

**Summary of Meeting #18, of RTCA SC-186, Working Group 5
[For the Development of a Revision of the UAT MOPS]**

<http://adsb.tc.faa.gov/WG5.htm>

The 18th meeting of Working Group 5 (WG-5) was held 8 December 2003, as a Teleconference beginning at 1:00pm EST and lasting until 4:00pm. The meeting was called to order at 1:00pm on 8 December 2003 by Co-Chairman George Ligler. George welcomed all attendees and asked that each one introduce themselves and their organization. The attendees during all or part of the meeting session included:

Larry Bachman – JHU – APL	Richard Jennings – FAA (AIR-130)	David Thomas – Titan - FAATC - ACB-410
Bob Burns – Titan – FAATC – ACB-410	George Ligler – PMEI	Warren Wilson – Mitre CAASD
Gary Furr – Titan - FAATC - ACB-410	Chris Moody – Mitre CAASD	
Carl Gleason – Advancia FAA/NISC	Tom Mosher – Garmin AT	

The following known regrets to attendance to this meeting were received prior to, or during the meeting:

- Robert Saffell, Rockwell Collins
- Todd Kilbourne, Trios Associates
- Tom Pagano, FAA Technical Center
- Ed Valovage, Sensis Corporation

1. The Meeting began with George Ligler giving the status of several items. (a) George discussed an email that has been distributed by Alessandro Capretti, which concludes that worldwide implementation of UAT will require a clarifying/additional footnote in the ITU Radio Regulations. This footnote will be addressed under an existing agenda item at the World Radio Conference (WRC) in 2007. (b) George indicated that Tom Pagano had briefed the ICAO SCRSP WG-B/Technical Subgroup (TSG) in Hawaii recently on the Diplexer. The WG-B/TSG requested a later detailed review, and Tom will support such a review at the next WG-B/TSG meeting, scheduled for early February 2004. (c) George concluded his initial remarks with a brief status of the meeting that he recently held with Air Traffic. George indicated that he would be producing a summary of that meeting after a draft of that summary has been approved by the attendees. The brief bottom line of the meeting was that those in attendance feel that it is not necessary to make any modifications to the UAT MOPS to support the transmission of a 4096 code. The work around that was inserted in the MOPS for the Capstone project will be sufficient until the automation systems can be updated.

2. The Working Group then began with the review of Working Paper WP-18-03, presented by Gary Furr. This Working Paper summarizes the history of the Aircraft/Vehicle Length/Width Code from the initial Table 3-10 in the ADS-B MASPS update (RTCA DO-242A), through the UAT MOPS (RTCA DO-282), then the 1090 MOPS update (RTCA DO-260A) and the draft UAT SARPS, where in March 2003 an Issue Paper (IP-73) was written to describe a change that was suggested by the ICAO ACP WG-C UAT Subgroup. The change suggested in IP-73 was implemented in the published DO-260A and was initially proposed for the future update of DO-282. However, when the ASA MASPS was reviewed by SC-186 Plenary, it was pointed out that the A/V L/W Code Table 3-2 was different from the suggested change of IP-73. An Ad Hoc Working Group was formed by RTCA SC-186 to

review the history of the A/V L/W Code and make any recommendations for a unified requirement. It was determined by that Ad Hoc Working Group that the draft ASA MASPS does in fact represent what should be the requirement for the A/V L/W Code, and that all other documents should be modified to conform to that specification. That recommendation was approved by the Working Group and Gary Furr was directed to make the appropriate changes to the A/V L/W Code Table in the UAT MOPS and to further document that change on the web site in the proposed change matrix.

3. The Working Group then began review of Working Paper UAT-WP-18-01, presented by Tom Mosher. In this Working Paper, Tom indicates that as a result of his analysis of several of the items listed in Table 2-64 as being "Optional" for certain equipment types, he would like to see some clarification of language of some of the requirements. After reviewing each of the items identified in WP-18-01, the Working Group *agreed* with all of the recommendations identified in WP-18-01, and directed Gary Furr to implement those changes in the UAT MOPS and to further document those changes on the web site in the proposed change matrix.
4. The Working Group then began review of Working Paper UAT-WP-18-04 after agreeing that they would initially cover only those items deemed by Tom Mosher and Garmin AT as being critical to their certification of initial UAT avionics. Several specific proposed changes in WP-18-04 were discussed and approved. Those agreements will be documented in the update to the proposed change matrix and presented during the Meeting 19 teleconference as a new Working Paper.
5. The Working Group then began review of Working Paper UAT-WP-18-02, presented by Tom Pagano and David Thomas. With respect to the implementation of an optional Diplexer, WP-18-02 outlines specific requirements text in section 2.2 and corresponding test procedures in section 2.4, in addition to some suggested changes to section 3 paragraphs. After some brief Working Group discussion, it was *agreed* that there were some additional changes that needed to be made to the proposed text of WP-18-02 and some additional changes that should be proposed for the Diplexer in Appendix E. The Working Group asked that Tom and David be prepared to make any final changes to the draft sections, including Appendix E and present those changes as another Working Paper not later than 8 January 2004. That Working Paper will be reviewed for major issues only during Meeting 19, and would then be reviewed in detail for inclusion into the UAT MOPS during Meeting 20 in Melbourne Florida on 9-11 February 2004.
6. The Working Group then began review of Working Paper UAT-WP-18-05, presented by Tom Mosher. In this Working Paper, Tom responded to Action Item 17-01 wherein he agreed to review the test procedure in §2.4.8.3.3 for possible changes, based on the acceptance of Working Paper WP-17-02 and its test procedure in §2.4.8.2.7, which allowed for the simplification of the test procedures for verification of the requirements for receiver processing of ADS-B Sync Triggers found in §2.2.8.3.3. Since the rate of Sync Triggers is now a clearly defined and separate requirement, the existing test procedure in §2.4.8.3.3 can be substantially simplified to only validate the Sync detection logic. After Working Group discussion, it was agreed to accept the recommended changes proposed in WP-18-05, contingent on the approval of the Working Paper by Tom Pagano, who had not yet had a chance to review the recommendations. If approved by Tom, then Gary Furr is directed to

implement those changes identified in WP-18-05 in to the UAT MOPS and to further document those changes on the web site in the proposed change matrix.

7. The Working Group then returned to the review of Working Paper WP-18-04, which is the summary of all proposed changes to the UAT MOPS. All currently unresolved proposed changes were reviewed and agreed upon, some with some modification. Those agreed changes will be noted in an update to the proposed change matrix and those agreed upon changes will be implemented by Gary Furr into the UAT MOPS and the changes will further be documented on the web site in the proposed change matrix.
8. Larry Bachman was not prepared to report on Action Item 17-02 wherein he had accepted the task of reviewing Working Paper UAT-WP-10-01, originally authored by Warren Wilson, for possible inclusion into the UAT MOPS as a new Appendix. Larry promised that he would review Working Paper WP-10-01 and report to the Working Group during the Meeting 19 teleconference.
9. The Working Group agreed to hold one more teleconference for the purpose of further reviewing possible changes to the UAT MOPS, some of which were presented during this meeting as Working Paper UAT-WP-18-04. It was agreed further that a three-day meeting would be held in February in Melbourne Florida for the purpose of finalizing the proposed changes to the UAT MOPS in preparation for presenting a consolidated draft change document to RTCA SC-186 at their Spring 2004 Plenary scheduled for 9 April 2004. It was suggested by George Ligler that the duration of the Meeting 19 teleconference be reduced from 4 to 2 hours. That suggestion was approved by the Working Group.

Dates/Time	Meeting Place
12 January 2004 1:00pm – 3:00pm EST	WG-5 will hold a teleconference for the purpose of further reviewing a set of possible changes to DO-282 that would be necessary or desirable if the Working Group receives approval from RTCA SC-186 to publish a Change-1 to DO-282.
9, 10, 11 February 2004 daily @ 9am – 5pm EST	To be held at the Hilton Oceanfront in Melbourne FL for the purpose of finalizing all proposed changes to the UAT MOPS in preparation for presenting a consolidated draft change document to the RTCA SC-186 during their Spring 2004 Plenary scheduled for 9 April 2004.
9 April 2004	RTCA SC-186 Plenary at RTCA in Washington DC

All Working Papers for all WG-5 Meetings, as well as the Meeting Agendas, Meeting Minutes and Meeting Schedules will continue to be posted on the ADS-B UAT WG-5 web site located at: <http://adsb.tc.faa.gov/WG5.htm>