

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

In the Matter of)	
)	
RESPONSE EFFORTS UNDERTAKEN)	PSHSB 17-344
DURING THE 2017 HURRICANE SEASON)	ET Docket 17-344
)	RE: DA 17- 1180
)	and WTB 16-239
)	and RM-11708 and RM-11759

To: The Chief, Public Safety and Homeland Security Bureau
AND
The Chief, Wireless Telecommunications Bureau (RE: WT 16-239)

Via: ECFS Electronic Filing

Reply comments Timely filed on February 21, 2018

REPLY COMMENTS TO ARRL IN 17-344

Janis Carson, amateur radio service licensee AB2RA since 1959, and ARRL member for over 40 years, herein responds to the ARRL Comments (ID 10122279117760) in the FCC record as:

<https://ecfsapi.fcc.gov/file/10122279117760/2018%20January%20FINAL%20Comments%20PS%20Docket%2017-344.pdf>

I also reply to Steve Waterman, (ID 10123298305905) :

<https://ecfsapi.fcc.gov/file/10123298305905/%2017-344.pdf>

This is also in reference to the FCC request DA 17-1180 in the FCC record as:

<https://ecfsapi.fcc.gov/file/1207118673392/DA-17-1180A1.pdf>

This 8 page FCC request regarding Puerto Rico disaster response (primarily intended for restoring broadcast and internet services and improving response methods) has only a few sentences that can be construed to be relevant to amateur radio on page 5:

“To what extent were response efforts facilitated by amateur radio operators? Going forward, should efforts be made to increase the use of amateur radio services in connection with the planning, testing and provision of emergency response and recovery communications?”

To what extent were service providers able to pre-position equipment, supplies, and/or resources close to the affected areas in advance of each hurricane?

Introduction

First, I wish to sincerely apologize to Homeland Security for taking some of the most contentious amateur radio rule making procedures we have faced, to be aired in an inappropriate forum. Now that comments have been filed by ARRL, Steve Waterman, ARSFI, and others with reference to those still open proceedings, there is no alternative but for us to proceed. It would have been more constructive to seek common ground, rather than a “winner takes all” approach that runs counter to the stated purposes of the amateur radio service. The ARRL took 31 pages. I will strive to stay on topic and be more concise, while still providing the relevant information.

Second, I wish to state for the record that the ARRL is in fact *only a large radio club*, and increasingly has found itself at odds with the roughly 80% of us who do not belong to that club. Steve Waterman found himself in that position before too (RM-9259 Page 4):

<https://ecfsapi.fcc.gov/file/2065680001.pdf>

“Likewise, the ARRL does NOT “the representative of amateurs in the United States.” Readily available information suggests that the ARRL represents about 15 to 20 percent of the U.S. licensed amateur.”

“I am a long-time member and supporter of the ARRL and am definitely in opposition to what is being proposed....How then can the ARRL claim to be representing the U.S. Amateur community?”

I myself have been a member for over 40 years. In FCC WT 16-239 filings , I did a tally that showed *approximately 92% of comments opposed the ARRL's position*. Even if all the 8% of supporting comments were ARRL members, that would represent less than half of their own membership! Most filers supported 3 band segments: narrow digital and CW, ACDS, and the existing VOICE/IMAGE, as did I. Do anything you want in the ACDS segment, leave the CW/DATA and VOICE/IMAGE segments in peace. But here we go again, at impasse, in the wrong forum.

Third. I wish to thank all the people and organizations that responded to the Puerto Rico disaster. I ask that nothing in these comments be taken as a criticism or minimizing of those

humanitarian efforts. They are all heroes. We need to do all we can to make Puerto Rico whole again.

Fourth I also thank the generous members of the maritime community that volunteered their time and their vessels to render assistance to Puerto Rico by transporting badly need relief supplies. This has sadly been under reported, and more credit is due. There needs to be better recognition of their efforts, and possibly a larger inquiry from the USCG to cooperate with them in future events.

Fifth **FirstNet** is the first step in the RIGHT direction for an effective NATIONAL strategy. Not all STAs are equal. Some of the reports about Puerto Rico communications demonstrate that Pactor 4 was not the method of choice that solved all problems. It is abundantly clear that VHF communications was needed in many cases, to serve isolated areas. **Balloons** with cellular service from **Google** were an *innovation* that solved problems, from the marketplace. *Now that is an example of a Special Temporary Authorization (STA) that had real quantifiable results.* Star Solutions International makes Winlink obsolete and irrelevant (ID 10219058185498): <https://ecfsapi.fcc.gov/file/10219058185498/FCC%20Ex%20Parte%20Presentation%20%E2%80%93%20PS%20Docket%20No.%2017-344.pdf>

Sixth Any of my negative comments regarding Winlink in this filing refer specifically and exclusively to HF non emergency email. Winlink or any other system which uses amateur or commercial spectrum for emergency communications is desirable.

Seventh If the FCC's position is to subsidize free HF email as an “entitlement” for yachts, they should give the commercial spectrum without fees to Sailmail or another provider for legal use. Use the defunct PinOak, SeaWave and Globe Wireless channels, not amateur radio allocations.

Eighth I intend this filing as a restatement of my prior Petition for Dismissal in 16-239, this time for dismissal with prejudice of 16-239 as well as RM-11708 and RM-11759. The “good cause” is noted herein, as well as 17-344 filings by Kolarik, McVey, Rappaport, and Dan White. “Good cause” is also shown by ARRL's own prior comments in RM-11306. Please expedite this petition.

<https://ecfsapi.fcc.gov/file/1005214251324/FCC%2016-239%20DISMISSorSTAY1.pdf>

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1. CONSIDER MORE EFFECTIVE HOA ANTENNA LEGISLATION

There is discussion about whether the ARRL proposed legislation is effective in providing the intended result of providing operational capabilities for the amateur service and supporting necessary growth potential by elimination of burdensome limitations imposed by HOAs. In any event, this is a legislative issue before the Senate (SB 1534). If enacted, ARPA as written would result in FEWER amateurs available to provide emergency services, not “increase the use of amateur radio services” as the ARRL claims. See:

http://www.cq-amateur-radio.com/cq_highlights/2017-cq/2017-08-cq/2017-cq-white-paper.pdf

I could not possibly add to N3JT Jim Talens' work, so I refer you to his filings.

2. ENACT RM-11785 but enforce rules

I filed comments in support of the ARRL's petition for the expansion of the 60 meter band to facilitate emergency communications. If any ACDS operations in the 60 meter band are discovered, rigorous enforcement is needed. This is a secondary use band for amateur radio. There is no excuse for jeopardizing primary users' access to 60 meters. It is not in the public interest to allow any *risk* to primary users. <https://ecfsapi.fcc.gov/file/10311021469888/RM-11785%20COMMENTS.pdf>

3. DO NOT ALLOW ENCRYPTION; FCC has ruled against it in RM-11699

The Waterman and ARSFI comments attempt to resurrect this matter. There is nothing new to add to the previous work the FCC already did. HIPPA does not require it. There are other radio services that are set up to take care of this, if needed. Please do not issue a new rule making. The FCC has already ruled on this matter. See: https://apps.fcc.gov/edocs_public/attachmatch/DA-13-1918A1_Rcd.pdf

I should not have to remind HSB that we are at war with hostile elements who are using technology and social media to destroy us. While it is difficult to contain its spread, we need to keep such

technologies to the extent possible in the hands of the trained professionals who defend us. MARS and SHARES has true emergency communications spectrum *outside* the amateur bands where encryption is legal. *I point this out here because the ARRL itself filed comments previously in RM-11699 opposing encryption.* There is no need whatsoever to make encryption available for yacht owners free email, under the guise of emergency communications.

4. RACES “SPECIAL PERMANENT AUTHORIZATION” PETITION

There is a petition for rule making modifying Part 97.407, already filed that provides a simple, focused solution to the needs of emergency communications employing wider band digital modes, while not allowing commercial HF email systems in the amateur spectrum. See the last pages of:

<https://ecfsapi.fcc.gov/file/1012251185288/FCC%20PS%20DOCKET%2017-344.pdf>

A full copy is also in the Appendix. Please issue a rule making number and open a new proceeding.

This new rule making petition, coupled with existing MARS and SHARES spectrum outside the amateur spectrum, will be the tools necessary for emergency communications, and put it in the right hands. The decision on which communications protocols to use will be controlled by the agencies who are supervising the relief work, not a salesman with a product. Dismiss RM-11708 and WT 16-239 with prejudice this time. Instead of the *entitlement* of free internet, you get what you want. If you just want a steak dinner, why buy a whole restaurant?

5. PLANT THE SEEDS FOR THE CROP YOU WISH TO GROW: If you “plant”

people who know how to order repairs for a yacht and post to Facebook, you will “grow” more of them. Will they be competent to configure and deploy a VHF link to an isolated Puerto Rico hospital?

If you plant the seed for trained communicators with technical knowledge, who have passed a background check, who understand the chain of command of ICS, and who possess CERT, NIMS, and

other useful training, you grow people who might actually be *useful* in Puerto Rico situations. If you equip them with a “Go Kit” containing equipment they have previously trained on, and the end users of the service select the right tools for the job, it will be even better. This new petition for RACES chooses the correct seeds to plant. The ARRL and Waterman ideas are just business plans to benefit their organizations and user base. Emergency response is not a pleasure cruise with a Facebook blog. The FCC request in 17-344 is “To what extent were service providers able to pre-position equipment”. Planting the correct seeds will increase the use of amateur radio services.

6. SERVE MARITIME AND ALASKAN EMAIL NEEDS, MARKET BASED SOLUTIONS

There needs to be well regulated commercial providers for email and internet access for Alaskan and other under-served land areas and maritime users. This needs to be provided outside the amateur radio service, which does not have free consumer email as an enumerated 97.1 purpose. If you read the New York Times article noted below, there were formerly two commercial providers, PinOak Digital and Globe Wireless, who are no longer appear to be in the HF email business. SeaWave has also been bought out and exited the HF email business. Sailmail, a non profit with lower charges, probably is now the only HF email service. Is this an unintended consequence, a *small business impact*? What happened to the HF channels once assigned to PinOak and Globe Wireless and other HF email providers who went out of business? Could those now vacant HF channels now be offered to Sailmail to move yacht email traffic to commercial channels and offer more connect time? There is no Sailmail “premium plan” that vessel based users can purchase to get more connect time. Sailmail never anticipated lasting more than a few years, until satellite became more affordable, according to this New York Times article. While various satellite providers are now in existence, users have not switched to it because they can still get it for free via amateur radio. Read about it here:

<http://www.nytimes.com/2001/11/22/technology/radio-e-mail-connects-ships-to-shore.html>

“Through threats of legal action, PinOak succeeded in 1999 in thwarting the startup of an SSB e-mail cooperative planned by Mr. Waterman and the Seven Seas Cruising Association, a nonprofit organization with a membership of some 11,000 cruising sailors. PinOak failed, however, in its efforts to block SailMail's application to the Federal Communications Commission for additional station licenses to expand its network.”

The creation of Sailmail was a proper legal solution to the problem of HF email. But if a service is free, why pay anything more for the correct legal source? Winlink did not then, nor does it now, have as its primary purpose emergency communications. If WT 16-239 is enacted, what is to prevent another organization or an individual from setting up his own personal HF email server, using very wide band width on “his” exclusive channel? What will prevent the emergency communications use of HF email from being *interfered with by proliferation of free HF email by uncoordinated ACDS* stations anywhere in the spectrum? While that business plan may serve the short term needs of the ARRL, it does not serve the public good or emergency communications, in ways that justifies its existence. Any amateur free HF email technology only needs to be a *temporary* arrangement until the transition. The permanent cost of taking a wrecking ball to Part 97 rules is not justified to attain that short term benefit. There already is a much better state of the art, market based solution for Randal Evans:

<http://www.globalmarinenet.com/hf-radio-and-pactor-modems-vs-satellite-phones-for-email-at-sea/>

7. WHO IS RANDAL EVANS, AND WHY IT MATTERS

Winlink is advertising its services to the maritime community to promote free HF email. One needs only to look within the FCC's RM-11708 filings for examples (spelling & grammar as quoted):

<https://ecfsapi.fcc.gov/file/7521315143.pdf>

“To: FCC – RM-11708 The *sailing forms* are all engouraging us to *file comments* in support of RM-11708. This is my first filing and if I mess this up, please see SailNet Forum at:

<http://www.sailnet.com/forums/general-discussion-sailing-related/111746-us-citizens-urged-support-fcc-rm-11708-a.html>

I have experienced very dependable service from the amateur radio Internet Winlink system. Its a great service because all of the other available Internet services cost money. Even when I am topside cruising the system runs automatically below deck publishing my position reports and downloading my email. I use the system for sending position reports, ordering supplies, repairs, chatting with friends and posting to facebook. My only complaint is that it needs to be much faster. I am not a amateur radio operator yet but a friend lets me use his call with a SIDD on the end. I hope to get my own ham call soon. From what I read on the sailing forums, RM-11708 will allow Winlink eMail to run twice as fast. That is great and I am for that. Some of the technical folks are saying that if RM-11708 is published with no bandwidth we can get even faster Internet and might be able to stream movies on the Winlink Internet. I'm for passing RM-11708 into law with no bandwidth limits.” - Randal Evans

I urge you to go to the Sailing Forums he references and read exactly how this occurred. “Listen before Transmit” is the bedrock of a shared spectrum like the amateur radio service; WT 16-239 as written may allow this unattended operation on both ends spread everywhere in the CW/DATA segment, since there is no way to verify if at least one of the RF transmitters is attended. Will that massive interference to narrow band digital modes or emergency operations “increase the use of amateur radio services” and operators available for service, or decrease it? Will the “Randal Evanses” that will dominate the CW/DATA spectrum be useful in Puerto Rico relief work? Has Winlink subsequently installed measures to prevent violations of this rule?

“§97.219 Message forwarding system.

(d) For stations participating in a message forwarding system, the control operator of the first forwarding station must:

(1) Authenticate the identity of the station from which it accepts communications on behalf of the system; or (2) Accept accountability for any violation of the rules in this part contained in messages it retransmits to the system.”

8. WINLINK ORIGINS AND OBSOLESCENCE

Yacht clubs have bankrolled Winlink. The previously referenced New York Times article told of a “cooperative planned by Mr. Waterman and the Seven Seas Cruising Association”, Sailmail. That exact same Sailmail email software and radio connect technology is used inside the amateur spectrum by Winlink. Their home page is: <http://www.winlink.org/> If you look at the Winlink home page (controlled by ARSFI, a filer in this proceeding), you see in the lower right corner, under the heading, “The 2000 to 2017 Platinum Club” of major contributors and sysops of RMS email relay stations: California Yacht Club Radio Amateur Group, K6CYC, and Eric Oistad, KF6DZT San Diego Yacht Club Amateur Radio Group, W6IM, and Rod McLennan, W6MWB In 17-344 filings, Winlink is now Obsolete: <https://www.fcc.gov/ecfs/filing/10219058185498> Star Solutions International ID: 10219058185498 **This is also good cause to dismiss WT 16-239.** Years ago, there was a lot of “phone patch” activity on 20 meters. This allowed vessels and deployed US military to call home, and was a contribution by amateur radio. Now that cell phone service is common, you can buy a gift card through the USO around November to give our overseas military the chance to visit privately with their families. I would be hard pressed now to find an amateur who had an obsolete phone patch box. There are no 2 meter auto patches nearby either. Winlink for vessels is obsolete also. Blue Water Sailors should adopt the same modern technology. Most land based US amateur radio operators do not need or have SCS Pactor Dragon modems, because their primary use is free HF email. The cost of an SCS Pactor Dragon modem is similar to a mid range new ham transceiver or compact beam antenna. Many of us use simple wire antennas and second hand radio equipment, and would upgrade our equipment, rather than buy a Pactor setup. Why would a Puerto Rico ham with limited funds buy a Pactor modem either? There is no surprise in ARRL having to send Pactor equipment to Puerto Rico, which in the end saw limited use, according to filings in 17-344. The real need was for VHF gear. While I commend legitimate emergency communications, I challenge trampling the rights of 750,000 amateurs and the subsidy we pay to parsimonious yacht owners.

9. MYTHS AND FACTS

MYTH: Winlink HF email is innovation, cutting edge new technology, that will be adopted over obsolete existing modes.

FACT: There are right now state of the art commercial businesses that provide email and internet legally and more effectively:

<http://www.globalmarinenet.com/hf-radio-and-pactor-modems-vs-satellite-phones-for-email-at-sea/>

FACT: Steve Waterman was right, when he stated: Page 5, RM-9259 FCC filing,

<https://ecfsapi.fcc.gov/file/2065680001.pdf>

“The use of *H.F packet* is *almost extinct* as new more robust and *narrower* spectrum using modes surface. The use of the computer and Digital Signal Processing (DSP), along with other new technologies have kept the Amateur up with the computer age. It is safe to assume that there will continue to be a gradual expansion of these digital modes as the younger computer generation becomes involved with Amateur Radio.”

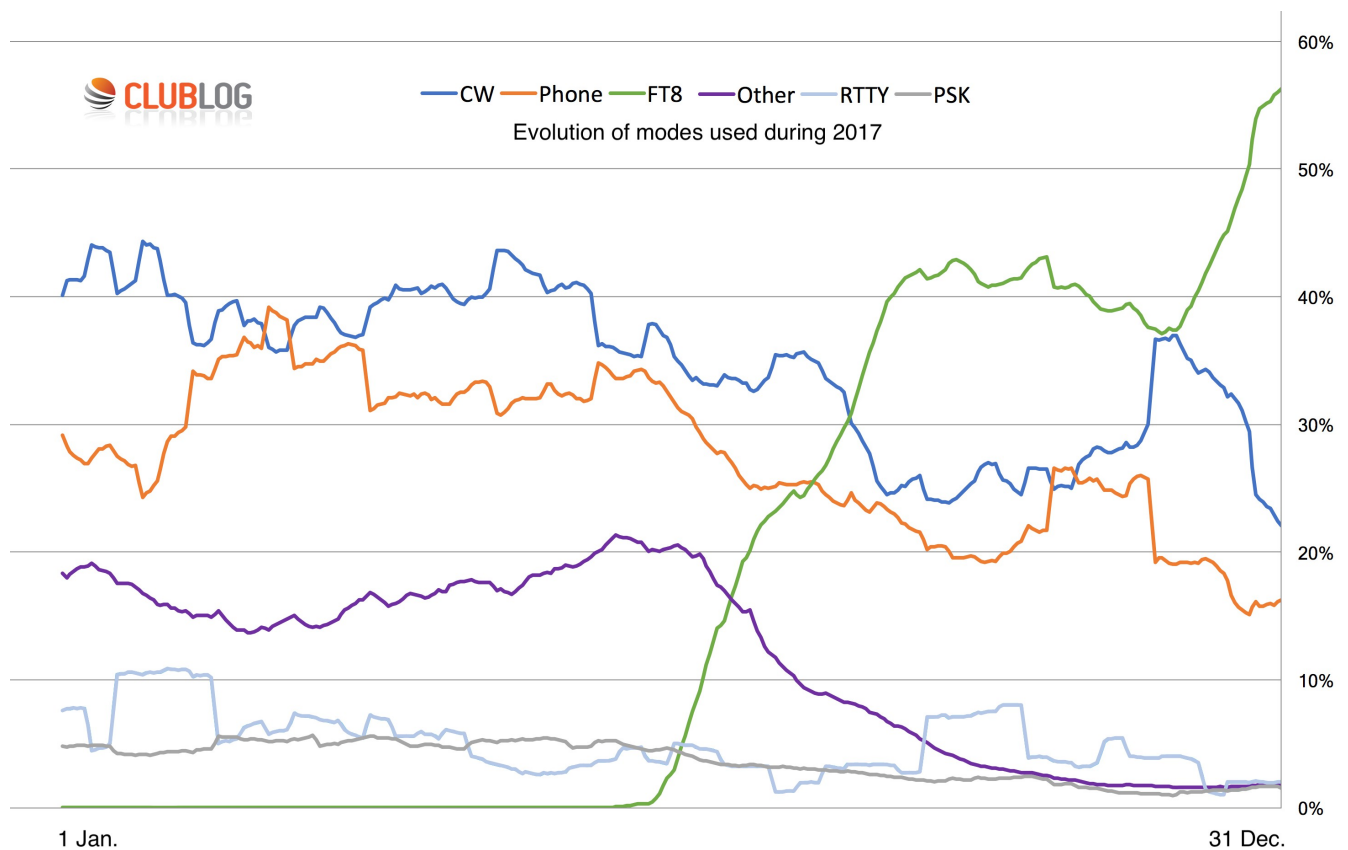
This is similar to what is stated recently at a Pactor fan site: <http://www.pactor.com/>

“Use of PACTOR-4 is still questionable within US ham radio jurisdiction and is mostly used to transfer files (email, pictures, etc.) to private or public mailboxes outside the USA. PACTOR-4 remains a *substitute for those unwilling to pay for mobile offshore internet*. And the cost of a PACTOR TNC has is still *excessively high*. As a result, there is an increase in the use of other modes, such as PSK-31, JT-65, and others. Most are involved in direct QSO's, at speeds slower than PACTOR. *What these modes have in common is that the cost is very low, mostly FREE*. What does this show? Namely, as these speeds increase some of the newer "FREE" modes rival PACTOR.”

The following chart is the most recent results in a radio club showing digital mode usage.

https://www.physics.princeton.edu/pulsar/K1JT/FT8_Operating_Tips.pdf

It shows that FT8 use is greater (55% total) than all other amateur modes combined, including SSB!



The ARRL is constantly obsessing about the lack of growth in amateur radio, especially for younger hams. Imagine all the new young beginning amateur operators who can operate with “minimum power necessary”, low priced equipment, and modest wire antennas that can enjoy sending their signals all over the world. Think how this would “*increase the use of amateur radio services*” by attracting young tech savvy hams who will write new open source code and become “makers”. Those young folks will have good health and be able to volunteer for emergency aid, maybe to join Civil Air Patrol, Coast Guard Auxiliary, or RACES. Now, just at the revelation of this stunning victory for innovation, the FCC (in WT 16-239), and the ARRL and Steve Waterman and Winlink want to demolish that innovation, so that “Randal Evans” can have free HF email and not have to pay Sailmail or a satellite provider by appropriating the entire CW/DATA HF band segment, possibly more. How exactly does any rational person with the facts before them justify that choice? Is the *benefit* of free email for yachts worth the *cost* of permanent loss of a national resource?

10. WINLINK PERMANENTLY TAKES CHANNELS BY “OWNING” THEM:

Winlink by its inherent design uses *assigned channels, just like VHF repeaters*. You have to download them from the Winlink.org website to update your SCS Pactor Dragon modem. Now your radio and modem know what frequency to set to send your email. The land based station is waiting for you to call them on that channel. Depending on propagation, some channels are available at your location, and some are not. But on 40 and 20 meters, those frequencies can be heard in some part of the world 24/7/365. On 80 and 60 meters, you get shorter range, but those channels are “in use” 24/7/365.

https://www.winlink.org/RMSChannels?qt-live_winlink_information=1#qt-live_winlink_information

Click on the Pactor button. This is a comprehensive listing of all the Pactor frequencies.

Why is this important? This runs counter to the FCC rules:

97.101 General standards.

(a) In all respects not specifically covered by FCC Rules each amateur station must be operated in accordance with good engineering and good amateur practice.

(b) Each station licensee and each control operator must cooperate in selecting transmitting channels and in making the most effective use of the amateur service frequencies. **No frequency will be assigned for the exclusive use of any station.**

(d) No amateur operator shall willfully or maliciously interfere with or cause interference to any radio communication or signal.

Who chooses the channel in the amateur radio CW/DATA segment? Does anyone else have input in that choice? Not the way FCC WT-16-239 or the ARRL's petition has arranged it. See the Ted Rappaport WT 16-239 ex parte filings referenced later. The alleged “voluntary” band planning “cooperation” consists entirely of a Winlink RMS operator *taking* that channel 24/7/365 for their *exclusive use* and getting it posted to the Winlink modem updater. Does that sound like “cooperation” or more like “willfully” to you? Is any of this “in accordance with good engineering and good amateur practice?” Please explain how that will “*increase the (proper) use of amateur radio services*” for emergency communications instead of more free HF email for yachts. Amateurs will more likely exit the service, with this interference.

Steve Waterman RM-9259 page 7 says:

<https://ecfsapi.fcc.gov/file/2065680001.pdf>

“To allow the prejudice of any organization to dictate its view of what constitutes "a voluntary, accepted band plan" and then attempt to officially enforce it, is ludicrous.”

But now he proposes to have his Winlink organization simply *take* one hundred 2.4 KHz channels from the CW/DATA segment. At the bottom of page 4 of his 17-344 filing he says:

<https://ecfsapi.fcc.gov/file/10123298305905/%2017-344.pdf>

“For example, how much high-speed data at 2.4 KHz (Pactor 3) can be sent and received on the 40 Meter Part 97 spectrum totaling an allowable 5 KHz total? But what about about two, three or *a hundred such stations all operating simultaneously?* After all, 2.4 KHz is the average bandwidth for a voice LSB signal. Why would the modern Amateur not want more than 5 KHz on 40 meters or 15 KHz on other HF Amateur bands for digital operations such as data transfer?”

The engineering facts do not change. This is not “voluntary” “cooperation” in band planning. He is *taking* 240 KHz of 40 meter spectrum (80%), for Randal Evans to have free email instead of paying for it. Why would the modern Amateur want 5 KHz on 40 meters for this activity, or indeed any at all?

Years ago, the FCC decided that it was not in accordance with “good engineering and good amateur practice” to use VOICE repeaters below 29 Mhz, because by design repeaters “own” a frequency. Techniques that work on VHF and UHF do not translate well to HF, because HF is world wide, and frequencies cannot be re used as easily. On VHF or UHF, frequencies are coordinated by a local organization whose duties are to ensure operation in accordance with “good engineering and good amateur practice” over the roughly 100 mile range of such repeaters.

Yet now we have similar channels “*assigned for the exclusive use of a station*” in the HF bands below 29 Mhz. They were once confined to narrow segments specified in 97.221. When sub paragraph C was added, they spread outside those segments. Now the ARRL wants to abolish band width limits by

adopting WT 16-239 as the FCC proposed. How do you explain that in terms of “good engineering and good amateur practice?” Where does this end? Steve Waterman RM-9259 page 5 says:

<https://ecfsapi.fcc.gov/file/2065680001.pdf>

“It is also a rule that *no station or group of stations "own" a frequency*. ... This is especially true of the digital modes as new and enabling technologies replace older, less used wider spectrum protocols.”

11. ANOTHER PROBLEM BREWING: PI GATE. How do Part 97 rules regulate this “PiGate” technology? Non licensed users with their hand held devices connecting to a system that connects to the Winlink system. How much traffic do you think that will generate? In the hands of legitimate RACES operators, this might help Puerto Rico operations. In the hands of a marina operator, it is a terrible idea. If this concept is used, it should be limited in Part 97 to only emergency use.

http://www.lakewashingtonhamclub.org/wp-content/uploads/2017/01/PiGate_Introduction_Jan_2017.pdf

12. PRELIMINARY CONCLUSION: The FCC needs to assign Sailmail more HF channels outside the amateur spectrum and/or partner with a satellite provider to arrange for more spectrum for Alaskan residents and maritime users legitimate needs. Police Winlink use more effectively on the HF amateur bands or eliminate it for all non emergency purposes.

13. FINISH THE EXISTING WT 16-239 PROCESS

Dismiss the badly conceived WT 16-239 proposal or start over with a “by band segment” approach which is also allowed under the FCC's WT 16-239 comment instructions, or consider the following “good cause” to dismiss as petitioned previously in:

<https://ecfsapi.fcc.gov/file/1005214251324/FCC%2016-239%20DISMISSorSTAY1.pdf>

There are serious legal complications to the existing FCC WT 16-239; it is “vague” and contradictory. The existing FCC WT 16-239 allows unlimited band width transmissions outside the ACDS specified segments. Further, it ignores that VHF data is limited to 20 Khz, UHF data is limited to 100 Khz, and HF data has no limit at all. It is not logical to limit VHF and UHF emissions while allowing unlimited emission on HF. Just one VHF band like 2 meters is the same amount of spectrum as the total aggregate HF frequency allocations. This is contradictory to all FCC past practice and IARU established practice. It is certain to be challenged, and will only result in a “reconsider” petition and more complications. **Please consider these facts “good cause” to dismiss WT 16-239 as written.**

The FCC WT 16-239 NPRM filing instructions offer two options: “regulation by band width” or “regulation by band segment”. The FCC also proposed to eliminate any band width limits, which could work, but ONLY if the FCC contains all ACDS regardless of bandwidth to the ACDS segment.

Reject the ARRL original defective proposal of 2.8 Khz “by band width” anywhere in the CW/DATA segments. That will not work, as demonstrated by existing “congestion” and defiance of current Part 97 rules. The ARRL admits that in their final reply comments in WT 16-239:

“ARRL ITEM 24: It can be fairly debated whether or not 2.8 kHz is the proper maximum bandwidth for data emissions. Greater bandwidth for data emissions would permit a wider array of data emissions now and in the future. *However, even 2.8 kHz could arguably permit usurpation of the subbands to the detriment of CW and other narrow bandwidth emissions.*”

Good grief, they admit that, and yet they are still badgering the FCC again in *this* forum to give it to them? Four years is enough. It was more like a decade, if you count the period before, back to RM-11306, withdrawn in 2006: <https://ecfsapi.fcc.gov/file/6519309716.pdf>

I encourage you to re-read their petition in 2005, RM-11306, and apply it to this WT 16-239 rule making. Here is what the ARRL (and the same lawyer) said (interspersed with my comments):

<https://ecfsapi.fcc.gov/file/6518181567.pdf>

Page 8: **“The HF allocations offer the least opportunity for frequency re-use,** and the higher UHF and microwave bands offer the most flexibility in this respect. The higher frequency bands, therefore, properly offer the widest available bandwidths.”

But under the FCC WT 16-239 plan it is upended with 20 Khz on VHF, 100 Khz on UHF, and unlimited band width emissions on HF, to take the amateur CW/narrowband segment for primary use of HF email.

“12. Having a narrow bandwidth segment and a wide bandwidth segment in a given allocation would tend to keep signals of roughly the same bandwidth in their own spectrum.”

“A bandwidth of 200 Hz was chosen to accommodate Morse telegraphy and the narrowest RTTY/data emissions. A bandwidth of 500 Hz would permit the foregoing modes and a wide range of RTTY/data modes and some image modes yet to be designed.”

Exactly what 16-239 reply comments said, and now they are demanding the whole CW/DATA segment.

“Automatic control of data communications at HF presents technical problems that make sharing with other modes and uses challenging. Fully automatic control, in a network or station configuration where both stations in communication can be under automatic control, unless limited to certain band segments where automatically initiated transmissions can be expected, complicates efficient sharing of crowded HF spectrum.”

And replies in 16-239 told the FCC to confine ALL ACDS to the ACDS segments, and let them do whatever they want there, as long as they leave the CW/DATA and VOICE/IMAGE segments alone.

“While it is not ARRL’s intention whatsoever to segregate HF data communications by rule, it is necessary to do so where the station or network configuration is such that **stations under automatic control can initiate transmissions. To do otherwise would be to create an environment where such**

stations might initiate transmissions that would interfere with ongoing communications on the same frequency using incompatible emission types.”

Which is exactly as we predicted, and why we insisted that all ACDS stay in the ACDS portion.

“17. Section 97.1 19 (b)(1) is proposed to be modified by **adding MCW for the purposes of identification in addition to CW, as the former is in common use for repeater identification.**”

*And we asked for an open ID system that did not require an expensive modem to snag the call signs, and the ARRL supported that back then. But not now. **The FCC should require it now.***

As “good cause” for dismissal or modification of WT 16-239, I present the following:

14. EX PARTE PRESENTATION BY TED RAPPAPORT IN WT 16-239:

On September 26, 2016, Theodore S. Rappaport, PhD, PE, N9NB made an oral presentation before the Federal Communications Commission on behalf of the **Ad-Hoc Committee on Preservation of Narrowband Shortwave Amateur Radio Communication** and the **CW Operators’ Club** (cwops.org). Below is the documentation he presented to the FCC, an Ex Parte PowerPoint™ Presentation:

<https://ecfsapi.fcc.gov/file/10925839109476/FCCNPRM Docket 16-239 Final.pptx>

Ex Parte Letter:

<https://ecfsapi.fcc.gov/file/10925839109476/FCC exparte letter 9 25 2016.docx>

Winlink Info Part 1:

<https://ecfsapi.fcc.gov/file/10925839109476/Winlink compilation pt1.pdf>

Handout given to FCC:

<https://ecfsapi.fcc.gov/file/10925839109476/K7NHV Winlink Handout.pdf>

Winlink Info Part 2:

<https://ecfsapi.fcc.gov/file/1092719005718/Winlink Compilation pt2.pdf>

Letter Covering Above Part 2:

<https://ecfsapi.fcc.gov/file/1092719005718/exparte September 26 2016 attachment.docx>

15. THREE CHOICES IN WT 16-239. DECIDE NOW:

16. MAKE 16-239 WORK. Provide for THREE SEGMENTS in the major HF bands. CW/DATA, ACDS, and VOICE/IMAGE. All ACDS regardless of bandwidth is confined to the ACDS segment because as ARRL notes above, ACDS is incompatible with anything else, regardless of emission bandwidth. The FCC WT 16-239 instructions allowed, “regulation by band segment”. Anything else is

catering to the intransigence of those who do not represent the majority of the amateur radio community, serve the public interest, or offer anything “to increase the use of amateur radio services” for emergency communications. The ARRL and Waterman are offering Randal Evans more free HF email or even internet browsing. They are also offering a massive FCC enforcement cost *when* the HF spectrum war starts. Likewise, you should reject a “Canadian” style no “band segment” plan.

17. EASY WAY: SCRAP IT & GO BACK TO 300 BAUD. Dismiss the entire RM-11708 and WT 16-239, as the cost of ARRL's intransigence. Leave Part 97 as is. Consider the 92% opposed to WT 16-239 and 17-344 **“good cause” to dismiss it with Prejudice**, and return to the 300 baud rule. Change 97.309 RTTY and data emission codes from “Pactor” to add “Pactor 1”, WSPR, and FT8; Prohibit Pactor 2, 3, 4. There is enough incentive for the FCC to guarantee that there is not a “sequel”.

18. END ACDS MODE NONEMERGENCY EMAIL ON HF. Prohibit all non emergency or non RACES ACDS HF email store and forward operations of any band width in the HF bands. Recognize it for what it is: “(5) Communications, on a regular basis, which could reasonably be furnished alternatively through other radio services.” Emergency communications is not a pleasure cruise. Don't confuse the two. If you just want a steak dinner, why buy a whole restaurant?

19. CLOSING REMARKS: Therefore, the foregoing considered, I respectfully request that the Commission proceed with the actions recommended herein, to facilitate the provision of emergency and disaster relief communications via Amateur Radio, and regulate the spectrum effectively.

Respectfully submitted,
/s/

Janis Carson, AB2RA, licensed since 1959, Extra, ARRL member for over 40 years
61 Rothermich Rd, Ithaca, NY, 14850

ATTACHMENT: APPENDIX PETITION FOR RACES

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

In the Matter of

**Amendment of Part 97 of the
Commission's Amateur Radio Service
Rules to Facilitate High-Frequency
Data Communications**

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RM- _____

**To: The Chief, Wireless Telecommunications Bureau
Via: Office of the Secretary**

PETITION FOR RULEMAKING

Janis Carson, amateur radio service licensee AB2RA since 1959, and ARRL member for over 40 years, pursuant to Section 1.405 of the Commission's Rules (47 C.F.R. §1.405), hereby respectfully requests that the Commission issue a *Notice of Proposed Rule Making* at an early date, proposing to modify only one section of Part 97 of the Commission's Rules governing the Amateur Radio Service as specified in the CONCLUSION paragraph herein. The rule changes proposed herein would appropriately facilitate Amateur Radio Emergency communications using modern High Frequency (HF) data transmission modes and protocols by making minimal but necessary changes in the RACES rules governing HF Amateur bands. At the same time, the rule changes would not have any impact on the non-RACES current uses, emission types, or band segment allocations in Sections 97.301 of the Commission's Rules, nor would they have any impact on ongoing Rule Making regarding amateur HF DATA emissions or band segment assignments. The changes allowed by this petition would only be open to RACES users, not the general amateur radio service. *The rule changes proposed herein are the simplest and most direct method to implement permanently the steps taken during the recent Puerto Rico relief work, under a STA (Special Temporary Authorization).* These recent Puerto Rico Emergency communications operations earned praise from Chairman Ajit Pai. *It also eliminates the need for the FCC to micro manage digital emission types for RACES purposes.*

I. INTRODUCTION.

1. This Petition for Rule Making seeks the modification of the Part 97 rules in the following respects only: This proposal accomplishes modern HF high speed DATA transmissions for Emergency Communications, without impact to ANY existing rules, other than adding a paragraph to §97.407 Radio amateur civil emergency service.
2. The open regulatory proposals stem from ARRL's Petition for Rule Making RM-11708 and RM-11759, and the FCC's own proposal, WT 16-239 (which abolishes all band width limits for DATA emissions on the HF bands). These Rule Making proceedings have been active since 2013 and have not yet been acted on. There have been vitriolic comments opposing implementing the current version of WT 16-239. I have filed a petition to dismiss or stay WT 16-239 as currently written, because it fails to implement the request of ARRL, the original petitioner, and extends beyond the scope of ARRL's petition. In addition, I have pointed out discrepancies in FCC's WT 16-239, which abolishes band width limits on HF while keeping them on VHF and UHF band allocations, with many undesirable consequences.

3. RACES is activated by local, county and state jurisdictions and are the only Amateur Radio operators authorized to transmit during declared emergencies when the President of the United States specifically invokes the War Powers Act. This petition makes available all of these DATA modes immediately, for just such a situation. The FCC could also reconsider issuing special RACES call signs again from the WC# group as before, if it so chooses.

II. BACKGROUND

The justification for expediting the existing Rule Makings RM-11708 and RM-11759, as well as WT 16-239, is to facilitate the use of faster wide band digital HF communications, including email specifically for Emergency Communications. Much discussion has ensued regarding the casual or commercial business uses, such as purchasing parts for sailing vessels using such amateur email servers. This petitioner is herein requesting a narrowly targeted Rule Making that addresses that Emergency Communications application, and that application alone. The existing contentious Rule Makings are overly broad, and have consequences that have not yet been evaluated objectively, which is why I filed a petition to dismiss or stay WT 16-239. This petition allows separate discussion of all the objections to NON RACES uses to continue as needed without urgency, while permanently solving the problem of needing modern DATA emissions for Emergency Communications.

III. CONCLUSION: I request insertion of the following paragraphs and wording into §97.407

“§97.407(d) (5) All communications transmitted in RACES must be specifically authorized by the civil defense organization for the area served. Only for RACES civil defense communications may the following additional enumerated emission types may be transmitted:

Any CW, DATA, VOICE or IMAGE emission enumerated in table §97.305 Authorized emission types, subject to the limitation: §97.307 Emission standards. (a) No amateur station transmission shall occupy more bandwidth than necessary for the information rate and emission type being transmitted, in accordance with good amateur practice.

Additionally, DATA emissions known as Pactor 2, 3, and 4, and STANAG, DSTAR, Codec2, or any other digital modulations are specifically authorized for RACES use only, as spelled out in this section for drills or emergency operations as set forth by Part 97.407 rules.

Any such DATA emission shall occupy equal to or less band width than a VOICE channel, as explained in: §97.307 Emission standards. (2) No non-phone emission shall exceed the bandwidth of a communications quality phone emission of the same modulation type. The total bandwidth of an independent sideband emission (having B as the first symbol), or a multiplexed image and phone emission, shall not exceed that of a communications quality A3E emission.”

Therefore, the foregoing considered, Janis Carson respectfully requests that the Commission issue a Notice of Proposed Rule Making at an early date, proposing to modify Section 97.407 of the Commission' s rules as specified above.

Respectfully submitted,
/S/

Janis Carson, AB2RA, licensed since 1959, Extra class, ARRL member over 40 years
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December 7, 2017