

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554**

In the Matter of)
)
WRC-12 ADVISORY COMMITTEE) **IB Docket No. 04-286**

To: The Commission

**COMMENTS OF ARRL,
THE NATIONAL ASSOCIATION FOR AMATEUR RADIO**

ARRL, the national association for Amateur Radio, formally known as the American Radio Relay League, Incorporated (ARRL), by counsel and pursuant to the *Public Notice*, DA 11-447, released March 10, 2011 (the Public Notice), hereby respectfully submits its comments regarding proposals for the 2012 World Radiocommunication Conference adopted by the WRC-12 Advisory Committee or provided to the Commission by the National Telecommunications Information Administration (NTIA).

I. The NTIA Proposal To Retain Resolutions 641 And 642 Should Be Adopted.

1. Agenda Item 4 calls on the next World Radiocommunication Conference “to review the resolutions and recommendations of previous conferences with a view to their possible revision, replacement or abrogation [.]”¹ Resolution 95 defines the scope and criteria of this review, particularly for Resolutions not related to any Agenda Item of the present Conference.²

¹ Agenda Item 4, Resolution 805 (WRC-07) (Agenda for the 2011 World Radiocommunication Conference) (conference subsequently moved to 2012).

² Resolution 95 (Rev. WRC-07), particularly *resolves* 2.

2. In Document WAC/109,³ NTIA proposes no change (NOC) to a number of Resolutions, including Resolutions 641, “Use of the frequency band 7 000-7 100 kHz,” and 642, “Relating to the bringing into use of earth stations in the amateur-satellite service.” Both of these Resolutions continue to have a necessary purpose for the amateur and amateur-satellite services, and ARRL supports their retention, as NTIA suggests.

II. The NTIA Proposal For A Future Broadband Wireless Access Agenda Item Is Preferable To Either of the WAC Views.

3. Three proposals for a future broadband wireless access (BWA) Agenda Item are made in the documents under consideration. In Document WAC/115, NTIA proposes to invite the next WRC to study spectrum in the range 400-4 400 MHz for broadband wireless access if existing fixed and mobile service allocations are found to be insufficient.⁴ In Document WAC/128, two proposals are presented. In Proposal A, a consortium of BWA private sector interests invites study between 400 and 6 000 MHz.⁵ In Proposal B, satellite and radionavigation interests suggest that only certain segments in the range 400-3400 MHz be considered.⁶

4. ARRL understands that given the ambitious United States goals for improvements to wireless broadband capabilities, as exemplified in the FCC’s National Broadband Plan and the NTIA’s responses thereto, a United States proposal for a future Agenda Item on this topic is a certainty. The likelihood of success of such an Agenda Item is enhanced by a reasoned scope. Of the three proposals before the Commission, the NTIA’s best sets a scope conducive to the issue at hand.

³ Letter from Karl B. Nebbia to Mindel De La Torre, November 17, 2010.

⁴ Letter from Karl B. Nebbia to Mindel De La Torre, January 28, 2011, particularly *resolves 2*.

⁵ Document WAC/128, Proposal A, particularly *resolves 1 and 4*.

⁶ *Id.*, Proposal B, particularly *resolves 2 and 5*.

5. Both industry proposals are deficient in various respects. Proposal A makes vague references to BWA spectrum needs at “lower frequency bands” and “higher frequencies,” without definition or qualification.⁷ Proposal A’s suggestion to investigate frequencies up to 6 000 MHz is unprecedented in the course of domestic rulemaking and planning on this issue. Without more justification, Proposal A ought to be discarded.

6. Proposal B is objectionable because of the significant swaths carved out by various private sector interests. Such carve-outs are premature at this time, and would limit the options of the next WRC to the point that obtaining United States goals would be difficult. The amateur and amateur-satellite services do not seek carve-outs at this time for this reason, and the efforts of other services to do so at this stage should not be permitted. Carve-outs at this stage will result in an Agenda Item with insufficient options to attain United States goals.

7. At this stage, the likelihood of United States goals being achieved is maximized if the range of spectrum under consideration is reasoned and justifiable and all frequencies within that range are candidates for study. Among the three proposals, NTIA’s comes closest to these objectives. ARRL supports using the NTIA proposal as the baseline for the forthcoming reconciliation process, and urges that amendments to it only be made to the extent they are technically justified and advance United States interests.

⁷ *Id.*, Proposal A, *recognizing j and k.*

III. The FCC Position on the NTIA's Nanosatellite Proposal Should Be Reserved At This Time.

8. Very recently, the NTIA has proposed a future Agenda Item addressing nanosatellites for WRC-19.⁸ This proposal seeks to consider general regulatory matters for nanosatellites and picosatellites and, pending results of ITU-R studies, identify up to 10 MHz for command, control, and data relay for nanosatellites and picosatellites in the 400-2 025 MHz range. IWG-3 was unable to reach consensus on this proposal at its lone meeting between the date of the letter and the March meeting of the WAC.

9. The amateur-satellite service is a pioneering user of nanosatellite and picosatellite technology, and ARRL welcomes the recognition that the existing notification protocols could be improved given the usual status of these small satellites as secondary payloads. ARRL also welcomes the acknowledgement that some existing research-oriented nanosatellite and picosatellite projects, while accommodated within the amateur-satellite service, push the limit of what is appropriate for the service.⁹ Nevertheless, some of the concerns raised in IWG-3, particularly with respect to the allocation portion of the proposal, were substantial.

10. ARRL will welcome a proposal seeking to remove regulatory hurdles to a technology heavily used by the amateur-satellite service. However, caution should be exercised in crafting such a proposal to ensure that barriers to the technology do not increase. ARRL also suggests that separation of the regulatory and spectrum aspects of this proposal may facilitate its advancement, perhaps even at WRC-15, rather than WRC-19. In short, ARRL is cautiously receptive to the NTIA proposal, but asks that the FCC

⁸ Document WAC/117, Letter from Karl B. Nebbia to Mindel De La Torre, February 23, 2011.

⁹ *Id.*, Background Information section, final paragraph.

reserve its position at this time so that WAC participants may attempt to come to a consensus by the final WAC meeting in April.

IV. The WAC Edits To The NTIA's GMDSS Proposal For WRC-15 Are The Minimum Necessary To Advance United States And Inter-American Positions For WRC-12.

11. The Commission has before it two proposals under Agenda Item 8.2 for a future Agenda Item for GMDSS modernization and e-navigation in the maritime services. Document WAC/112,¹⁰ proposed by the NTIA, and Document WAC/123,¹¹ agreed by the WAC after negotiations between ARRL and RTCM in IWG-1, are substantially similar. Both proposals seek to advance GMDSS modernization in existing maritime allocations.

12. As the Commission is aware, the United States and Inter-American Proposals for an affirmative resolution of WRC-12 Agenda Item 1.23 and the use of the 495-505 kHz segment for high speed data broadcasts under Agenda Item 1.10 were the result of significant negotiation and compromise among United States Amateur Radio and maritime interests. ARRL is grateful for the FCC's facilitation of these negotiations, and we are fully supportive of the outcome for Agenda Item 1.23, proposing a secondary allocation to the amateur service at 461-469 and 471-478 kHz. While this is a substantial departure from ARRL's initial position, we recognize it is at least an equally substantial departure from the initial position of United States maritime interests. ARRL is pleased with the outcome, and will continue to advocate for this approach through WRC-12.

13. Nevertheless, ARRL is constrained to object to the NTIA proposal on a narrow but significant ground. While the United States position on Agenda Item 1.23 has been resolved, maritime interests outside the United States have objected (and, on

¹⁰ Letter from Karl B. Nebbia to Mindel De La Torre, January 12, 2011.

¹¹ "IWG-1 Comments on NTIA Proposal on Agenda Item 8.2 on Maritime Issue" (adopted March 8, 2011).

information and belief, continue to object) to an affirmative outcome on Agenda Item 1.23 precisely because GMDSS modernization and e-navigation implementation is being contemplated in the future. Significantly, the draft International Maritime Organization position on Agenda Item 1.23 cites future GMDSS requirements as a reason for opposing a secondary allocation to the amateur service:

With respect to the band 415 kHz to 526.5 kHz, under Agenda item 1.10, IMO is developing new requirements (1) for the promulgation of additional security-related information, **(2) for the implementation of e-navigation and (3) in reviewing the elements and procedures of the GMDSS.** Due to the technology today, these systems will not be operated manually and automatic transmissions can be carried out at any time, if required. Interference by transmissions from services with secondary status would prevent reception of information from the primary user.

Therefore, IMO has concerns that, based on existing studies, a secondary allocation for the amateur service will cause harmful interference and recommends that this allocation is not made.¹²

14. The draft IMO position ignores the fact that maritime interests have had **nearly four years** to characterize contemplated systems for evaluation under Agenda Item 1.23. Outside of frequencies at 495 kHz and above, they have failed to do so, whether under the auspices of WRC-12 Agenda Item 1.10 or in any other proceeding. IMO's argument is essentially that no allocation should be made because they need more time to figure out with what applications to fill the entirety of 415-526.5 kHz. ARRL suggests that maritime interests have had ample time and opportunity to consider their use of 415-526.5 kHz, have described what they need and can technically justify, and that WRC-12 Agenda Items 1.10 and 1.23 are ripe for affirmative resolution given work that has been accomplished.

¹² "Draft IMO Position on WRC-12 Agenda Items Concerning Matters Relating to Maritime Services", Contribution to Conference Preparatory Meeting for WRC-12, Document CPM11-2/11, December 8, 2010 (emphasis added).

15. The argument that future work on GMDSS precludes an affirmative outcome on Agenda Item 1.23 is without merit. To the credit of United States maritime interests, they have abandoned that argument. It is essential to the success of carefully negotiated United States objectives for Agenda Item 1.23 that any United States effort to advance GMDSS modernization reaffirms the WRC-12 positions that have been taken and disavows the use of GMDSS modernization as an obstacle to a secondary allocation to the amateur service at MF. The WAC proposal adopts the absolute minimum necessary text to do this, and ARRL urges its adoption.

V. Conclusion

Therefore, the foregoing considered, ARRL, the national association for Amateur Radio, respectfully requests that the Commission adopt positions in accordance with the foregoing.

Respectfully submitted,

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March 25, 2011