

March 25, 2002

Federal Communications Commission  
445 12<sup>th</sup> Street SW  
Washington DC 20554

RE: First Report and Order ET Docket No. 98-153

The recent announcement of FCC intent to limit the use of Ground Penetrating Radar (GPR) systems via general limitations on UWB devices is unnecessarily restrictive and will produce negative economic and social results.

GPR is demonstrably effective in the location of utility hazards (pipelines and cables), storage tanks, subsurface voids, foundation components (post-tension cables, rebar), cultural (archaeological) resources and geological features. The applications for this tool are wide-ranging and date back over three decades of use.

Restrictions on the frequency range of antennas as announced will reduce the effective location of targets. Detection of many civil engineering hazards requires the use of antennas in the proposed banned range of 960 MHz to 3.1 GHz. However, GPR systems are focused into a medium and not into the air, the power levels are extremely low and there is no measurable interference with either phone or GPS systems. All of the manufacturers have provided documentation to this effect. There is no need to ban the use of GPR from these frequencies.

Implementation of the announced licensing requirements are unduly burdensome and restrictive on businesses. Most of the commercial GPR work today is carried out not by construction companies, government organizations and educational facilities (as envisioned in the Order), but by numerous consulting and engineering companies who have specialized knowledge and economic investment in training and equipment. Excluding these companies from applying their expertise could result in anything from an explosion from an undetected gas line to a back-hoed archaeological site.

A great number of existing businesses rely on GPR to form a basis for their revenues. Our company services many such consultants and the negative impact of these restrictions cannot be underestimated. The restrictions as envisioned in the Order will drive most of these companies out of business without an offsetting greater good. The FCC must consider Ground Penetrating Radar to be excluded from the Order.

Sincerely,

Exploration Instruments LLC  
Dennis M. Mills  
President