



Tom Bleier CEO and Chief Technology Officer of QuakeFinder

Tom graduated from Clarkson University in Potsdam N.Y. in 1967 with a B.S.E.E. and had worked for 37 years developing, building, testing, and flying DOD and commercial satellites and ground control systems.

He worked for the Aerospace Corp for 24 years, starting with providing lead technical support for several very complex classified DoD satellites, including system engineering and design requirements support for a large command and control system, and manager for the Satellite Control Advanced Planning group. He received a special award for outstanding technical contributions in the planning of advanced satellite control architecture work in 1986.

About 25 years ago, Tom became interested in understanding the physics of pre-earthquake process and began developing ELF magnetometers to detect the onset of large earthquakes. He started an educational outreach program in which he donated time and materials to provide extremely low frequency (ELF) instrument kits to high school physics classes. Soon afterward, he was funded to expand this with California State technology funding for 10 high schools, and then a total of 30 high schools. The result was a web-based network of high school sensors that detected and recorded ELF background signals—looking for earthquakes. In 2000, he then co-founded QuakeFinder, a small business in Palo Alto Ca., and has built an additional 40 commercial ELF stations in California, some with direct support from California Space Authority. Tom was responsible for starting a project to build a “proof of concept” 4.5 kg nanosatellite called

“QuakeSat” to detect worldwide pre-earthquake ELF signals. This satellite was designed and built in collaboration with Stanford University, and was fabricated with simple, commercial-off-the-shelf parts with an expected lifetime of 6 months. QuakeSat I has now lasted for over 29 months on orbit, and QuakeFinder is starting the design of a much more sensitive follow-on, QuakeSat II, for another flight in 2008.

The goal of QuakeFinder is to exploit several electromagnetic signals that may be precursors to large quakes, and provide critical days-to-hours warning for these deadly seismic hazards.