

2018-12-15

Re:

RM-11708 / WT 16-239

RM-11759

To The Commission:

I am writing in regards to the above-listed items.

I must admit that I am surprised that the Commission is still accepting public comment for these items at this late date, and I would have hoped that final determinations would have been issued already.

If, however, the Commission is continuing to accept public input on these matters, I would like to reiterate (and perhaps slightly update) the following points I made previously:

1. The Amateur Radio Service is uniquely positioned to permit individuals an opportunity to experiment with an advance the art and science of communications via RF.
2. To that end, Part 97 is in need of updating given the advancement of technology over the past several years. The amateur radio service would be best served with regulations that are as mode-agnostic as possible, and which remove antiquated or unnecessary restrictions, such as the current limit on symbol rate to 300 baud on most HF frequencies.
3. The Commission has proposed declining to set a restriction on bandwidth of transmitted signals on HF in conjunction with removing the old symbol rate restriction. While I agree that it is appropriate to give users of the amateur radio service great leeway in their activities in light of the advancement of



technology, it is also important to note that amateurs use the limited spectrum for a broad range of purposes, some of which are incompatible with one another. The Commission should consider imposing a bandwidth restriction of 2.8kHz on the data portions of 12, 15, 17, 20, 40, and 80 meters; as well as on 160 meters; and consider whether a 500Hz bandwidth restriction would be appropriate on 30 meters in light of international amateur radio practices. While such a restriction may seem incompatible with granting amateurs the greatest possible latitude to experiment on their designated frequencies, Part 97 does act as a form of “rules for the sandbox” that we hams play in, and it would be too easy for an ultra-wide signals to destroy the utility of the bands for a majority of users. If the Commission does not wish to impose a bandwidth restriction, then at least update Part 97 to clarify that proper amateur practice is for amateur stations to use the minimum power and bandwidth to achieve the type of communication desired, to clarify what is meant by “type of communication”, and perhaps re-emphasize the obligation to avoid intentional interference...including how the degree of obligation is inherently proportionate to the bandwidth of the intended transmission.

4. The ARRL has proposed a shift in the dividing line between data and phone / 80 and 75 meter bands. Please act on that soon. The current US amateur band plans call for non-automated and automated data stations to share the same

limited space at the top of 80 meters. An adjustment is needed.

5. Despite my prior point, it is worth noting that utilization of different data modes has changed since these items on the FCC docket were first introduced. Outside of contest weekends, amateur data (45bps Baudot, PSK 31, etc.) transmissions that were common have declined in favor of very narrow-band data modes introduced since these proceedings started. This would suggest that, despite the feedback of some enthusiasts, conflict between automated data and other modes may be on the decline.
6. Several commenters have expressed concern on the presence of PACTOR in the amateur radio service. I have no objection to the principle of PACTOR 3 and PACTOR 4 being used on the bands, despite poor operating practices being demonstrated by some operators making use of Winlink, and some operators upset at the presence of Winlink on “their” frequencies. I offer the following more detailed thoughts on the subject.:
 - a. If part of the purpose of the amateur radio service is to promote experimentation in the art of radio communications, it stands to reason that the use or adaptation of non-amateur technologies should be permitted.

- b. Many of those non-amateur technologies are in formats that are difficult for many amateurs to decode, creating new challenges with the peer/self-enforcement of the amateur radio service that the Commission seems to endorse. Can these challenges be addressed by general operating practices (re-introduction of identification by CW in certain situations?), or perhaps by publication of records of transmissions rather than a de facto ban on such transmissions (which would severely restrict experimentation)?
- c. The incidental / personal / technical nature of the kinds of communications authorized for the amateur radio service is such that there is no need of encryption of the content of such. However, does the resultant prohibition of encryption necessarily translate to a severe restriction upon or prohibition of newer modes of transmission?
- d. On top of these points, we must remember that the amateur radio service is an international service. Such modes are currently generally unrestricted in international use, and RF tends to ignore lines drawn on maps. Restrictions on US amateur use of such technology will not stop such signals from being found in amateur spectrum.

7. At least one commenter has garnered headlines recently for claiming that “national security concerns” warrant a restriction or prohibition upon certain modes. While I empathize with the concern, I note:
 - a. Federal authorities charged with guarding against such concerns presumably have (or can get) the tools to respond to such concerns.
 - b. Bad actors generating such concerns are not likely to heed regulatory restrictions. Such actors are likely to already run afoul of other elements of Part 97 as it is. If regulations are to be amended to eliminate national security concerns...it wouldn't be too hard to create a justification to end the amateur radio service on security grounds, begging the question of: does “national security” outweigh the national interest that has been served for most of the past hundred-plus years in enabling amateur experimentation?
 - c. Accordingly, I would ask the Commission to focus its attention to the questions of symbol rate, signal widths, and mode appropriateness to the harmonious use of frequencies authorized for amateur use, and harmonizing US regulations with current international practice.

To summarize:

- I endorse the proposal to eliminate the symbol rate restriction.
- I oppose the Commission's proposal to allow unlimited-bandwidth signals; either a specific limit is required, or some clarification that excessively wide signals should be avoided and extra care taken to avoid harmful interference.
- I endorse the proposal to expand the 80 meter band.
- I generally oppose measures that would unduly restrict the use of newer data modes, such as PACTOR 4, but I would endorse reasonable measures that would encourage better operating practices through facilitating peer-oversight among hams.
- These proposals have been in limbo for too long. I hope the Commission will act soon.

Sincerely,

A handwritten signature in brown ink, appearing to read "Michael Adams", with a long horizontal flourish extending to the right.

Michael Adams