

DOCUMENT 106-05

CHANGES CONTAINED IN THIS EDITION

Chapter 4, Pulse Code Modulation Standards: Changes include updates to Class I / Class II distinctions and additional explanations concerning minor frame synchronization and subframe synchronization.

Chapter 6, Magnetic Tape Recorder and Reproducer Standards: The title has changed to Digital Cassette Helical Scan Recorder/Reproducer, Multiplexer/Demultiplexer, Tape Cassette, and Recorder Control and Command Mnemonics Standards. The standards for longitudinal fixed-head recorder and reproducer systems have been transferred from Chapter 6 and are now contained in Appendix D, paragraphs 12.0 through 21.2.

Chapter 7, Magnetic Tape Standards: Standards for longitudinal instrumentation magnetic tape previously contained in Chapter 7 can now be found in Appendix D, paragraphs 22.0 through 27.11. Chapter 7 has been deleted and will be replaced by a new topic, Ground Based Digital Recording Standard (Solid State and Disk Systems).

Chapter 8, Digital Data Bus Acquisition Formatting Standard: Chapter 8 has been replaced in its entirety, the most obvious change being the title change from “MIL-STD-1553 Acquisition Formatting Standard” to “Digital Data Bus Acquisition Formatting Standard.” Significant modifications to the document flow were made to more readily accommodate incorporation of additional data bus types. All changes are backward compatible through and including the 106-96 version of Chapter 8. Specific key changes include the following:

- Extended bus addressing
- Made the use of the parity bit optional
- Added an optional cyclic redundancy check
- Increased framesize from a maximum of 256 words to a maximum of 512 words
- Added an entire section addressing ARINC 429 capability

Chapter 9, Telemetry Attributes Transfer Standard: Changes include the addition of packet telemetry in the new TMATS S-group and additions to the R-group corresponding to updates to Chapter 10.

Chapter 10, Digital On-Board Recorder Standard: Changes are as follows:

- Change of title change from “Solid State On-Board Recorder Standard” to “Digital On-Board Recorder Standard”
- Revision to Figure 10-1
- Addition of Data Download Structure and Naming to Section 10.3
- Addition of Data Recording Structure (Figure 10-4)
- Addition of Time Packets with Distributed Multiplexers
- Added Computer Generated Data Packets, Format 2 (Recording Events) and Format 3 Recording Index (Root Index)

- Addition of KLV Metadata per MISP to Video Format 0 and Format 1
- Addition of IEEE-1394 Fire Wire Data, Format 0
- Addition of Parallel Data Packet, Format 0
- Addition of 1394B Interface to Recorder Media

Appendix D, Magnetic Tape Recorder and Reproducer Information and Use Criteria: Changes contained in IRIG 106-05 included transfer of a major portion of Chapter 6 and all of Chapter 7 to Appendix D as follows:

- The standards for longitudinal fixed-head recorder and reproducer systems were transferred from Chapter 6 and are now contained in Appendix D, paragraphs 12.0 through 21.2.
- Standards for longitudinal instrumentation magnetic tape previously contained in Chapter 7 can now be found in Appendix D, paragraphs 22.0 through 27.11.