

Revision of US Military HF Radio Standards

12 February 2009

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Working Group

- Voting members represent
 - Lead Standardization Activity: DISA
 - Preparing Activity: USAF OKC Air Logistics Ctr
 - Custodians
- Observers
 - Industry
 - Academia

Custodians – HF Standards

- Air Force
 - Oklahoma City Air Logistics Center
- Army
 - Communications – Electronics Command
- Navy
 - Space and Naval Warfare Systems Command
- Additional departments and agencies

Technical Advisory Committee

- Informal team reporting to Working Group
- Small group of technical experts
 - Government, industry, academia reps
- Suggests changes to reflect state of the art
- Provides technical “sanity check”
- Corporate/agency/marketing/political issues remain outside the TAC

Development Process

- Unofficial TAC Draft(s)
- Working Group Draft
- Coordination Draft (2009?)
- Comments
 - Essential
 - Suggested
- Resolution Meeting
- Approval

Current Status of HF Standards

Standards Revision Progress

- TAC met June 2007
 - Thorough review of updates since last revisions
 - New recommended changes
 - TAC Drafts sent to Working Group late in 2007
- Working Group met 5 February 2008
 - Approved major changes recommended by TAC
 - Many technical comments to be sent to TAC
- TAC met February 2009

MIL-STD-188-141B

- “Interoperability and Performance Standards for Medium- and High-Frequency Radio Systems”
- Current issue is Change Notice 1, dated 31 August 2001

MIL-STD-188-141C

- Working Group approved some major surgery:
 - Add wideband radio specs (up to 24 kHz channels)
 - Appendix C (3G): replace with reference to STANAG 4538
 - Remove Appendix D (HF networking)
 - Appendix E (HF Applications) to be informative only
 - Remove Appendix F (3G Anti-jam)
 - Remove Appendix G (2G data link protocol)
 - Remove Appendix H (HF MIB)

MIL-STD-188-141C

- TAC Meeting February 2009
 - Resolved technical comments from the services and industry
 - New Appendix K:
Guidance for shipboard co-sited applications
 - Wideband channel characteristics in development

MIL-STD-188-110B

- “Interoperability and Performance Standards for Data Modems”
- Current issue is dated 27 April 2000

MIL-STD-188-110C

- Working Group approved some major surgery:
 - Removed VF, wireline, LF, and UHF modems
 - Removed Appendix A (16-tone waveform)
 - **Appendix B (39 tone) retained, but obsolescent**
 - Removed Appendix D (subnetwork interface)
 - Removed Appendix E (data link protocol pointer)
- TAC is finalizing:
 - New Appendix G (LAN interface)
 - New Appendix H (channel simulator specs)

MIL-STD-188-110C

- TAC Meeting February 2009
 - Resolved technical comments from the services
 - Recommend retaining Appendix B (39-tone):
 - Still in use by DHS (but phasing out)
 - Wideband waveforms in development
 - Will recommend passband specs to radio TAC
 - Appendix H simulator specs to be augmented for 6 kHz and 12 kHz channels

AFCEA HF Radio Class

- Introduction to HF radio and HF standards
- Classes scheduled this year in Fairfax, VA
 - 5 – 7 May
 - 1 – 3 September (before US Labor Day holiday)

Questions?