

ATS 1/2020

16 January 2020

MANAGEMENT OF CRITICAL SAFETY INFORMATION: NOTAMs

Background

A Notice to Airman (NOTAM) is a critical piece of safety information for pilots. To achieve the intended function NOTAMs must be easily understood, easy to read, relevant and structured. At present, NOTAMs are difficult to interpret, presented in a text only ALL CAPS format, date time groups being a single non punctuated 10-digit number, have limited punctuation and littered with ambiguous abbreviations and jargon. With these features, the current NOTAM system frequently fails to achieve the appropriate level of safety when conveying information to pilots. US NTSB Chairman, Robert Sumwalt, commenting on a recent runway/taxiway incident noted:

"That's what NOTAMs are: they're a bunch of garbage that no one pays any attention to..."¹

It is not enough just to be colourful and direct in identifying the threat to aviation safety - we must do much more to make NOTAMs fit for purpose in ensuring stakeholders, especially pilots, are informed in a timely manner of potential risks to safe aviation operations.

Improving Presentation

In the first instance, the NOTAM character set can be updated to a modern format with:

- upper- and lower-case lettering;
- date time groups either punctuated to delineate years, month, day and time or in standard date time formats;
- a full punctuation set; and
- a standard for capitalisation, abbreviations, and jargon, such as the Eurocontrol AIXM (Aeronautical Information Exchange Model) digital NOTAM abbreviation list.²

These small changes will vastly improve the current readability of NOTAMs and be a clear safety enhancement. In the longer term, the NOTAM system requires a complete overhaul based on modern technology to make the product "pilot friendly" and effective. Internationally, the efforts of IFALPA, the OPS Group and Eurocontrol digital NOTAM group in achieving this aim should be supported³. Changes to the ICAO Standards and Recommended Practices will be required, but this process can take a considerable period.

In the meantime, Australia should look for early opportunities to implement safety enhancements as recommended above, whilst maintaining its current international obligations to provide NOTAMs in an "ICAO Format". These objectives are not mutually exclusive.

AusALPA Recommendations for Improving NOTAMs

AusALPA recommends a staged improvement to the NOTAM system as follows:

Recommendation 1

NOTAMs should be produced using a modern character set that includes lower case letters and standard punctuation.

AusALPA Position – NOTAMs

Recommendation 2

NOTAM text fields should be in standard English with normal capitalisation with a recommendation to avoid ambiguous jargon and abbreviations.

Recommendation 3

NOTAMs should use a standard abbreviation list, such as the Eurocontrol digital NOTAM abbreviation convention (*AIXM version 5.1*)

Recommendation 4

Operators should make every attempt to provide the flight crew with tailored NOTAMs that are limited to the route/sector in question, including diversion airfields, and with the most significant issues affecting the flight highlighted. Where an operator uses an EFB system, thought should be given to providing this information in a “pilot friendly” format using colour and schematics, as appropriate.

Recommendation 5

The NOTAM production system requires a complete overhaul with a view to making NOTAMS digital including (but not necessarily limited to) standard format for text fields, use of whole words or standard abbreviations, header and meta data fields for easier filtering, graphical or video fields where appropriate and map/GPS fields. It is noted that Eurocontrol has produced a complete digital NOTAM standard.⁴

AusALPA’s Position

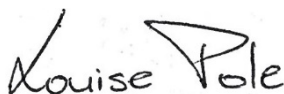
The current NOTAM system poses safety risks by failing to provide effective safety critical information to pilots.

In the near-term, substantial improvements in the readability of NOTAMs is needed to enable effective comprehension.

Longer term, effort is needed both in Australia and internationally to improve the overall presentation, prioritisation and relevance of individual NOTAMs and the system.

Failure to do otherwise exposes the aviation industry to unnecessary and avoidable risk.

Approved on 16 January 2020:



Captain Louise Pole
President AusALPA
President AFAP



Mark Sedgwick
Vice President AusALPA
President AIPA

References

- ¹ <https://www.ainonline.com/aviation-news/business-aviation/2018-09-28/ntsb-chairman-calls-notams-garbage>
- ² https://ext.eurocontrol.int/aixm_confluence/display/DNOTAM/Appendix+A+-+Abbreviations+and+acronyms
- ³ <https://www.eurocontrol.int/news/eurocontrol-supports-ais-transition-digital-data-sets>
- ⁴ <http://aixm.aero/page/digital-notam>