**Rebuttal to Comments from Philip R. Karn, Jr, re: RM-11831**

I am William H. Axelrod, a licensed Extra class Radio Amateur Operator, K3WA. In reading Mr. Karn’s comments it is obvious that he either misinterprets or does not understand the comments of those who favor RM-11831. Moreover, Mr. Karn openly states that “I don’t operate much, but I continue to experiment and develop open source amateur radio software for satellite tracking, error correction, digital radio modems and software defined radios”. He follows this statement with nine pages of technical detail – all addressing very specific technical details or providing his interpretations of FCC rulings. Much of this detail is correct as far as it goes. But none of it addresses the three key issues that should determine whether the FCC adapts or rejects RM-11831.

The three key base issues to be considered are:

1. **National Security** – Proprietary, wide band data communications that are actually or effectively encrypted without an available public decoder from autonomous transmitters on the amateur spectrum constitute a risk. If the broadcast cannot be “read” by others than those who have, or have purchased, the proprietary software effectively negates any opportunity to detect if any malefactors are using the media inimical to the safety of law and order or the security of the United States.

2. **Science, Technology, Engineering and Math. (STEM)** – Impacts of unlimited wide band data signals do not have an available decoder for youth to listen in. These younger amateurs will rapidly loose interest in amateur radio with a potential corresponding lessening of interest in pursuing STEM careers. Win Link is simply an e-mail system linked by radio. E-mail is a decades old system.

3. **Impacts on the Amateur Radio Service** – In addition to the STEM issue, operation of encrypted communications, especially in the parts of the spectrum allocated to narrow bandwidth modes which include the most modern digital modes, is detrimental to the amateur radio service and  will likely cause younger amateurs to rapidly loose interest. The younger generations do not get excited by e-mail. As my millennial age grandchildren say “E-mail is so twentieth century”. Other low band-width capture their imaginations including the FT-8 and FT-4 modes and any that bring gaming notions to amateur radio such as near real-time contest scoring and the NA Collegiate Championship. Additionally, allowing autonomous transmitters to broadcast a wide-band signal in portions of the allocated amateur radio service frequency bands will result in hogging needed bandwidth and interference to on-going communications, potentially including emergency communications. And for what? Yet another means of sending and receiving email? An operator should know that.

It is clear that rejecting RM-11831 will be detrimental of these three issues regardless of the technical details or hair-splitting parsing of current regulation. Therefore, I **strongly urge** the Commission adopt RM-11831.

Respectfully, William H. Axelrod K3WA