RTCA Special Committee 186, Working Group 3

ADS-B 1090 MOPS, Revision A

Meeting #15

Proposed Changes to 2.2.5.1 to Account for Omitted Data Elements

Presented by Ron Jones

SUMMARY
During review of Draft-5 of DO-260A, it was discovered that there were some data elements of the Operational Status Message and the target State and Status Message that were not accounted for in §2.2.5.1. This Working Paper attempts to propose that subparagraphs be added to account for those missing data elements.

Proposed DO-260A additions/corrections for defined sources for Target State data, Operational Status data, and Aircraft Status data

2.2.5.1.23 needs to be corrected by adding the following text onto the existing text:

> "…as specified in 2.2.3.2.7.2.3.2 and in the "Capability Code" subfield transmitted in the ADS-B Target State and Status Message as specified in 2.2.3.2.7.1.3.14."

2.2.5.1.30 needs to be corrected by adding the following text onto the existing text:

> "…as specified in 2.2.3.2.7.2.4.2 and in the "Mode Code" subfield transmitted in the ADS-B Target State and Status Message as specified in 2.2.3.2.7.1.3.14."

Add the following subparagraphs:

2.2.5.1.35 Navigation Accuracy Category for Position (NAC_P) Data

The ADS-B Transmitting Subsystem shall accept own vehicle NAC_P information via an appropriate variable data input interface and use such data to establish the "NAC_P" subfield transmitted in the ADS-B Target State and Status Message as specified in 2.2.3.2.7.1.3.11 and the "NAC_P" subfield transmitted in the ADS-B Operational Status Message as specified in 2.2.3.2.7.2.7.

2.2.5.1.36 Navigation Integrity Category for Barometric Altitude (NIC_{BARO}) Data

The ADS-B Transmitting Subsystem shall accept own vehicle NIC_{BARO} information via an appropriate variable data input interface and use such data to establish the "NIC_{BARO}" subfield transmitted in the ADS-B Target State and Status Message as specified in 2.2.3.2.7.1.3.12 and the "NIC_{BARO}" subfield transmitted in the ADS-B Operational Status Message as specified in 2.2.3.2.7.2.10.

2.2.5.1.37 Navigation Integrity Category Supplement (NIC_{SUPP}) Data

The ADS-B Transmitting Subsystem shall accept own vehicle NIC_{SUPP} information via an appropriate variable data input interface and use such data to establish the "NIC_{SUPP}" subfield transmitted in the ADS-B Operational Status Message as specified in 2.2.3.2.7.2.6.

2.2.5.1.38 Length/Width Code (L/W Code) Data

The ADS-B Transmitting Subsystem shall accept own vehicle A/V Length/Width Code information via an appropriate variable data input interface and use such data to establish the "A/V Length/Width Code" subfield transmitted in the ADS-B Operational Status Message as specified in 2.2.3.2.7.2.11.

2.2.5.1.39 Track Angle/Heading Data

The ADS-B Transmitting Subsystem shall accept own vehicle Track Angle/Heading information via an appropriate variable data input interface and use such data to establish the "Track Angle/Heading" subfield transmitted in the ADS-B Operational Status Message as specified in 2.2.3.2.7.2.12.

2.2.5.1.40 Horizontal Reference Direction (HRD) Data

The ADS-B Transmitting Subsystem shall accept own vehicle HRD information via an appropriate variable data input interface and use such data to establish the "HRD" subfield transmitted in the ADS-B Operational Status Message as specified in 2.2.3.2.7.2.13.

2.2.5.1.41 Surveillance Integrity Level (SIL) Data

The ADS-B Transmitting Subsystem shall accept own vehicle SIL information via an appropriate variable data input interface and use such data to establish the "SIL" subfield transmitted in the ADS-B Target State and Status Message as specified in 2.2.3.2.7.1.3.13 and the "SIL" subfield transmitted in the ADS-B Operational Status Message as specified in 2.2.3.2.7.2.9.

2.2.5.1.42 Vertical Data Available/Source Indicator Data

The ADS-B Transmitting Subsystem shall accept own vehicle Vertical Data Available/Source Indicator information via an appropriate variable data input interface and use such data to establish the “Vertical Data Available/Source Indicator” subfield transmitted in the ADS-B Target State and Status Message as specified in 2.2.3.2.7.1.3.1.

2.2.5.1.43 Target Altitude Type Data

The ADS-B Transmitting Subsystem shall accept own vehicle Target Altitude Type information via an appropriate variable data input interface and use such data to establish the “Target Altitude Type” subfield transmitted in the ADS-B Target State and Status Message as specified in 2.2.3.2.7.1.3.2.

2.2.5.1.44 Target Altitude Capability Data

The ADS-B Transmitting Subsystem shall accept own vehicle Target Altitude Capability information via an appropriate variable data input interface and use such data to establish the “Target Altitude Capability” subfield transmitted in the ADS-B Target State and Status Message as specified in 2.2.3.2.7.1.3.4.

2.2.5.1.45 Vertical Mode Indicator Data

The ADS-B Transmitting Subsystem shall accept own vehicle Vertical Mode Indicator information via an appropriate variable data input interface and use such data to establish the “Vertical Mode Indicator” subfield transmitted in the ADS-B Target State and Status Message as specified in 2.2.3.2.7.1.3.5.

2.2.5.1.46 Target Altitude Data

The ADS-B Transmitting Subsystem shall accept own vehicle Target Altitude information via an appropriate variable data input interface and use such data to establish the “Target Altitude” subfield transmitted in the ADS-B Target State and Status Message as specified in 2.2.3.2.7.1.3.6.

2.2.5.1.47 Horizontal Data Available/Source Indicator Data

The ADS-B Transmitting Subsystem shall accept own vehicle Horizontal Data Available/Source Indicator information via an appropriate variable data input interface and use such data to establish the “Horizontal Data Available/Source Indicator” subfield transmitted in the ADS-B Target State and Status Message as specified in 2.2.3.2.7.1.3.7.

2.2.5.1.48 Target Heading/Track Angle Data

The ADS-B Transmitting Subsystem shall accept own vehicle Target Heading/Track Angle information via an appropriate variable data input interface and use such data to establish the “Target Heading/Track Angle” subfield transmitted in the ADS-B Target State and Status Message as specified in 2.2.3.2.7.1.3.8.

2.2.5.1.49 Target Heading/Track Indicator Data

The ADS-B Transmitting Subsystem shall accept own vehicle Target Heading/Track Indicator information via an appropriate variable data input interface and use such data to establish the “Target Heading/Track Indicator” subfield transmitted in the ADS-B Target State and Status Message as specified in 2.2.3.2.7.1.3.9.

2.2.5.1.50 Horizontal Mode Indicator Data

The ADS-B Transmitting Subsystem shall accept own vehicle Horizontal Mode Indicator information via an appropriate variable data input interface and use such data to establish the “Horizontal Mode Indicator” subfield transmitted in the ADS-B Target State and Status Message as specified in 2.2.3.2.7.1.3.10.

2.2.5.1.51 Emergency/Priority Status Data

The ADS-B Transmitting Subsystem shall accept own vehicle Emergency/Priority Status information via an appropriate variable data input interface and use such data to establish the “Emergency/Priority Status” subfield transmitted in the ADS-B Target State and Status Message as specified in 2.2.3.2.7.1.3.15 and the “Emergency/Priority Status” subfield transmitted in the ADS-B Extended Squitter Aircraft Status Message as specified in 2.2.3.2.7.8.