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## HEALTH AND SAFETY ISSUES

PRESENTED BY:  
BOB ROSENBAUM

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## Recent Press

- "Currents of Death: Power Lines, Computer Terminals and the Attempt to Cover up Their Threat to Your Health" - Paul Brodeur, *New Yorker Magazine*, June, 1989
- "Sick of Wires? Sicker With No Wires?" - John Dvorak, *PC Magazine*, May 28, 1991
- "How safe are wireless nets?" - Mitch Radcliff, *MacWeek*, September 10, 1991

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## Status of Standards Activities

- IEEE SCC 28 - ANSI C95.1-1990  
*Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3kHz to 300GHz*  
Status: In final approval. Due January 92  
Chair: Tom Budinger, UC Berkeley  
Designator: ANSI C95.1-1990
- IEEE Committee on Man & Radiation (COMAR)  
Education & advocacy group  
Chair: Jim Lia - Univ of IL

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## Related IEEE Standards

- C95.2-1981 : Radio Frequency Radiation Hazard Warning Symbol; Reaffirmed in 1989
- C95.3-1973 : Techniques and Instrumentation for the Measurement of Potentially Hazardous Electromagnetic Radiation at Microwave Frequencies; Reaffirmed in 1979
- C95.4-1978 : Safety Guide for the Prevention of Radio-Frequency Radiation Hazards in the Use of Electric Blasting Caps
- C95.5-1981 : Recommended Practice for the Measurement of Hazardous Electromagnetic Fields—RF and Microwave

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## EPA

- Scientific Advisory Board & Committee on Interagency Radiation Research  
Focused on extremely low frequency and radiofrequency radiation (.003 - 30,000MHz)  
"... it would be inappropriate at this time to classify the carcinogenicity of EM fields in the same way as the Agency does for chemical carcinogens... With our current understanding, we can identify 60Hz magnetic fields from power lines and perhaps other sources in the home as a possible, but not proven, cause of cancer in humans."

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## General Reference Books

- Michaels & Lins: Biological Effect & Health Implications of RF Radiation, 1987, Plenum Press
- Lin, editor: Electromagnetic Interactions with Biological Systems, 1989, Plenum Press

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 **Prominent Researchers**

Henry Kuss - John Hopkins Applied Physics Lab  
Jim Lin - Univ of Illinois  
Asher Shepard - J.L. Pettis Mem Veterans' Hospital  
Ross Adey - "  
Arthur Guy - Univ of Washington

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 **Industry Groups**

**Electromagnetic Energy Policy Alliance (EEPA)**  
Executive Director: Richard Ekfeldt  
202-452-1070

"An association of manufacturers and users of electronic and electrical systems that utilize non-ionizing electromagnetic energy in telecommunications, broadcasting, manufacturing and consumer services. EEPA's primary objective is to work for a responsible and rational public policy regarding electromagnetic energy."

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 **Courses of Action for 802.11**

- Liaise with IEEE SCC 28 & COMAR
- Lobby with government funding groups to promote research into wireless LAN issues - spread spectrum, etc.
- Promote dialogue with key researchers

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