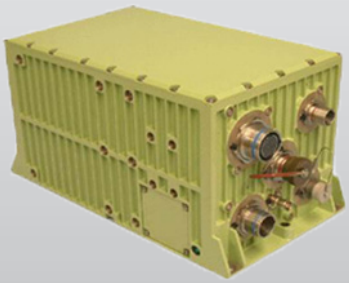
Gun Laying & Positioning System

Kearfott
a subsidiary of Astronautics



Land Navigation Unit

Goniometer

Vehicle Motion Sensor

Control and Display Unit

Power Control Unit

Laser Range Finder

Target Acquisition System with Mission Planning Application

The Gun Laying & Positioning System (GLPS) can be used as a target acquisition system by the artillery forward observer as well as a surveying system. Azimuth accuracy is not influenced by magnetic interferences and/or atmospheric interruptions. The GLPS application easily enables mission planning with a large number of routes, and each route can have a large number of waypoints.

The GLPS replaces the traditional battery optical director (currently based on a magnetic compass). The GLPS accurately measures the horizontal position in UTM coordinates and altitude for each of the howitzers and provides a precise azimuth to the howitzer's optical sight. The GLPS accurately measures survey points.

Features & Benefits

- Time to Lay 6 Guns: < 5 Minutes
- Mountable on Any Light Vehicle or Tripod
- Sophisticated Navigation Application with Digital Map
- Improved Gun-Laying Accuracy

GLPS Product Specifications

System Characteristics	
Land Navigation Unit (LandNav-24)	
GPS/INS Position Accuracy (CEP)	10 m
INS/VMS Position Accuracy (CEP)	0.25 % DT
GPS/INS Altitude (RMS)	10 m
INS/VMS Altitude (RMS)	< 0.067 % DT
Size	8849 cm^3 (540 in^3)
Weight	9.1 kg (<20 lbs)
Control and Display Unit (CDU)	The CDU is the System Computer and the main Display. While on the move, as an option, the CDU can be installed in the vicinity of the vehicle commander to assist in navigation and orientation. The CDU includes a moving map application (Digital Map) which displays real time vehicle location. In stationary mode, the CDU is mounted in the vicinity of the Goniometer, INS, and LRF.
Vehicle Motion Sensor (VMS)	The VMS provides continuous independent measurement of wheel or track speed to the VRU during vehicle movement for optimal system performance.
Laser Range Finder (LRF)	Optical device mounted on the Goniometer and optically collimated with the Goniometer
Goniometer	The Goniometer is mounted on the LandNav Mounting Tray and precisely collimated with the VRU and the LRF
Power Control Unit (PCU)	Detachable PCU with backup batteries

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