

**Summary of Meeting #34 of RTCA SC-186 Working Group 3
and Meeting #11 of EUROCAE Working Group 51, Subgroup 1
held as a Joint Teleconference and WebEx Session for the
Maintenance of the ADS-B 1090 MHz Extended Squitter (1090ES) MOPS
at 10:00am EDT on Tuesday, 16 August 2011**
<http://adsb.tc.faa.gov/WG3.htm>

The meeting was called to order by Working Group 3 Co-Chair Thomas Pagano of the FAA ATO-P organization at about 10:10am, 16 August 2011. Gary Furr read off the list of participants that had joined via Telephone and WebEx. The participants during part, or all, of the meeting included:

Dave Barnard, L-3 / ACSS	Dean Miller, Boeing ATM	Charles Sloane, FAA AIR-130
John Fisher, FAA, AIR-130	Tom Pagano, FAA, AJP-653	Jorg Steinleitner, Eurocontrol
Gary Furr, Engility Corp, FAA AJP-653	Eric Potier, Eurocontrol	Bill Thedford, Consultant, USAF
Mike Garcia, ITT	Friedhelm Runge, EASA	Jessie Turner, Boeing
Martin Gray, Trig Avionics	Kurt Schueler, Garmin	Gary Watson, L-3 Aviation Systems
Johan Martensson, Eurocontrol	Bob Semar, United Airlines	Kevin Wilson, Honeywell International

1. Tom Pagano began the meeting with **Agenda Item #1** by welcoming all participants to the Teleconference.
2. The attention of the participants was drawn to **Agenda Item #2** to review the proposed Agenda presented in Working Paper 1090-WP34-01. Gary indicated that the “final” version of the Agenda would be posted to the web page after the end of the Teleconference and WebEx Session. Further, Gary noted that all revisions of Working Papers would be posted to that web page as soon as possible after their revision or after the end of the meeting.
3. Next, under **Agenda Item #3**, the Teleconference focused on Working Paper 1090-WP34-02 as presented by Gary Furr as the Summary of Meeting #33 held as a Teleconference and WebEx Session on 7 June 2011. There were no comments on the Minutes of Meeting #33 and therefore they were accepted as published.
4. Under **Agenda Item #4**, Gary Furr indicated that unless there were specific comments on the draft of Working Paper 1090-WP34-03, that he would proceed directly to the additional proposed errata presented in the Working Papers in Agenda Item #5.
5. Under Agenda Item #5,
 - 5.1 The first Working Paper to be reviewed was 1090-WP34-04 as a summary of agreed upon changes that were discussed during the previous Meeting #33 and that were taken to the ICAO Aeronautical Surveillance Panel (ASP) Technical Subgroup (TSG) for further discussions during their meeting in Paris in July. The result of those discussions was agreed upon changes for the Horizontal Reference Direction (HRD), the Selected

Heading and the Difference from Baro issues. Gary noted that all of the changes that had been agreed to, which are presented in Working Paper 1090-WP34-04, had already been entered into the draft Corrigendum in Working Paper 1090-WP34-03 and also into the draft of Edition 2 of ICAO Doc 9871 for presentation to the ICAO ASP Working Group of the Whole in September for publication. There was no discussion on the proposed changes and therefore they are accepted as entered into the draft Corrigendum.

- 5.2 The next Working Paper to be reviewed was 1090-WP34-05 presented by Friedhelm Runge of EASA as suggested changes to the Environmental Test Conditions presented in Table 2-112 of DO-260B/ED-102A. Friedhelm points out that the existing text before Table 2-112 references testing “when required,” but that the Table itself does not specify which tests this applies to. Friedhelm references Table 2-11 in the recently published RTCA DO-181E Transponder MOPS, in which the “when required” remark has been properly applied to several specific tests. Friedhelm requests that the “when required” remark be applied to those specific items in Table 2-112 as they exist in DO-181E, Table 2-11. After a brief discussion, the Working Groups agreed that this addition would be good and that in conjunction with existing errata items already in the Corrigendum, the column heading of Table 2-112 would also be updated to reference RTCA DO-160G, as the latest version of that document. With the addition of DO-160G, it is also appropriate to add the “Fire/Flammability” condition on to the bottom of Table 2-112 to match that of the Transponder MOPS, Table 2-11. These changes will be added to the draft Corrigendum, version 4.0 prior to submission to RTCA and EUROCAE for Final Review and Comment (FRAC) and Open Consultation.
- 5.3 The next Working Paper to be reviewed was 1090-WP34-06 presented by Eric Potier on the topic of using CA=0 in some test procedures using DF=17 ADS-B Messages. Eric points out that this topic originally surfaced as a comment from EADS against the draft of the updates to the Transponder MOPS documents (RTCA DO-181E and EUROCAE ED-73E) in September 2010. The resolution of that discussion was to review the use of CA=0 in the ADS-B MOPS, since it is recognized that CA=0 should not be authorized for an Extended Squitter capable Transponder, because such Transponders are required to be Level 2 or above. In Working Paper 1090-WP34-06, Eric offers several proposed solutions to locations in DO-260B/ED-102A. As Eric presented his individual proposed changes, there was manufacturer objection to deleting reference to “Set 1” tests in Table 2-136, and re-numbering subsequent test sets, as doing so would require manufacturers to update a lot of their documentation and many of their automated tests. After discussion, it was agreed that in §2.4.3.2.1.7, the reference to “Set 1” would be deleted, but that no renumbering or deleting of “Set 1” in the Table would be proposed. It was further agreed that all references in Test Procedures where DF=17, and CA=0, there would be a single errata clarification entry indicating that the reference to CA=0 would be deleted as the value of CA is not relevant. These changes will be added to the draft Corrigendum, version 4.0 prior to submission to RTCA and EUROCAE for Final Review and Comment (FRAC) and Open Consultation.

5.4 Mike Garcia provided additional comments on Item 1.27 of the draft Corrigendum which contains clarifying Notes for the reporting of received NIC because of potential ambiguities during NIC transitions. Mike recommended additional clarification to NIC reporting during transitions between surface and airborne formats. He also recommended making it clear that NIC with “R_C unknown” should not be used as the reported NIC as could be the interpretation of the existing text that recommends using the largest R_C for undefined combinations of surface Type Codes and NIC Supplement bits. Tom Pagano took the action to draft a proposed change to the Notes to address the comments. It was agreed that the proposed changes would be sent initially to Mike and several others who indicated interest in reviewing the material. The agreed changes will then be added to the Corrigendum prior to submission to RTCA and EUROCAE for Final Review and Comment (FRAC) and Open Consultation.

6. Under **Agenda Item #7**, the Meeting discussed the dates and times of the future meetings of the joint sessions of RTCA SC-186 WG-3 and EUROCAE WG-51, SG-1. The Meeting agreed that the currently planned future meetings in order to meet our schedule would be the following:

Meeting #	Dates/Time	Meeting Location
	Proposed distribution of FRAC copy NLT 16 Sept 2011	
#35	27 October 2011 (9am – 5pm)	RTCA, Washington DC, with Joint Plenary on Friday, 28 October 2011

7. There were no remaining Open Action Items following Meeting #34.
8. The **Working Papers** for all WG-3 Meetings, as well as the Meeting Agendas, Meeting Minutes, and Meeting Schedules are posted on the ADS-B 1090 MHz web site maintained at the FAA William J Hughes Technical Center, located at: <http://adsb.tc.faa.gov/WG3.htm>