Aeronautical Information Management

Summary of Airline Survey Responses
Industry Day

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Background

- **Survey of Air Carriers and Data Providers was conducted to better understand their usage of Aeronautical Information (AI) received from the FAA**

- **Survey results will be used by the AIM Program as part of the justification for building a more robust AI system for the NAS**

- **Eight Domestic Airlines, Air Carriers, and Data Providers; Fourteen International Airlines and Air Carriers responded to our survey request**

- **Most of the questions centered on their usage of NOTAM data.**

Summary of Airline Responses (Highlights)

What are the fundamental difficulties that your Company/organization experiences with NOTAM Data?

- Too many data formats (such as ICAO and US NOTAM "D")

- Local NOTAM messages are not electronically distributed

- U.S. NOTAM Messages are not ICAO compliant (Invalid or incomplete Q-Codes)

- Content can use non-standard acronyms and confusing

- NOTAM messages not always distributed in a timely manner

- NOTAM messages are still text based yet many of them require graphic references

- Current Special Use Airspace (SUA) data is not available in a machine readable format

- International access of US NOTAM information

- Pilots want plain language NOTAM messages

Does the lack of data availability (e.g. local NOTAM messages, etc.) cause you to expend resources to collect the data?

- **All the air carriers do expend resources to collect and validate, resulting in inefficient flight planning and en route advisories.**

- **Issues include:**
    - Local NOTAM and ramp/runway field conditions not readily available
    - Lack of awareness on SUA activity causing flights to be planned around non-active and available airspace
    - Airspace Facility Directory (AFD) and Notice To Airman Publication (NTAP) entries in book form are impossible to integrate and maintain in automated systems
    - Multiple sources of information. A lack of a central source for information makes the entire process more lengthy and may cause additional reroutes or delays
    - Missing, incomplete, incorrect, outdated information may influence route planning as well as alternate selection
    - Delivery of paper documents to international air carriers may take several weeks
    - Extra personnel is necessary to clarify information
    - Expiration of NOTAM messages should be more precise i.e. some messages show a 3 month-estimate and are cancelled 2 days later while others are estimated for a short period, but remains active for 3 months or longer

Federal Aviation Administration

Does the timeliness of translating the data from receipt to dispatch functions result in inefficient flight planning and en route advisories?

- **Most of the air carriers who responded stated that translating the data does effect the flight planning and en route advisories.**

- **Issues include:**
  - The volume of NOTAM messages now being issued is becoming quite unmanageable in terms of restrictions and limitations
  - Lack of Local NOTAMs continue to be a safety of flight issue
  - Information extracted from FDC/NFDD often gets manually processed and sorted before it is used.
  - Timelines and lead times are critical functions required of data disseminated to final users
  - Following the ICAO Standard NOTAM procedures would help to process data in an electronic format in all quality matters, i.e. time, accuracy, completeness, and traceability

Are there any additional issues associated with the aeronautical data processing and delivery system?

- **Issues include:**
  - Ownership and understanding of NOTAMs issued by the US NOTAM office.
  - Not having a central authority charged with ensuring that all issued NOTAM messages meet a standard set of criteria
  - NOTAM data differs significantly from the ICAO standard and from region to region
  - Inconsistent and incomplete static data between civil and military data sources cause varying interpretations
  - FAA's procedure to move NOTAM messages that extend longer then 30 days to the NOTAM publication or AFD
  - The lack of Local, GPS, WAAS, NTAP, En route and International NOTAM messages and real time airfield condition reports
  - Information not being available in a timely manner to the international air carriers in Europe
  - Managing the flow of aeronautical information

Federal Aviation Administration

Do you have an in-house dispatch support function? What is the number of full-time and/or part-time employees dedicated to this activity?

- **Number of personnel ranging from a low of 1 to a high of 100+. Average was between 10 and 40 individuals for most air carriers**

- **Many air carriers mentioned that their staff had other duties or responsibilities so that an exact number was very difficult to calculate**

Do you contract this function out through a vendor? If yes, what are the main reasons for not providing this service in-house?

- **Most of the domestic and international air carriers have in-house dispatch support function internal to their operations and do not contract this function to an external vendor.**

- **One domestic and several international air carrier stated that use an outside vendor to translate and process NOTAM data into an improved and highly effective product for their flight operations.**

- **Several domestic air carriers mentioned that they do purchase International aeronautical data**

Federal Aviation Administration

If you could select one major deficiency and/or problem that the FAA should focus on resolving sooner than later, what would that be?

- ## Some suggestions include:
  - An increase in data accuracy, more timely processing, and the delivery of aeronautical data will improve the quality of flight operation decisions and effectively mitigate risks
  - A "Google-like" search function that will allow global NOTAM data base filtering
  - A single source and point of contact for NOTAM issuance and support, instead of having to call every single center (i.e., on a wild goose chase) to see who issued it and why
  - Stop the practice of removing Class 1 NOTAMS from the system after 30 days, as it is not operationally sound
  - Make high-speed Taxiway closures and Taxiway Lead-off light information available
  - Stop distinction between local/international NOTAM messages

Recommendations

- **Implement ICAO formats.**

- **Provide Local NOTAM information to all air carriers in both graphical and text formats.**

- **Use standard terms and acronyms as identified by ICAO.**

- **Provide NOTAM and weather information as soon as possible.**

- **Be pro-active verses reactive.**

- **Reduce duplication of NOTAM information from multiple sources.**

- **Simplify NOTAM messages to reduce the amount of information.**

- **Provide NOTAM information that can be parsed by other systems, i.e. AIXM.**