

RTCA Special Committee 186 Working Group 6

ADS-B / ASA Combined MASPS

Meeting #28

**Teleconference and WebEx Session
9:00am – 11:00am EDT
19 October 2011**

Analysis of the Proposed Appendix on Design Tradeoff Considerations

Tom Pagano, FAA

SUMMARY

As per an action accepted during the last WG-6 Meeting at RTCA, 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. Appendix “G” contains 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, I recommend not including this Appendix in the updated MASPS. 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.