

**REPORT OF THE RF SAFETY COMMITTEE
TO THE
ARRL BOARD OF DIRECTORS**

July 2009

The RF Safety Committee participated in the following areas over the past six months:

1. RF Safety Committee Activities.
2. Monitoring recent scientific studies regarding RF Safety.
3. Participation in the scientific RF Safety community.
4. Administrative issues.

1 RF Safety Committee Activities

- 1.1 An article was received about San Luis Obispo County, California passing an ordinance to prohibit radio amateurs from operating due to RF safety concerns. This article turned out to be an April fool's joke, but not before it generated quite a bit of concern among the committee members.
- 1.2 The committee was asked to review the safety questions in the Technician pool. The current RF safety questions did not cause much concern but two questions about the relative safety of conducted currents in the body elicited quite a bit of discussion. Though not RF safety-related, the committee unanimously felt that these were not appropriate questions for an amateur radio question pool. Not only is there quite a bit of disagreement in the scientific community about the exact amount of conducted current that is lethal in the human body, but it is felt that hams derive no benefit from knowing an amount of current that would be lethal; rather they should be taught how to avoid any current from flowing through their bodies.
- 1.3 Mr. Hare responded to a ham's questions about requirements for performing an RF Safety evaluation. The ham had been informed that evaluations are not required for stations in rural areas and wanted to know if this was true. He also wanted to know if it was required to perform evaluations for operating in public areas, such as at a Field Day site. Mr. Hare informed him that an evaluation is required whenever there is a chance that exposure to any people will exceed MPEs. He also mentioned that evaluations for Field Day sites are a good idea in case any people visiting the site ask about RF safety.

2 Monitoring Scientific Studies

- 2.1 Articles continue to be published about experiments about "wireless electricity." The committee has discussed this before and its analysis of this technology has not changed. Article about such experiments have ignored the RF safety implications of transmitting electricity through the air, either as RF electrical or magnetic fields. The scientists who are studying this technology also appear to have ignored, or misunderstood, that MPE levels exist for human exposure to both electrical and magnetic fields at any frequency above 100 kHz. This is technology that should be followed carefully.
- 2.2 A relatively small group of scientists whose research and publications have been widely discredited by the RF safety scientific community has formed and is going on the offensive. They have published the "Bioinitiative Report," which features only the

discredited research and ignores the bulk of the research that has been performed on electromagnetic bioeffects. This publication is often quoted by those who wish to place excessive limitation on RF transmissions. This group has been taking their message to third world countries to try to convince their regulatory agencies to develop rules that severely limit RF emissions. Their most recent meeting have taken place in China and Brazil.

3 Participation in the Scientific RF Safety Community

- 3.1 Mr. Hare continues to serve on the ICES (IEEE) SCC-28 RF Safety Standards Committee. He generally shares the voting ballots for changes to the standards with the committee prior to voting on them.
- 3.2 Dr. Lapin continues to testify about RF safety at zoning board hearings when cellular tower placement is being considered.

4 Administrative Issues

- 4.1 Several of the members of the RF Safety Committee have been admitted as ARRL Technical Advisors. Technical advisors have access to QST and QEX articles prior to publication and the RFSC is expected to monitor these for topics that have RF safety implications.

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