

Automating Landmine Detection Training

GENERAL DYNAMICS - Ordnance and Tactical Systems

General Dynamics OTS understands the needs of U.S. military armed forces. Those needs include effective land mine removal using mine locating sensors. Efficient and flexible training of the personnel that operate these sensors is critical to the ultimate safety of the military forces.

GD-OTS has developed the **Sweep Monitoring System (SMS)** which tracks the movement of handheld mine detection wands using an advanced video tracker to provide operator training and proficiency measurements independent of detector operation. The "target" is a brightly colored ball, which is mounted atop the detector. The SMS is programmed to track the movement of this target through space continuously and in near-real time. The SMS tracker computes a location for the ball 30 times per second. Operator performance is displayed in real-time on a computer display. From this positional data, the SMS measures parameters essential to proper use of the mine locating sensors. The complete system packs into two rugged transit cases for transportation, storage and portability

The **SMS** requires a fast, precise pan-tilt unit to support the real-time tracking of the mine detection wand. The GD-OTS team turned to Directed Perception's **PTU-D46 model** pan-tilt. The built-in serial command protocol allows the fast update and real-time control needed for tracking the wand.

"We needed a compact, lightweight and durable unit for this tripod-mounted system and found the PTU-D46 to be a great off-the-shelf solution. The system has been in production for several years now and we have been very pleased with the performance of the product and with the service we have received from Directed Perception".

-- Dan Hartman, Business Development Director, General Dynamics Ordnance and Tactical Systems



Sweep Monitoring System (SMS) – Automates Mine Detection Training

About General Dynamics Ordnance and Tactical Systems

General Dynamics-Ordnance and Tactical Systems, a business unit within the Combat Systems Group of General Dynamics, empowers the U.S. military and its allies with an extensive range of overarching product segments applied across all levels of strategic and tactical operations.