RTCA

THE GOLD STANDARD FOR AVIATION SINCE 1935

Approved by the Tactical Operations Committee February 2015

NOTAM Search Phase 1 Implementation

Report of the NOTAM Task Group in Response to Tasking from

The Federal Aviation Administration

February 2015

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Background/Introduction

The Federal Aviation Administration (FAA) is required under Section 3(c) of Public Law 112-153, also known as the 2012 Pilot's Bill of Rights ("PBoR"), to "establish a NOTAM Improvement Panel, which shall be comprised of representatives of relevant nonprofit and not-for-profit general aviation pilot groups, to advise the Administrator in carrying out the goals of the NOTAM Improvement Program." The FAA would like to build on the progress already derived from previously established efforts to digitize NOTAMs to comply with the provisions of this law.[1]

The Tactical Operations Committee (TOC) serves as the NOTAM Improvement Panel to further assist the Administration in crafting specific goals and priorities to meet the law's intent and make needed enhancements to the NOTAM program. In this capacity, the TOC is relying on the NOTAM Task Group (TG) to provide specific recommendations on issues related to the NOTAM program.

The work of the panel will yield an increasing amount of standardized digital NOTAMs that can be more easily filtered, sorted, and prioritized. This should result in a significant reduction in the volume of NOTAMs pilots must currently review and allow pilots to focus only on those NOTAMs relevant to their flight plan/path. As a result, pilots will be more confident in the quality and accuracy of this focused NOTAM information, and the safety of the National Airspace System (NAS) will be improved.

The panel is currently in process of providing feedback to the FAA on the implementation of the NOTAM Search website.

Task and Approach

In previous FAA responses to NOTAM Improvement Panel recommendations, the FAA requested "working meeting[s] between the members of the Task Group and the Federal NOTAM System (FNS) engineering and development teams to define stakeholder requrements for some of the specific requests." The Task Group Leadership engaged directly with the FNS team previously and provided clarification of search and filter terms, prioritization of search and filter options and other specific inputs. Much of the input of the NOTAM Task Group formed the NOTAM Search implementation plan for the FAA.

Building upon these interactions, the FAA requested the NOTAM Improvement Panel continue to provide feedback to the FAA after NOTAM Search implementation. The FAA crafted a four phase plan and the NOTAM Task Group agreed to provide feedback after each phase of implementation.

The NOTAM Task Group evaluated the NOTAM Search Phase 1 implementation during November-December 2014 and compiled feedback. Raw feedback is available on the RTCA Workspace sharing site for the NOTAM Task Group. The Task Group met with the FAA in December 2014 to review and discuss the feedback. The summary of that meeting forms the body of this recommendation document.

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[1] Letter from Elizabeth L. Ray (Vice President, Mission Support Services) to Margaret Jenny (RTCA President) dated July 10, 2013.

Feedback on NOTAM Search Phase 1 Implementation

The following sections represent the summarized feedback from the NOTAM Task Group regarding the first phase of implmentation of NOTAM Search:

Broad Considerations for NOTAM Search

1. The Task Group discussed the disclaimer upon entry to the NOTAM Search website. The disclaimer states: "*This site is informational in nature and is designed to assist pilots and aircrews for flight planning and familiarization. It may be used in conjunction with other pre-flight information sources needed to satisfy all the requirements of 14 CFR 91.103 and is not to be considered as a sole source of information to meet all pre-flight action.*" The Task Group learned that the disclaimer language was developed in August 2013 to communicate that NOTAM Search serves as a valid source for pilots to use in meeting the requirements of 14 C.F.R. 91.103. However, the requirements in 14 C.F.R. 91.103 go beyond the information provided by NOTAM Search and include additional requirements, such as weather information. Hence, NOTAM Search should be considered a valid, but not a sole source, for meeting the requirement.
2. Consider adding the option to select a VFR vs IFR flight.
3. Consider ways to communicate how one would utilize the functionality beyond a printed user guide. The idea of utilizing videos for training was suggested.
4. The Task Group noted that a user may want to download the content from NOTAM Search on a tablet and access it while flying the airplane. After being on the airplane, the user may wish to filter or sort the content while offline using the NOTAM Search interface in an offline mode.
5. The group suggested for mobile applications that the FAA replicate the functionality of www.faa.gov/mobile.
6. The Task Group observed that if one changes the sequence in NOTAM Search through sorting, it does not change the sequence of the printed NOTAMs. This raised questions on what the approach should be for printing. Should it print how the user sorts the information? Or is it preferred to have a standard sequence of how NOTAMs are printed?

General Suggestions for Website

7. The group requested improvements in how counts are depicted to the user. There are counts for the total number of NOTAMs, the number filtered out and the number remaining. Currently the information is in multiple places and the presentation of the information can be improved.
8. The group suggested the FAA consider viewing the route string space separated (and not comma separated) as that is industry standard.
9. When using data/time filters, there should be an option to click to open a calendar to select the date.
10. The site should provide guidance and clarity to the user that the system does not accept SIDs/STARs in the flight path tool.
11. There should be a way for the user to see full NOTAM text without having to go to another screen. This may include seeing the full text by hovering, using wrapped text, a "see more/see less" button, etc.

12. If the user goes to a new window to see full text (or anything else) and returns to the list of NOTAMs, the user wants to return to the spot where he or she was before (not the top of the list as it is now).
13. The Flight Path screen should include "Show ARTCC" and "Show TFR" on the same side with clarity that ARTCC is superset and TFR is subset.
14. There needs to be a distinction between 4 letter and 3 letter codes in Location Search (i.e., when searching ZZV the search could be with respect to an airport or the VOR).
15. For pointer NOTAMs, there should be a tab or a link with the content of the NOTAMs that are pointed to.
16. The group recommends to categorize NOTAMs by their keywords (and a few other items) and not by Class. The Class column should be replaced with one called "Category".
17. For search categories (Location, Flight Path, etc.), the group requests the site provide a description if you hover over it. This is particularly relevant for lesser known categories like "Accountability."
18. Letters to Airmen (LTA): the group suggests to provide the full text in the NOTAM Search individual line item; but users do not want the full text if you download the content to PDF.

Specific Fixes for Website

19. The group found the "Counts" icon to be confusing and requested it be replaced.
20. Currently, the archive search export to a PDF does not show you what you searched in the header.
21. The group requested that the label "Help" be changed to "User Guide".
22. There are date format differences when using the Safari web browser.
23. There was question of whether the time filter is based on UTC or local time and the group suggested including the label of "Zulu time".
24. The group requested an "End of Report" label.
25. The PDF export has extra header labels that increase the page count.
26. For the User Guide, start the text on the first page at the top of the page.
27. The group noted bugs during scrolling and requested these be fixed immediately.
28. The group requested that the search history recall the last 10 and not the last 5 searches. This was deemed to be a lower priority.
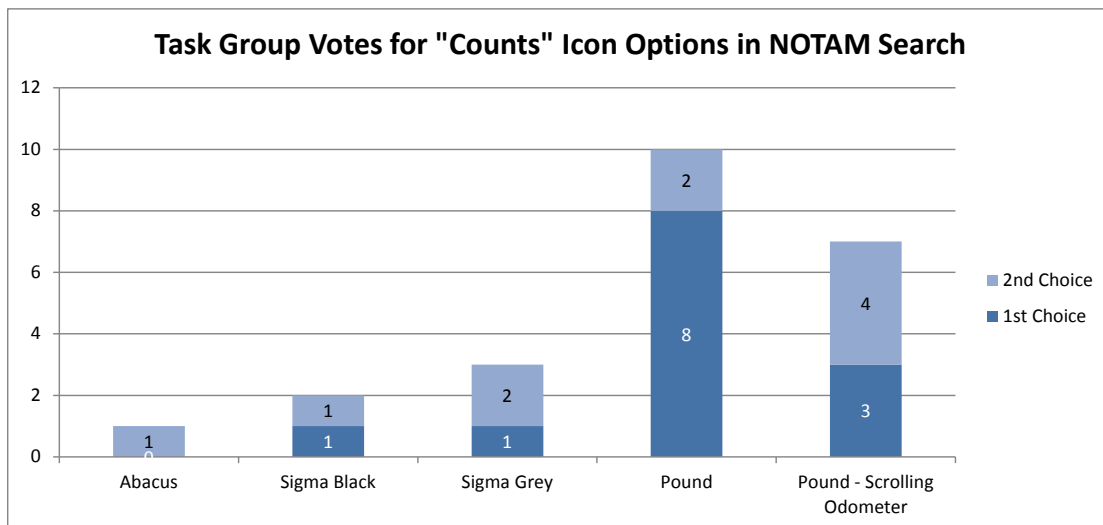
Feedback on the "Counts" Icon

The Task Group was asked by the FAA to provide specific feedback on the "Counts" icon which is referenced in Comment #19 above. The FAA Human Factors organization provided the following set of alternatives and asked for Task Group input on a preferred option:

1. Abacus	
2. Sigma Black	
3. Sigma Grey with Border	

4. Pound Black	# Counts 33 ▾
5. Pound – Scrolling Odometer	▦▥ Counts 33 ▾

Task Group members were requested to provide their first and second choice for the Counts icon. Thirteen members of the Task Group responded and the results are depicted in the chart below. The results suggest a majority of the Task Group prefers the Pound or Pound-Scrolling Odometer icon to represent "Counts" in NOTAM Search.

Task Group Votes for "Counts" Icon Options in NOTAM Search

Icon Option	1st Choice	2nd Choice
Abacus	0	1
Sigma Black	1	1
Sigma Grey	1	2
Pound	8	2
Pound - Scrolling Odometer	3	4

The Task Group noted that it may be more appropriate to label this icon as the singular term "Count" versus "Counts". If the intent of the icon is to represent the single total count of NOTAMs from a search, then the singular term may be more appropriate.

Next Steps

The next scheduled release for NOTAM Search is March 5, 2015 and will focus on User Profiles. The NOTAM Task Group plans to schedule a meeting with the AIM office in March to review the site and compile feedback.

Appendix A: Members of the NOTAM Task Group

Chris Baum	Air Line Pilots Association	Bob Lamond	National Business Aviation Association
Rich Boll	National Business Aviation Association	Jeffrey Miller	International Air Transport Association
Dave Bradshaw	Federal Aviation Administration	Jim Mills	U.S. Air Force
Mark Cardwell	**FedEx Express (Co-Chair)**	Trin Mitra	RTCA, Inc.
Andy Cebula	RTCA, Inc.	David Newton	Southwest Airlines
Jocelyn Cox	CNA	Glenn Sigley	Federal Aviation Administration
Trish Gay	Federal Aviation Administration	Ashish Solanki	Maryland Aviation Administration
Adam Gerhardt	TASC, Inc.		
Steve Habicht	CNA	Edwin Solley	Southwest Airlines
Shaelynn Hales	CNA	Harold Summers	Helicopter International Association
Jack Hurley	Delta Air Lines, Inc.		
Ezra Jalleta	The MITRE Corporation	Brandi Teel	RTCA, Inc.
Scott Jerdan	Federal Aviation Administration	Robert Utley	National Air Traffic Controllers Association
Christian Kast	United Parcel Service	David von Rinteln	Hewlett Packard
Des Keany	American Airlines, Inc.	Michael Williams	Hewlett Packard
Tom Kramer	**Aircraft Owners and Pilots Association (Co-Chair)**	Diana Young	Federal Aviation Administration