



## Stellar Technology

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## **Load Cells**

Help Control New Radar System



The Ground/Air Task-Oriented Radar (G/ATOR), in development by the United States Marine Corps, is a tactical radar system designed to detect, identify, and track low-level cruise missiles, manned aircraft, and unmanned aerial vehicles as well as rockets, and mortar and artillery fire. The groundbreaking G/ATOR is a highly mobile, multi-role radar system that will perform the functions of five different ground-based radars it is slated to replace.

This trailer-based portable radar system can be towed by a Humvee and utilizes 4 hydraulically controlled leveling jacks (legs) that support the platform which holds the rotating radar system. The actuator leg assemblies are designed to provide a stable base and to level the platform on up to a 7 degree slope.

At the heart of this support and leveling system are 4 customized pancake load cells designed by STI engineers. With custom base plates to integrate with the leg assemblies, military grade electronics, and MIL STD 38999 nickel-plated electrical receptacles, these load cells provide the control needed to stabilize this vital piece of equipment. In addition, the load cells are shock and vibration protected, resistant to EM pulse and lightning, and provide resolution better than ±150 lbf to provide the control and durability required by this tactical, front-line radar system as it is deployed on rough terrain and in battlefield conditions. This is just one more example of STI's ability to custom engineer products to meet the needs of unique applications.