

TO: The Chief, Wireless Telecommunications Bureau, Federal Communications Commission

Regarding: RM-11708, a proposed amendment of Part 97 Amateur Radio Service Rules and the comments made by the original petitioner (ARRL) on 23 December, 2013

I thank the Commission for allowing Amateur Radio Operators to voice their opinion about the proposed changes to Part 97 Amateur Radio Service Rules as petitioned by the ARRL. This document is in response to the Comments of Petitioner provided to the Commission on 23 December, 2013 by legal counsel for the ARRL.

- 1) **Bandwidth limitation:** The petitioner's request is to set a maximum bandwidth of 2.8 kHz on the MF and HF bands for emissions. The Commission should be aware of the reason behind the petition is to allow the use of the Pactor-4 coding in the aforementioned frequency bands. This is likely evident to the Commission based on many of the comments filed which specifically mention the Pactor-4 type of emission. The amateur radio community is well aware that the underlying intent of the petition is to allow Pactor-4 communications which utilize an approximate bandwidth of 2.8 kHz.
- 2) **Proprietary coding:** The Pactor-4 coding methodology utilizes patented proprietary encryption hardware and software to code and decode transmissions. This hardware is only available from one global supplier and thus restricts those who do not purchase said hardware and software from the supplier from being able to identify such Pactor-4 amateur radio stations. Thus the ability by the FCC and the general amateur radio community to identify Pactor-4 stations in the event of interference or other violations will not be possible unless one purchases the proprietary hardware/software. The supplier of Pactor-4 equipment and software has not released the Pactor-4 code to the general public and thus it is not possible to develop any methodology to decode such transmissions. This goes against the spirit of Amateur Radio Service in general and the Commission is asked to view such proprietary coding as a violation of FCC rules as it is essentially encryption. Encrypted transmissions in the Amateur Radio Service are not allowable per my understanding of FCC governance of Amateur Radio.
- 3) **Band Plan:** While it is my understanding that band plans controlling the types of emissions in the amateur radio bands is generally the responsibility of the ARRL and the amateur radio community, the ARRL has failed to present a complementary modified band plan that would designate sub-bands for the wider 2.8 kHz emissions in the digital portion of the HF bands. Thus interference to narrow legacy emissions such as radio-Teletype (RTTY), PSK, and JT65-A types of coding will likely transpire. This is considered to be a shortcoming in the petition since no consideration has been given to propose methods to segregate narrow-band from wide-band digital emissions.

- 4) **CW Operations Impact:** The petitioner in their comments (Section 3, part B) state that there will be no impact to those amateurs who operate CW in the lower portions of the amateur bands. This is not true since the petitioner failed to consider the problem of interference to existing narrow bandwidth digital emissions, it is not practical or feasible to intersperse wide band-width emissions amongst narrow-width emissions. The petitioner should have provided a complementary revised band plan as evidence that such potential interference will be managed by segregating the narrow bandwidth from the wide bandwidth emissions. Thus operators of RTTY will be forced by the wide bandwidth emissions to move their transmissions down into the CW portions of the amateur bands which will therefore have an impact on CW operators.
- 5) **Unattended Operation:** The Commission should be aware that wide bandwidth Pactor-4 transmissions are generally considered to be unattended operations, no operator is generally present on a constant basis to monitor the frequency in use. Thus there is no assurance that interference will be prevented to other operators.

While I am in agreement with the ARRL that experimentation with newer digital technology should always be encouraged, the ARRL fails to recognize that generally new digital transmission methodology has in recent years trended towards developing ever more narrow bandwidths of emissions so as to make efficient use of valuable and limited frequency spectrum. This is evidenced by the PSK31 and JT65A emission types which utilize very narrow segments of the amateur bands. Therefore the petition goes completely against the grain of encouraging efficient use of the spectrum via improved narrow bandwidth methodology.

I ask that the Commission consider that the ARRL's petition in sum is an incomplete proposal and that consideration for its impact on all amateur radio operators was not fully taken into account. Therefore the RM-11708 petition should be rejected for that reason and the points mentioned above.

Respectfully yours,

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January 4, 2014