RTCM at 75

Origin and the first 35 years

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Radar and Loran for merchant ships
International Meeting - May 1946
Radio Aids to Marine Navigation (IMRAMN)

23 nations – 105 delegates
Organized by UK – met in London
European focus
Developed plans for a postwar international marine radio service

U.S. sent delegation
Hastily assembled
Limited participation rights
No defined positions
All-nighter to organize
ITU International Telecommunications and Radio Conference – Atlantic City
Planning for the 1947 Conferences

November 20, 1946 – State Department meeting with relevant government agencies, the maritime industry and radio manufacturers
◊ Decided to form new non-profit organization to
  - Coordinate government and industry views
  - Formulate appropriate recommendations
◊ Subcommittee to draft constitution and bylaws

November 29, 1946 – Meeting reconvenes to finalize organization
◊ Modeled on Radio Technical Commission for Aeronautics (RTCA)
◊ Named Radio Technical Commission for Marine Services (RTCM)
◊ Established interim Executive Committee
The 1947 Conferences and Founding of RTCM


May 12, 1947 - RTCM First Assembly Meeting and Formal Establishment: Washington, DC

May 16 – October 2, 1947 - ITU International Telecommunication and Radio Conferences: Atlantic City

First RTCM Assembly

45 representatives from five different groups:

- Radiocommunication users and associations
- Marine electronics manufacturers and associations
- Radio and telephone communication companies
- Radio operator associations
- Government agencies concerned with maritime affairs

Selected permanent Executive Committee carefully allocated to represent interest groups.
Elected first Chairman and Vice Chairman of Executive committee

(The British Embassy also sent a representative)
• Edward M. Webster (USCG Commodore)

• RTCM Executive Committee Vice Chair – 1947-1956
• RTCM Executive Committee Chair – 1957-1964

• USCG Chief Communications Officer – 1923-1934
• USCG Chief Communications Officer – 1942-1946
• Telecommunications Director National Federation of American Shipping – 1946-1947
• FCC Commissioner – 1947-1956
• Western Union Telecommunications Consultant – 1956-196?

• Legion of Merit – 1945
• Radio Committee Chair – 1948 SOLAS Conference
Getting to Work

Subcommittee under the 1946 interim Executive Committee

- Report recommended FM vs. AM on 30 Mc-300Mc VHF frequencies
- Resulted in VHF-FM adoption for Region 2 at 1947 conference
- VHF-FM later adopted worldwide

Establishment of Special Committees

- Issues assigned by Executive Committee
- Government and industry representatives prepare recommendations and reports
- Special Committees disbanded when report approved by Executive Committee
- 81 Special Committees would be formed between 1947 and 1982
The First Special Committees

SC-1 - Air-Sea Distress Communications
• Formed before official establishment of RTCM
• Joint study with RTCA (RTCA SC-10)
• Reported out November 1947

SC-2 - LF Omni vs LF Loran
• Formed before official establishment of RTCM
• Joint study with RTCA
• Reported out October 1948

SC-3 - Study of AM vs FM on VHF non-Government Marine Radiotelephone Frequencies
• (Official designation of the interim subcommittee)
• Reported out April 1947
Notable Special Committees – VHF-FM

SC-3 - Study of AM vs FM on VHF non-Government Marine Radiotelephone Frequencies
• Recommended FM on VHF frequencies

SC-7 - VHF Marine Requirements and Utilization
• Specified basic requirements for practical marine VHF system
• Resulted in FCC rulemaking incoordination with USCG

SC-13 - Difficulties which would Result from a Failure to Standardize Internationally on FM for Marine Comms
SC-20 - Progress Report on the Development and Use of VHF (FM) in the Maritime Mobile Service in the U.S.
• Instrumental in the adoption of FM for maritime VHF worldwide

SC-18 - The Standardization of Marine Radiotelephone Channel Designators
• Voluntary U.S. channel numbering plan
• Evolved into the international standardization of marine radiotelephone channel designators

SC-19 - Study of Reliable Short Range Radiotelephone System
• Recommended working frequency for non-commercial boats
• VHF equipment should revert automatically to receive 156.8 MHz (Channel 16) for during standby operation
Notable Special Committees

SC-64 - MF, HF, and VHF Maritime Radioteleprinter and Data Systems and Operations
• Basis for U.S. CCIR positions on narrow band direct printing and digital selective calling systems

SC-65 - Ship Radar

SC-70 - Minimum Performance Standards for Marine Loran-C Receiving Equipment
• First products identified as “standards”
• Relevance to OMB Circular A-119 – Use of voluntary consensus standards
Broadening the Focus – First International Associates

Cunard Line - 1981

Japan Radio Company - 1982
Advisory Committee and Transition

Federal Advisory Committee Act
• FCC sponsorship required every two years
• Oversight by White House Office of Management and Budget
• FY 1982 FCC budget zeroed out RTCM support
• FCC extended charter only to October 1, 1982

Reorganization Plan
• RTCM to become non-profit corporation
• Move to commercial office space
• All operating expenses to be paid by member dues
The new organization

Date of Birth: October 1, 1982


FCC office space and support → Commercial office space and 100%-member support

Executive Committee → Board of Directors (Elects Chair, Vice Chair, Secretary, Treasurer)

Final Executive Committee meeting September 16, 1982 (breakfast meeting with open bar)

Executive Secretary (W.T. (Bill) Adams) → President (W.T. Adams elected by Board)

Existing Special Committees closed except:

SC-74 Digital Selective Calling → SC-101 Digital Selective Calling


SC-65 Ship Radar → SC-103 Marine Radar

Adoption of logo:
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