

CHANGE ISSUE – RTCA/DO-242

MASPS for ADS-B

Rev B

Tracking Information (committee secretary only)	
Change Issue Number	85
Submission Date	19 November 2009
Status (open/closed/deferred)	OPEN
Last Action Date	09/15/2010

Short Title for Change Issue:	Provisioning for Potential Wake Vortex and Arrival Management Applications
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MASPS Document Reference:		Originator Information:	
Entire document (y/n)	y	Name	Thomas Pagano, FAA
Section number(s)		Phone	609-485-5387
Paragraph number(s)		E-mail	thomas.pagano@faa.gov
Table/Figure number(s)	Tables	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
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Issue Description:

RTCA SC-186 Co-Chair Rocky Stone, Chief Technical Pilot of United Airlines is also a member of an Ad Hoc Subgroup of another RTCA Special Committee dealing with wake vortex. During the SC-186 Plenary meeting in September 2008, Rocky expressed a request for the SC-186 Plenary and WG-3 to consider broadcasting wake vortex avoidance information via a 1090ES Message. Working Papers 1090-WP24-19 and 1090-WP24-20 presented the case for this new information being broadcast.

Working Paper 1090-WP28-26 was offered as an initial draft of the proposed Wake Vortex Appendix. 1090ES Appendix V was refined during the FRAC process and a new subgroup of WG-1 is being started to draft the SPR/Interop for the Wake Vortex application. UAT Appendix S was edited starting with the 1090ES Appendix V to make it UAT specific.

Originator's proposed resolution if any:

Wake turbulence constraints have been identified as a major contributing factor to inefficient use of the Nation's airspace capacity, especially when Instrument Flight Rules (IFR) operations are in effect. Concept exploration research by the National Aeronautics and Space Administration (NASA) and the Federal Aviation Administration (FAA) has indicated that greater utilization of the nation's airspace could be accomplished if the location of wake turbulence from aircraft could be known with sufficient fidelity to allow following aircraft to fly paths that are free of hazardous turbulence. Significant potential increases in airport capacity, as much as a 40 percent increase at several airports during some periods of Instrument Meteorological Conditions (IMC), are achievable.

Appendix V for DO-260B and Appendix S for DO-282B were added for the provisioning of the potential wake vortex application.

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

Issue History:

September 2008: Rocky Stone requested that Wake Vortex applications be addressed in the proposed revision to the Link MOPS.

2009: A Subgroup as established to draft proposed Appendices for the Link MOPS, which produced DO-260B, Appendix V and DO-282B, Appendix S.

November 2009: WG-1 established a Subgroup to discuss the development of a Wake Vortex SPR/Interop specification.

Working Group 6 Deliberations:

9/15/2010 – Meeting #17

The reconvened WG-6 reviewed this Issue Paper and agreed that this Issue Paper should be OPEN until the SC-186 Plenary deals with the issue of whether or not the application should be included in the revised MASPS.