

RTCA SC-186 Working Group 6
Summary of Meeting #28
Held as a Teleconference and WebEx Session on 19 October 2011
For The Maintenance and Updates of the ADS-B & ASA MASPS

The 28th meeting of RTCA SC-186 Working Group 6, for the maintenance, updates and combining of the ADS-B and ASA MASPS documents, referenced herein as Meeting #28, was called to order by WG-6 Co-Chair, Dean Miller of Boeing shortly after 9:00am EDT on 19 October 2011 as a Teleconference and WebEx Session. Mr. Miller welcomed all attendees and asked that each attendee introduce themselves and their organization. The attendees for all or part of the meeting, either in person at RTCA, or on the Teleconference and WebEx session, included the following:

Roxaneh Chamlou, ITT	Rudy Johnson, L-3/ACSS
Bill Chung, SAIC	Stan Jones, Mitre
Jim Duke, SAIC	Dean Miller, Boeing
Dave Elliott, Mitre	Peter Stassen, Mitre
John Fisher, FAA AIR-130	Rob Strain, Mitre
Gary Furr, Engility Corp., FAATC-AJP-653	

1. Agenda Item #1

- 1.1 Dean Miller thanked participants for calling into the Teleconference and indicated that we look forward to the face-to-face meeting in Seattle. Dean asked for a count of those attending the Seattle meeting for interfacing with the Hilton Garden Inn.

2. Agenda Item #2

- 2.1 The preliminary Agenda for Meeting #28 was posted on the Meeting #28 web page as Working Paper WG6-WP28-01. Gary displayed the preliminary Agenda for the Working Group review. Gary indicated that the final version of the Agenda would be posted to the web page after the end of the Meeting #28 and marked as the “final” Agenda.

3. Agenda Item #3

- 3.1 The Minutes of Meeting #27 held at the facilities of RTCA in Washington DC on 13 – 15 September 2011 were posted to the Meeting #28 web page as Working Paper WG6-WP28-02. Dean requested that Gary display these Minutes and Gary stepped through them quickly, stopping at the Meeting schedule and at the summary of Action Items. There was no discussion or questions related to the posted Minutes. The Minutes of Meeting #27 were therefore accepted as published.

4. Under Agenda Item #4, Gary briefly indicated that Action 24-02 was still open and there has been no report from Tom Pagano or Don Walker as to their actions with regard to discussing TIS-B at ICAO. All other Action Items have been closed.

5. Agenda Item #5 contained several bulleted items for discussion during this Meeting regarding issues related to the combining of the ADS-B and ASA MASPS, but not specifically in response to any Action Item. The Working Papers were not taken in the specific order in the following subparagraphs, however the detail below is accurate for the discussions of the Working Group regarding the review of the specific Working Papers.
 - 5.1 Gary Furr offered Working Paper WG6-WP28-03 as the continuing draft of a short version of the Table of Contents of the combined MASPS document. During the RTCA Meeting #27, this file was opened and edited as the Working Group decided to make revisions. Working Paper WG6-WP28-03 represents the final version of the file from Meeting #27. The Working Group stepped through the short TOC looking at what sections still need to be drafted and stopping briefly at the Appendices. Gary took an action to create a new Appendix "F" from the Working Paper WG6-WP27-06. Gary also took an action to create a new Appendix "G" from the Working Paper WG6-WP28-05. These new Appendices will become part of the combined document for review at the Seattle meeting. Gary indicated that he will continue to maintain this short TOC as required for future meetings in case there needs to be refinement to the section arrangements, or additions/deletions of Appendices.
 - 5.2 Gary offered Working Paper WG6-WP28-04 was the version 5.0 draft of the combined MASPS. Gary indicated that this version of the draft MASPS reflects inputs from several authors as they reviewed their sections to add back any "shall" requirement references that may have gotten deleted during previous editing. It also reflects the effort by Dean to make the column headings of the Tables in Section 2 consistent. As the Working Group stepped through the draft document, we indicated that there needs to be an Agenda item for the Seattle meeting to discuss the use of the Latency specification as a 95% number or "not to exceed" number. It was also noted by the Working Group that there still needs to be a resolution to the use of the terms "On-Condition" versus "Event-Driven." Gary and Tom Pagano will need to review the draft document and try to standardize the usage, when they reflect the usage of the terms in the existing published Link MOPS. It was also indicated by the Working Group that there was still a section in the draft document related to Target State and Status, where it had previously been agreed to remove that section and create a new Appendix. Gary and Tom Pagano will need to review the draft document and extract the Target State information to create a new Appendix.
 - 5.3 The Meeting continued with the review of Working Paper WP28-06 under Agenda Item 5c as prepared by Tom Pagano as an updated version of the proposed Appendix H for Air Referenced Velocity (ARV). Upon review of the Working Paper, the Working Group agreed to retain the draft as a new Appendix "G." Gary will take WP28-06 and create a new Appendix G.
 - 5.4 The Meeting continued with the review of Working Paper WP27-07 under Agenda Item 5d as prepared by Tom Pagano as an analysis of a proposed Appendix D. As per an action accepted during the WG-6 Meeting at RTCA in September, a proposed Appendix "D" for "Design Tradeoff Considerations" was proposed to be included in the new combined MASPS pending a review of the old Appendix G from DO-242A. DO-242A, Appendix "G" contained a discussion along with relevant analysis of

design tradeoff decisions that need to be factored into the design of a transmission scheme on an ADS-B link. These include the selection of number of bits in the position data to minimize quantization error, position uncertainty due to latency, impact of message segmentation, design considerations for an ADS-B tracker and finally ADS-B antenna considerations including multipath effects. After review of Appendix G, Tom recommended not including this Appendix in the updated MASPS. He felt that it seems sufficient to have this Appendix available in the archived DO-242A, as it deals with design decisions that have already been made and are reflected in the updated combined MASPS. The Working Group agreed that this Appendix on “Design Tradeoff Considerations” would not be a part of the new combined MASPS.

5.5 During a summary of work to be performed prior to the Seattle meeting, Dean encouraged each Working Group member to review the FRAC draft of DO-317A to ensure that all of the items in our new combined MASPS draft complied with their requirements and vice versa. It was also agreed that a new draft of the entire MASPS would be made available via the Seattle meeting web page by Gary not later than 1 November, along with a comments spreadsheet for members to review and comment and return those comment spreadsheets to John Fisher for consolidation not later than close of business on Tuesday 8 November. During the Seattle meeting, we will go through the comments in an effort to address any open issues prior to release of a FRAC draft to SC-186 membership in mid-December.

6. Agenda Item #6

6.1 The Meeting Attendees reviewed the proposed future meeting dates and the following table indicates the currently agreed upon meeting and teleconference dates.

Meeting	Dates/Time	Meeting Location
#29	14 – 17 November 2011	Hilton Garden Inn, Everett WA, starting at 1:00pm PST on 14 November, 9:00am to 5:00pm PST other days
	Mid-December	Distribute a FRAC copy of the combined MASPS to RTCA by 16 December for SC-186, and indicate comments to be returned not later than 3 February 2012
#30	15 February 2012	Teleconference/WebEx starting at 9:00am EST to review comments received and assign actions
#31	2/28 to 3/1/2012	Location TBD to resolve all comments against FRAC copy
	20 March 2012	SC-186 to hold a Plenary for review, discussion and acceptance of the Combined MASPS

7. The following is a summary of all of the Action Items. The status of Action Items was discussed briefly under Agenda Item #4 and then updated with discussions and assignments during the Meeting.

Action Number	Open Action Item Descriptions	Assigned to	Status
24-01	Make a decision on which version on the application requirements will actually appear in DO-3xx Section 4. If MOPS requirements exist, then they should be used. If no MOPS exist, then the requirements from the SPR should be used.	Section 4 Authors	Closed Included in WP28-04
24-02	After review of the TIS-B and ADS-R Services Descriptions in WG-6-WP24-04, it was agreed by the Working Group that Don and Tom need to have a separate discussion regarding how to take some TIS-B implementation guidelines to the International community through ICAO.	Tom Pagano Don Walker	
27-01	Take a look at all of the tables in Section 2 and coordinate the naming of all columns/applications/etc.	Dean Miller	Closed Included in WP28-04
27-02	Review all shall statements in the integrated document to be distributed by Gary, and determine if the requirement came from either of DO-289/DO-242A/DO-286B and insert the requirement number in braces i.e., {242AR3.212}	All authors	Closed Included in WP28-04

8. The **Working Papers** for the reconvened SC-186 WG-6 Meetings, as well as the Meeting Agendas, Meeting Minutes, Action Items, Meeting Schedules and proposed draft modifications to the ADS-B and ASA MASPS will be posted on the new RTCA Workspace environment. For the time being, all of the previously identified elements will also continue to be posted on the web site maintained at the FAA Technical Center at:

<http://adsb.tc.faa.gov/WG6.htm>