

CHANGE ISSUE – RTCA/DO-242

MASPS for ADS-B

Rev B

Tracking Information (committee secretary only)	
Change Issue Number	87
Submission Date	23 November 2009
Status (open/closed/deferred)	CLOSED
Last Action Date	09/15/2010

Short Title for Change Issue:	Add References Related to the GPS Antenna Offset and ADS-B Position Reference Point
-------------------------------	---

MASPS Document Reference:		Originator Information:	
Entire document (y/n)	y	Name	Thomas Pagano, FAA
Section number(s)	2.1.2.5, 3.4.4.6	Phone	609-485-5387
Paragraph number(s)		E-mail	thomas.pagano@faa.gov
Table/Figure number(s)	Tables 2-1 & 3-10 Figure 2-1	Other	

Proposed Rationale for Consideration (originator should check all that apply):	
<input type="checkbox"/>	Item needed to support of near-term MASPS/MOPS development
X	DO-260()/ED-102 1090 MHz Link MOPS / SARPs
X	UAT MOPS / SARPs
<input type="checkbox"/>	STP/ASAS MOPS
<input type="checkbox"/>	ASA MASPS
<input type="checkbox"/>	ADS-B or related TSO's, AC's or other regulatory guidelines
<input type="checkbox"/>	Item needed to support applications that have well defined concept of operation
<input type="checkbox"/>	RTCA OSED / SPR/Interop: (Approved/In Progress)
<input type="checkbox"/>	RFG OSED / SPR/Interop: (Approved/In Progress)
<input type="checkbox"/>	Has supporting analysis, if candidate stressing application
<input type="checkbox"/>	Item needed to support Ground Station Requirements/Specifications
<input type="checkbox"/>	Item identified during recent ADS-B development activities and operational evaluations
<input type="checkbox"/>	ADS-B MASPS clarifications and/or correction item
<input type="checkbox"/>	Validation/modification of questioned MASPS requirement item
X	New requirement item (must be associated with traffic surveillance to support ASAS or ATC Services)
<input type="checkbox"/>	Other: (Explain)

Nature of Issue:	<input type="checkbox"/> Editorial	<input type="checkbox"/> Clarity	<input type="checkbox"/> Performance	X	Functional
<u>Issue Description:</u>					
<p>Based on the MASPS requirement for identifying the ADS-B Position Reference Point, both DO-260A and DO-282A implemented a single bit to indicate "Position Offset Applied" (POA). In DO-260B/ED-102A and DO-282B, it was agreed that the POA bit would be deleted and would be reflected in an ALL ZERO encoding for the GPS Antenna Offset parameter. DO-242B should reflect the change in broadcast parameters as they may relate to the ADS-B Position Reference Point and the A/V Length Width Codes.</p>					

Originator’s proposed resolution if any:

Review the implementation of the GPS Antenna Offset parameter in DO-260B/ED-102A and DO-282B and make changes in DO-242B as necessary, if any.

Note: Attach additional sheets to capture supporting discussion with source and date.

Issue History:

22 February 2002: Issue Paper IP 04 was originally written in February 2002 regarding the broadcast of the A/V size characteristics and was resolved by the inclusion of §3.4.4.6 and the A/V Length Width Codes in Table 3-10. Issue Paper IP 14 was originally written, also in February 2002 regarding the use of “Certified Navigation Center” with own position, and was resolved with the insertion of §2.1.2.5 and Table 2-1 and Figure 2-1 showing the ADS-B Position Reference Point.

2009: The RTCA/EUROCAE groups discussing the revised Link MOPS agreed to delete the POA bit and to incorporate the meaning of the bit into an ALL ZERO encoding of the GPS Antenna Offset parameter.

Working Group 6 Deliberations:

9/15/2010 – Meeting #17

The reconvened WG-6 reviewed this Issue Paper and agreed that all of the proposed changes have been made to the respective Link MOPS and to the working draft of DO-242B as it will be combined with DO-289.