AIS/AIM from a data house perspective

How a closer collaboration within the aeronautical data supply chain could increase Aviation Safety

Carsten Skrybeck
Source Liaison, Boeing Global Services

13 OCT 2023, Safety Issue Review Meeting, Emara Ole-Sereni Hotel, Nairobi
Standardizing Aeronautical Information

ICAO Annex 15

2.1 State responsibilities

2.1.1 Each Contracting State shall: provide an aeronautical information service (AIS) …

2.1.2 Each Contracting State shall ensure that the provision of aeronautical data and aeronautical information covers its own territory and those areas over the high seas for which it is responsible for the provision of air traffic services …

2.1.4 Each Contracting State shall ensure that the aeronautical data and aeronautical information provided are complete, timely and of required quality …
Aeronautical Data Supply Chain

Aeronautical Information Regulation and Control (AIRAC)
Updates every 28 days
Jeppesen Source Liaison

69 ANSPs Frankfurt / 170+ Globally

International Organisations and Regulators
Database Cut-off

Internal Cut-off in conjunction with the AIRAC Cycle

**AIRAC**
- Major Changes in-time 56 days prior Eff date

**AIRAC**
- Changes in-time 28 days prior Eff date

**AIRAC**
- Effective Date

**JAD Cut-Off**

**JAD Maintenance & Verification**

**Navigation Database Creation and Delivery**
- Data verification process
- Transforming JAD data into ARINC 424
- Providing ARINC 424 data to OEMs
- OEMs create data package
- Delivery
- Acft FMS update

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Aeronautical Data Supply Chain Challenges

Aeronautical Information Regulation and Control (AIRAC) Updates every 28 days

- Airports
- Communications, Navigation and Surveillance Infrastructure
- Airspace Designers
- Air Traffic Control
- Others

- Aeronautical Information Service Organization (Air Navigation Service Provider)
- Aeronautical Information Publication
  - Notice to Airmen
  - Pre-Flight Information Bulletin etc.

- Data House

- Airlines
- Pilots
- Other Airspace Users

End User

Flight Management System Manufacturer

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Aeronautical Data Supply Chain Challenges

Late source, no source

Incomplete and erroneous source

Missing harmonisation between states

Late postponement / cancellation
Aeronautical Data Supply Chain Challenges

Effective date outside AIRAC system

<table>
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AIRAC changes published in a non-AIRAC Amendment

- **AMDT 14/23**
  - **AIRAC 21-SEP-23**

- **AMDT 363/23**
  - **26-JAN-23**

Restrictive disclaimers on Websites, Manipulation of source on Websites

- Not for operational use
- Reupload of information without notification to Aeronautical Data Supply Chain Stakeholders

Permanent AIRAC changes published by SUP or NOTAM

ICAO Global campaign on NOTAM improvement (NOTAM2021)
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Airlines
Pilots
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End User

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Aeronautical Data Supply Chain Challenges

No response / insufficient response / less collaboration related to clarifications in regards to all shown challenges

Dear Colleagues,

We would like to ask for your professional support in the following matter:

during analysis of RNP RWY 3 [redacted] from AIRAC AMDT 009-23, we found a possible discrepancy between coding table and chart in regards to altitude at waypoint

URGENT. Friendly Reminder: [redacted] Obstacle position, Clarification ID: 43815430

Dear Madam or Sir,

Let us kindly ask you if you have any news regarding our clarification below.

Please handle this clarification as URGENT.

Thank you very much in advance for your quick response.