

ASSAP MOPS AI #36,38,55,56

**Tom Eich**

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# ASSAP MOPS AI #36

- **AI #36: Don's presentation included an analysis explaining how Honeywell transponders (DO-260 version 0) meet the minimum integrity requirements defined in the ASA MASPS. The ASSAP group request that other transponder manufacturers present a similar analysis and explain how NUCp is encoded on their current transponders.**
- **The ACSS transponder software as of 2004 uses HPL instead of HFOM for calculating NUCp**

# ASSAP MOPS AI #38

- **AI #38: Verify if the TCAS track priority is based on TAU (i.e., time to CPA) or closest in range. For example, if it is based on TAU, then ASSAP will change the ASSAP track priority to the following: RA alerts, TA alerts, ASA Application Alerts, Coupled traffic, Selected traffic, and then those with the smallest time to CPA .**
  - **Per DO-185A, TCAS track priority is based on a Traffic\_Score algorithm in the CAS function.**
  - **(Reference DO-185A Volume I, Section 4.91) RAs are highest priority and contain the highest Traffic\_Score. TAs, PAs, and Other traffic are prioritized by alert level and range except for one case when a TA is converging and not within a range threshold based on Sensitivity Level (SL). This one exception takes into account their range rate.**



# ASSAP MOPS AI #55

- **AI #55: Create a white paper to deviate from Table 3-21 requiring display range / map scale and display orientation. Also check if there are other parameters in question. Some of the parameters may only be optional. Also, ACL and TQL are not expected for the initial release of the ASSAP MOPS.**

## ■ Status:

- Identified parameters in question
- Identified new possible parameters
- White paper in-work

# ASSAP MOPS AI #55

## ■ Parameters in question:

- Display Range / Map Scale – Table says required but Section 3.3.3.3.1.1 says “may” be needed.
- Display Orientation / True – Table says required but Section 3.3.3.3.1.1 says “may” be needed.
- Display Orientation / Mag – Table says required but Section 3.3.3.3.1.1 says “may” be needed.
- Call Sign / Flight ID – Remove “Call Sign”; Flight ID should only be addressed.
- Traffic Geometric Altitude – Why is this required? Traffic Pressure Altitude should be the minimum?
- Quality of Traffic Directionality – How can degraded traffic directionality be determined? Either it’s Valid or Invalid?

# ASSAP MOPS AI #55

## ■ New Possible Parameters:

- Traffic Vertical Sense – Required for TCAS targets. Is this required for ADS-B and TIS-B traffic?
- Traffic Ground Status – Required for differentiating Airborne Traffic and Ground Traffic.
- Traffic Type – TCAS, ADS-B, TIS-B, etc. This may be needed to differentiate traffic symbology.



# ASSAP MOPS AI #56

- **AI #56: Own-ship information to the CDTI is missing in Table 3-21 of the ASA MASPS such as lat/lon, ground speed, etc. Review the data from the STP document and propose which parameters need to be sent to the CDTI.**

## ■ **Status:**

- **Identified new possible parameters**
- **White paper in-work**



# ASSAP MOPS AI #56

## ■ New Possible Parameters:

- Own-ship Horizontal Position – Required for positioning ADS-B and TIS-B traffic relative to own-ship symbol.
- Own-ship Horizontal Velocity – May be needed for own-ship velocity vectors.
- Own-ship Ground Speed – May be needed for displaying own-ship ground speed.
- Own-ship Heading – Required for positioning ADS-B and TIS-B traffic relative to own-ship symbol.
- Own-ship Track Angle – Required for determining traffic directionality.
- Own-ship Pressure Altitude – Required for determining ABSOLUTE altitude of traffic if their relative altitude is only known.
- Own-ship Position Quality – Required for reporting own-ship position degradation.
- Own-ship Usable for Active Applications – Required to determine if own-ship data is qualified for active applications.

