo notice (11015 dated 1 September 2011) which informed aircraft operators about ATIS messages and additional R/T phraseology associated with reduced runway length operations during and following aerodrome/ runway construction work in the USA.

Purpose

The purpose of this Request for Support message was twofold: first to highlight the FAA approach to advising reduced runway length available; and second to gain a better appreciation of European practices, procedures and phraseologies being applied in these circumstances with a view to assessing if a consistent, harmonised global position could/should be considered.

FAA Provisions

FAA InFo Notice 11015 states that, *“For runways that are undergoing construction or have recently completed construction. Operators and pilots can expect to hear the following messages via the ATIS recording. In situations where the runway has been shortened, operators will hear “WARNING” and “SHORTENED”*

- For example: *“WARNING, RUNWAY (number) has been SHORTENED, (length in feet) FEET AVAILABLE.”*

In addition, it states that, *“SHORTENED” will be used as part of the take-off (or line up and wait) and landing clearance...’*

- For example: *“RUNWAY (number) SHORTENED, CLEARED FOR TAKE OFF.”*

Note: These procedures will apply for the duration of works or until a permanent shortening of the runway is reflected accordingly in aeronautical publications.

ICAO Provisions

ICAO Annex 11, Air Traffic Services, 4.3.7, states that ATIS broadcasts shall include, *“k) other essential operational information.”*

ICAO Doc 4444, PANS ATM, 7.5.2 *“Essential information on aerodrome conditions shall include information relating to the following:*

- a) Construction or maintenance work on, or immediately adjacent to the movement area...*
- h) any other information.”*

ICAO Doc 4444, PANS ATM, 7.5.3: *“Essential information on aerodrome conditions shall be given to every aircraft, except when it is known that the aircraft already has received all or part of the information from other sources. The information shall be given in sufficient time for the aircraft to make proper use of it, and the hazards shall be identified as distinctly as possible. Note - “Other sources” include NOTAM, ATIS broadcast, and display of suitable signals.”*



REQUEST FOR SUPPORT MESSAGE (CONT'D)

ICAO Doc 4444, PANS ATM, Phraseologies 12.3.1.10:

- "d) CAUTION CONSTRUCTION WORK (location);
- e) CAUTION (specify reasons) RIGHT (or LEFT), (or BOTH SIDES OF RUNWAY [Number]);
- f) CAUTION WORK IN PROGRESS (or OBSTRUCTION) (position and any necessary advice)."

(EUROCONTROL Note: "Necessary advice" includes "essential information" such as reduced TORA/LDA that may be associated with any WIP/construction work.)

Analysis

When construction work reduces the length of the runway distance available for take-off and landing, it is imperative that this information is made available to aircraft operators and flight crews in a timely manner. In turn they must be aware of, and fully understand, the messages they may hear/see on the ATIS/DATIS and/or receive from ATC as part of their air traffic clearance.

There are existing ICAO provisions covering these circumstances and the FAA has complemented them by introducing its own bespoke phraseology as a safety risk reduction measure. Flight crews should therefore be aware of specific (regional and local) procedures and phraseologies that exist to inform them about reductions in TORA/LDA associated with runway construction/WIP scenarios.

Information requested

Air navigation service providers, aircraft operators, aerodrome operators, local runway safety teams, and national aviation authorities are invited to note the subject and submit their national/local procedures relating to such cases, including ATIS and/or ATC phraseology to be used and aerodrome (temporary) signage.

Respondents are also invited to indicate the need, or otherwise, for a more harmonised approach regarding the procedures and phraseology to be used in the circumstances described.

Summary of responses

There were only 8 responses to this particular RFS message: Four ANSPs, two civil aviation authorities and two aircraft operators.

The general findings were that:

- ANSPs followed the existing ICAO provisions and phraseology. There was no call to introduce similar wording in Europe. However, 2 CAAs (one European, one African) thought that it might be worth debating the merits of adopting the US FAA phraseology.
- ANSPs are aware of the impending proposed change to ICAO EUR SUPPS to replace "TAKE-OFF" with "TOR-AH" in the context of runway intersection departure clearance phraseology. (See below for more about this specific issue)
- One aircraft operator recommended that all runway dimension changes should be promulgated in metres in addition to feet.

After discussions with EUROCONTROL Agency in-house runway safety and procedures experts, it was decided that no further follow-up action should be taken. However, the situation will continue to be monitored through mechanisms such as EVAIR (EUROCONTROL Voluntary ATM Incident Reporting), the Safety Improvement Sub Group (SISG) and the European Working Group for Runway Safety (EWGRS). At national/local level, Local Runway Safety Teams (LRST) can also maintain an overview.



Further reading

- FAA InFO Notice 11015 dated 1 September 2011.
http://www.faa.gov/other_visit/aviation_industry/airline_operators/airline_safety/info
- FAA Air Traffic Organisation Policy Notice N JO 7110.564 - 22 September 2011.
http://www.faa.gov/air_traffic/publications/
- ICAO Annex 14, 2.8 Declared Distances.
- ICAO Annex 14, 2.13 Coordination between Aeronautical Information Services and Aerodrome Authorities.

Reduced runway length operations – Intersection departures – revision to ICAO EUR SUPPS, ICAO doc 7030, phraseology

As part of the research for the Alert, it was found that the ICAO EANPG (European Air Navigation Planning Group) was in the process of proposing changes to the phraseology in the EUR SUPPS, ICAO Doc 7030, relating to the provision of information for intersection departures.

Specifically, the EANPG had recommended that, to bring the EUR SUPPS into line with the guidance in ICAO Doc 9870, Manual for the Prevention of Runway Incursions, the phrase "TAKE-OFF" should be removed from the EUR SUPPS phraseology for intersection departures because it contradicted the advice given in ICAO Doc 9870, which says that the words "TAKE-OFF" should only be used as part of a take-off clearance. Instead, the acronym TORA (to be pronounced "TOR-AH") should be used.

Thus, typical phraseology to be used by ATC to warn pilots of reduced runway length from an intersection should be:


"CALL SIGN, TORA (TOR-AH) RUNWAY 09, FROM INTERSECTION ALPHA, 2800 METRES".

In addition, the EANPG recommended that the word "REDUCED" should also be omitted in future since it was obvious that departing from an intersection would reduce the length of the TORA.

An ICAO State letter was circulated in January 2012 asking States to comply with the revised phraseology.

To supplement the oral message, ICAO Annex 14, Aerodromes, recommends that an intersection take-off sign should be provided, when there is an operational need, to indicate the remaining TORA for intersection take-offs. In addition, Annex 14 § 5.4.3.29 says that, *"the inscription on an intersection take-off sign shall consist of a numerical message indicating the remaining take-off run available in metres plus an arrow, appropriately located and oriented, indicating the direction of take-off..."*.

ANSPs should cooperate with aerodrome operators to clarify the signage requirements at individual aerodromes. **S**



...the word "REDUCED" should also be omitted in future since it was obvious that departing from an intersection would reduce the length of the ... neck of the giraffe...
