



NATIONAL GEOSPATIAL-INTELLIGENCE AGENCY

Know the Earth... Show the Way... Understand the World

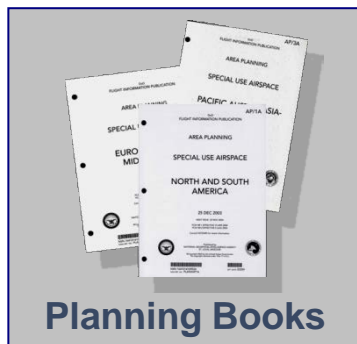
NGA Perspective on AIXM Metadata Management and Digital Data Exchange



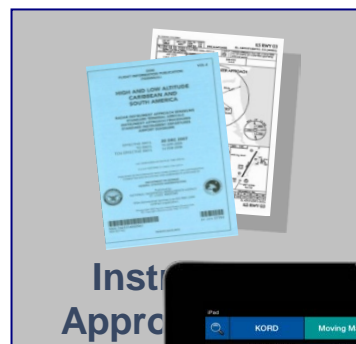


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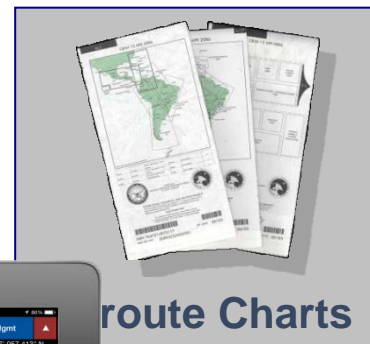
NGA Aeronautical Navigation Products and Data



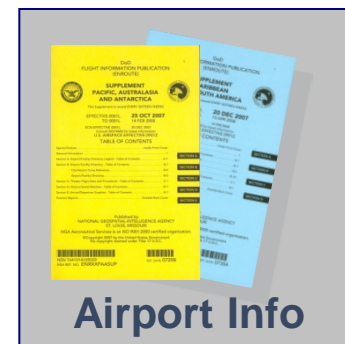
Planning Books



**Instrument
Approach**

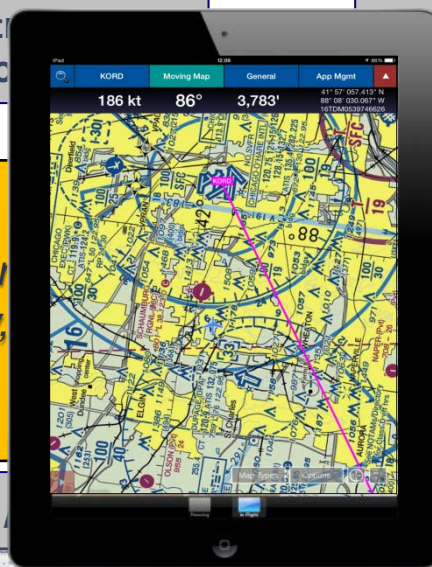


Enroute Charts



Airport Info

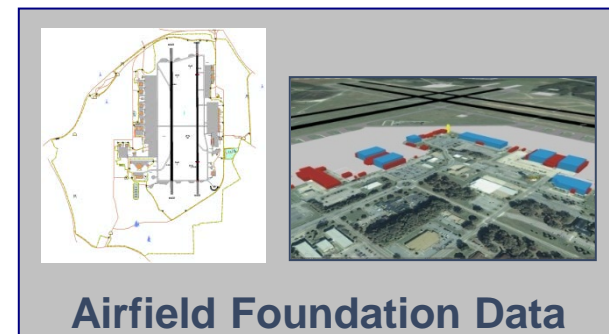
The Aeronautical Information Service produces aeronautical products, to meet users' needs.



**Vertical
Obstructions**



AQP



Airfield Foundation Data



AIXM: Metadata Management

- What is Metadata?
 - Information about the data
- Metadata provides the answer to:
 - What is the value or changing?
 - For a specific location? (Where?)
 - For a specific date or period? (When?)
 - Who provided the information?
- Frequency is 127.5MHz
- Tower at Aerodrome XXXX
- Permanently starting on 15OCT2015





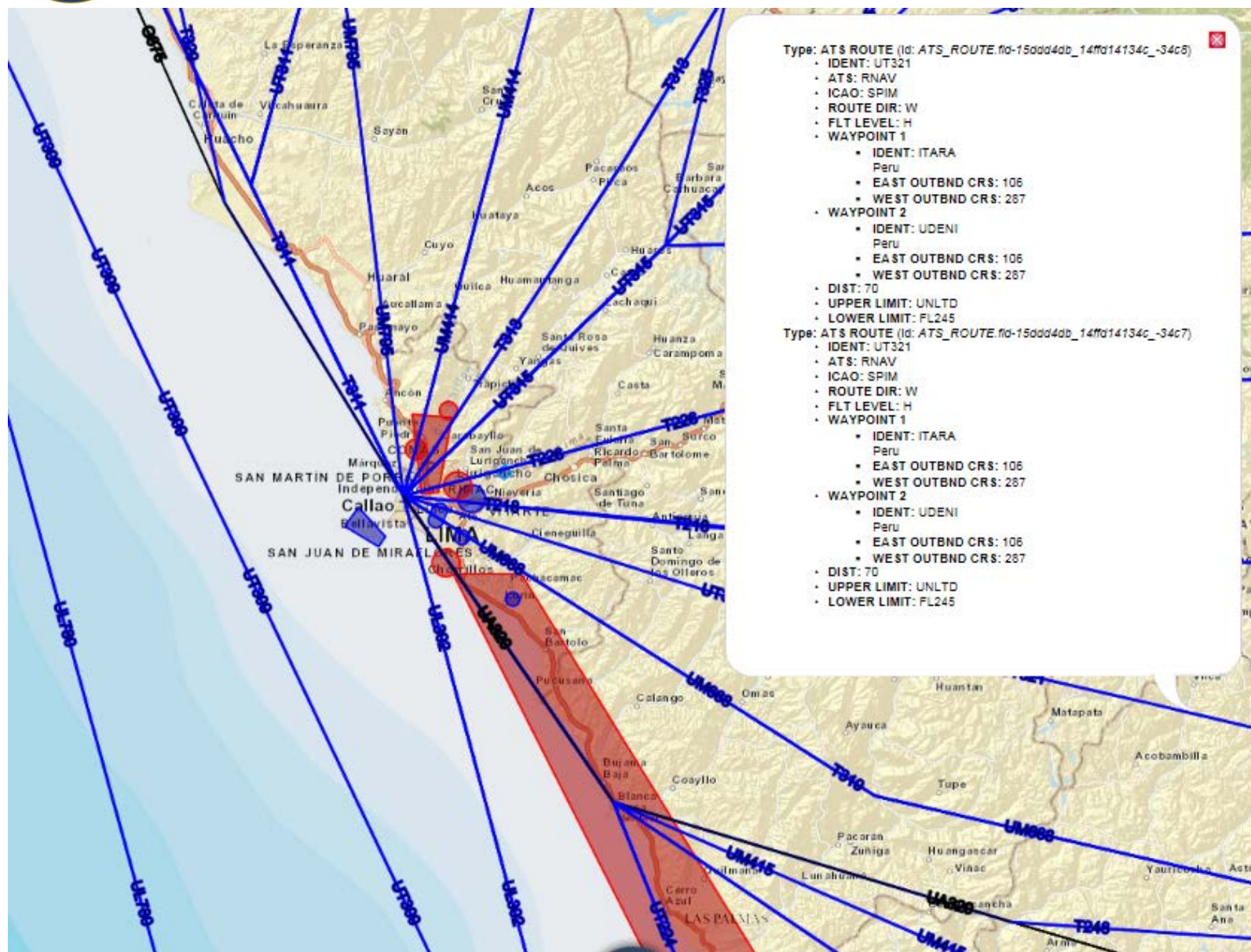
AIXM: Metadata Management

- AIXM goal is to exchange **ALL** types of aeronautical information in a standardized format
- Using the same definitions for data is becomes essential
 - Additionally, Providing the needed data fields becomes essential
- Once this data is collected and digital.....
What can be done with this data?



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What are the Benefits of a Digital Information Exchange?

- Safety
 - One-Feature One-Time
 - Reduction in data inconsistencies
 - Machine-to-Machine interpretable data
- Reduce Cost
 - Ability to automate data quality checking
 - Leverage software tools for inputting and exporting
 - Electronic Charting



What is next for Aeronautical Information Management?

- Have the AIXM schema....
 - Need the Business Rules
- As information becomes digital, it triggers an increase in the amount of data available.....
 - Terabyte (TB) , Petabyte (PB), Exabyte (EB), Zettabyte (ZB)



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