SUBJECT: Airport Geographic Information System

QUESTION: Will Geographic Information System (GIS) Obstacle data be available for airline engineers to calculate take off gross weights?

ANSWER: The FAA produces a Digital Obstacle File and obstacle information is available through the Obstruction Evaluation Services Team Web site at oeaaa.faa.gov. International Civil Aviation Organization (ICAO) Annex 15 requires states to provide obstacle data.

QUESTION: In order to use airports GIS as a source for charting, we need to know when we can expect it to be populated and accessible?

Note: 30 airports now - 16,000 airports in NAS.

ANSWER: AGIS is expected to be populated incrementally with data from many of the airports (approximately 6,000). The acquisition of this data will depend on several factors, including funding and available resources.

QUESTION: What does OGC compliant translate to? Airport GIS?

ANSWER: Open Geospatial Consortium (OGC) is an international standards group promoting geographic information system standards. AIM is standardizing on several OGC standards to increase interoperability. Standards used by AIM include Geography Markup Language (GML), Web Mapping Service (WMS), Web Feature Service (WFS), and Web Coverage Service (WCS). For more information about the relationship between AIM and OGC, see the OGC Web Services, Phase 6 (OWS-6) activity on the OGC Web site at opengeospatial.org.

QUESTION: A. Currently FNS pulls airport info from National Airspace System Resource (NASR). What work has been done to see if this info will be pulled from AGIS in the future?

ANSWER: FNS will be using the FAA's official source of aeronautical data from the NFDC. Integration between NASR and AGIS is a work in progress requiring ongoing analysis and development. Over time, the airport GIS information will be merged into the NFDC data sets.

QUESTION: A. Will Electronic Airport Layout Plan (eALP) data be made available to public, commercial, and other end users?

ANSWER: The availability of eALP for public, commercial, and general use will depend on several factors such as the type of user, the type of data, the sensitivity of the data, and how data is tagged. The data should be made available in some form for general use; however, the policy for distributing the data still needs to be established. NOTAM originators and customers will need information on the layout of the airport so that digital NOTAMs can be interpreted. We envision the release of airport movement area information to support interpretation and use of digital NOTAMs.

QUESTION: What configuration management controls are in place to verify accuracy of the huge amount of data that is provided to users?

ANSWER: AGIS currently uses data standards and specifications for establishing geodetic control (FAA Advisory Circular 150/5300-16), acquiring and submitting airport imagery (AC 150/5300-17), and collecting and submitting survey data (AC 150/5300-18). It is currently the surveyors' responsibility to follow the appropriate collection procedures to provide the data within the specifications provided in these ACs. Once data has been submitted to AGIS, it goes through automatic validation and is submitted to National Geodetic Survey for verification of safety critical data.

SUBJECT: NOTAMS

QUESTION: Where is it written that NOTAMs are not mission critical, only mission essential?

ANSWER: According to the FAA National Airspace System Requirements Specification (NAS SR-1000)¹, NOTAM information and NOTAM systems are classified as mission essential systems. NOTAMs provide safety essential alerts of temporary changes to aeronautical information that are used by pilots and controllers to conduct safe flight operations and ensure the safe conduct of flights during take off, landing, en route, and ground movement phases of flight.

QUESTION: What is being done regarding FDC NOTAMs as digital NOTAMs? **ANSWER:** Temporary Flight Restriction NOTAMs are available in legacy digital format from tfr.faa.gov. The transition to digital NOTAM will be incremental and a future release of digital NOTAM will address FDC NOTAMs.

QUESTION: We are currently migrating from the Weather Message Switching Center Replacement (WMSCR) to Aeronautical Integrated Data Access Portal (AIDAP) for NOTAM delivery, once digital NOTAMs are implemented, will AIDAP continue to provide delivery or will there be a new interface delivery requirement?

ANSWER: AIDAP capabilities will continue to be available for distributing U.S. formatted text NOTAMs. The transition to digital NOTAMs will require new System Wide Information Management (SWIM) compliant interfaces for transmitting digital NOTAM information as XML. We expect to maintain legacy interfaces until at least 2015

QUESTION: When will ICAO acronyms be switched, such as PSR (Plowed Snow Ridges) vs. ICAO (Primary Surv Radar)?

ANSWER: ICAO acronyms and FAA acronyms will remain in force. Regarding Packed Snow on the Runway (PSR): this is a National Weather Service acronym used in snow conditions. ICAO has an acronym for Primary Surveillance Radar (PSR) not used as a snow NOTAM but used as a radar outage. Depending on the subject matter of the NOTAM, the same acronym may be used for different scenarios.

SUBJECT: Federal NOTAM System

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¹ Section 4.5 of the NAS SR-1000, Rev. B identifies the Reliability, Maintainability & Availability (RMA) requirements for NAS services and capabilities including the service levels – critical, essential & routine. Section 6.6 of the RMA handbook 006A identifies NAS Status updates as an essential service. NAS status updates are NOTAMs.

QUESTION: How will the website you demonstrated handle UAR (STAR: Standard Terminal Arrival)/USD (SID: Standard Instrument Departure)/Flight Data Center (FDC) NOTAMS?

ANSWER: Through the P code and keywords.

QUESTION: Are there efforts to realign the navigational NOTAMs so they are better associated with the airports they impact? EXAMPLE: ZUN Very High Frequency Omnidirectional Range (VOR) is considered to be a critical VOR for an arrival into PHX, but one must look at the NOTAMs for ABQ to see ZUN. For checking critical VOR/DME this is very challenging and workload intensive. Note: ZUN = Black Rock VORTAC. **ANSWER:** The NOTAM Search and NOTAM Search Air Traffic Control Web sites will be able to translate and display FDC NOTAMs in the future. Currently the systems display D NOTAMs. Future capabilities will better associate navigational NOTAMs to the airports they impact.

QUESTION: What dataset does the NOTAM entry Web site use for runways, taxiways, etc.?

ANSWER: We are using the official data sources from the NFDC, including the National Airspace system resources database and data contained in the Airport GIS system.

QUESTION: Is the dataset only updated on the ARINC cycle dates? **ANSWER:** NOTAMs are temporary changes to published information. Therefore, the data used in the NOTAM Entry Web site is based on the published cycle dates.

QUESTION: Our concern is a National Flight Data Digest (NFDD) change goes effective immediately, but the dataset does not reflect those changes. How does a customer validate the data?

ANSWER: NOTAMS are temporary changes to published information. Customers should be validating NOTAM information using the published static aeronautical data.

QUESTION: When will the requirements for digital NOTAMs be mature enough to incorporate into programs, such as storing, processing, displaying, etc.? **ANSWER:** We anticipate the program will achieve its final investment decision in 2010 with final operation capability to be delivered by 2014.

QUESTION: What is the time frame to go to the production? Note: This will also include ICAO format.

ANSWER: The official schedule for digital NOTAM is final operating capability by 2014. We expect capabilities to be incrementally released over time until 2014.

QUESTION: When and if this goes to production will you support the current format and feed, for how long?

ANSWER: We expect to support legacy formats through 2015.

QUESTION: Where does the EST or estimated fit on the airport input screen? **ANSWER:** In accordance with the ICAO Aeronautical Information Services Manual (Document 8126, para. 6.4.7), item C must contain the date and time of the end of the occurrence or activity by using as applicable: A ten-figure date-time group giving the year, month, day, hours and minutes in UTC. A date-time group followed by EST (estimated) where information on timing is uncertain (e.g., C) 0911250600 EST). Any NOTAM containing EST must be cancelled or replaced as circumstances may dictate.

QUESTION: Will issue and cancel periods be standardized? **ANSWER:** Yes, issue and cancel periods will be standardized.

SUBJECT: GPS

QUESTION: Where do GPS jamming issues fit (Coast Guard NOTAM) in the Receiver Autonomous Integrity Monitoring (RAIM)/GPS NOTAM world? **ANSWER:** GPS NOTAMs pertaining to testing (not jamming) of satellite signals are a separate and distinct GPS NOTAM type issued (or initiated) by the FAA's Spectrum Office (after coordination/approval between FAA and Department of Defense).

SUBJECT: Field Conditions

QUESTION: The TALPA ARC identified a need to use the NOTAM system for field condition reports. Where does this fit into the road map?

ANSWER: The TALPA ARC recommendation is about 2 years away from becoming law. In the meantime, the AIM Group will continue to look at making any necessary policy and procedure changes to FAA Order 7930.2 and future books, in preparation for any new rules that may come forth. As a member of the TALPA ARC committee, we have always looked at the fact that a NOTAM is not a good location for a full Field Condition Report (FICON). We need to make this an independent Web site or something similar. Further discussion with the necessary stakeholders is required to determine a common format that can be used and populated by the participating airports. We will also explore the possibility of gathering the data from either existing entry points or provide an input screen on the new Federal NOTAM System. In the meantime, we have reserved the R series for possible use as a Runway Condition Report (RCR). This series would be populated with much more information than a typical NOTAM (See Example 1 below). We would also consider linking to other airports R series and adding an archive button so that you could look back at an airport and view the past few hours in order to give you a trend on the Runway Conditions. This is where are planning is leading us, so look for future briefings to see when the RCR and FICON are developed. Example 1: DEN RWY 35L 3/3/3 FIRST 7000 FEET 50% COMPACTED

SNOW 60 FEET WIDE REMAINDER 100% 2 INCH DRY SNOW OVER COMPACTED SNOW LAST 5000 FEET 75% 4 INCH DRY SNOW 10% 6 INCH DRY SNOW 24 IN SNOWBANKS WEF 0901121430.

QUESTION: SNOWTAM Issue: They don't get cancelled. Airline dispatchers are unable to determine currency so they ignore the SNOWTAM and call the tower for a

braking action report. Under ICAO standards, will we adopt a more standardized method of reporting field conditions?

ANSWER: There will be a standardized method of reporting field conditions.

SUBJECT: Special Use Airspace

QUESTION: Any thought to reducing delays by returning some special use airspace back to the industry that provides most of the funding?

ANSWER: As part of the AIM modernization effort and in response to the RTCA Task Force 5 recommendations, we are working towards the "End to End" automation of the SUA scheduling process. One part of our plan is to collaborate with the DoD in an effort to incorporate proposed commercial and private flight schedules into their planning process. The hope is that, by including this data in the planning process and when given the option of more than one viable SUA or SUA complex, we will be able to identify the airspaces which best allows the DoD to conduct their required missions, while having the least impact on the non-participating stakeholders, thereby reducing delays.

SUBJECT: General

QUESTION: Is there a Federal Aviation Administration data source available today for downloading that contains Taxiway, Ramp, Apron, and Navigational Aid (NAVAID) data by airport?

ANSWER: Yes, the National Flight Data Center's (NFDC) Facility Aeronautical Data Distribution System (FADDS) available at nfdc.faa.gov/fadds.

QUESTION: What is the plan to allow users to be notified when permanent data changes? Will a NOTAM always be issued or in some other form of revision management?

ANSWER: Our concept of operations calls for the integration of static and dynamic aeronautical information. The goal is to enable a system or human to have a "one stop shop" for all aeronautical needs.

QUESTION: AIM looks primarily for terminal use. Is the plan for use at En-Route facilities? Will this system (site) reach into the realm of NOTAMs for Special Use Airspace (SUA) or stay primarily in the terminal world?

ANSWER: Under the current Special Use Airspace Management System (SAMS) automation effort, we are working to automate the submission of NOTAMS for Special Use Airspace (SUA) and Military Training Routes (MTR) outside of published time, as depicted in FAA Order JO 7400.8, into the U.S. NOTAM System. The intent of AIM's modernization plan is to integrate static and dynamic information. This integration includes SUA shape, schedule, and status to be incorporated into FNS in the future.