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

In the Matter of	)	
Amendment of Parts 2 and 97 of the Commission's Rules to Create a Low Frequency Allocation for the Amateur Service By Mark W. Kahrs, PhD.	)	ET Docket No. 02-98 RM - 9404
To: Chief, Public Safety and Private Wireless Branch Wireless Telecommunications Bureau	)	

COMMENTS

The proposed rule changes to part 97 are to be applauded by the Amateur Radio community. On the one hand, it preserves the 160 kHz (1750 meter) band for unlicensed use by "Lowfers" under Part 15 and on the other hand, it expands use of the 136 kHz (2200 meters) band for amateurs. The 2200 meter band, is of particular use since it is already being used by several European countries, as noted ably by the commission.

However, the proposed restriction to General Class and above does not serve either radio science and engineering or the amateur community. As the commission well knows, its decision to create a "no code" license (over the objection of the ARRL) was directly responsible for the enfranchisement of many computer savvy amateurs. By proposing this simple class restriction, these practitioners are left out in the cold. Claiming that General Class amateurs are less likely to cause band interference is at best unsubstantiated and at worst discriminatory. For example, no-code Technicians can construct their own microwave equipment; does this mean microwave construction is of less

complexity and difficulty than building a goniometer?

Modern transmission techniques in the LF bands demand computer codes including Forward Error Correction and shaped modulation. Many technician class amateurs are equipped to supply these skills. Because the current licensing structure would not enable the "no-coders" to upgrade without learning an obsolete modulation method (OOK), it should not be used to discriminate against this class of very useful and skilled amateurs.

Further, as an inducement, it is respectfully suggested to limit modulation of the 136 kHz band to *data transmission* modes only (ITU emission classifications F1D, F2D, G1D and G2D). This will encourage the use of state of the art modulation methods involving Digital Signal Processing thereby demonstrating the use of the Amateur band for radio research in science and engineering.

Respectfully submitted,

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