Geophysical Survey Systems, Inc.

Date: January 4, 2017
Re: Certification Application FCC ID: QF7PALMXT & IC: 8498A-PALMXT

Dear Sir/Madam:

The above-referenced application, filed by Geophysical Survey Systems, Inc., seeks certification for a ground-penetrating radar (GPR) device. The application shows compliance with the Commission's Rules and does not require waivers.

We request that certain photographs showing the interior of the devices be withheld from public disclosure. The Commission has previously granted confidentiality under similar conditions to the following applications:

FCC ID: QF7MINIXT	IC:8498A-MINIXT
FCC ID QF7MINISIR	
FCC ID QF750400 EA640311	IC: 8498A EA640311
FCC ID QF762000 EA291754	IC: 8498A EA291754
FCC ID QF75103A EA870041	IC: 8498A EA870041
FCC ID QLA250MHZ EA586775	IC: 8498A EA586775
FCC ID QLAMID EA364767	IC: 8498A EA364767
FCC ID QLA500MHZ EA369105	IC: 8498A EA369105
FCC ID QLA800MHZ EA813498	IC: 8498A EA813498

FACTUAL BASIS FOR CONFIDENTIALITY REQUEST

Ordinarily the Commission denies confidentiality to photographs of a device on the ground that the information they contain is freely available to a competitor, simply by purchasing the device and (if necessary) unscrewing the cover.

The devices in question are different. The interior is sealed, and its internal appearance is inaccessible to the purchaser.

To gain access to the views shown in the interior photographs, a competitor would have to purchase the device and then carry out the following steps:

1. Remove all of the tamperproof screws securing the cover to the rest of the enclosure. These are custom made security screws and unique to GSSI. They require a custom security screwdriver which is ONLY sold to GSSI and is never given out to customers. Without this tool access to the interior of the product would require destroying part(s) of the antenna.

2. With the custom antenna enclosure open the various electronic assemblies must be dissembled in a careful and properly ordered manner to prevent irreversible damage to the components. To access to certain electronics of the antenna it is necessary to de-

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solder the transmitter AND sampler heads and then carefully disconnect and withdraw the assemblies from the shield /construct assembly. When these steps are done improperly the electronics can be severely damaged.

3. Magnetic absorbers are glued to the transmitter element enclosures and cannot be removed undamaged. These absorbers have specific electrical properties and only work properly in the specific arrangement as built. A competitor is unlikely to have access to the right material, or even to know what grade of materials to use and the proper orientations to install them for use.

GSSI has never released instructions on how to disassemble its units, and does not answer questions on how to do so. This information is kept internal to the company. If a unit arrives at the company's repair facility showing evidence of such tampering, the company does not repair it, but charges the customer for a new unit plus freight costs.

The Commission's posting of the photographs would allow a competitor to bypass this difficult and expensive disassembly. From the photographs, a competitor can estimate:

1. the costs of manufacturing the printed circuit boards and mechanical housing;
2. the man-hours required to assemble the device;
3. any compatibility problems the manufacturer will have in designing new systems; and
4. the age of the electronic design (which gives valuable competitive information on upgrade and R&D efforts).

Access to interior photographs would almost permit a competitor to conduct a complete reverse engineering, to the point of producing a schematic.

We respectfully submit that manufacturers should not be required to hand over to competitors the fruits of years of expensive engineering.

Regards,

Signature: 

Printed Name: John Clark

Title: VP of Electrical Engineering

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