

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

In the Matter of)
)
Improvements to the Low Power FM) **RM-11749**
(LPFM) Radio Service)
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To the Commission:

Comments of Nickolaus E. Leggett, Certified Electronics Technician, Amateur Radio Operator (N3NL), GROL Licensee, Inventor, and Analyst

I am a certified electronics technician (NARTE and ISCET) and Extra Class amateur radio operator (call sign N3NL). I also hold an FCC General Radiotelephone Operator License with a Ship Radar Endorsement. I am an inventor holding three U.S. Patents. My latest patent is a wireless bus for digital devices and computers (U.S. Patent # 6,771,935). I have a Master of Arts degree in Political Science from the Johns Hopkins University.

I am one of the original petitioners for the establishment of the Low Power FM (LPFM) radio broadcasting service (RM-9208 July 7, 1997 subsequently included in MM Docket 99-25). I am also one of the petitioners in the docket to establish a low power radio service on the AM broadcast band (RM-11287). I have filed a total of well over 200 formal comments with the FCC over the years since the 1970s. I have filed comments with other Federal agencies as well including the USPTO, NASA, FAA, FERC, EPA, and the TSA.

Recommended Commission Actions

I am recommending that the Commission add some time to this docket. The Commission should include the petition for rulemaking submitted by Donald J. Schellhardt, Esq and Nickolaus E. Leggett on December 20, 2013 (Proceeding Number PRM13MB) in this docket (RM-11749). In this petition, we made several suggestions about the constructive uses of 250-Watt stations in the low power FM (LPFM) radio broadcasting service.

Power Levels for the LPFM Radio Service

It is clear that several different power levels can be useful for low power FM radio broadcasting. We originally proposed a quite low power level for LPFM stations. This would allow numerous neighborhood-oriented LPFM stations to serve their communities and to share broadcast frequencies. In addition, these low-power stations could be affordable by communities and would be manageable by community-based organizations. My own preference is for table-top LPFM broadcast stations running power levels ranging from approximately one Watt up through about 40 Watts. These stations could be set up in church basements, community residents' homes, and community centers. These little stations would be operated and serviced by community residents, bringing many new people into radio broadcasting.

More powerful (250 Watt) LPFM radio stations would be quite useful in areas of low population density such as tribal lands or rural Kansas. However, 250-Watt stations are not desirable in high-density neighborhoods and in regions where there are already large numbers of FM broadcast stations. We need lower-power stations so that LPFM can be introduced into urban neighborhoods to enable these communities to develop themselves.

I would like to see an open and constructive public discussion of the value of 250-Watt LPFM stations as compared to lower power LPFM stations including the current 100-Watt

stations, as well as even lower power FM stations. Our petition (PRM13MB) has some useful inputs on this issue that should be considered by the commenters, the public, and the Commission itself. Please allow our suggestions for 250-Watt stations to be considered by the public and the Commission itself.

Respectfully Submitted,

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Note: A copy of the Schellhardt and Leggett petition (PRM13MB) that we submitted on December 20, 2013 is included with this filing.

Appendix A – My Patents and Document References

Some of my document references are listed below:

**United States Patent 6,771,935, Wireless Bus August 3, 2004
United States Patent 3,280,929 Ground-Effect Machine October 25, 1966
United States Patent 3,280,930 Ground-Effect Vehicle October 25, 1966**

“Demonstration and Development of Amateur Radio Applications of Natural Vacuum Electronics”; Nickolaus E. Leggett, N3NL - 22nd AMSAT Space Symposium and Annual Meeting October 8-10, 2004 in Arlington, Virginia

“A ‘Lighthouse’ Protocol for Random Microwave Contacts”, Nickolaus E. Leggett, N3NL, QEX The Experimenter’s Exchange – Technical Notes July/August 2004 – American Radio Relay League, Newington, CT.