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

July 2004

The RF Safety Committee has 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.
- 5. Future Plans.

1 RF Safety Committee Activities

- 1.1 Ross Adey, K6UI, a former member of the ARRL Bioeffects Committee, died in May 2004. The committee acknowledged Dr. Adey's hard work and interest in the subject.
- 1.2 The committee was made aware of an article in QST about indoor operating of microwave transmitters. We reviewed the text and the photos and concluded that there were no inherent RF Safety issues with this article. However, we noted that the article also lacked precautions about exposure to the proximate antenna. Since microwave antennas are much more highly focused than other antennas used by hams, the potential for overexposure is greater.

2 Monitoring Scientific Studies

- 2.1 The British National Radiological Protection Board (NRPB) in another review study reported that "the biological and epidemiological evidence does not suggest cancer causation, in particular from mobile phone use, nor any other adverse health effect from radio frequency exposures at levels below guidelines." They did add the caveat that the relatively short time that cellular telephones have been in use means that different results could be found at a later date so they suggested, as did the Stewart report in 2000, that people take a precautionary approach to the use of the technology.
- 2.2 A Swedish group developed a mathematical model that showed the possibility that interaction between RF and red blood cells may cause them to clump together. The Committee obtained a copy of the paper published on this work and concluded that the work is purely speculative and does not describe any previously observed phenomena.
- 3 Participation in the Scientific RF Safety Community.

- 3.1 Dr. Lapin serves as a member of the IEEE Committee on Man and Radiation (COMAR).
- 3.2 Mr. Hare and Dr. Guy continue to serve on the IEEE Standards Coordinating Committee 28 on Non-Ionizing Radiation, which develops the standards for human exposure to RF energy. Mr. Hare maintains a list server for communications among members of this committee, and occasionally cross-pollinates pertinent issues between the RFSC and SCC-28 list servers.
- 3.3 Dr. Lapin has served as a reviewer for two papers on RF Safety submitted to <u>Biomedical Engineering Online</u>.
- 3.4 Dr. Lapin presented an RF Safety Forum at the Dayton Hamvention in May 2004. The purpose of the forum was to introduce hams to the types of research that lead to pronouncements about the safety of RF in the press. The goal was to briefly train hams to distinguish news reports based on good science from those that are merely sensationalism.
- 3.5 Dr. Lapin's presentation at Dayton was excerpted and presented on the RAIN report during two weeks in July 2004.

4 Administrative Issues

4.1 The committee has received requests from two amateurs who would like to participate in the work of the committee. They are being reviewed.

5 Future Plans

5.1 The committee is considering if there is a need to revise the RF Safety text used in ARRL publications.

Gregory Lapin, Ph.D., P.E., N9GL Chair, ARRL RF Safety Committee

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