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Marlene H. Dortch, Secretary  
Federal Communications Commission  
445 Twelfth Street, SW  
Washington, DC 20554

Notice of *Ex Parte* Presentation:

**WT Docket No. 16-239**, Amendment of Part 97 of the Commission's Amateur Radio Service Rules to Permit Greater Flexibility in Digital Data Communications

**RM-11828**, Amendment of Part 97 of the Commission's Rules Governing the Amateur Radio Service Rules Concerning Permitted Emissions and Operating Privileges for Technician Class Licensees

**RM-11759**, Amendment of Part 97 of the Commission's Amateur Radio Rules to Facilitate High-Frequency Data Communication

**RM-11767**, Amendment of Part 97 of the Commission's Rules to Amend Section 97.317 by Removing Reference to the 15 dB Gain Limitation

Dear Ms. Dortch:

On November 4, 2019, members of the Board of Directors' Executive Committee of ARRL, the national association for Amateur Radio (ARRL) and their Washington Counsel met with staff of the Wireless Telecommunications and the Public Safety and Homeland Security Bureaus. A list of participants is attached. The points discussed are set out below and are consistent with submissions made earlier by the ARRL in the respective proceedings.

**WT Docket 16-239**: The ARRL participants noted the overwhelming support for removing the symbol rate limits in the amateur rules.<sup>1</sup> The symbol rate limits are outdated and no longer serve their original purpose of limiting signal bandwidth. Replacing the current limits with a 2.8 kHz maximum bandwidth will accomplish the desired purpose of limiting bandwidth without the stymying of technological advances and experimentation that U.S. radio amateurs experience today as a direct result of the symbol rate limit.

Any rule that has the effect of prohibiting U.S. amateurs from using the same efficient digital techniques and modes that are being utilized daily by radio amateurs throughout the rest

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<sup>1</sup> See 47 C.F.R. §§97.305(c), 97.307(f)(3).

of the world makes no sense. The signals using these techniques are received strongly throughout the United States as transmitted by fellow radio amateurs in neighboring countries. We noted that these same digital modes are being promoted by the International Telecommunications Union (ITU) for amateur emergency communications in neighboring Caribbean nations<sup>2</sup> notwithstanding that radio amateurs in the United States uniquely are not allowed to use some of the modes to communicate with their neighboring radio amateurs because of the symbol rate limits.

As the ARRL argued in multiple earlier filings, adoption of a basic “rule of the road” maximum bandwidth of 2.8 kHz to replace the symbol rate limits below 30 MHz, rather than the alternative proposal of no bandwidth limit at all, will promote sharing and experimentation within the available limited amateur HF spectrum allocations.

During the meeting we discussed other issues raised by commenters in this proceeding consistent with ARRL’s recent *Ex Parte* comments.<sup>3</sup> Regulation should continue to encourage the ability of radio amateurs to foster innovation through experimentation with new digital techniques while ensuring that encryption is not used in the amateur service beyond that explicitly authorized, such as for satellite control. The existing rules explicitly authorize amateurs to use new digital techniques without prior Commission approval provided that the techniques employed are publicly documented. When adopting the rule, the Commission approved the published documentation for three specific techniques that demonstrate the level of documentation required by the rule.<sup>4</sup>

It is noteworthy that several individual radio amateurs have filed with the Commission descriptions of their efforts to monitor some of the modes being discussed. Each succeeded in monitoring the transmissions. Work detailed in the record by Dr. Gibby indicates that he successfully viewed information transmitted using the Winlink digital techniques that some have stated cannot be decoded.<sup>5</sup> Obviously something that can be received using publicly-available information is not encrypted, no matter how easy or difficult the reception. Before Dr. Gibby submitted his filing another amateur licensee, John S. Huggins, also reported having developed a system that he used to receive some of the information being transmitted.<sup>6</sup> Subsequently the

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<sup>2</sup> See ARRL *Ex Parte* Comments, WT Docket No. 16-239 at pp. 4-5 and fn. 10 (filed Sept. 17, 2019).

<sup>3</sup> *Id.*

<sup>4</sup> The documentation for the three modes is published on the ARRL’s website, *see* Amendment of the Amateur Service Rules to Clarify Use of CLOVER, G-TOR, and PacTOR Digital Codes, 10 FCC Rcd 11044 at fns. 4,5 (WTB, 1995).

<sup>5</sup> See Gordon L. Gibby MD, KX4Z, *Ex Parte* Comments, WT Docket 16-239, “Inconvenient Observations” (filed Nov. 1, 2019).

<sup>6</sup> See John S. Huggins, KX4O, *Ex Parte* Comments, WT Docket 16-239, “Exhibit Demonstrating over the air monitoring of a Winlink email exchange using, in this example, the Pactor Mode” (filed July 30, 2019); and “Addendum to previous exhibit” (filed Aug. 13, 2019).

Commission was informed that software has been developed and made available at no charge that permits viewing Winlink Pactor signals utilizing just a Raspberry Pi.<sup>7</sup>

These multiple submissions demonstrate that the digital signals addressed by these commenters are not encrypted and that the signals can be decoded notwithstanding contrary statements by some of the other parties. The conclusions of these demonstrations also are consistent with and confirm the determinations and regulatory practices in other countries. All countries with active radio amateurs are subject to the same ITU Radio Regulation that prohibits encryption, and all widely permit use of these same digital techniques and modes on the international amateur radio bands.

Finally, we referenced our recent *Ex Parte* comments with regard to the accepted worldwide meaning of the regulation that prohibits “messages encoded for the purpose of obscuring their meaning, except as otherwise provided....”<sup>8</sup> This wording is verbatim from the ITU Radio Regulations as adopted at the World Radio Conference in 2003 (WRC-2003), constitutes a treaty obligation of the United States, and applies to radio amateurs in all countries (not just the United States). It was adopted at the WRC-2003 to make clear that amateur communications encoded for digital transmission are authorized in the amateur radio service so long as they are not encrypted. As explained in the ARRL monthly magazine QST shortly after the Conference concluded: “... today amateurs use many codes, and so ... the phrase ‘plain language’ .... in the old regulation was replaced to provide that transmissions between amateur stations ‘shall not be encoded for the purpose of obscuring their meaning....’”<sup>9</sup> Those wishing for some other formulation or meaning should work for such an agreement at a future ITU World Radio Conference rather than argue that the Commission should change its rule or interpretation that derives directly from U.S. obligations pursuant to the ITU Radio Regulations treaty.

We also addressed the below three petitions for rulemaking on which the comment record is complete. The ARRL supports all three petitions and urges the Commission to move forward to Notices of Proposed Rulemaking on these matters at its earliest convenience.

**RM-11828:** Adoption of the proposals in this ARRL petition are needed to provide attractive new opportunities to those who may be interested in electronic communications and amateur radio. Today’s youth who might be attracted to STEM pursuits are focused especially (although by no means exclusively) on digital communications and techniques and emergency communications opportunities, yet the current rules were written in another era and do not provide sufficient privileges for newcomers to enter these activities in a meaningful way. Without such opportunities, the success of efforts to make exciting STEM opportunities available to our nation’s youth through amateur radio have been less successful than they otherwise would be. The ARRL’s proposals in this petition, made after extensive outreach to the

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<sup>7</sup> See Hans-Peter Helfert, Spezielle Communications Systeme GmbH & Co. KG, *Ex Parte* Comments, WT Docket 16-239, “Regarding monitoring/transparency of our PACTOR 3/4 communications modes (filed Oct. 23, 2019). See also PMON – a PACTOR® Monitoring Utility for Linux: <https://www.scs-ptc.com/en/PMON.html>.

<sup>8</sup> 47 C.F.R 97.113(a)(4).

<sup>9</sup> See Michael Owen, VK3KI, New Regulations for the Amateur Services (sidebar to WRC-03 from the Amateur Perspective), QST, September, 2003 at p. 42.

amateur community, deserve prompt consideration. Attempts to slow their consideration until this or that unrelated issue is resolved are misplaced and ill serve the public interest in attracting youth to exciting opportunities in today's world.

**RM-11759:** ARRL seeks to update the subband divisions in the 80 and 75 meter bands. Doing so will better reflect the uses of the band and provide spectrum for new and innovative experimentation.

**RM-11767:** Expert Linears America, LLC, proposed repeal of the 15 dB maximum amplification ratio for linear amplifiers manufactured for and marketed to radio amateurs.<sup>10</sup> The limit inhibits efficient use of many modern low-power amateur transceivers when used with an amplifier to increase transmit power. There is no countervailing benefit. The rule's original purpose of enforcing a prohibition on using high-power amplifiers in the Part 95 Citizens Radio Service at 27 MHz is prohibited by other FCC rules that have proven effective. Therefore we urge that a rulemaking be initiated with a view to deleting this now-antiquated vestige of earlier technology.

Pursuant to Section 1.1206 of the Commission's Rules, this letter is being electronically filed in the above-referenced dockets and a copy e-mailed to each participant. Please refer any questions to David Siddall at the address below.

Respectfully submitted,

ARRL, THE NATIONAL ASSOCIATION  
FOR AMATEUR RADIO

By:

A handwritten signature in blue ink that reads "DR Siddall". The signature is written in a cursive, flowing style.

David R. Siddall  
ARRL Washington Counsel

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<sup>10</sup> See 47 C.F.R. 97.317(a)(2).

## **ATTACHMENT**

### **Attendees at November 4, 2019 Meeting**

#### ARRL, the national association for Amateur Radio (ARRL)

Rick Roderick, President  
Tom Abernethy, Atlantic Division Director  
Fred Hopengarten, New England Director  
George W. “Bud” Hippisley, Roanoke Division Director  
John Robert Stratton, West Gulf Division Director  
David Siddall, ARRL Washington Counsel

#### Wireless Telecommunications Bureau

Suzanne Tetreault, Deputy Bureau Chief  
Charles Eberle, Legal Advisor, Office of the Bureau Chief  
Dr. Kenneth R. Baker, Chief Electronics Engineer, Office of the Bureau Chief  
Scot Stone, Deputy Chief, Mobility Division

#### Public Safety and Homeland Security Bureau

Curt R. Bartholomew, Senior Emergency & Continuity Manager