PUBLIC NOTICE

Federal Communications Commission
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DA 10-1408
July 30, 2010

FCC SEEKS COMMENT ON RECOMMENDATIONS APPROVED BY THE ADVISORY COMMITTEE FOR THE 2012 WORLD RADIOCOMMUNICATION CONFERENCE

IB Docket No. 04-286

Comment Date: August 13, 2010

On July 28, 2010, the Advisory Committee for the 2012 World Radiocommunication Conference (WRC-12 Advisory Committee) approved and provided for Commission consideration its recommendations on a number of issues that will be considered by the 2012 World Radiocommunication Conference (WRC-12). These recommendations are attached to this Public Notice (Attachment 1).

Based upon an initial review of the recommendations forwarded to the Commission, the International Bureau, in coordination with other Commission Bureaus and Offices, tentatively concludes that we can generally support the attached WRC-12 Advisory Committee recommendations.

The FCC seeks comment on the recommendations provided by the WRC-12 Advisory Committee. The FCC also seeks comment on the attached draft proposals that have been provided to the FCC by the National Telecommunications and Information Administration (NTIA) (Attachment 2). Finally, the FCC seeks comment on the International Bureau's initial conclusions with regard to the WRC-12 Advisory Committee recommendations.

The comments provided by interested parties will assist the FCC in its upcoming consultations with the U.S. Department of State and NTIA in the development of U.S. positions for WRC-12. The recommendations that are attached to this Public Notice may evolve in the course of interagency discussions as we approach WRC-12 and, therefore, do not constitute a final U.S. Government position on any issue.

The complete text of these preliminary views and proposals is also available in the FCC's Reference Information Center, Room CY-A257, 445 12th Street, SW, Washington, DC 20554 or by accessing the FCC's WRC-12 web site at: http://www.fcc.gov/ib/wrc-12/.

The deadline for comments on the proposed preliminary views is August 13, 2010. It is necessary that all comments be received by August 13, 2010 in order to allow sufficient time to finalize the U.S. position before commencement of regional WRC-12 preparatory meetings.

All comments should refer to IB Docket No. 04-286 and to specific recommendations by WAC document number. Comments may be filed using (1) the Commission's Electronic Comment Filing System (ECFS), (2)

by email to wrc-12@fcc.gov, or (3) by filing paper copies.[1] Generally, only one copy of an electronic submission must be filed.

Comments filed through the ECFS can be sent as an electronic file via the Internet to http://www.fcc.gov/cgb/ecfs/. In completing the transmittal screen, commenters should include their full name, U.S. Postal Service mailing address, and the applicable docket or rulemaking number. Parties may also submit an electronic comment by Internet e-mail. To get filing instructions for e-mail comments, commenters should send an e-mail to ecfs@fcc.gov, and should include the following words in the body of the message, "get form." A sample form and directions will be sent in reply.

Parties who choose to file by paper must file an original and four copies of each filing.

Filings can be sent by hand or messenger delivery, by commercial overnight courier, or by first-class or overnight U.S. Postal Service mail (although we continue to experience delays in receiving U.S. Postal Service mail). All filings must be addressed to the Commission's Secretary, Office of the Secretary, Federal Communications Commission.

The Commission's contractor will receive hand-delivered or messenger-delivered paper filings for the Commission's Secretary at 236 Massachusetts Avenue, N.E., Suite 110, Washington, D.C. 20002. The filing hours at this location are 8:00 a.m. to 7:00 p.m. All hand deliveries must be held together with rubber bands or fasteners. Any envelopes must be disposed of before entering the building.

Commercial overnight mail (other than U.S. Postal Service Express Mail and Priority Mail) must be sent to 9300 East Hampton Drive, Capitol Heights, MD 20743.

U.S. Postal Service first-class mail, Express Mail, and Priority Mail should be addressed to 445 12th Street, S.W., Washington, D.C. 20554.

Additionally, filers must deliver courtesy copies by email to the following Commission staff: Alexander Roytblat, at Alexander.Roytblat@fcc.gov

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- FCC -

[1] *See* Electronic Filing of Documents in Rulemaking Proceedings, 63 Fed. Reg. 24121 (1998).

ATTACHMENT 1
to FCC Public Notice DA 10-1408

Recommendations approved at
28 July 2010 Meeting of
the Advisory Committee for
the 2012 World Radiocommunication Conference

Maritime Aeronautical and Radar Services

DOCUMENT WAC/083(28.07.10)

WAC Informal Working Group (IWG)-1

UNITED STATES OF AMERICA

DRAFT PROPOSALS FOR THE WORK OF THE CONFERENCE

Agenda Item 1.14: *to consider requirements for new applications in the radiolocation service and review allocations or regulatory provisions for implementation of the radiolocation service in the range 30-300 MHz, in accordance with Resolution **611 (WRC-07)***

Background Information: Resolution 611 (WRC-07) asks WRC-12 to determine if any new radiolocation service allocations or applications in a portion of 30-300 MHz, with bandwidth no larger than 2 MHz, are compatible with existing services and applications in these bands. The Resolution recognizes that it is important to ensure radiolocation radars can be operated compatibly with the existing primary services having allocations in the portions of the VHF band. The ITU-R has studied technical characteristics, protection criteria, and other factors to determine whether radiolocation systems can operate compatibly with systems operating in accordance with the Table of Frequency Allocations in services in the 30-300 MHz frequency range.

Based on contributions to ITU meetings and other regional groups, it appears that the primary range of interest is 154-156 MHz for a new radar allocation for space object detection purposes.

The 30-300 MHz band is allocated to and used by a wide variety of services, including the fixed, mobile, aeronautical mobile (R), aeronautical radionavigation, broadcasting, and amateur services, as well as a range of space services. A review of the FCC's licensing database for the frequency band 150-174 MHz band shows over 176,000 active licenses. In the 154-156 MHz band alone, there are over 70,000 active licenses. The United States also has a large number of LMR systems operating in portions of the VHF band that are not part of the FCC licensing database. This frequency band has favorable propagation which allows implementation of systems with fewer base stations and hence a lower overall cost. Additionally, the maritime mobile service utilizes frequencies immediately above 156 MHz, and there are space service allocations in the 137-138 MHz, 148-149.9 MHz and 149.9-150.05 MHz bands.

Contributions to ITU meetings have not persuasively demonstrated compatibility with primary services in or adjacent to the 154-156 MHz range, nor are future contributions likely to demonstrate compatibility with primary services elsewhere in the range 30-300 MHz. Further, space object detection is already accommodated in the worldwide harmonized radiolocation allocation at 420-450 MHz. The UHF band is more suitable for this purpose because of a lower relative likelihood of transmissions being refracted back toward the earth during ionospheric disturbances.

Proposal:

ARTICLE 5

Frequency Allocations

Section IV – Table of Frequency Allocations

NOC USA/AI1.14/1

Reason: No change to the Radio Regulations is necessary or desirable. The application of space object detection is already accommodated at a more suitable frequency range, and compatibility with primary services has not been demonstrated.

SUP USA/AI1.14/2

~~RESOLUTION 611 (WRC-07)~~

~~**Use of a portion of the VHF band by the radiolocation service**~~

Reason: Consequential to completion of Agenda Item 1.14 at WRC-12.

DOCUMENT WAC/084(28.07.10)

WAC Informal Working Group (IWG)-1

Modifications to NTIA's Proposal on
Agenda Item 1.9

Preparation for ITU Radiocommunication Conferences

UNITED STATES OF AMERICA
DRAFT PROPOSALS FOR THE WORK OF THE CONFERENCE

Agenda Item 1.9: to revise frequencies and channeling arrangements of Appendix **17** to the Radio Regulations, in accordance with Resolution **351 (Rev.WRC-07)**, in order to implement new digital technologies for the maritime mobile service

Background Information: The introduction of new data exchange technologies[1] in the HF maritime mobile service is providing an alternative to narrow-band direct printing (NBDP) technology. According to the International Maritime Organization, current NBDP applications include maritime safety information (MSI) broadcasts, ship reporting, weather forecasts and business communications (e.g. fishing fleets). Since alternative data communication technologies for these functions are available, NBDP equipment use is in rapid decline. However, NBDP telegraphy remains essential for distress communications in the polar regions (sea area A4) where geostationary satellites cannot provide coverage and other terrestrial means of communication are unreliable.

The global maritime community intends to improve efficiency and flexibility in the HF maritime mobile service spectrum by designating certain assignable frequencies in Appendix **17** to data transmissions using new data exchange technologies. This proposal would:

1) significantly reduce the number of NBDP frequencies to those actually used for NBDP telegraphy and the GMDSS/NBDP core frequencies (Appendix **15**);
2) allow for the use of the current NBDP bands for digital data transmissions, subject to not claiming protection from nor causing harmful interference to other stations in the maritime mobile service using NBDP technology until December 31, 2014;
3) make new digital data transmissions primary in the current NBDP bands effective January 1, 2015, though stations could use NBDP technology subject to not claiming protection from nor causing harmful interference to stations in the maritime mobile service using digital data transmissions;
4) re-designate the frequencies currently assignable to stations using facsimile, wide-band telegraphy and Morse telegraphy A1A/A1B to stations using data transmission without a transition period;
5) neither specify nor limit the bandwidth of new digital transmissions;

[1] See Recommendation ITU-R M.1798 *Characteristics of HF radio equipment for the exchange of digital data and electronic mail in the maritime mobile service*

6) allow stations using wide-band telegraphy or Morse telegraphy A1A/A1B to continue on their currently assigned frequencies subject to not claiming protection from nor causing harmful interference to stations in the maritime mobile service using digital data transmissions;

7) not modify Appendix **25** radiotelephony bands, but would allow for the use of digitally modulated emissions ~~digital data transmissions~~ in the radiotelephony bands in accordance with the Appendix **25** allotment plan; and

8) provide some flexibility to administrations in portions of the bands 4 MHz, 6 MHz and 8 MHz to assign new simplex radiotelephony frequencies in accordance with No. **52.177**, subject to not claiming protection from stations **in** the maritime mobile service using digital data transmissions.

Proposal:

MOD USA/AI 1.9/1

APPENDIX 17 (REV.WRC-~~03~~12)

Frequencies and channelling arrangements in the high-frequency bands for the maritime mobile service

(See Article **52**)

PART A – Table of subdivided bands (WRC-~~03~~12)

In the Table, where appropriate[1], the assignable frequencies in a given band for each usage are:

– indicated by the lowest and highest frequency, in heavy type, assigned in that band;

– regularly spaced, the number of assignable frequencies (*f.*) and the spacing in kHz being indicated in italics.

1 Within the non-shaded boxes.

Table of frequencies (kHz) to be used in the band between 4 000 kHz and 27 500 kHz allocated exclusively to the maritime mobile service

Band (MHz)	**4**	**6**	**8**	**12**	**16**	**18/19**	**22**	**25/26**
Limits (kHz)	4 063	6 200	8 195	12 230	16 360	18 780	22 000	25 070
Frequencies assignable to ship stations for oceanographic data transmission *c)*	**4 063.3** to **4 064.8** *6 f. 0.3 kHz*							
Limits (kHz)	4 065	6 200	8 195	12 230	16 360	18 780	22 000	25 070
Frequencies assignable to ship stations for telephony, duplex operation *a) i) hh)*	**4 066.4** to **4 144.4** *27 f. 3 kHz*	**6 201.4** to **6 222.4** *8 f. 3 kHz*	**8 196.4** to **8 292.4** *33 f. 3 kHz*	**12 231.4** to **12 351.4** *41 f. 3 kHz*	**16 361.4** to **16 526.4** *56 f. 3 kHz*	**18 781.4** to **18 823.4** *15 f. 3 kHz*	**22 001.4** to **22 157.4** *53 f. 3 kHz*	**25 071.4** to **25 098.4** *10 f. 3 kHz*
Limits (kHz)	4 146	6 224	8 294	12 353	16 528	18 825	22 159	25 100

Table of frequencies (kHz) to be used in the band between 4 000 kHz and 27 500 kHz allocated exclusively to the maritime mobile service (*continued*)

Band (MHz)	**4**	**6**	**8**	**12**	**16**	**18/19**	**22**	**25/26**
Limits (kHz)	4 146	6 224	8 294	12 353	16 528	18 825	22 159	25 100
Frequencies assignable to ship stations and coast stations for telephony, simplex operation *a) hh)*	**4 147.4** to **4 150.4** *2 f. 3 kHz*	**6 225.4** to **6 231.4** *3 f. 3 kHz*	**8 295.4** to **8 298.4** *2 f. 3 kHz*	**12 354.4** to **12 366.4** *5 f. 3 kHz*	**16 529.4** to **16 547.4** *7 f. 3 kHz*	**18 826.4** to **18 844.4** *7 f. 3 kHz*	**22 160.4** to **22 178.4** *7 f. 3 kHz*	**25 101.4** to **25 119.4** *7 f. 3 kHz*
Limits (kHz)	4 152	6 233	8 300	12 368	16 549	18 846	22 180	25 121
~~Frequencies assignable to ship stations for wide-band telegraphy, facsimile and special transmission systems~~ Frequencies assignable to ship stations for data transmission *p) ee)*	~~4 154~~ to ~~4 170~~ ~~*5 f. 4 kHz*~~	~~6 235~~ to ~~6 259~~ ~~*7 f. 4 kHz*~~	~~8 302~~ to ~~8 338~~ ~~*10 f. 4 kHz*~~	~~12 370~~ to ~~12 418~~ ~~*13 f. 4 kHz*~~	~~16 551~~ to ~~16 615~~ ~~*17 f. 4 kHz*~~	~~18 848~~ to ~~18 868~~ ~~*6 f. 4 kHz*~~	~~22 182~~ to ~~22 238~~ ~~*15 f. 4 kHz*~~	~~25 123~~ to ~~25 159~~ ~~*10 f. 4 kHz*~~
Limits (kHz)	4 172	6 261	8 340	12 420	16 617	18 870	22 240	25 161.25
Frequencies assignable to ship stations for oceanographic data transmission *c) p)*		~~6 261.3 to 6 262.5 *5 f. 0.3 kHz*~~	~~8 340.3 to 8 341.5 *5 f. 0.3 kHz*~~	~~12 420.3 to 12 421.5 *5 f. 0.3 kHz*~~	~~16 617.3 to 16 618.5 *5 f. 0.3 kHz*~~		~~22 240.3 to 22 241.5 *5 f. 0.3 kHz*~~	
Limits (kHz)	4 172	6 262.75	8 341.75	12 421.75	16 618.75	18 870	22 241.75	25 161.25

Frequencies assignable to ship stations for data transmission *d) p) aa) bb) cc)*								
Limits (kHz)	4 175.25	6 266.25	8 341.75	12 421.75	16 618.75	18 870	22 241.75	25 161.25
Frequencies (paired) assignable to ship stations for narrow-band direct-printing (NBDP) telegraphy and data transmission systems at speeds not exceeding 100 Bd for FSK and 200 Bd for PSK *d) j) ~~m) p)~~*	**4 172.56 to 4 181.578** *185 f. 0.5 kHz*	**6 2636.5 to 6 275.568.5** *25 f. 0.5 kHz*						
Limits (kHz)	4 178.25	6 268.75	8 341.75	12 421.75	16 618.75	18 870	22 241.75	25 161.25
Frequencies assignable to ship stations for data transmission *d) p) aa) bb) cc)*								
Limits (kHz)	4 181.75	6 275.75	8 341.75	12 421.75	16 618.75	18 870	22 241.75	25 161.25

Table of frequencies (kHz) to be used in the band between 4 000 kHz and 27 500 kHz allocated exclusively to the maritime mobile service (*continued*)

Band (MHz)	**4**	**6**	**8**	**12**	**16**	**18/19**	**22**	**25/26**
Limits (kHz)	4 181.75	6 275.75	8 341.75	12 421.75	16 618.75	18 870	22 241.75	25 161.25
~~Calling frequencies assignable to ship stations for A1A or A1B Morse telegraphy~~ Frequencies assignable to ship stations for data transmission *~~e)~~ p) m)*								
Limits (kHz)	4 186.75	6 280.75	8 341.75	12 421.75	16 618.75	18 870	22 241.75	25 161.25
~~Frequencies (paired) assignable to ship stations for NBDP telegraphy and data transmission systems at speeds not exceeding 100 Bd for FSK and 200 Bd for PSK~~ Frequencies assignable to ship stations for data transmission *d) ~~m)~~ p) aa) bb) cc)*		~~6 281~~ to ~~6 284.5~~ *~~8 f. 0.5 kHz~~*						
Limits (kHz)	4 186.75	6 284.75	8 341.75	12 421.75	16 618.75	18 870	22 241.75	25 161.25
~~Working frequencies assignable to ship stations~~	~~4 187~~ to	~~6 285~~ to	~~8 342~~ to	~~12 422~~ to	~~16 619~~ to		~~22 242~~ to	~~25 161.5~~ to

~~for A1A or A1B Morse telegraphy~~ ~~c) f)~~ Frequencies assignable to ship stations for data transmission ~~m)~~ p)	~~4 202~~ ~~31 f. 0.5 kHz~~	~~6 300~~ ~~31 f. 0.5 kHz~~	~~8 365.5~~ ~~48 f. 0.5 kHz~~	~~12 476.5~~ ~~110 f. 0.5 kHz~~	~~16 683~~ ~~129 f. 0.5 kHz~~		~~22 279~~ ~~75 f. 0.5 kHz~~	~~25 171~~ ~~20 f. 0.5 kHz~~
Limits (kHz)	4 202.25	6 300.25	8 365.75	12 476.75	16 683.25	18 870	22 279.25	25 171.25
~~Calling frequencies assignable to ship stations for A1A or A1B Morse telegraphy~~ Frequencies assignable to ship stations for data transmission ~~c)~~ p) m)								
Limits (kHz)	4 202.25	6 300.25	8 370.75	12 476.75	16 683.25	18 870	22 284.25	25 172.75
~~Working frequencies assignable to ship stations for A1A or A1B Morse telegraphy~~ Frequencies assignable to ship stations for data transmission ~~e) f)~~ p) m)			~~8 371~~ to ~~8 376~~ ~~11 f. 0.5 kHz~~					
Limits (kHz)	4 202.25	6 300.25	8 376.25	12 476.75	16 683.25	18 870	22 284.25	25 172.75

Table of frequencies (kHz) to be used in the band between 4 000 kHz and 27 500 kHz allocated exclusively to the maritime mobile service (*continued*))

Band (MHz)	**4**	**6**	**8**	**12**	**16**	**18/19**	**22**	**25/26**
Limits (kHz)	4 202.25	6 300.25	8 376.25	12 476.75	16 683.25	18 870	22 284.25	25 172.75
Frequencies (paired) assignable to ship stations for NBDP telegraphy and data transmission systems at speeds not exceeding 100 bauds for FSK and 200 bauds for PSK d) j) ~~m) p)~~			**8 376.5** to **8 39678.5** *405 f. 0.5 kHz*	~~**12 477** to **12 549.5** 146 f. 0.5 kHz~~	~~**16 683.5** to **16 733.5** 101 f. 0.5 kHz~~	~~**18 870.5** to **18 892.5** 45 f. 0.5 kHz~~	~~**22 284.5** to **22 351.5** 135 f. 0.5 kHz~~	~~**25 173** to **25 192.5** 40 f. 0.5 kHz~~
Limits (kHz)	4 202.25	6 300.25	8 378.75	12 476.75	16 683.25	18 870	22 284.25	25 172.75
Frequencies assignable to ship stations for data transmission d) p) aa) bb) cc)								
Limits (kHz)	4 202.25	6 300.25	8 396.25	12 517.25	16 693.25	18 892.75	22 351.75	25 192.75
Frequencies (paired) assignable to ship stations for NBDP telegraphy and data transmission systems at speeds not exceeding 100 bauds for FSK and 200 bauds for PSK d) j)				**12 517.5** to **12 522** *10 f. 0.5 kHz*	**16 693.5** to **16 696.5** *7 f. 0.5 kHz*			

Limits (kHz)	4 202.25	6 300.25	8 396.25	12 522.25	16 696.75	18 892.75	22 351.75	25 192.75
Frequencies assignable to ship stations for data transmission *d) p) aa) bb) cc)*								
Limits (kHz)	4 202.25	6 300.25	8 396.25	12 549.75	16 733.75	18 892.75	22 351.75	25 192.75
~~Calling frequencies assignable to ship stations for A1A or A1B Morse telegraphy~~)Frequencies assignable to ship stations for data transmission *m) p)*								
Limits (kHz)	4 202.25	6 300.25	8 396.25	12 554.75	16 738.75	18 892.75	22 351.75	25 192.75
~~Frequencies (paired) assignable to ship stations for NBDP telegraphy and data transmission systems at speeds not exceeding 100 bauds for FSK and 200 bauds for PSK~~ Frequencies assignable to ship stations for data transmission *aa) bb) cc) d) ~~m)~~ p)*				~~12 555~~ to ~~12 559.5~~ *~~10 f. 0.5 kHz~~*	~~16 739~~ to ~~16 784.5~~ *~~92 f. 0.5 kHz~~*			
Limits (kHz)	4 202.25	6 300.25	8 396.25	12 559.75	16 784.75	18 892.75	22 351.75	25 192.75

Table of frequencies (kHz) to be used in the band between 4 000 kHz and 27 500 kHz allocated exclusively to the maritime mobile service (*continued*)

Limits (kHz)	4 202.25	6 300.25	8 396.25	12 559.75	16 784.75	18 892.75	22 351.75	25 192.75
Frequencies (non paired) assignable to ship stations for ~~NBDP telegraphy and~~ data transmission systems ~~at speeds not exceeding 100 Bd for FSK and 200 Bd for PSK and for A1A or A1B Morse telegraphy (working)~~ *b) p) dd) m)*	~~4 202.5~~ to ~~4 207~~ *~~10 f. 0.5 kHz~~*	~~6 300.5~~ to ~~6 311.5~~ *~~23 f. 0.5 kHz~~*	~~8 396.5~~ to ~~8 414~~ *~~36 f. 0.5 kHz~~*	~~12 560~~ to ~~12 576.5~~ *~~34 f. 0.5 kHz~~*	~~16 785~~ to ~~16 804~~ *~~39 f. 0.5 kHz~~*	~~18 893~~ to ~~18 898~~ *~~11 f. 0.5 kHz~~*	~~22 352~~ to ~~22 374~~ *~~45 f. 0.5 kHz~~*	~~25 193~~ to ~~25 208~~ *~~31 f. 0.5 kHz~~*
Limits (kHz)	4 207.25	6 311.75	8 414.25	12 576.75	16 804.25	18 898.25	22 374.25	25 208.25
Frequencies assignable to ship stations for digital selective calling *k) l)*	**4 207.5** to **4 209** *4 f. 0.5 kHz*	**6 312** to **6 313.5** *4 f. 0.5 kHz*	**8 414.5** to **8 416** *4 f. 0.5 kHz*	**12 577** to **12 578.5** *4 f. 0.5 kHz*	**16 804.5** to **16 806** *4 f. 0.5 kHz*	**18 898.5** to **18 899.5** *3 f. 0.5 kHz*	**22 374.5** to **22 375.5** *3 f. 0.5 kHz*	**25 208.5** to **25 209.5** *3 f. 0.5 kHz*
Limits (kHz)	4 209.25	6 313.75	8 416.25	12 578.75	16 806.25	18 899.75	22 375.75	25 210

Limits (kHz)	4 209.25	6 313.75	8 416.25	12 578.75	16 806.25	19 680.25	22 375.75	26 100.25
Frequencies assignable to coast stations for data transmission *n) o) p) aa) bb) cc)*								
Limits (kHz)	4 213.75	6 317.75	8 416.25	12 619.75	16 816.75	19 703.25	22 443.75	26 120.75
Frequencies (paired) assignable to coast stations for NBDP and data transmission systems, at speeds not exceeding 100 Bd for FSK and 200 Bd for PSK *d) ~~n) o) p)~~*	**4 ~~209.5~~14** to **4 21915.5** *~~204~~ f. 0.5 kHz*	**6 3148** to **6 33019.5** *~~34~~ f. 0.5 kHz*	**8 416.5** to **8 ~~436~~18.5** *~~405~~ f. 0.5 kHz*	**12 ~~579~~620** to ~~12 656.5~~ **12 624** *~~1569~~ f. 0.5 kHz*	**16 ~~806.5~~17** to ~~16 902.5~~ **16 819.5** *~~1936~~ f. 0.5 kHz*	~~19 680.5~~ to ~~19 703~~ *~~46 f. 0.5 kHz~~*	~~22 376~~ to ~~22 443.5~~ *~~136 f. 0.5 kHz~~*	~~26 100.5~~ to ~~26 120.5~~ *~~41 f. 0.5 kHz~~*
Limits (kHz)	4 215.75	6 319.75	8 418.75	12 624.25	16 819.75	19 703.25	22 443.75	26 120.75
Frequencies assignable to coast stations for data transmission *d) p) aa) bb) cc)*								
Limits (kHz)	4 219.25	6 330.75	8 436.25	12 656.75	16 902.75	19 703.25	22 443.75	26 120.75
Frequencies assignable to coast stations for digital selective calling *l)*	**4 219.5** to **4 220.5** *3 f. 0.5 kHz*	**6 331** to **6 332** *3 f. 0.5 kHz*	**8 436.5** to **8 437.5** *3 f. 0.5 kHz*	**12 657** to **12 658** *3 f. 0.5 kHz*	**16 903** to **16 904** *3 f. 0.5 kHz*	**19 703.5** to **19 704.5** *3 f. 0.5 kHz*	**22 444** to **22 445** *3 f. 0.5 kHz*	**26 121** to **26 122** *3 f. 0.5 kHz*
Limits (kHz)	4 221	6 332.5	8 438	12 658.5	16 904.5	19 705	22 445.5	26 122.5

Table of frequencies (kHz) to be used in the band between 4 000 kHz and 27 500 kHz allocated exclusively to the maritime mobile service (*end*)

Band (MHz)	**4**	**6**	**8**	**12**	**16**	**18/19**	**22**	**25/26**
Limits (kHz)	4 221	6 332.5	8 438	12 658.5	16 904.5	19 705	22 445.5	26 122.5
Frequencies assignable to coast stations for wide-band ~~and A1A or A1B Morse telegraphy~~, facsimile, special and data transmission systems and direct-printing telegraphy systems *m) p) ee) ff)*								
Limits (kHz)	4 351	6 501	8 707	13 077	17 242	19 755	22 696	26 145
Frequencies assignable to coast stations for telephony, duplex operation *a) hh)*	**4 352.4** to **4 436.4** *29 f. 3 kHz*	**6 502.4** to **6 523.4** *8 f. 3 kHz*	**8 708.4** to **8 813.4** *36 f. 3 kHz*	**13 078.4** to **13 198.4** *41 f. 3 kHz*	**17 243.4** to **17 408.4** *56 f. 3 kHz*	**19 756.4** to **19 798.4** *15 f. 3 kHz*	**22 697.4** to **22 853.4** *53 f. 3 kHz*	**26 146.4** to **26 173.4** *10 f. 3 kHz*

Limits (kHz)	4438	6525	8815	13200	17410	19800	22855	26175

NOC USA/AI 1.9/2

Note *a)*

Reasons: Maintains the frequency bands dedicated for the radiotelephony simplex operation.

SUP USA/AI 1.9/3

Note *b)*

Reasons: After the entry into force date of 1 January 2015, Section III, Part B this note will no longer be required.

NOC USA/AI 1.9/4

Note c) and *d)*.

Reasons: Maintains frequencies for transmission of oceanographic data and paired frequencies for NBDP.

SUP USA/AI 1.9/5

Note *e)*

Reasons: Maintains frequencies for ship stations using A1A Morse telegraphy not travelling faster than 40 Bd

SUP USA/AI 1.9/6

Note *f)*

Reasons: Part B, Section V is proposed for suppression.

SUP USA/AI 1.9/7

Note *g)*

Reasons: Part B, Section IV is proposed for suppression.

NOC USA/AI 1.9/8

Note *i)* to *l)*

Reasons: Maintains paired frequencies for digital selective calling.

MOD USA/AI 1.9/9

Note *m)* Frequencies from these frequency bands may also be used for A1A or A1B Morse telegraphy ~~(working) (see Part B, Section II).~~subject to not claiming protection from other stations, in the maritime mobile service .

Reasons: Assigns additional frequencies for A1A or A1B Morse telegraphy subject to protection of the maritime mobile service using new digital technologies.

NOC USA/AI 1.9/10

Note *n)* and *o)*

Reasons: No change is proposed to frequencies used for maritime safety information (MSI) and Navigational Telex (NAVTEX).

MOD USA/AI 1.9/11

Note *p)* These sub-bands, except the frequencies referred to in Notes *i), j), n)* and *o)*, may be used for for maritime mobile service (e.g. as described in Recommendation ITU-R M.1798)~~the initial testing and the possible future introduction within the maritime mobile service of new digital technologies. Stations using these sub-bands for this purpose shall not cause harmful interference to, and shall not claim protection from, other stations operating in accordance with Article 5~~. .

Reasons: Implements the channels for new digital technologies in the frequency bands designated for wide-band telegraphy, and facsimile without transition a period.

ADD USA/AI 1.9/12

Note *aa)* Until 1 January 2015, these bands may be used by narrow-band direct printing applications.

Reasons: Allows for transition period for frequencies employing NBDP to transmission of new digital technologies subject to not causing interference into NBDP.

ADD USA/AI 1.9/13

Note *bb)* After 1 January 2015, these bands may be used by narrow-band direct printing applications by the administrations, subject to not claiming protection from other stations, .

Reasons: Allows for continued use of NBDP after transition date subject to not claiming protection from the maritime mobile service.

ADD USA/AI 1.9/14

Note *cc)* After 1 January 2015, the administrations who make assignments to stations using affected administrations.

Reasons: Removes the use of single channel NBDP after 1 January 2015 to allow the introduction of new HF data exchange technologies into the maritime mobile service.

ADD USA/AI 1.9/15

Note *dd)* These bands may be used by narrow-band direct printing applications by the administrations, subject to not claiming protection from other stations.

Reasons: Removes the use of single channel NBDP after 1 January 2015 to allow the introduction of new HF data exchange technologies into the maritime mobile service.

ADD USA/AI 1.9/16

Note *ee)* Frequencies from these bands may be used for wide-band telegraphy, facsimile, A1A Morse telegraphy and special data transmission on condition that harmful interference is not caused to and protection is not claimed from stations, in the maritime mobile .

Reasons: Removes the use of single channel NBDP after 1 January 2015 to allow the introduction of new HF data exchange technologies into the maritime mobile service.

ADD USA/AI 1.9/17

Note *ff)* The bands 4 345 – 4 351 kHz, 6 495 – 6 501 kHz, 8 701 – 8 707 kHz may be used for simplex (single-sideband) telephone operation (regularly spaced by 3 kHz), in accordance with provision No. **52.177**, subject to not claiming protection from other stations in the maritime mobile service .

Reasons: Removes the use of single channel NBDP after 1 January 2015 to allow the introduction of new HF data exchange technologies into the maritime mobile service.

ADD USA/AI 1.9/18

Note *gg)* When assigning frequencies on the bands 4 202.25 – 4 207.25 kHz, 6 300.25 – 6 311.75 kHz, 8 396.25 – 8 414.25 kHz, 12 559.75 – 12 576.75 kHz and 16 784.75 – 16 804.25 kHz, administrations shall take all necessary precautions to not cause interference on the DSC distress frequencies 4 207.5 kHz, 6 312 kHz, 8 414.5 kHz, 12.577 kHz and 16 804.5 kHz.

Reasons: Provides protection for DSC distress frequencies.

ADD USA/AI 1.9/19

Note *hh)* The bands 4 066.4 – 4 150.4 kHz, 4 352.4 – 4 436.4 kHz, 6 201.4 – 6 231.4 kHz, 6 502.4 – 6 523.4 kHz, 8 196.4 – 8 298.4 kHz, 8 708.4 – 8 813.4 kHz, 12 231.4 – 12 366.4 kHz, 13 078.4 – 13 198.4 kHz, 16 361.4 – 16574.4 kHz, 17 243.4 – 17 408.4 kHz, 18 781.4 – 18 844.4 kHz,-19 756.4 -19 798.4 kHz, 22 001.4 – 22 178.4 kHz, 22 697.4 – 22 853.4 kHz, 25 071.4 – 25 119.4 kHz, 26 146.4 – 26 173.4 kHz may be used, in accordance with Appendix **25**

allotment plan, for digitally modulated emissions on condition that harmful interference is not caused to and protection is not claimed from other stations in the maritime mobile service using radiotelephony operations. The digitally modulated emissions may be used provided that their occupied bandwidth does not exceed 2 800 Hz, it is situated wholly within one frequency channel and the peak envelope power of coast stations does not exceed 10 kW and the peak envelope power of ship stations does not exceed 1.5 kW for per channel.

~~for digital data transmissions on condition that harmful interference is not caused to and protection is not claimed from other stations, using radiotelephony operations, in the maritime mobile service.~~

Reasons: Allows additional use for digitally modulated emission s~~digital data transmissions~~ in the RR Appendix **25** bands.

PART B – Channelling arrangements (WRC-~~07~~12)

Section II – Narrow-band direct-printing telegraphy (paired frequencies)

MOD USA/AI 1.9/20

TABLE 17a

Table of frequencies for two-frequency operation by coast stations (kHz)

Reasons: Providing a table number will help distinguish this table from new the table (17b) that comes into force after January 1, 2015.

NOC USA/AI 1.9/21

Channel No.	4 MHz band[1]		6 MHz band[3]		8 MHz band[4]	
	Transmit	Receive	Transmit	Receive	Transmit	Receive

Reasons: There are no proposed changes to the table (17a).

ADD USA/AI 1.9/22

TABLE 17b (WRC-12)

Table of frequencies for two-frequency operation by coast stations (kHz)

Channel No.	4 MHz band [1]		6 MHz band		8 MHz band	
	Transmit	Receive	Transmit	Receive	Transmit	Receive
1					8 376.5 [2]	8 376.5 [2]
2					8 417	8 377
3					8 417.5	8 377.5
4					8 418	8 378
5					8 418.5	8 378.5
6						
7						
8	4 214	4 176	6 318	6 266.5		
9	4 214.5	4 176.5	6 318.5	6 267		
10	4 215	4 177	6 319	6 267.5		
11	4 177.5 [2]	4 177.5 [2]	6 268 [2]	6 268 [2]		
12	4 215.5	4 178	6 319.5	6 268.5		
13						

[1] Ship stations may use the coast station receiving frequencies for transmitting A1A or A1B Morse telegraphy (working), with the exception of channel No. 11 (see Appendix **15**).

[2] For the conditions of use of this frequency, see Article **31**.

TABLE 17b (end)

Channel No.	12 MHz band		16 MHz band	
	Transmit	Receive	Transmit	Receive
21			16 817	16 693.5
22			16 817.5	16 694
23			16 818	16 694.5
24			16 695 [2]	16 695 [2]
25			16 818.5	16 695.5
26			16 819	16 696
27			16 819.5	16 696.5
82	12 620	12 517.5		
83	12 620.5	12 518		
84	12 621	12 518.5		
85	12 621.5	12 519		
86	12 622	12 519.5		
87	12 520 [2]	12 520 [2]		
88	12 622.5	12 520.5		
89	12 623	12 521		
90	12 623.5	12 521.5		
91	12 624	12 522		

Reasons: New Table 17b allows for introduction of new HF data exchange technologies into the maritime mobile service. Numbering for the other table (17a) in Section II Part B helps distinguish between the two tables in Appendix **17**.

SUP USA/AI 1.9/23

Section III – Narrow-band direct-printing telegraphy (non-paired frequencies)

Reasons: After the entry into force date of 1 January 2015, this section will no longer be needed and will be suppressed. Article **59** references the new Resolution **XYZ.NBDP**, which abrogates this suppression.

SUP USA/AI 1.9/24

Section IV – Morse telegraphy (calling)

Reasons: Removes the use of Morse telegraphy to allow the introduction of new HF data exchange technologies into the maritime mobile service.

SUP USA/AI 1.9/25

Section V – Morse telegraphy (working)

Reasons: Removes the use of Morse telegraphy to allow the introduction of new HF data exchange technologies into the maritime mobile service.

ADD USA/AI 1.9/26

RESOLUTION XYZ.NBDP (WRC-12)

Application and abrogation of certain provisions of the Radio Regulations as revised by WRC-12

The World Radiocommunication Conference (Geneva, 2012),

considering

a) that this conference has adopted a partial revision to the Radio Regulations (RR) in accordance with its terms of reference which will enter into force on 1 January 2014;

b) that some of the provisions, as amended by this conference, need to apply as of a later date;

c) that as a general rule, new and revised Resolutions and Recommendations enter into force at the time of signing of the Final Acts of a conference;

d) that as a general rule, Resolutions and Recommendations which a WRC has decided to suppress are abrogated at the time of the signing of the Final Acts of the conference,

resolves

1 that, as of 1 January 2015, the following provisions of the RR, which are suppressed by this Conference, shall be abrogated: Table 17a of Appendix **17**, Section III of Part B of Appendix **17**;

2 that, as of 1 January 2015, the following provisions, as established by this Conference, shall enter into force: Table 17b of Appendix **17**;

Reasons: The Resolution XYZ.NBDP allows for provisions in Appendix 17 to enter into force on the agreed date of 1 January, 2015.

MOD USA/AI 1.9/27

ARTICLE 59

Entry into force and provisional application of the Radio Regulations (WRC-2000)

59.XX The other provisions of these Regulations, as revised by WRC-12, shall enter into force on 1 January 2014, with the following exceptions: (WRC-12)

59.YY – the revised provisions for which other effective dates of application are stipulated in Resolutions:

XYZ.NBDP (WRC-12)

Reasons: This reference to Resolution XYZ.NBDP allows for the transition date for the entry into force of provisions in Appendix 17 and suppress other provisions.

SUP USA/AI 1.9/28

RESOLUTION 351 (Rev.WRC-07)

Review of the frequency and channel arrangements in the HF bands allocated to the maritime mobile service contained in Appendix 17 with a view to improving efficiency through the use of new digital technology by the maritime mobile service

Reasons: All of the work related to this Resolution is complete.

DOCUMENT WAC/085(28.07.10)

UNITED STATES OF AMERICA

DRAFT PROPOSALS FOR THE WORK OF THE CONFERENCE

Agenda 1.4 To consider, based on the results of ITU-R studies, any further regulatory measures to facilitate introduction of new aeronautical mobile (R) service(AM (R)S) systems in the bands 112-117.975 MHz, 960-1164 MHz and 5000-5030 MHz in accordance with Resolution 413 (Rev. WRC-07), 417 (WRC-07, and 420 WRC-07).

Background

WRC-07 adopted this agenda item in accordance with the Resolutions referenced above. WP-5B is the lead ITU-R Working Party for this agenda item. It has carried out studies in accordance with provisions of these resolutions. One of the main focuses of these studies has been to determine the amount of spectrum required to support the newly-proposed service.

The RNSS allocations 5000-5030 MHz were newly allocated to the Radio-Navigation Satellite Service (RNSS) at WRC-03. They were part of a set of actions that increased the amount of spectrum available to the RNSS. Since WRC-03, there has been a large increase in the ITU filings for RNSS bands. Further, the anticipated launch of new RNSS systems will completely use all available RNSS allocations at lower frequencies. In addition there has been a large increase in the number and type of services provided by the RNSS. Therefore, the availability of the 5 GHz RNSS allocations has increased in importance as the basis for providing for the future growth of the RNSS. The importance of the availability of the 5 GHz RNSS allocations has been recognized by the provisions of Resolution **420**.

ITU-R Working Party (SG 5B) completed its studies under Agenda Item 1.4 consistent with Resolution **420.** With regard to the 5010-5030 MHz band, given the available information on AM(R)S operational environment and RNSS signal characteristics there was not sufficient information to conclude on sharing studies therefore no allocation to AM(R)S is proposed in this band. Based on these studies the US proposes to a NOC in the 5010-5030 MHz band. The U.S. may have a companion proposal under this agenda item regarding the 5000-5010 MHz band.

Proposal:

ARTICLE 5

Frequency Allocations

Section IV – Table of Frequency Allocations

USA/AI 1.4/1
NOC

Allocation to services		
Region 1	**Region 2**	**Region 3**
5010-5030	AERONAUTICAL RADIONAVIGATION RADIONAVIGATION-SATELLITE (space-to-Earth) (space-to-space) 5.328B 5.443B 5.367	

Reason: To ensure protection of RNSS systems.

DOCUMENT WAC/086(28.07.10)

WAC Informal Working Group (IWG)-1

UNITED STATES OF AMERICA

DRAFT PROPOSALS FOR THE WORK OF THE CONFERENCE

Agenda Item 1.10: to examine the frequency allocation requirements with regard to operation of safety systems for ships and ports and associated regulatory provisions, in accordance with Resolution **357 (WRC-07)**

Background Information:

Simplex Use of Duplex Channels

The Radio Regulations Board approved a Rule of Procedure after WRC-07 regarding simplex use in Appendix **18**, effectively implementing this part of the enclosed proposal. WRC-07 revised Appendix **18** to allow simplex use of channels 01, 07, 19, 20, 21, 60, 66, 78, 79, 80, and 81 subject to coordination with affected administrations (Note *m)*. However, WRC-07 omitted placing an "x" in the "Single frequency" column against affected channels in Appendix **18**, thereby unintentionally omitting this from the Radio Regulations.

Expansion of optional simplex use of duplex channels (add more "x" designations to duplex channels) in Appendix **18** will provide further benefits to maritime radiocommunications by relieving current congestion in the VHF maritime mobile bands in accordance with Recommendation ITU-R M.1084-4. Report ITU-R M.2010-1, a study on efficiency in the VHF maritime mobile band, concluded that this spectrum efficiency option expands the number of usable communications channels with the minimum of compatibility issues. The analogue VHF radio on board vessels that travel internationally would have access to both the original two-frequency channels and their single-frequency derivatives, thus allowing port operations on two or single frequency channels.

Channels for E-Navigation (e-Nav)

Designating in Appendix **18** six channels for E-Navigation (eNAV)*data exchange responds to the International Maritime Organization's (IMO) E-Navigation initiatives for future VHF data exchange. Technical studies are ongoing within the International Association of Marine Aids to Navigation and Lighthouse Authorities (IALA) E-Navigation Committee with close coordination between IALA and the ITU-R. Recommendation ITU-R M.1842-1 provides examples of potential VHF E-Navigation systems and recommends the use of Appendix **18** channels for the exchange of data for E-Navigation to support future digital technologies in the maritime mobile service VHF bands. The ITU-R summarizes E-Navigation spectrum requirements in a liaison statement to IALA (5B/417 Annex 28) and proposes continued cooperative efforts between the two maritime organizations. Adding a new Note *s*) to the table of Appendix **18** and to the section "Notes referring to the Table" supports the identification six channels (24, 25, 26, and 27) for potential E-Navigation systems.

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* eNAV – From IMO: "E-Navigation is the harmonised creation, collection, integration, exchange and presentation of maritime information onboard and ashore by electronic means to enhance berth to berth navigation and related services, for safety and security at sea and protection of the marine environment".

Protection of Channels AIS 1 and AIS 2

Protecting the Automatic Identification System channels (AIS 1 and AIS 2) from harmful interference would ensure the future safety of maritime mobile radiocommunications for these channels. Report ITU-R M.2122 "EMC assessment of shore-based electronic navigation (eNAV) infrastructure and new draft standards for data exchange in the VHF maritime mobile band (156-174 MHz)" describes the susceptibility of AIS 1 and AIS 2 to interference from the adjacent duplex channels. This Report also provides technical guidelines for the electromagnetic compatibility between AIS and systems that use channels 27 and 28. Thus, modifying Note *c)* in the section "Notes referring to the Table" of Appendix **18** is necessary for protecting AIS.

Non-Application of Channel Interleaving

Recommendation ITU-R M.1084-4 describes the advantages of increased spectrum efficiency by channel interleaving 12.5 kHz channels with 25 kHz channels. The current Appendix **18** excludes maritime mobile service safety channels from 12.5 kHz channel interleaving (See Note *e)*). By modifying Note *e*) in the section "Notes referring to the Table" of Appendix **18**, the non-application of channel interleaving extends to the exclusion of AIS 1 and AIS 2, and the proposed channels for E-Navigation discussed above.

Long-Range Detection of AIS

Taking into account the studies performed within ITU-R, especially the Report ITU-R M.2169 and the Recommendation ITU-R M. 1371-4, it is proposed to identify the channels 75 and 76 of the Appendix 18 for the purpose of improving the satellite detection of AIS Message 27. To do so, a primary allocation to the mobile satellite service (Earth-to-space) is proposed via a footnote in regards to the frequencies of channels 75 and 76 in Article 5. ~~Recommendation ITU-R M.1371-3 provides technical and operational characteristics for designing systems intended for long-range detection of AIS.~~ Additionally, m~~M~~odifying Note *n*) in the section "Notes referring to the Table" of Appendix 18 identifies the use of AIS for long-range detection for channels 75 and 76 and ensures the protection of these channels from harmful interference.

These revisions will provide spectrum for the implementation of the latest version of Recommendation ITU-R M.1371-4 for improved satellite detection, increasing reliability for greater probability of vessel tracking. The frequencies used are already allocated to the Maritime mobile service

A primary allocation in the maritime mobile service and a secondary allocation for aeronautical mobile service in the bands 161.9625-161.9875 MHz and 162.0125-162.0375 MHz are proposed. A secondary allocation to the mobile-satellite service (Earth-to-space) in the Table of Frequency Allocations (Article 5) is also proposed. Consequentially, Footnote No. 5.227A will be suppressed. This will provide additional protection for AIS frequencies which are used for search and rescue, safety of navigation, ship movement and tracking of vessels, as well as use by search and rescue aircraft authorized by Appendix 18 of the Radio Regulations and the latest version of Recommendation ITU-R M.1371-4.