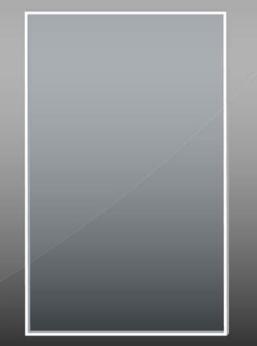
NATIONAL GEOSPATIAL-INTELLIGENCE AGENCY

NGA Implementation of AIXM

Jerry Leicht AIXM Users Conference 12-14 May 2009











NGA's Mission

NGA provides high quality aeronautical information for the safety of navigation layer in the geospatial intelligence model. NGA products support the Navigation information needs in support of DoD flight crews and national decision-makers.

- Our Primary Responsibility:

Safety of Navigation Data



Our Unique Position

- NGA is an Aeronautical Data Supplier
 - No Aeronautical Data Origination
 - Adhere to International Standards for Aeronautical Data
 - Develop Aeronautical Products that support our customers' requirements



AIXM Implementation

- Create an AIXM Ingest Tool
 - Ingest Aeronautical State data
 - Harmonize with other State data
- Maintain one conflated database for all Aeronautical Navigation Information



AIXM Implementation

- Create datasets that show a single view of Aeronautical Navigation Data
 - Minimize Situational Awareness issues
- Provide them to our customers via a better means than mailing a CD/DVD.
 - Provide a service instead of a product

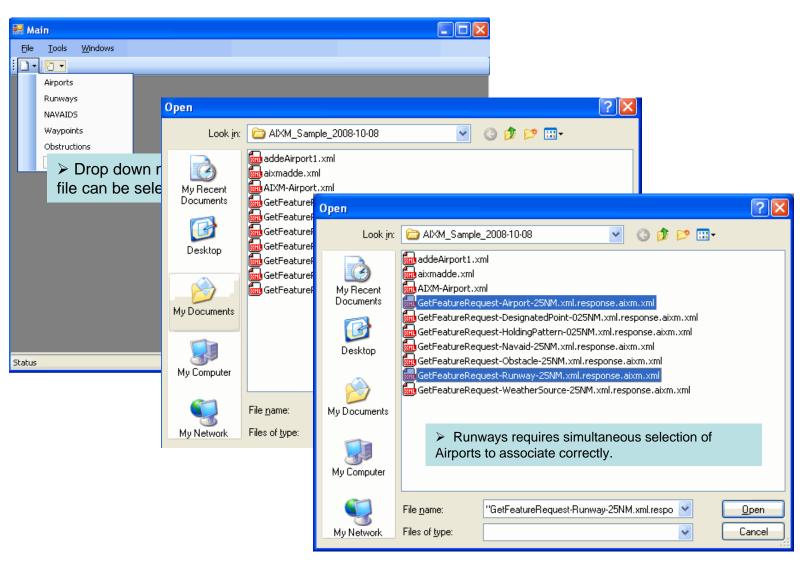


AIXM Ingest

- Ingest Tool in Development
 - Original Requirements based on Terminal Procedure base data
 - Navaids, Waypoints, Runways, Obstructions, etc.
 - Developed Based on 2 rules:
 - 1. Must have a candidate screen for analyst review.
 - 2. There are no more rules.

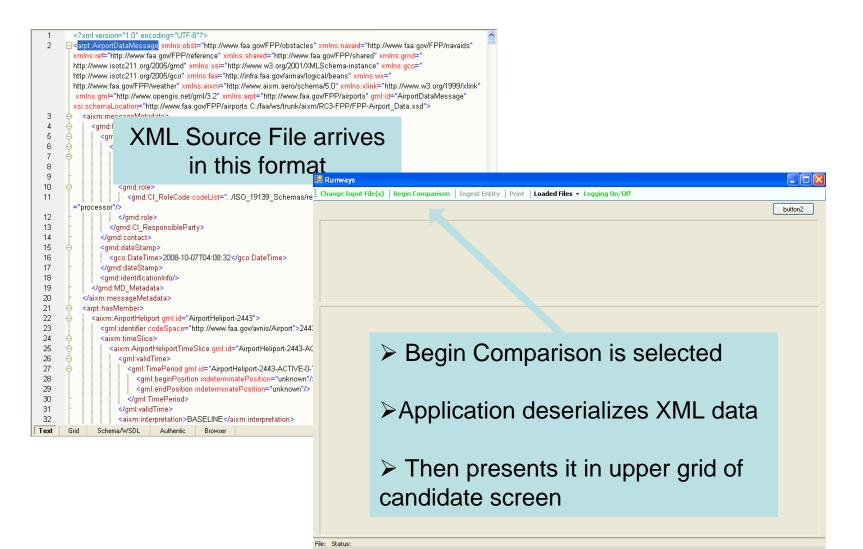
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AIXM Ingest Interface





AIXM Ingest Interface



AirportDataMessage,RunwayDataMessage



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AIXM Ingest Interface

ICAO	wac_innr	name	state		
KNXX	0310-00503	WILLOW GROVE NAS JRB	Pennsylvania		
KOQN	0357-00209	BRANDYWINE	Pennsylvania		
KP72					
KPHL	0357-00150	PHILADELPHIA INTL-AP	Pennsylvania	Match	
KPNE	0310-00325	NORTHEAST PHILADELPHIA	Pennsylvania		
KPTW	/ 0310-00363	POTTSTOWN LIMERICK	Pennsylvania		
KVAY	0357-00312	SOUTH JERSEY RGNL	New Jersey	\checkmark	



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AIXM Ingest Interface

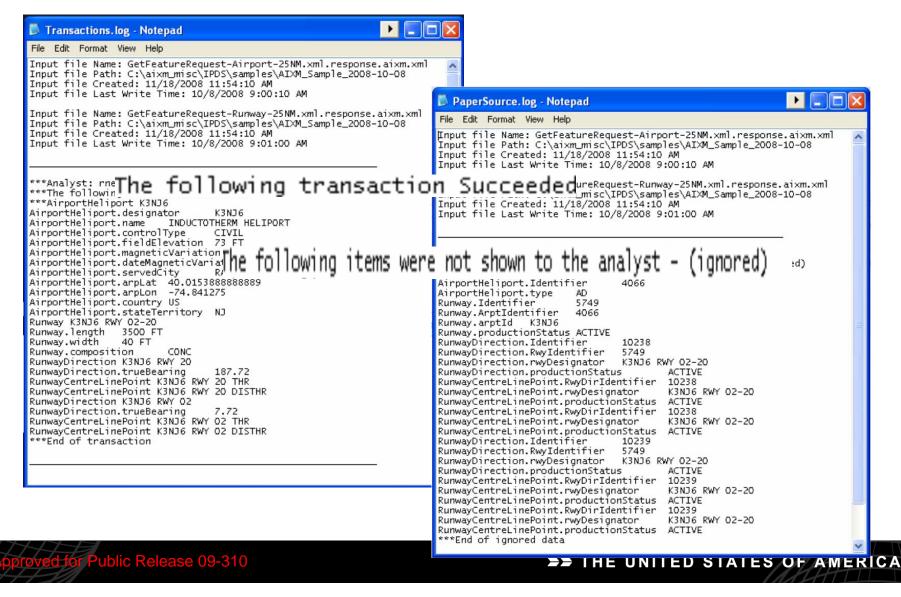
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	KNXX	0310-00503	WILLOW GROVE NAS JRB	Pennsylvania	
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AIXM Ingest Interface

Two examples:



A STATE OF GUILT

AIXM Data Ingest Benefits

- Data Standardization
- Resource Savings
- Drastic reduction in manual data entry errors
- Provide better Situational Awareness to our customers





Data Dissemination Services

Revolutionize Interaction with our Customers

- Product Support
- Web Services





Data Dissemination Services

- Developing WFS Functionality
 - Exploit open standards to develop full web services for data dissemination
 - Utilize/Extend AIXM schema to develop a new DoD Aeronautical Data Schema



Data Dissemination Services

- Developing WFS Functionality
 - Consolidate/Upgrade NGA's current Aeronautical Web Presence
 - Provide customer's a better means to receive, shape, and utilize Aeronautical Data



Dissemination Service Benefits

- Web Services Support
 - Better way to interact with Production Partners
 - Better way to interact with Customers
- Standards Based Architecture
 - Both WFS functionality and Schema based on International Standards
- Saving Resources
 - No more significant product upgrades
 - No need for another iteration of DAFIF[™]





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