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Federal Communications Commission  
445 F St. NW  
Washington, DC 20022

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**Ref: RM-11828, RM-11708 and NPRM 16-239**

I am an Amateur Extra class radio operator of 40 years and am also an occasional Winlink user. The Winlink service has proven indispensable to me in providing a means for sending and receiving non-commercial messages and log files in support of DXpeditions and humanitarian work in remote areas of the world.

**I wish to alert the Commission that Ted Rappaport's letter dated March 20, 2019 is rife with misleading information, including the following:**

*"AIRMAIL/SAILMAIL"*

The letter attempts to conflate amateur and non-amateur software and services:

- Airmail - free software for use with Pactor modems (in any spectrum of service).
- Sailmail - a service confined to HF marine band frequencies, having nothing to do whatsoever with the amateur radio service.
- Winlink - a free software and service in use by both amateur radio and the US government.

*"WIDEBAND DATA TRAFFIC"*

This is a sensationalized phrase to describe the typical 2.8 kilohertz usage of Winlink protocols. As the Commission is aware, at any given time there are hundreds of these small slices of spectrum in use by amateur radio operators. While it represents the bandwidth required for a Winlink data session, it also represents the bandwidth required for one person at a time using a microphone to carry on an SSB (J3E) conversation. Winlink data sessions are no more "wideband" in spectrum usage than a voice conversation.

True, there are narrower bandwidth data modes than Winlink (eg FT8, WSPR), but they are limited in functionality to the sending of signal reports and are of no use for emergency communications.

*"US HF AMATEUR BANDS"*

RF transmissions know no boundaries. If Mr. Rappaport were truly concerned about crowding of the amateur bands he would be asking the Commission to work with foreign peer agencies to restrict radiosport contesting, where on any given weekend the amateur bands are alive with SSB (J3E) transmissions from thousands of operators world-wide. I happen to enjoy radiosport and can attest that there is plenty of amateur HF spectrum to not only meet the most popular contesting activities, but CW (A1A), RTTY, FT8, WSPR, and the occasional Winlink e-mail transmission too. Mr. Rappaport admits that Winlink users represent a tiny fringe of the hobby, so why the emotionally-charged rhetoric about supposed spectrum crowding by it?

*"RM-11828 TO ENRICH ARRL AND ARSFI COFFERS"*

The letter wrongly depicts a scenario of 385,000 new HF operators suddenly descending onto the HF bands so as to sign up for a free e-mail service. While I am opposed to RM-11828, even if this initiative should come to pass Mr. Rappaport provides no rationale for a linkage between it and what modes of transmissions the Technician-class licensees would chose to operate on HF. Nor is any evidence provided that these licensees would make any impact whatsoever on the ARRL, the ARSFI membership rolls, nor how a supposed "pecuniary interest" would result.

*"OPEN SOURCE"*

By utilizing the term "open source" in reference to both...

- a) An openly published data transmission protocol, and
- b) Openly published software coding,

... the letter conflates these two separate and distinct topics into one so as to confuse the reader into thinking that the Winlink software somehow violates the spirit of the amateur radio regulations. Winlink software bundles the openly published data transmission protocols Winmor, Ardop, and VARA. But there is nothing inherently wrong with radio control software being published as closed source. Proprietary closed-source software is utilized at virtually every amateur radio station: from embedded firmware in the transceiver to the logging software at the PC.

*"OBSCURED, PROPRIETARY DATA SCHEMES"*

The variety of openly published digital modes and variants utilized in the amateur service today is staggering.<sup>1</sup> This is a result of the service fostering innovation, as intended. But it also means that obscuring data transmissions has never been easier by way of random selection of even the published data protocols. While Mr. Rappaport correctly identifies Pactor 2, 3, and 4 transmissions as being difficult if not impossible to decode by third parties, he provides no rationale for why innovative, published protocol development should continue to be hampered by the current artificial baud rate limitations imposed by Section 97.307.

**Summary**

**RM-11708 & Docket 16-239:** No rationale is provided for why innovative, published protocol development should continue to be hampered by the current artificial baud rate limitations.

**RM-11828:** No rationale is provided for the premise that proposed HF licensing allocations would be detrimental to orderly use of the spectrum.

I have no comment as to his allegations with respect to improper actions of the Commission, ARRL and ARSFI.

Thank you,



John Mitton  
Amateur Radio Operator KK7L

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<sup>1</sup> Some of the more common ones are presented here: [http://www.hfradio.org.uk/html/digital\\_modes.html](http://www.hfradio.org.uk/html/digital_modes.html)