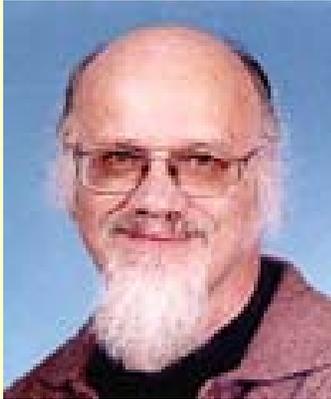


Radio Propagation and Antennas Group



Dr John Bennett



Dr Greg Cambrell



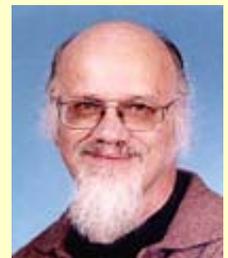
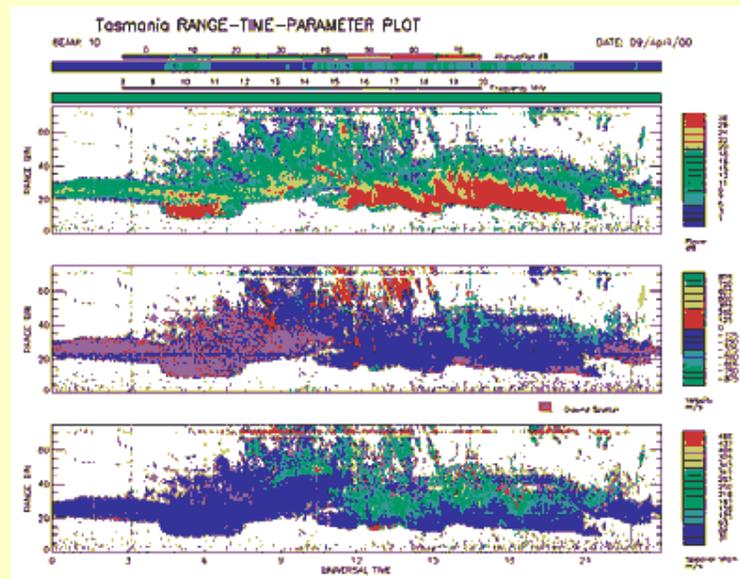
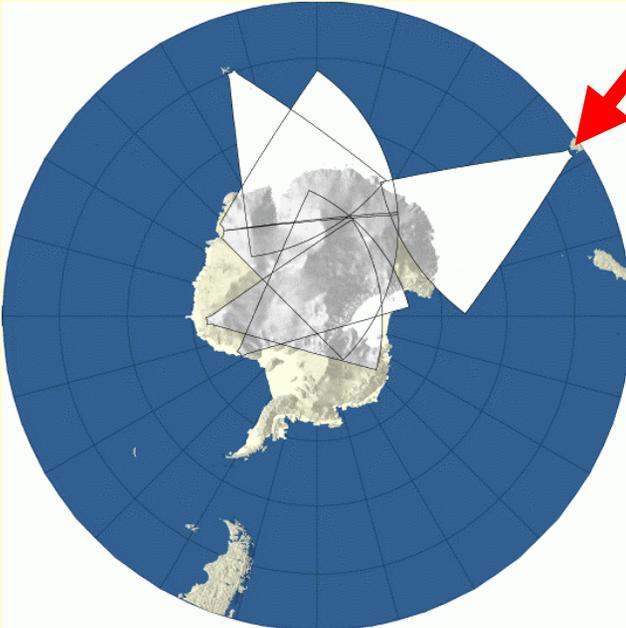
Stewart Jenvey

- 1. Problems in electromagnetics*
- 2. Radio Propagation*
- 3. Antenna design and testing*



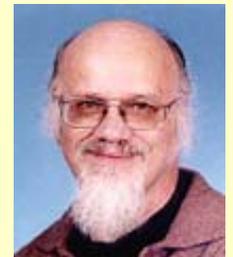
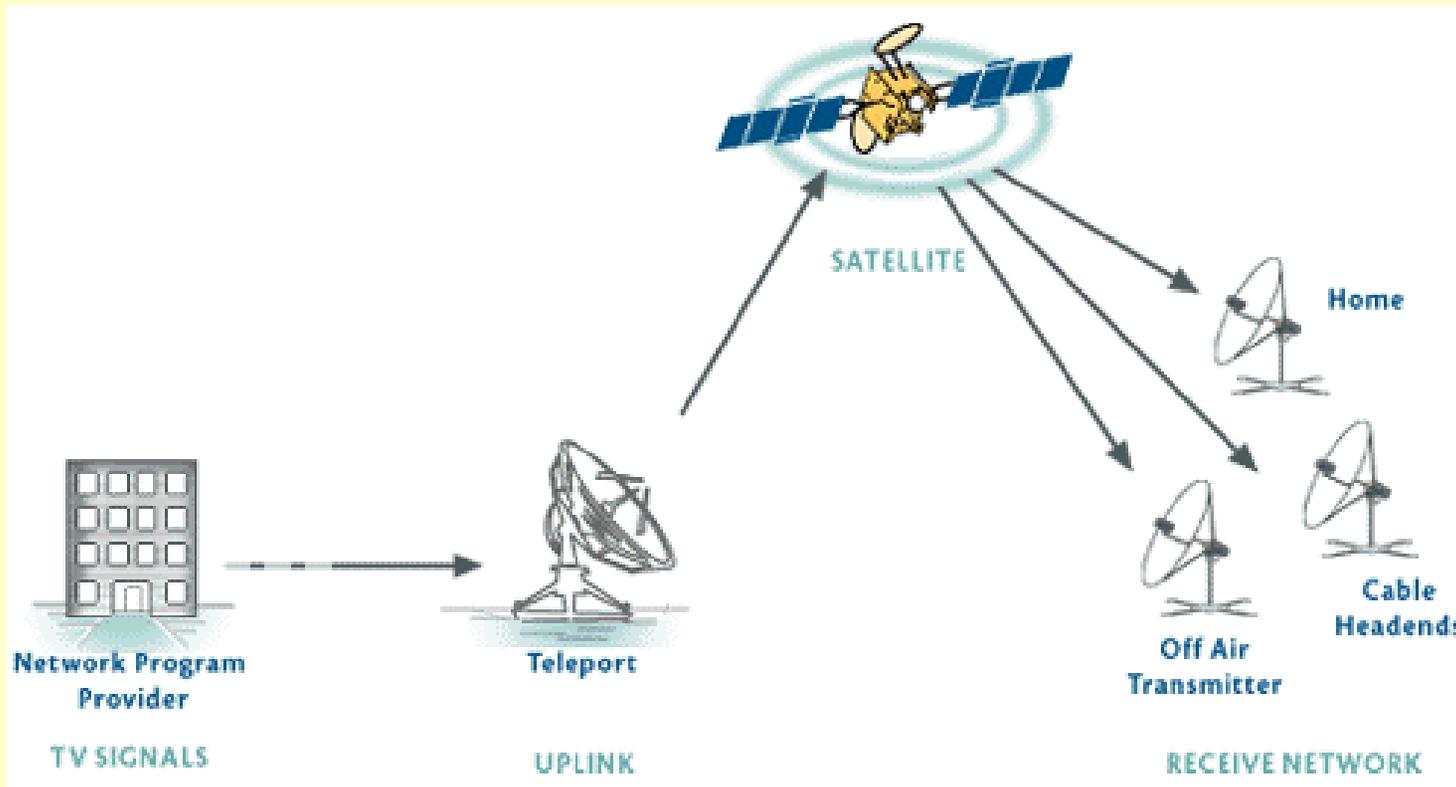
- TIGER RADAR

- An HF radar in Tasmania
- Part of the Super DARN network of radars around the world
- Investigating the structure of the ionosphere in the Arctic and the Antarctic



J Bennett

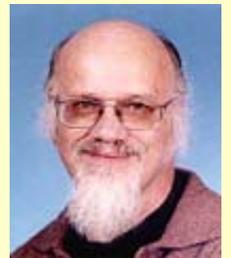
- New forms of Satellite Broadcast Radio



J Bennett

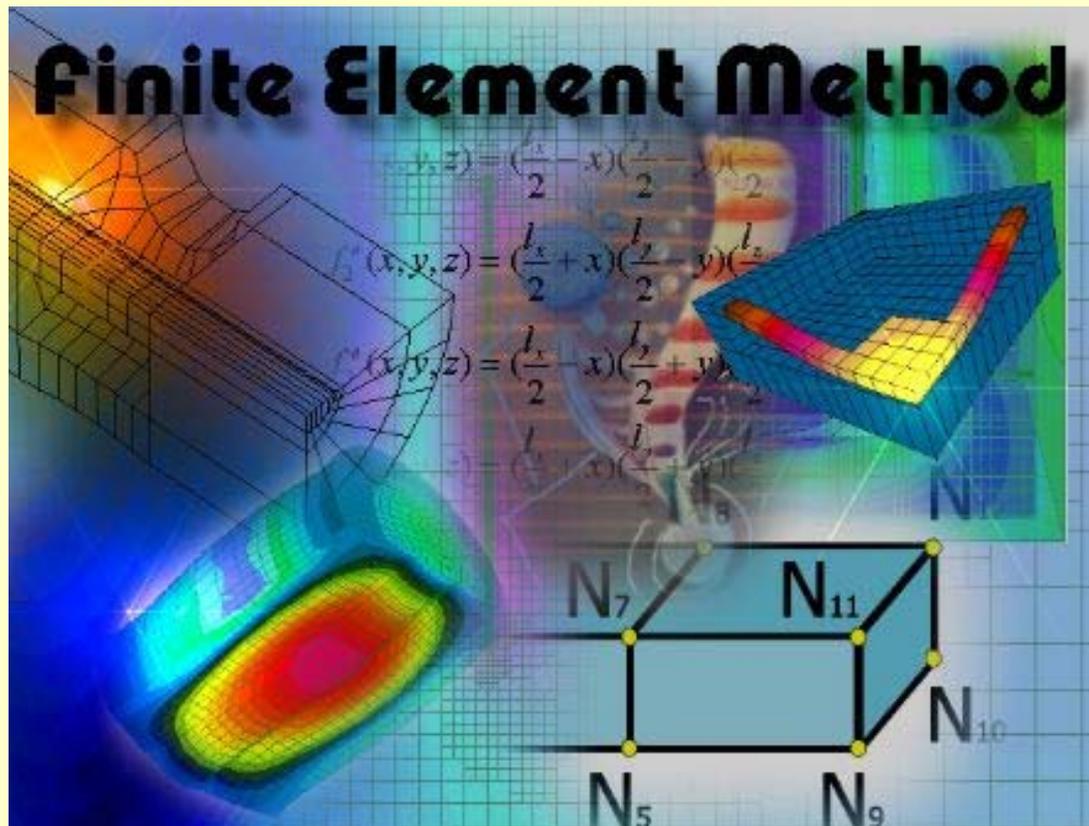


- Distribution of received satellite broadcasts inside buildings
- Studies in propagation from radiating “leaky” co-axial cables



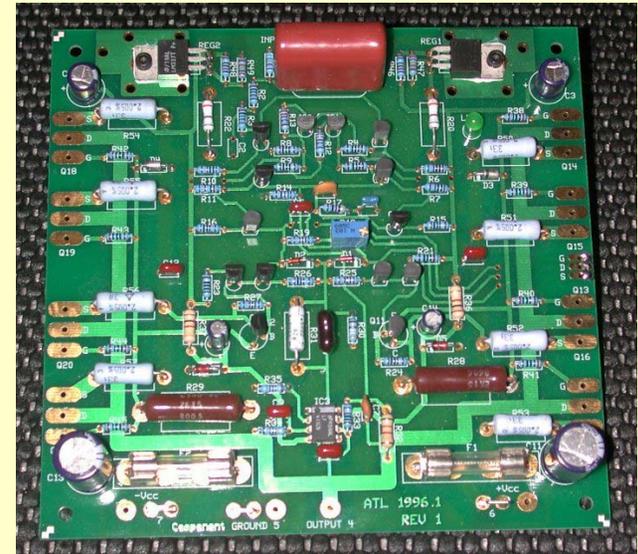
J Bennett

- Problem in Electromagnetics
 - Numerical methods



Greg
Cambrell

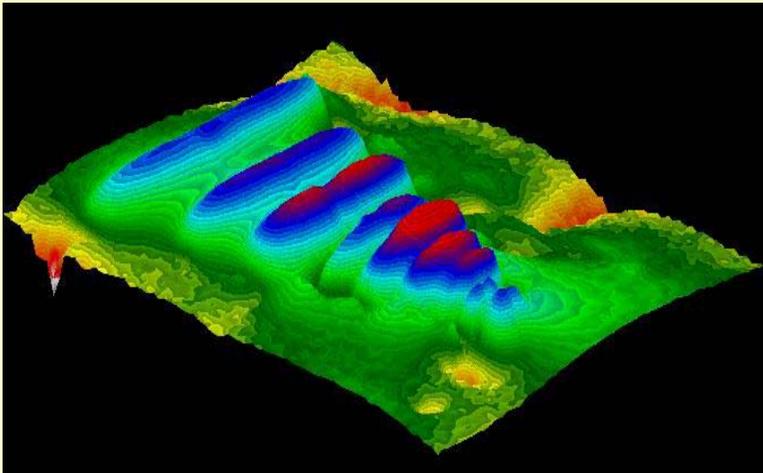
- Electro Acoustics
 - Specialised amplifier design
 - Innovative speaker design



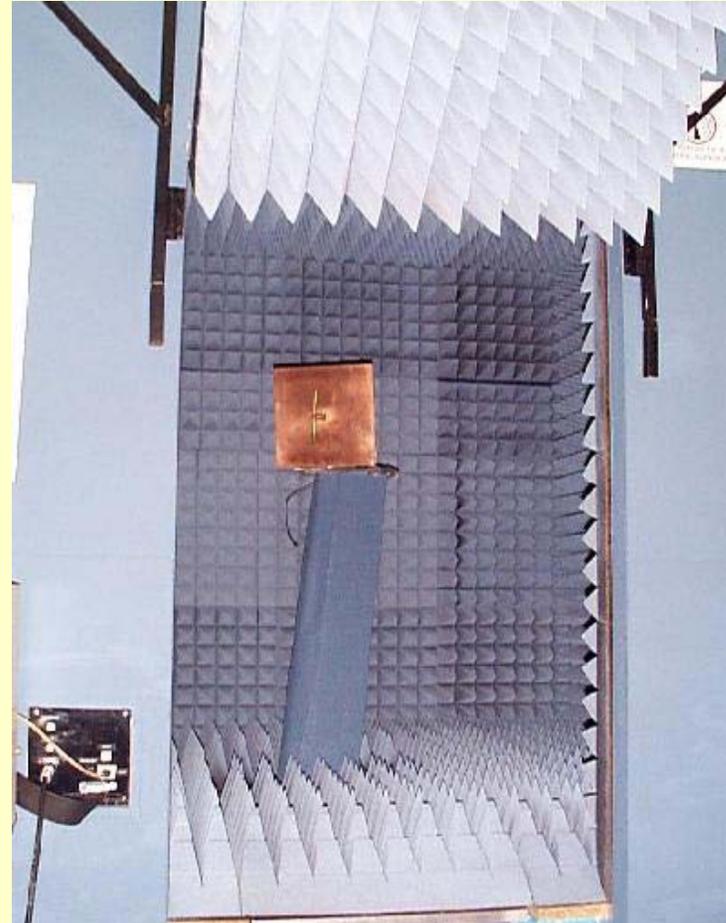
Greg Cambrell

Note: These speakers and amplifier board are commercial, not Dr Cambrells

Antenna Design and Development



Design, analyse and test
different antenna types



Anechoic chamber for
microwave antenna testing

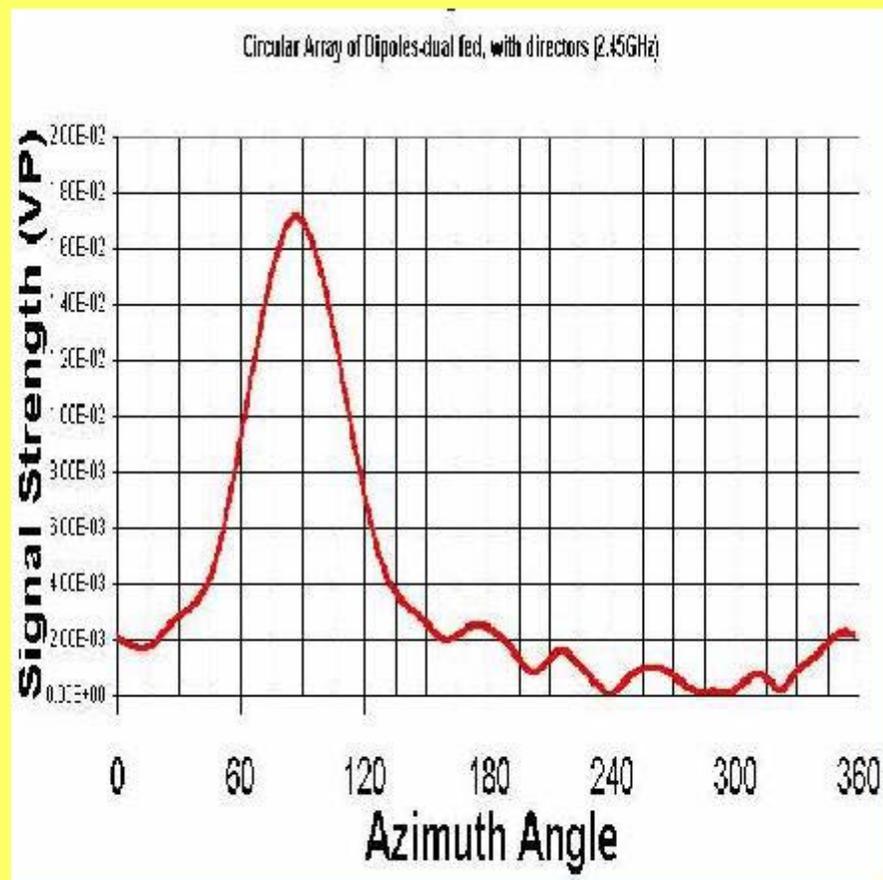


Stewart
Jenvey

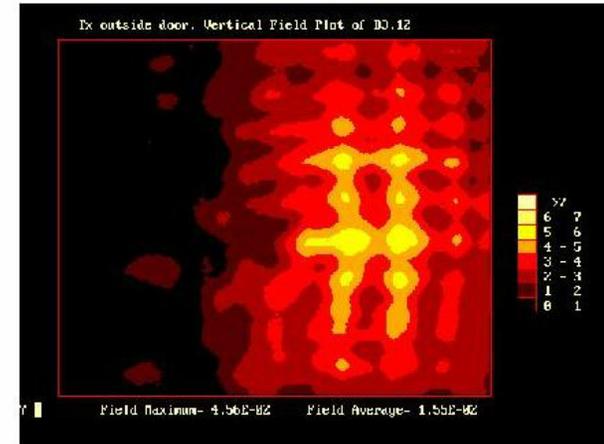
Program 3.2 WIRELESS-SMART ANTENNAS



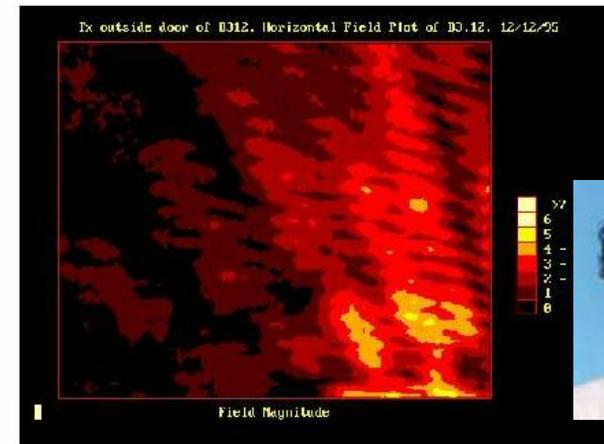
Eight Beam Circular
Yagi Antenna Array



Indoor Radio Propagation Studies



(a) Field magnitude distribution in a vertical plane normal to the door



(b) Field magnitude distribution in a horizontal plane adjacent to the door



Stewart
Jenvey

- Three members
 - John Bennett
 - Ionospheric propagation-Tiger Radar
 - Satellite broadcast
 - Leaky coax distribution systems
 - Greg Cambrell
 - Electromagnetics, numerical analysis
 - Electroacoustics
 - Stewart Jenvey
 - Antennas
 - Indoor radio propagation