

RTCA Special Committee 186, Working Group 5

ADS-B UAT MOPS Maintenance

WG-5 Meeting #26

RTCA Headquarters
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Proposed Text for Source Selection
In Response to Action Item 25-07
Revision 1

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Summary
This Working Paper addresses proposed text for source selection. It was originally proposed to WG-3 for inclusion in DO-260B after their review of the proposed issues related to preserving paragraphs out of the STP MOPS, related to Action Item 25-07 accepted by Larry Bachman.

Proposed Text for Source Selection:

When more than one position source is provided to the ADS-B Transmitting Subsystem, the transmitter **shall** select a single source to provide horizontal position, horizontal velocity, and their associated quality metrics. Heading used to populate the Track Angle/Heading Field on the surface may be supplied by a different source than that which supplies horizontal position and ground speed.

Notes:

- 1. The source selection logic should be designed to prevent the selection from alternating between valid sources. One acceptable way to ensure this is to allow the source selection to switch sources only after an alternate source has consistently exceeded the performance of the currently selected source for several seconds.*
- 2. Source selection logic may include criteria specific to the sources available on the aircraft. When selecting among sources with equal Source Integrity Level (SIL) values, the source with the smallest Radius of Containment should be selected. It is anticipated that regulatory guidance will be provided to govern source selection among sources with different non-zero SIL values.*