

**Before the
Federal Communications Commission
Washington, D.C. 20554**

In the Matter of:)
)
Amending Part 97 of the)
Commission's Rules and Regulations)
to Redesignate Sub-Bands)
from Exclusively Morse Code to)
Narrowband Modes, including CW)
and for Other Purposes)
) **RM-11769**
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)
By: W. Lee McVey)
)
)
To: The Chief, Wireless)
Telecommunications Bureau)
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_____)

COMMENTS in OPPOSITION

Comes now, W. Lee McVey, P.E. Ret., licensee of amateur radio station W6EM, and holder of General Radiotelephone lifetime license PG-12-19879; who wishes to file the following Comments in Opposition to the instant Petition. Commenter has been a Commission licensee in the Amateur Service since 1961, and a commercial radiotelephone licensee since 1965. These Comments are timely filed following Public Notice, in accordance with §1.41 and §1.405 of the Commission's rules.

1. The instant Petition should be Dismissed, since segregating portions of amateur bands to include large, unrestricted segments for "symbol" communications would create a *Wild West* free for all, making effective communications difficult within such allocations.

Without the spectral sub-band constraints that now exist to help prevent interference, communication could become difficult and chaotic. Intermingling wide-bandwidth digital signals randomly across sub-band segments reserved primarily for narrow bandwidth communication would result in frequent operator frustration and likely further decline in utilization of amateur allocations.

2. Narrow bandwidth modes such as CW, PSK and the various versions of JT, for the most part occupy less than several hundred Hertz of bandwidth. And, these modes involve operator-initiated, station-to-station contact. Narrow bandwidth modes can be worked around, and all can share spectrum without much disruption. Especially since these modes are operator-to-operator, transmissions are of relatively short duration, and operators listen first before transmitting.

3. However, wider-bandwidth digital modes such as PACTOR, use Orthogonal Frequency Division Multiplexing (OFDM). OFDM amounts to a series of maximum amplitude subcarriers, a virtual signal *curtain* from the carrier frequency out to as much as 2.4kHz above or below the carrier frequency, depending on selected sideband. OFDM modes offer much greater throughput than what is needed for keyboard typing speeds encountered in typical amateur-to-amateur contacts.

4. OFDM *Mailbox* stations are now used to pass Internet email messages along with often lengthy file attachments. And, transmission durations greater than 10 minutes without sending station identification may easily occur¹. Mailbox stations are automatically controlled, and a control operator is not always present to monitor channels before transmissions are attempted or made. Due to the nature of some of the modes, (PACTOR, and probably others too) the occupied bandwidth may change suddenly if propagation conditions change. Narrowing automatically to slow down throughput during adverse conditions, while expanding bandwidth and speed immediately if propagation improves. While narrowing of bandwidth would not cause unintended interference, dynamically expanding bandwidth rapidly may, since that characteristic

¹ §97.119(a) requires that an amateur licensee identify his or her station at least every 10 minutes during continuous transmissions. Lengthy digital file transfers could easily exceed this interval.

could wipe out adjacent, in-progress communications. Sophisticated modems with digital signal processors are needed to send and receive OFDM modes. As such, stations cannot be identified, monitored or content examined by observers unless the observing stations have modems that are capable of decoding the particular mode. Narrow-bandwidth keyboard modes, on the other hand, use widely available public domain software and utilize generic computer sound cards for modulation and demodulation.

5. As an example of impending chaos following adoption of this Petition, automatically controlled digital email-*Mailbox* stations would no longer be restricted to just a few kilohertz of each band as they are now. If these stations could select any frequencies in an uncoordinated, unrestricted manner, nearby peer-to-peer communications could be wiped out for extended periods *anywhere* in a “symbol” allocation.

6. Some might argue that opening the frequency flood gates would facilitate better emergency communications support. While it is noteworthy for the amateur service to assist public agencies in passing traffic when Internet connectivity is unavailable, it must be done so carefully to be effective. Unless prior coordination and restriction to a channelized approach is used, as is the case now, the damage to other forms of communication may be extensive. In fact, just when flexibility with *all* forms are needed most: post disaster.

In summary, this Petition is totally unnecessary and would have vast, undesirable consequences if adopted. It should be summarily Dismissed.

Respectfully,

/s/

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