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www.aopa.org

February 1, 2018

Mr. Paul Von Hoene Aviation Safety Inspector Flight Standards Service 470 L'Enfant Plaza SW Washington, DC 20024

Re: Pilot Guidance Should be Updated to Alert Pilots of FIS-B NOTAM Limitation

Dear Mr. Von Hoene,

The Aircraft Owners and Pilots Association (AOPA), the world's largest aviation membership association, is concerned pilots are not being adequately informed that many Notices to Airmen (NOTAM) are not being uplinked via the FAA's Flight Information Services-Broadcast (FIS-B). On September 26, 2016, the FAA announced via NOTAM¹ that NOTAM-Ds and NOTAM-FDCs that have an effective date or issuance date 30 days in the past will no longer be broadcast. The FAA's estimate is that about 20 percent fewer NOTAMs are being uplinked because of this service change². NOTAM-Ds and NOTAM-FDCs can contain flight safety critical information; it is important pilots are aware that they are not receiving all relevant NOTAMs when using FIS-B. AOPA proposes the FAA provide additional guidance in the Aeronautical Information Manual (AIM) to ensure this limitation on the service is well advertised.

The FAA's FDC NOTAM announcing the change to the FIS-B NOTAM broadcast had a valid time that indicated it was permanent (PERM); however, this NOTAM was cancelled not long after it was issued. The NOTAM itself served as adequate notice of the change and as a reminder, but its cancellation removed this important guidance from the pilot's field of view. More pilots are taking advantage of FIS-B every day, but they are not given adequate notice of this service limitation.

As part of Change 1 to Advisory Circular 00-63A, the FAA incorporated a new paragraph³ in Appendix 1 indicating the limitation to the NOTAM system. The majority of pilots are not reading this appendix,

¹ "!FDC 6/6918 ZLA AIRSPACE..SPECIAL NOTICE..THE FLT INFORMATION SERVICES BCST DATA SOURCE FOR ZLA ARTCC AIRSPACE IS CHANGING. ALL FLT INFORMATION SERVICES BCST PRODUCT FORMATS REMAIN UNCHANGED AND EXISTING AVIONICS SHOULD REMAIN COMPATIBLE WITH THE NEW DATA SOURCE. NOTAM-D AND NOTAM-FDC PRODUCTS THAT ARE OLDER THAN 30 DAYS WILL NO LONGER BE UPLINKED WHEN THIS CHANGE IS IMPLEMENTED. THIS UPDATE WILL OCCUR BTN 1200UTC AND 2200UTC ON SEPTEMBER 26 2016 AND WILL BE PERMANENT. ANY OBSERVED ISSUES SHOULD BE REPORTED VIA EMAIL TO ADSB @FAA.GOV 1609261200-PERM"

² Language from Service Change: "3.2.1.2.4-c. The FIS-B Service shall not be required to uplink NOTAM-D & NOTAM-FDC products which have an Effective Date, Issuance Date, or are first received by FIS-B more than a configurable number of days in the past (with a default value of 30 days). Note: This requirement does not apply to NOTAM-TFR products."

³ "FIS-B METI and AI do not include all the weather products or Notices to Airmen (NOTAM). As a result, FIS-B METI and AI may not include all the weather products or NOTAMs that a preflight briefing includes (NOTAM information is limited to the past 30 days. The pilot in command (PIC) is responsible for reviewing all necessary information prior to flight. Therefore, AI information obtained via FIS-B may not be relied on for a thorough

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which begins on page 21 of 55, and many that do read it are missing the significance of this short statement. The AC guidance is helpful, but this change is significant; therefore, adequate notice must be included in a more prominent and well known pilot guidance document.

The FAA's Technical Standard Order for FIS-B equipment does not require the manufacturer to include in their operating manual any specific guidance related to this limitation. The only requirement is to indicate in the manual that FIS-B is for advisory use only. AOPA agrees FIS-B has numerous limitations and must only be used in concert with a thorough preflight briefing, but that does not remove the requirement for specific guidance to be provided to pilots so they can be aware of those "gaps" and "traps." Additionally, AIM paragraph 7-1-11(a)(3) indicates the manufacturer should be providing guidance to pilots about system limitations⁴; however, AOPA was not able to find any commercial FIS-B product manual that included a notice of the 30 day NOTAM limitation. It is inadequate to rely on manufacturers to alert users of this limitation.

The FAA has failed to alert users via their website of this service change. Notably, the FAA's online FIS-B education resource⁵ does not mention a 30 day limitation for NOTAM-Ds or NOTAM-FDCs. Including these types of service changes on the FAA's website, a resource pilots are more likely to look at than an AC, would be positive. AOPA published an online article in August 2016⁶ announcing the upcoming change to NOTAMs being broadcast, but we did not conduct any additional outreach as we were unaware the announcement NOTAM would be cancelled. Additional outreach is important for this topic and we stand ready to collaborate with the FAA on that effort.

NOTAMs can contain important information relevant to flight safety. We contend this service change is significant enough to warrant inclusion in the applicable section of the AIM. Please find attached AOPA's proposed document change proposal for AIM paragraph 7-1-11(a)(1)(h)(3) and for Table 7-1-1. We believe the AIM is the correct location to educate pilots of the 30 day NOTAM limitation as it is the primary flight document pilots use to stay aware of operations in the National Airspace System.

We appreciate the opportunity to provide feedback on the FAA's FIS-B pilot guidance and we look forward to further discussions on this topic. Thank you for reviewing our comment on this important issue. Please feel free to contact me at 202-509-9515 if you have any questions.

Sincerely,

Rune Duke

Senior Director, Airspace and Air Traffic

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preflight briefing). For additional information on standard briefing, refer to the Aeronautical Information Manual (AIM), subparagraph 7-1-4b."

⁴ "If FIS products are systemically modified (for example, are displayed as abbreviated plain text and/or graphical depictions), the modification process and limitations of the resultant product should be clearly described in the vendor's user guidance."

⁵ https://www.faa.gov/nextgen/programs/adsb/pilot/#fisb

⁶ https://www.aopa.org/news-and-media/all-news/2016/august/10/fis-b-advisory-service-adding-data-curtailing-older-notams

AIM OLD

AIM NEW

7-1-11. Flight Information Services (FIS)

7-1-11. Flight Information Services (FIS)

Title thru (a)(1)(h)(2)

No change

(3) Users of FIS—B should familiarize themselves with the operational characteristics and limitations of the system, including: system architecture; service environment; product lifecycles; modes of operation; and indications of system failure.

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Add

NOTE-

The NOTAM-D and NOTAM-FDC products broadcast via FIS-B are limited to those issued or effective within the past 30 days. Except for TFRs, NOTAMs older than 30 days are not provided. The pilot in command is responsible for reviewing all necessary information prior to flight.

Paragraph (a)(1)(h)(4) thru (b)(2)

No change

OLD

 ${\it TBL\,7-1-1}$ FIS-B Over UAT Product Update and Transmission Intervals

Product	FIS-B Over UAT Service Update Intervals ¹	FIS-B Service Transmission Intervals ²
AIRMET	As Available	5 minutes
Convective SIGMET	As Available	5 minutes
METARs/SPECIs	1 minute/As Available	5 minutes
NEXRAD Composite Reflectivity (CONUS)	15 minutes	15 minutes
NEXRAD Composite Reflectivity (Regional)	5 minutes	2.5 minutes
NOTAMs-D/FDC/TFR	As Available	10 minutes
PIREP	As Available	10 minutes
SIGMET	As Available	5 minutes
SUA Status	As Available	10 minutes
TAF/AMEND	8 Hours/As Available	10 minutes
Temperatures Aloft	12 Hours	10 minutes
Winds Aloft	12 Hours	10 minutes

¹ The Update Interval is the rate at which the product data is available from the source.

² The Transmission Interval is the amount of time within which a new or updated product transmission must be completed and the rate or repetition interval at which the product is rebroadcast.

NEW

TBL 7-1-1 FIS-B Over UAT Product Update and Transmission Intervals

Product	FIS-B Over UAT Service Update Intervals ¹	FIS-B Service Transmission Intervals ²
AIRMET	As Available	5 minutes
Convective SIGMET	As Available	5 minutes
METARs/SPECIs	1 minute/As Available	5 minutes
NEXRAD Composite Reflectivity (CONUS)	15 minutes	15 minutes
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NOTAMs-D/FDC ³	As Available	10 minutes
NOTAMs-TFR	As Available	10 minutes
PIREP	As Available	10 minutes
SIGMET	As Available	5 minutes
SUA Status	As Available	10 minutes
TAF/AMEND	8 Hours/As Available	10 minutes
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