RTCA Special Committee 186, Working Group 3

ADS-B 1090 MOPS, Revision B

Meeting #26

Position Offset Applied

Presented by Chip Bulger

SUMMARY

WG-3 posed two questions to the SC-186, WG-1 SURF IA team:
1) Will SURF IA need Position Offset Applied?
- The answer is likely yes, and WG-1 feels POA should be maintained.
2) Would SURF IA prefer the ADS-B Reference Point be the center of the length width box, as it stands in DO-260A, or the nose of the aircraft?
- WG-1 recommends this stay as the center of the length/width box.

ISSUE PAPER
SC-186 WORKING GROUP 3
POSITION OFFSET APPLIED (POA)

1.0 BACKGROUND:

DO-260A prescribes a length width code and position offset designator. The purpose of these bits is primarily for surface surveillance or surface ADS-B In applications.

2.0 ISSUES

2.1 Need for Position Offset Applied (POA)

Question: Will Surface Alerting require Position Offset Applied.

Answer: Initial research into false and missed alert rates tends to indicate that POA will help reduce nuisance alerts. The consensus within the SURF IA team was that POA will enhance the usefulness of SURF IA. It is too early to determine if POA will be a minimum requirement, however it's safe to say that POA will provide benefit to SURF IA.

WG-1 strongly requests that POA remain in DO-260B.

2.2 Position Reference Point for POA

Question: Should the ADS-B Reference Point be the point on the aircraft which represents the center of the Length/Width box or should the Position Reference Point be the nose of the aircraft?

Answer: There was significant discussion on this topic in WG-1. However, in the end, the SURF IA team was unable to identify one reference point as superior to the other for SURF IA. Position of the nose of the aircraft is important to SURF IA, however that information is available from the current DO-260A format.

WG-1 recommends maintaining the position reference point as the center of the length width box as in DO-260A.

Note: *SURF IA does not have traffic display requirements. Requirements for display of traffic to the pilot are covered in the ASSA/FAROA applications. One could argue the benefit of the nose reference point for certain display implementations, however this was not addressed by WG-1.*