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ARRL BOARD OF DIRECTORS

September 4, 2019

Dear ARRL Board of Directors & Counselor:

I'm writing you to keep you updated on the software to read WINLINK transactions, which I disclosed to the FCC recently. (See: https://ecfsapi.fcc.gov/file/10830048730238/FreeSoftwareToReadWINLINK.pdf).   Not unexpectedly, for a completely novice programmer as myself, I have discovered two software "bugs," one of which has been corrected; the other will require a bit more coding, but can be worked around via a small text edit.   With those corrected, I have fully decompressed two more emails in a very short period of effort last night (now that the hurricane is less of an issue, and the balun-building effort of our ARES group[1] is ready to go for Saturday).   A third email showed *capture difficulties*, and I have an expert at SCS assisting me as we try to fathom what went wrong in an otherwise perfect capture....and a loaner pactor modem graciously being shipped to me to compare modems. (See: https://www.fcc.gov/ecfs/filing/10904245343229   )

Unexpectedly, I have found that simply using a distant RMS Gateway is far, far easier than what I had been doing (both receiver and transmitter in the same house). (The opposite of what some have speculated in social media.)   As I had explained, work from this point onward is just optimization and learning more about these systems; the basic decompression algorithm is written, and works, though one of the bugs discovered last night was a rather embarrassing error!

PUBLIC SOFTWARE CACHES
My original software and associated test files can now be retrieved here:
https://www.qsl.net/nf4rc/Tech/RaspberryPiWinlinkDecoder/
My corrections and improvements and test files of last night can be retrieved here:
https://www.qsl.net/nf4rc/Tech/RaspberryPiWinlinkDecoder/0903/
and future daily improvements will similarly go into sub-directories for easy access.

I think my part in this *software development* is rapidly ending, as my mission there was just to get reader software working, and let people who are much more expert than I, go about the business of optimizing it. ***When this all started in the spring, I knew very very little about any of this***. I have had to put a lot of time into coming up to speed on all these issue, and I'm probably not the only one who had to!   But that is amateur radio; that is what we all do: learn things we didn't know.   There are certainly MANY more people in amateur radio who are far more qualified at C-programming than I...and I'm still quite surprised that none of them pulled this off years and years ago.

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[1]   https://qsl.net/nf4rc/2019/InstructionsEFHW.pdf

But I will continue to make small improvements and fix obvious "dumb" bugs for a while.

I think there is a need to bring this quite-wasteful two-decade debate to closure. Some posts in social media suggest that some persons are having difficulty adjusting to what has already been solidly proved by original research, and the plethora of questions Mr. Kolarik sent after my last email indicate the same.   Social media posts can't really be verified for authorship or accuracy, so I don't make too much of it, but I would point you to a post ostensibly by NA4M with an unsubstantiated post copied ostensibly from another individual, in the comments here: https://www.eham.net/articles/43661   The number of inaccuracies, provably false claims, and moot points in that post are breathtaking.   I attempted to address those in further comments there.   Proven facts, are proven facts.   Getting people to acknowledge proven facts is one of the first steps toward consensus building.   Then you choose your judgement of how best to apply all the facts, I guess.

My personal view is that the recent Board action was attempting to solve a problem that has already been shown by original (and un-rebutted) research to be virtually non-existent. (See: https://ecfsapi.fcc.gov/file/10408063816674/FCCRM11831-2.pdf) The decision reached by the Board has rather untoward unintended consequences for JS8, which are unseemly.[2] Further the loss of privileges to simple digitally-interested amateurs is significant, likely unwarranted, and may come to be viewed in a very negative light in the future.   In regards to the larger issues posed by Mr. Kolarik, it has been difficult to address his changing positions which seem more based on "what can be negotiated" in some instances, than on principled stands. See for example the (corrected) invited editorial for the Wireless Association of South Hills here: https://qsl.net/nf4rc/ResponseEditorial.pdf (with 37 footnotes).

I believe there are now a significant number of issues where the **facts are now clear, and un-rebutted**. I would call the attention to the Board to this recitation of those facts: https://qsl.net/nf4rc/2019/Conclusions0903.pdf .

In my field of medicine, the first maxim is "Do No Harm."   I appreciate the time and effort all of you have put into this complicated issue.

Sincerely,

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ARRL Field Instructor
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2   During the preparations for Hurricane Dorian, a small group of Alachua County amateurs have been doing private simple studies of how JS8 could be utilized for passing formal traffic between deployed stations in difficult circumstances.   The JS8 community voluntarily provided multiple automated stations in multiple states, and using them we were able to demonstrate methods that would reliably move traffic at any point in the 24-hour cycle, even the most difficult time for intra-state communications, the middle day intensification of the D-layer.   We passed our first ARRL Radiogram (into which an ICS document can always be inserted) between sender and recipient using a 3rd party station as the "cache."   Our study suggests that JS8 can be a low-signal, low-data-rate alternative to WINLINK for reliable digital communications at any hour of the day or night even for a large state as Florida.   Previous Section tests had documented near impossibility (without relays) of accomplishing the same task on SSB HF nets, and the SARNET has been quite problematic recently.