RTCA, Inc. 1828 L Street, NW, Suite 805 Washington, DC 20036 USA

Change No. 2

-to-

RTCA/DO-210D

# MINIMUM OPERATIONAL PERFORMANCE STANDARDS FOR GEOSYNCHRONOUS ORBIT AERONAUTICAL MOBILE SATELLITE SERVICES (AMSS) AVIONICS

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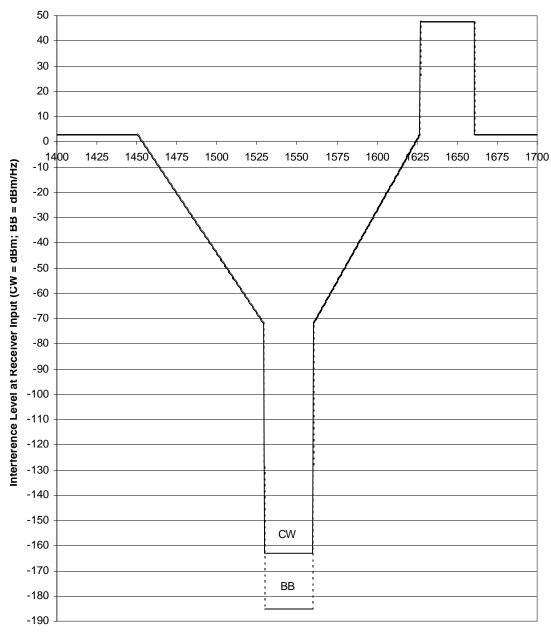
### Change No. 2 to DO-210D

**1.** Section 2.1.9 of DO-210D and <u>Figure 2</u> were added via Change No. 1 to RTCA/DO-210D. Replace that former Section 2.1.9 and <u>Figure 2</u> with the following text for Section 2.1.9 and <u>Figure 2</u>:

# 2.1.9 <u>Interference Susceptibility</u>

A receiver meeting the requirements of this document will operate satisfactorily in the presence of interference at RF levels at the receiver's input port not exceeding the following tabulated levels. The RF levels in the frequency ranges near the SATCOM receive band are also illustrated in <u>Figure 2</u>.

Frequency Range	Maximum Interference Level
470 to 1450 MHz	+3 dBm
1450 to 1529 MHz	Decreases linearly in decibels from +3 dBm at 1450 MHz to -72 dBm at 1529 MHz
1529 to 1560 MHz	-163.2 dBm (CW interference)
1529 to 1560 MHz	-184.9 dBm/Hz (broad-band interference density)
1560 to 1626.5 MHz	Increases linearly in decibels from -72 dBm at 1560 MHz to +3 dBm at 1626.5 MHz
1626.5 to 1660.5 MHz	+47.8 dBm
1660.5 to 18000 MHz	+3dBm



Frequency (MHz)

## FIGURE 2. RECEIVER SUSCEPTIBILITY

- **2.** In Section 2.2.4.2.17 (Page 42), make the following changes:
  - a. In the first paragraph following the heading, after the words "Appendix 6", delete the semicolon and the text "and Reference Document "B" Section 4.2.3".
  - b. After the reference to Figure AP6-2, add the following text, "In addition to these requirements, the R- and T-channel burst timing should comply with the requirements of Reference Document "B" Section 4.2.3, including all referenced tables, figures, annexes and appendices applicable to the AES, as identified below:"

- **3.** In Section 2.2.6 (Pages 44-45), make the following changes:
  - a. Delete the line that reads "7.3.1P-Channel Signal Quality Monitoring".
  - b. Immediately before the notes, insert the following text: "In addition to the requirements identified above, the AES should comply with the P-Channel signal quality monitoring of Reference Document "B", Section 7.3.1."
- **4.** Make the following revisions to <u>Table 2-4</u> on (Pages 65-66) in DO-210D:
  - a. In <u>Table 2-4</u> (Pages 65-66 of DO-210D), in the third column of the row starting "Packets having a Packet Type Identifier shorter than one byte and a Logical Channel Identifier equal to 0", after the entry "A=ERROR S = r3 D = 38", add "(see Note 3)".
  - b. In <u>Table 2-4</u> (Pages 65-66 of DO-210D), in the last column of the row starting "RESTART REQUEST OR RESTART CONFIRMATION Packet with format error", after the entry "A = ERROR D = 38, 39, 81 or 82", add "(see Note 3)".
  - c. In <u>Table 2-4</u> (Pages 65-66 of DO-210D), in the third column of the row starting "Call Setup, Call Clearing, DATA, Interrupt, Flow Control or RESET Packet", after the entry "A = ERROR S = r3 D = 18", add "(see Note 3)".
- **5.** In Section 2.2.8 (Pages 75-77), make the following changes:
  - a. Delete the line that reads "6.7.1 Power Control Management".
  - b. Immediately following the line that reads "1.7 Vocoder Implementation", insert the following text: "In addition to the requirements identified above, the AES should comply with the Power Control Management requirements of Reference Document "A", Section 6.7.1."
  - c. Delete the line "10.4.5 Voice/Circuit-Mode Data Delay".
  - d. Immediately following the new insertion, begin a second new paragraph and insert the following text: "In addition to the requirements identified above, the AES should comply with Voice/Circuit-Mode Data Delay requirements of Reference Document "B", Section 10.4.5."
- **6.** In <u>Table 2-20</u> (Pages 203-204), make the following changes:
  - a. Delete the row that has 6.7.1 in the first column.
  - b. Delete the row that has 10.4.5 in the second column.
  - c. In the row that has 10.5 in the second column, add the text "Design Requirement, not tested" in the third column.
- 7. In Appendix C, make the following changes:
  - a. On Page 3, for the PERFORMANCE column reference to 2.2.4.2.17–A–3.3.2, add "Tested Throughout 2.4.5, 2.4.6 and 2.4.7" in the VERIFICATION column.
  - b. On Page 3, for the PERFORMANCE column reference to 2.2.4.2.17–A–3.3.2.1, add "Tested Throughout 2.4.5, 2.4.6 and 2.4.7" in the VERIFICATION column.
  - c. On Page 3, for the PERFORMANCE column reference to 2.2.4.2.17–A–3.3.2.2, add "Tested Throughout 2.4.5, 2.4.6 and 2.4.7" in the VERIFICATION column.
  - d. On Page 3, for the PERFORMANCE column reference to 2.2.4.2.17–A–3.3.2.3, add "Tested Throughout 2.4.5, 2.4.6 and 2.4.7" in the VERIFICATION column.
  - e. On Page 3, for the PERFORMANCE column reference to 2.2.4.2.17–A–3.3.2.4, add "Tested Throughout 2.4.5, 2.4.6 and 2.4.7" in the VERIFICATION column.
  - f. On Page 3, for the PERFORMANCE column reference to 2.2.4.2.17–A–3.4, add "Tested Throughout 2.4.5, 2.4.6 and 2.4.7" in the VERIFICATION column.
  - g. On Page 3, for the PERFORMANCE column reference to 2.2.4.2.17–A–A6 Fig. AP6-1, add "Tested Throughout 2.4.5, 2.4.6 and 2.4.7" in the VERIFICATION column.

- h. On Page 3, for the PERFORMANCE column reference to 2.2.4.2.17–A–A6 Fig. AP6-2, add "Tested Throughout 2.4.5, 2.4.6 and 2.4.7" in the VERIFICATION column.
- i. On Page 3, delete the row 2.2.4.2.17 B 4.2.3.1.
- j. On Page 3, delete the row 2.2.4.2.17 B 4.2.3.2.
- k. On Page 3, for the PERFORMANCE column reference to 2.2.4.2.18, add "Refer to PERFORMANCE 2.2.4.1.12" in the VERIFICATION column.
- 1. On Page 5, for the PERFORMANCE column reference to 2.2.6-B-7.3.3, add "2.4.6 <u>Table 2-18</u>" in the VERIFICATION column.
- m. On Page 7, for the PERFORMANCE column reference to 2.2.7.4.2-A-7.2.5, add "2.4.5 <u>Table 2-17/2"</u> in the VERIFICATION column.
- n. On Page 10, for the PERFORMANCE column reference to 2.2.7.5.2.3.2, add "2.4.7.3.1.1, 2.4.7.3.1.2, 2.4.7.3.4.1, 2.4.7.3.4.2, 2.4.7.3.4.3, 2.4.7.3.4.6" in the VERIFICATION column.
- o. On Page 10, for the PERFORMANCE column reference to 2.2.7.5.2.3.3, add "2.4.7.3.1.1, 2.4.7.3.1.2, 2.4.7.3.4.1, 2.4.7.3.4.2, 2.4.7.3.4.3, 2.4.7.3.4.6" in the VERIFICATION column.
- p. On Page 10, delete the row 2.2.8-A-6.7.1.
- q. On Page 11, delete the row 2.2.8-B-10.4.5.
- r. On Page 11, in the second column of the row 2.2.8-B-10.5, add the text "2.4.8, Table 2-20."