

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554**

In the Matter of

Amendment of Part 97 of the Commission's Rules Governing the Amateur Radio Services))))	WT Docket No. 04-140
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To: The Commission

**COMMENTS of Nickolaus E. Leggett, N3NL
Electronics Technician and Amateur Radio Operator**

The following is a set of comments from Nickolaus E. Leggett, an amateur radio operator (Extra Class licensee – call sign N3NL), inventor (U.S. Patents # 6,771,935 (wireless bus), #3,280,929 and #3,280,930), and a certified electronics technician (ISCET and NARTE). I also have a Master of Arts degree in Political Science from the Johns Hopkins University (May 1970).

My comments are directed at some of the concepts that were included in my petition, *Field Repair Requirements for Commercially-built Transmitter and Transceiver Equipment for the Amateur Radio Service (RM-10412)*, that was denied in this docket. My comments identify new evidence that is relevant to this issue.

Electromagnetic Pulse (EMP) Events and Field Repair

In my petition, I stated that field-repairable radio equipment would be very useful in major emergencies such as Electromagnetic Pulse (EMP) attacks by rogue nations or terrorist groups. An EMP attack results in a comprehensive impact that would have to be countered by improvised repairs to the damaged communications equipment.

In its denial of my petition, the Commission did not address this issue of intense emergencies at all.

The Commission should reconsider the issue of field repairability of commercially built amateur radio equipment and radio equipment in other radio services.

New Relevant Evidence

The U.S. House of Representatives has sponsored the Commission to Assess the Threat to the United States from Electromagnetic Pulse (EMP) Attack. This Commission has just issued its report stating that “the current vulnerability of our critical infrastructure can both invite and reward attack if not corrected. Correction is feasible and well within the Nation’s means and resources to accomplish. (Reference 1)”.

The FCC should carefully examine this new report and reconsider the value of field repair standards for radio equipment.

Additional Recommended Actions

At the same time the Commission should consider other options for protecting amateur radio communications from electromagnetic pulse. These options could include the following:

1. Allocating additional frequencies for public service use by amateur radio equipment that is shielded and bypassed from EMP events and attacks.
2. Retaining the Morse Code testing requirement for some classes of amateur radio licenses. Morse Code allows the use of very simple and repairable transmitters and receivers.
3. Evaluate the use of Federal subsidies for the production of EMP-resistant electronic components and equipment enclosures for civilian use.

Basic Responsibility

The Commission is fundamentally responsible for the protection of our Nation's civilian communications infrastructure from EMP attack.

If an EMP attack occurs and our infrastructure is not adequately protected, the results would be grave for our Nation. Also, in this situation the Commission itself would probably be dismantled and replaced.

Respectfully Submitted,

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Reference 1: Abstract of the **Report of the Commission to Assess the Threat to the United States from Electromagnetic Pulse (EMP) Attack**

Note: Refer to the editorial, **Mother of All Blackouts**, in the Wall Street Journal (Thursday August 12, 2004). In this editorial, the Journal states that "The EMP study, which came out the same week as the 9/11 Commission's report, got little media attention. It deserves more."