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where innovation meets reality™

Ms. Magalie Roman Salas
Secretary
Federal Communications Commission
445 12th Street, S.W.
Washington, DC 20554

RECEIVED

September 7, 2000

SEP 11 2000

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

RE: Ultra-Wideband, ET Docket 98-153

Dear Ms. Salas:

This letter is in response to the FCC's Notice of Proposed Rule Making on ultra-wideband radio. The Jore Corporation is a major manufacturer and marketer of power tool accessories and hand tools, located in Ronan, Montana. We work hard to design and manufacture high quality tools that are based on what we believe to be safe designs. The effort to make safer and more useful tools, however, is not a task that is ever finished. As technology evolves, we find new opportunities for safety and productivity enhancements. For several years we have been actively researching and developing ultra-wideband radio sensing tools for the construction and assembly industries. Consequently, we were pleased to learn of the Commission's efforts to implement rules for ultra-wideband radio.

We desire to use ultra-wideband radio in low power, close proximity radar applications to aid construction workers in the location of floor joists, roof trusses, and wall studs in order to enhance their productivity in fastening sub-floor panels, gypsum panels, siding, and wall and roof sheathing. Presently, construction workers are unable to see the structural member to which they are attempting to fasten these materials. This results in considerable additional time being spent to mark the paneling prior to setting fasteners. It also results in many mis-located fasteners which can lead to a significant loss of structural integrity, especially in high wind load situations, on active load bearing walls or in structures subject to ground movement (i.e., earthquakes). In remodeling or retrofit construction, locating structural members behind walls, roofs or floor panels is presently a "hide and seek" operation. This makes a simple job a complicated situation as one does not desire to perform destructive activities just to find the necessary support structures.

Additionally, construction and assembly workers utilize inherently dangerous cutting and shaping tools including portable saws (both circular and jig or saber), stationary saws, routers, shapers, presses, shears, torches, and the like. Cutting and shaping tool injuries are frequent and include injuries to and losses of fingers, hands, arms and legs that result in expensive medical costs, personal trauma and often the loss of a way of life and employment for the

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worker or even worse, the loss of life. We have seen that ultra-wide band radar can sense and distinguish human flesh and bone differentially from wood and metal, which should allow the technology to be used as a safety feature to be included in the controls of power tools, shutting the cutting tool down before it strikes flesh. This safety characteristic of low power, close proximity ultra-wideband radar could eliminate the cause of thousands of terrible injuries each year and the loss and destruction of many lives. Our hope is that a reduction in these injuries will also have the effect of reducing the cost of construction of homes, commercial buildings, furniture, cabinets, and most manufactured items (such as cars, trucks, ships, etc.) as the costs of medical injuries drop and, therefore, the costs of workers compensation insurance drop. Workers compensation insurance premiums for contractors is often equal to 20% to 30% of the labor rate for the workers and labor is a major component of construction and assembly industries.

If you have any doubts as to the immediate receptiveness and need for this safety feature, we encourage you to visit any construction site and ask the workers if they know of anyone who has been injured by cutting or shaping tools and what the implications and results of such an injury are to a construction worker. The stories will sadden you, when you hear how people have had to give up their chosen profession because their hands have been injured and made inoperable. Their families have suffered and their dreams been destroyed. These injuries result in huge economic costs, but much more importantly, they have personal, individual effects that are beyond valuation.

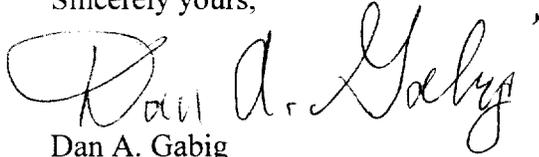
We urge the FCC to move forward promptly and fully to allow the use of ultra-wideband radio so that we can move diligently toward completing the development of the tools of the future that will improve productivity and safety for the workers that build our homes, offices, schools, hospitals, churches, commercial buildings. These improvements in worker safety will also result in improved safety for the occupants of those structures who can not be aware (until catastrophe occurs) of the hidden flaws and structural weaknesses that are common due to fasteners of structural panels that have not been properly set into the load bearing beams, joists, studs and trusses. Every day of delay is a delay in the commercialization of the products that will provide enhanced productivity and safety. Every day delayed can be counted not on fingers, but by the loss of the fingers of construction and assembly workers.

We ask that the FCC reach a decision regarding technical issues that will allow the use of ultra-wideband radio for radar applications; a decision is required that does not compromise the everyday, common use of this technology. A compromised decision would lead to a compromised tool. A compromised tool will not work effectively, will not be found in the bed of a contractor's pick-up truck, will not be used daily on the job site, and will not improve safety and productivity for workers.

We recognize that ultra-wideband radio exists in a world of many existing radio band users many of which are of critical public safety, but we urge you to allow it to be employed with reasonable regulation that will permit it to likewise fulfill its critical safety capabilities in the hands of the working public.

Please contact me if we can be of further assistance to you in this regard.

Sincerely yours,

A handwritten signature in black ink that reads "Dan A. Gabig". The signature is written in a cursive style with a large initial "D" and a distinct "A".

Dan A. Gabig
Vice President – Business Development