

## **Beginning to bring closure to the WINLINK/RM-11831 debate: Acknowledging what has been proved**

by Gordon Gibby KX4Z  
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Reasonable people can disagree on the proper application of facts, but **getting the facts straight** is generally one of the more important items on the checklist of reaching consensus. Unfortunately, that has been difficult with all the claims, charges, and accusations flying around the RM-11831 discussion

I've learned a LOT in this discussion, some of it from Ron himself! Some good has come from this, in my view (Disclaimer: I am not a member of the Winlink Development Team though I'm a gateway sysop and friendly with them.). *Openness in amateur radio* is important, and a great deal more of that has been achieved. Following the rules is important, and *vastly* more of that has been achieved in an astonishing collaboration of foes toward that end.<sup>1</sup>

Nevertheless, there still seem to be a lot of people who don't get the basic "facts" of this discussion, or are not aware of the recent developments. In order to figure out the facts, I completed multiple original-research efforts (all published to the FCC) to put **numbers** on things that people were arguing **from subjective viewpoints**. You should know that I ended up learning the history of Jean-Paul Roubelat F6FBB, the first developer of compressed, ARQ amateur radio file transfers (subsequently adopted by WINLINK and PAT)...**and that I have now written a free open-source reader application** (which requires a Dragon modem and a Raspberry Pi 3B), because that was needed to put an end to this argument that lasted 2 decades....largely over 2 days of qualified programmer work. Folks, this is now a waste of time. *The facts are in*, for most of this. The rest is optimization, folks.

Therefore, I present the following table for your consideration to review what is now factually known (from my viewpoint). Similar information can be gathered together to dispel a ton of rumors about PACTOR, or WINMOR, or ARDOP. I was amazed at what had been documented and published, sitting there literally waiting to be used.

Sincerely,  
Gordon L. Gibby MD KX4Z

<b>ISSUE</b>	<b>Study</b>	<b>Conclusion</b>
Is winlink encrypted?	<a href="https://ecfsapi.fcc.gov/file/10410170249078/FCCRM11831-4.pdf">https://ecfsapi.fcc.gov/file/10410170249078/FCCRM11831-4.pdf</a>	<b>NO.</b> Because I demonstrated an uninvolved station capturing a message in a special case-- it only takes ONE such demonstration to disprove encryption.

<sup>1</sup> In my opinion, the collaboration of persons opposed to WINLINK and the WINLINK Development Team through the distributed networked receiver-viewer is one of the brightest parts of recent ham radio, and all participants deserve sincere praise and appreciation.

<p>Do winlink 97.221(c) stations cause large amounts of interference? In other words, WAS THERE A PROBLEM THAT THE ARRL NEEDED TO SOLVE?</p>	<p><a href="https://ecfsapi.fcc.gov/file/10408063816674/FCCRM11831-2.pdf">https://ecfsapi.fcc.gov/file/10408063816674/FCCRM11831-2.pdf</a></p>	<p><b>NO.</b> I did a statistical study. The maximum possible interference (worst case) in a 14day sample was in the hundredths to thousandths of even 1 percent. <b>This is a non-problem.</b></p>
<p>What was the level of hanky-panky being done via WINLINK? [undoubted some of which was out of bounds!!]</p>	<p><a href="https://ecfsapi.fcc.gov/file/10723230403421/IncidenceCalculations.pdf">https://ecfsapi.fcc.gov/file/10723230403421/IncidenceCalculations.pdf</a></p>	<p><b>It was approximately 1.1%</b> and if the opponents had answered more of my questions, I could have gotten an exact figure. You can make of this what you will, good or bad -- reasonable people can view this in several lights -- but this is the number. It comes from usage BEFORE PEOPLE KNEW of the viewer. That is why it is so valuable.</p>
<p>Can winlink be effectively self-policed?</p>	<p>Original Research: <a href="https://ecfsapi.fcc.gov/file/10822196770221/ReAnalysisOfWinlinkObjectiveMessages.pdf">https://ecfsapi.fcc.gov/file/10822196770221/ReAnalysisOfWinlinkObjectiveMessages.pdf</a></p>	<p><b>YES</b> -- the rate of hanky-panky dropped by 90% in 3 months, and another 90% of that (2 orders of magnitude) after the 4th month, to only 1 objectionable item out of 15,000 transfers. Making WINLINK the cleanest part of all of amateur radio.</p>
<p>Do many hams REALLY want anything more than the winlink viewer?</p>	<p>Original research; <a href="https://ecfsapi.fcc.gov/file/1080509964054/ExParteCommunicationAug5.pdf">https://ecfsapi.fcc.gov/file/1080509964054/ExParteCommunicationAug5.pdf</a></p>	<p><b>NO</b> -- once the Viewer was out, there were almost No Persons on QRZ who requested the ability to personally read any of it. I did this attempt at a study to determine the true interest beyond the vocal persons.</p>
<p>Is WINLINK really impossible to read?</p>	<p>Original software development: <a href="https://ecfsapi.fcc.gov/file/10830048730238/FreeSoftwareToReadWINLINK.pdf">https://ecfsapi.fcc.gov/file/10830048730238/FreeSoftwareToReadWINLINK.pdf</a></p>	<p><b>NO</b> -- the code to do so is now public knowledge and requires (for pactor) only a pactor modem and a raspberry pi. With suitable alterations, ARDOP and WINMOR can also be read.</p> <p>This was written by a very novice programmer (me!) and certainly could be improved. There is now a <b>vast field of amateur radio research and development</b> waiting to be accomplished, by people building on what I wrote.</p> <p><a href="https://www.qsl.net/nf4rc/Tech/">https://www.qsl.net/nf4rc/Tech/</a></p>

		<a href="#"><u>RaspberryPiWinlinkDecoder/</u></a>
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