

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

<b>In the Matter of</b>	)	<b>RM-11831</b>
	)	<b>NPRM 16-239</b>
<b>Amendment of Part 97 of the</b>	)	<b>RM-11708</b>
<b>Commission's Amateur Radio Service</b>	)	<b>RM-11759</b>
<b>Rules to to Reduce Interference and</b>	)	<b>AND</b>
<b>Add Transparency to</b>	)	<b>RM-11306</b>
<b>Digital Data Communications</b>	)	<b>July 18, 2019</b>
<b>AND</b>		
<b>Amendment of Part 97 of the Commission's</b>		
<b>Amateur Radio Service Rules to Permit Greater</b>		
<b>Flexibility in Data Communications</b>		

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

**REPLY COMMENT TO ARRL/SIDDALL FINAL REPORT 7/15/19**

We, the undersigned, have been long term ARRL members, and long term amateur radio operators, pursuant to Section 1.405 of the Commission's Rules (47 C.F.R. §1.405), hereby respectfully request consideration of this Ex Parte notice and reply comments to July 15, 2019 ARRL Final Report, via their representative, Dave Siddall FCC ID: 107152292806056 and 107150047500607.

[https://ecfsapi.fcc.gov/file/107150047500607/ARRL%20FCC%2016-239%20Final%20Report%2007\\_15\\_2019.pdf](https://ecfsapi.fcc.gov/file/107150047500607/ARRL%20FCC%2016-239%20Final%20Report%2007_15_2019.pdf)  
[https://ecfsapi.fcc.gov/file/107152292806056/ARRL%20FCC%2016-239%20Final%20Report%2007\\_15\\_2019.pdf](https://ecfsapi.fcc.gov/file/107152292806056/ARRL%20FCC%2016-239%20Final%20Report%2007_15_2019.pdf)

**A. BACKGROUND AND EXECUTIVE SUMMARY**

RM-11831 (Kolarik petition FCC ID 100918881206) solves long standing problems with the now suspended NPRM 16-239, RM-11708, and associated RM-11759 and the previously withdrawn RM-11306 by addressing the root causes of the current problems: 1. the inability to monitor all over the air content of transmissions, and 2. interference from ACDS operations. RM-11831 also proposes the ONLY workable solution presented in these proceedings to date: segregation of ACDS modes into their own spectrum. This intractable issue has been petitioned, opposed, withdrawn, petitioned again in

various forms, opposed again, suspended, and dragged on since before 2007.

Siddall summarizes: “By the end, the parties had reached consensus on some of the issues, but not all. Despite our best efforts, some of the parties did not agree to submit to the Commission any of the recommendations on which there had been an apparent consensus, having negotiated with an “all or nothing approach.””

With negotiations having failed, we therefore wish to proceed with the FCC on OUR PROPOSAL, WHICH INCLUDES THE ONLY SOLUTION IN THESE FILINGS, CONTAINING A DETAILED BAND PLAN, NOT A “WINNER TAKE ALL” WIDE BAND IN ALL THE RTTY/DATA SEGMENTS OF THE HF BANDS. Such a practical solution is permitted in the FCC filing instructions in NPRM 16-239, and has been persistently ignored by the ARRL to date.

## **B. DISCUSSION**

1. All of these previous actions failed to address the protection of incumbent users of the spectrum and violation of FCC Part 97 rules on a large scale. Sufficient time and debate has occurred to verify that these all constitute a badly engineered patchwork of proposals that are defective regulatory policy, do not serve the public good, and have wasted unjustified amounts of time and FCC resources.

2. The ongoing interference problems between an unreadable wide band proprietary data format employing fixed channels assigned for their use for free HF email, and traditional incumbent narrow band peer to peer operations has continued to grow for over a decade. **ALL OTHER PROPOSALS AND COMMENTS, INCLUDING ARRL'S INTRANSIGENT INSISTENCE (in RM-11708 and in NPRM 16-239 to date) ON WIDE BAND EMISSIONS THROUGHOUT THE ENTIRE RTTY/DATA SEGMENTS, FAIL TO PROVIDE A SOLUTION FOR THIS PROBLEM.** We now wish to provide to the FCC a detailed band plan to segregate incompatible emissions in these reply documents. We, along with hundreds of commenters in RM-11708 and NPRM 16-239, have advocated this solution since the very beginning of this process. **ARRL consistently refused, through its lawyer, Chris Imlay, to even consider this option, which is clearly allowed in the instructions from the**

**FCC in NPRM 16-239.**

**FCC FILING INSTRUCTIONS IN NPRM 16-239:**

“12. While we tentatively conclude that a specific bandwidth limitation for RTTY and data emissions in the MF/HF bands is not necessary, we nonetheless request comment on whether we should establish emission bandwidth standards for amateur service MF/HF RTTY and data emissions. Commenters favoring such action should address what the maximum bandwidth should be, the basis for the particular limitation the commenter proposes, and whether the limit should apply across the bands or only in particular subbands. Commenters should explain the grounds for departing from the generally applicable standards.”

This failure of ARRL to properly represent all amateur radio operators instead of a small contingent of vocal users of free HF email, which could be obtained at small expense from a legal commercial provider, Sailmail, is unacceptable. The ARRL appears not to even represent the 20% of total US amateur operators that are its members, by this historic opposition to a solution which would accommodate that email use, while still protecting incumbent peer to peer users.

3. The proposed band plan in this reply comment, along with eliminating Part 97.221(c) as RM-11831 proposes, would solve long standing interference issues suffered by radio amateurs wishing to use the HF RTTY/Data sub bands for other mainstream and emerging digital modes, rather than ACDS purposes.

**4. The root cause of this host of problems, lack of over-the-air interception capability for all transmissions in the amateur radio spectrum, has caused documented potential violations of FCC part 97 rules on content, including obscenity, commercial content, and illegal third party contacts to countries with no such agreement. (FCC DA 13-1918 ¶ 6) Had the FCC been aware of these practices, it probably never would have consented to the changes in Part 97 that have allowed this. With this knowledge, the FCC now has “good cause” to act immediately to correct this situation. REFERENCE: Enforcement Bureau TICKET # 3184322 (redacted extract attached)**

5. RM-11831 ensures the ability to identify and monitor the radio transmissions of any data signal using readily available over-the-air interception methods by third parties, as required by Part 97.113(a)(4) and 97.119(a).

6. RM-11831 assures that the amateur radio service will not be used to bypass commercial internet or email services or be used for commercial use as required by Part 97.1, 97.3(4), 97.113(a)(5)

7. This five year long failure of ARRL to establish a consensus solution, rather than a “winner takes all” approach, is “good cause” for SUMMARY DISMISSAL of RM-11708 and NPRM 16-239 as well as RM-11759, based on internal contradictions, conflict with IARU rules, generally applicable standards, and lack of merit, as well as other relevant points raised in this RM-11831 proceeding. Therefore, we respectfully request that the Commission issue a Notice of Proposed Rule Making at an expedited date, to delete Section 97.221(c) and modify Section 97.309(a)(4) of the Commission's rules as described in this document and RM-11831, and adopt the band plan proposed herein.

### **C. NOTICE AGAINST “CHERRY PICKING”**

All the contents (each page, sentence, table, and bullet point) and attachments to this document are intended as a mutually contingent and inter-dependent suite of solutions, intended to serve together as a concise and complete singular proposal, as expressed by the recurring footnote in the attached documents:

\*This proposal increases 97.221(b) segments for ACDS/wideband data and eliminates 97.221(c), provided that only transparent data modes are used which are able to be intercepted, over-the-air, for meaning by the public.

### **D. NEED FOR AN ACCESSIBLE, WORKING OVER THE AIR MONITORING METHOD**

[https://ecfsapi.fcc.gov/file/10417301289214/SCS\\_FCC\\_Comment\\_RM11831.pdf](https://ecfsapi.fcc.gov/file/10417301289214/SCS_FCC_Comment_RM11831.pdf)

In this comment, Helfert says it “requires considerable effort” for even someone possessing the source code (undisclosed code) and “expensive”, not so easy anyone could devise an inexpensive method.

#### **QUOTED FROM HELFERT COMMENTS IN RM-11831:**

Nevertheless, SCS is willing to develop and provide a free PACTOR monitoring tool as a contribution to “mutual understanding” in the spirit of AR. This would be a software solution under the operating systems Linux and / or Windows. The tool would not require any special hardware. However, such a development would require considerable effort for SCS, as our modems are powered by specialized signal processors. Porting the software to common Intel and ARM processors will be correspondingly expensive. Nonetheless, we are willing to provide such a comprehensive, free monitoring tool. It would integrate with the Volunteer Monitor Program now being organized by the ARRL.

We propose the following be adopted as requirements for a (new) digital method:

1. Description of its fundamental characteristics (ITU emission designator)
2. Description of the channel and source coding
3. Availability of an easily accessible monitoring mode

We see this as more than adequate for the required “transparency”

- Finally, after five years of contentious comments, we have an admission from the SCS Design Engineer that Over the Air display of ALL the content requires an “expensive” solution that “requires considerable effort for SCS”.
- Furthermore this offer proves that a free, working, practical monitoring tool **NEVER EXISTED**. (Recent claims to have accomplished this appear to conflict with Helfert's “expert” testimony, as the actual Design Engineer of the SCS Pactor Dragon modem.  
<https://ecfsapi.fcc.gov/file/1071540521688/FCCCommentJuly2019.pdf>)
- We simply propose to accept Helfert's above offer of such a monitoring tool, and require it as Part 97 rule of SCS and all other emission or proprietary system now existing or in the future. This monitoring tool should be a vital component of a “disclosed code”, as detailed in RM-11831.
- Please ensure the continuation of FCC policy (RM-11699, DA 13-1918) as stated in paragraph 6:

[http://transition.fcc.gov/Daily\\_Releases/Daily\\_Business/2013/db0918/DA-13-1918A1.pdf](http://transition.fcc.gov/Daily_Releases/Daily_Business/2013/db0918/DA-13-1918A1.pdf)

#### **QUOTED FROM DA 13-1918:**

The primary protection against exploitation of the amateur service and the enforcement mechanism in the amateur service is its self-regulating character... To ensure that the amateur service remains a non-commercial service and self-regulates, amateur stations must be capable of understanding the communications of other amateur stations.

Footnote 19: We note that a hallmark of enforcement in the amateur service is “self-policing,” which depends on an amateur station hearing a message being able to determine whether message violate the amateur service rules. See, e.g., Waiver of Sections 97.80(b) and 97.114(b)(4) of the Amateur Rules to Permit the Retransmission of Third-Party Traffic in Certain Situations, Order, PR Docket No. 85-105, 59 Rad. Reg. (P & F) 1326, 1326 ¶ 2 (PRB 1986).

#### **D. WINLINK COMPLIANCE WITH CONTROL OPERATOR RULES**

Winlink as it is implemented now, allows:

1. Access via the HF RF port to unlicensed individuals (pirates) and US Tech class licenses for WEEKS, due to an ineffective vetting and license verification process.

2. Access to the internet port (incoming messages) by unlicensed individuals who have no knowledge of Part 97 or third party treaties, making UNLICENSED PEOPLE THE DE FACTO CONTROL OPERATOR. The first RMS operator should be required to take these incoming messages from a buffer file, and SCREEN THEM before transmission over RF.

3. Access by foreign nationals (licensed or not) to communications systems in the USA that violate Third Party agreements. There are NO members of the EU which have Third Party agreements. Japan has no Third Party agreement, and it is a high percentage of the world wide amateur population.

4. The claim of a "vigilant control operator" in the system to persist.

5. The claim of a difference between "automatic" and "remote control" operation outside the ACDS bands to persist. A Pactor terminal can be set to AUTOMATICALLY connect in the 500 Hz CW/DATA segments, and there is no way to verify that it is ATTENDED. Confining ALL the email operations to an ACDS segment removes that problem, as well as fixing interference problems.

6. The claim that the bulk of Winlink is Emergency Communications, or will provide valuable relief services to serve the public good to persist. Yacht emails serving the public good is at best an exaggeration, especially when they can pay minimal fees for this service (Sailmail) like everyone else that uses email or text messaging.

7. Potential violation of 97.105: Control operator duties: "(a) The control operator must ensure the immediate proper operation of the station, regardless of the type of control."

8. Potential violation of 97.219:

**97.219**

(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."

9. Potential failure to comply with the agreements that established special rules for store and forward email systems: [https://apps.fcc.gov/edocs\\_public/attachmatch/FCC-94-76A1.pdf](https://apps.fcc.gov/edocs_public/attachmatch/FCC-94-76A1.pdf)

While this particular rule was devised to regulate the VHF packet systems of the time, this rule and others have come to be interpreted as justification for the HF systems now in use. The common misuse, as documented in the reference Enforcement Bureau ticket, is "good cause" to revisit all these previous rule making procedures. Please start with RM-11831 and the proposal included with this document.

**FCC 94-76A1-pdf**  
**PR Docket No. 93-85**

Amendment of Part 97 of the  
Commission's Rules Concerning  
Message Forwarding Systems in  
the Amateur Service.

**RM-7649 RM-7669**

**RM-7675 RM-7676**

**RM-7681 RM-7904**

Adopted: March 30, 1994; Released: April 13, 1994

This development has resulted in thousands of amateur operators voluntarily linking their individually-licensed very-high frequency (VHF) stations together to form easily-accessible ad hoc message forwarding systems

There is no central supervisory authority in an ad hoc amateur service digital network. The vulnerability of an unsupervised system can make it an easy target for misuse by uncooperative operators and non-licensees. It can be difficult, moreover, to establish after the fact that a particular VHF station originated a fleeting high speed digital transmission. **For these reasons, there must be on-going oversight of the system. The control operators of the first forwarding stations are in the best position to provide such oversight.**

**OBVIOUS SOLUTION:** Require in Part 97, and enforce the practice, that any email originating from the internet (from unlicensed users) is to be placed first in a BUFFER FILE which must be reviewed by a "vigilant control operator" **BEFORE TRANSMISSION** over the Winlink RF system. My question

to the Enforcement Bureau is this: If you were to send a warning letter to a control operator, **WHO WOULD YOU SEND IT TO?** Possibly ALL OF THE SYSOPS AND WINLINK TEAM? The phrase “jointly and severally” comes to mind.

### **E. CONCLUSION**

We wish to thank the FCC for ensuring contact with the FCC and proceed according to proper rule making procedures, rather than allowing special interests a “back door” access without filing proper Ex Parte Notices.

As attachments, please find included our proposal, originally devised in a presentation format, which includes the “band plan proposal” and other essential points of a comprehensive package solution that provides a positive and equitable way forward for all parties. We hope that the FCC will seriously consider and act positively on this proposal in its entirety.

The future of the amateur radio service is at stake.

Respectfully submitted, /S/

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NEXT PAGE: ATTACHMENTS LIST AND EMAIL DISTRIBUTION LIST



## ATTACHMENTS LIST

1. PRESENTATION: PROPOSAL PDF
2. REFERENCE: FCC Enforcement Bureau TICKET # 3184322 (redacted extract)  
(See FCC data base for full unredacted version)

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