

Summary Report for Individual Task
061-320-5301
Set Up the Gun Laying Positioning System (GLPS)
Status: Approved

DISTRIBUTION RESTRICTION: Approved for public release; distribution is unlimited.

DESTRUCTION NOTICE: None

Condition: Given a Gun Laying and Positioning Systems (GLPS), PLGR or Defense Advance GPS Receiver (DAGR) a location, and the GLPS Technical Manual 9-6675-314-13&P. Some iterations of this task should be performed in MOPP.

Standard: Set up the gun laying positioning so that the howitzer can be oriented on the azimuth of fire IAW the technical guidance listed in TM 9-6675-314-13&P.

Special Condition: None

Special Standards: None

Special Equipment:

Safety Level: Low

MOPP: Sometimes

Task Statements

Cue: Upon occupation of a position

DANGER
None

WARNING
None

CAUTION
None

Remarks: All required references and technical manuals will be provided by the local Command.

Notes: None

Performance Steps

1. Select the location for placement of the GLPS to serve as the orienting station (OS). The OS will provide line of sight to the weapons.

Note:

PLGR/DAGR SHOULD BE INITIALIZED AND OPERATING PRIOR TO MOUNTING ON TRIPOD. HIGHER FIGURE ORDER OF MERIT (LOWER FOM #) WILL PROVIDE MOST ACCURATE POSITIONING. FOM 1 WILL MEET THE POSITIONAL ACCURACY REQUIREMENTS OF GLPS.

2. Set up the tripod.

Note:

The height of the tripod legs should be adjusted to operator height (baseplate at approximately waist level) before placing tripod into operation.

CAUTION:BEFORE MOUNTING THE GYROSCOPE AND THEODOLITE, ENSURE THE TRIPOD LEGS ARE SEATED FIRMLY IN THE GROUND. THIS IS CRITICAL TO THE PROPER ORIENTATION OF THE GYROSCOPE AS IT REQUIRES AN ABSOLUTE STABLE PLATFORM TO ACHIEVE AN ACCURATE DIRECTION

- a. Invert tripods with protective cover facing the ground.
- b. Loosen tripod leg clamping screws.
- c. Extend tripod legs until tripod boots are chest height.
- d. Tighten tripod leg clamping screws.
- e. Place tripod in upright position, spreading legs until the tilting dish is about waist-level to the operator.

Note:

ARRANGE TRIPOD LEGS TO ENSURE THAT THE TRIPOD LEG WITH PROTECTIVE COVER FOR THE TILTING DISH IS POINTING IN THE GENERAL DIRECTION OF THE HOWITZER(S). THIS WILL ENSURE OPTIMUM SPACE IS AVAILABLE FOR THE OPERATOR WHEN OPERATING THIS INSTRUMENT.

- f. Seat each tripod by firmly stepping on the boot and pushing downward with the outside of the foot.
- g. Uncover tripod tilting dish.
- h. Remove tripod protective cover.
- i. Ensure that leveling screws are in the center position with grooves visible.

Remarks: At a minimum, half of the bubble should be within circle upon completion

- j. Level the tripod base using the circular leveling vial by adjusting tripod leg height until the bubble is centered.

CAUTION

ENSURE THE GYROSCOPE CLAMPING SCREW (5) IS IN THE OPEN POSITION BEFORE INSERTING GYROSCOPE.

3. Mount the North Seeking Gyroscope.

Note: The azimuth determined by the gyroscope is accurate to +/- 0.2 mil. The gyroscope requires approximately three to "spin-up", then download the reference azimuth directly into the electronic theodolite.

CAUTION

ENSURE THE GYROSCOPE CLAMPING SCREW (5) IS IN THE OPEN POSITION BEFORE INSERTING GYROSCOPE.

a. Download the reference azimuth directly to the electronic theodolite.

Note: The azimuth determined by the gyroscope is accurate to +/- 0.2 mil. The gyroscope requires approximately three to "spin-up", then download the reference azimuth directly into the electronic theodolite.

b. Remove the gyroscope from the carrying case.

c. mount the gyroscope in the tripod tilting dish with the RS-232 connector facing the operator.

d. Move gyroscope back and forth, while in tripod tilting dish, to ensure it is sitting flush in the dish.

e. Fold lifting handle toward operator.

f. Secure the gyroscope with clamping screw on the tilting dish.

g. Remove protective cover from theodolite data port located on the gyroscope.

h. Place theodolite locking lever on the gyroscope in the forward position to receive the theodolite.

4. Mount the digital electronic theodolite with Laser Rangefinder.

a. Remove theodolite from container.

b. Remove the gyroscope interface protective cover.

c. Mount the theodolite on the gyroscope.

CAUTION

CAUTION. TO PREVENT DAMAGE, DO NOT LIFT THEODOLITE BY THE KNOBS OR EYEPIECE.

d. Ensure that the gyroscope interface port on the gyroscope aligns with the gyroscope interface port on the theodolite.

e. Secure the theodolite by switching the theodolite locking lever to the rear position.

f. Remove the target rod from the container.

g. Mount the target rod on the target rod connector on the theodolite carrying handle.

5. Mount the battery or power pack.

a. Remove one battery from container.

Note:
 BATTERIES SHOULD BE FULLY CHARGED PRIOR TO BEGINNING EXTENDED OPERATIONS.

PROPER STORAGE AND THE USE OF PROPER RECHARGING PRACTICES
 WILL MAINTAIN MAXIMUM BATTERY CAPACITY.

NOTE:
 PROPER SEQUENCE OF MOUNTING BATTERIES IS WITH THEODOLITE MOUNTED TO GYROSCOPE
 WHICH IS INSTALLED ON TRIPOD

- b. Attach battery hinge to the hinged mounting bracket located on the gyroscope.
 - c. Rotate battery until it is flush with the gyroscope.
 - d. Secure battery latch to the locking bracket on the left rear of the gyroscope.
6. Mount the Precision Lightweight GPS Receiver (PLGR) or Defense Advanced GPS Receiver (DAGR).
- a. Remove SHT9 PLGR/DAGR mounting bracket from the theodolite container.
 - b. Attach PLGR/DAGR mounting bracket to the left tripod leg using hook and clamps.
 - c. Remove the protective covers from the RS 232 cable receptacles located on the PLGR/DAGR and the Gyroscope.
 - d. Remove the PLGR/DAGR RS232 interface cable from the theodolite container.
 - e. Connect RS-232 cable to the PLGR/DAGR and the RS232 data port on the gyroscope, being careful not to bend the pins.
 - f. Mount the PLGR/DAGR to the PLGR/DAGR mounting bracket located on the tripod leg and secure with latch.
7. Center the bubble by using the "LEFT THUMB RULE FOR LEVELING", CENTER BUBBLE in circular leveling vial on the theodolite using leveling screws on the tripod

(Asterisks indicates a leader performance step.)

Evaluation Preparation: Setup: Ensure that all information, references, and equipment required to perform the task are available. Use the performance measures and the references to score the Soldier's performance. Brief the Soldier. Tell the Soldier what he is required to IAW the task conditions and standards.

PERFORMANCE MEASURES	GO	NO-GO	N/A
1. Selected location for the GLPS.			
2. Set up the tripod.			
3. Mounted Gyroscope			
4. Mounted theodolite with the laser rangefinder.			
5. Mounted battery or power pack.			
6. Mounted PLGR or DAGR.			
7. Centered the bubble by using the "LEFT THUMB RULE FOR LEVELING", CENTER BUBBLE in circular leveling vial on the theodolite using leveling screws on the tripod.			

Supporting Reference(s):

Step Number	Reference ID	Reference Name	Required	Primary
	TM 9-6675-347-13&P	Operator, Organizational and Direct Support Maintenance Manual Including Repair Parts and Special Tools List for Gun Laying and Positioning System (GLPS): M67 (NSN 6675-01-430-1965) (EIC: CJ2)	Yes	No

Environment: Environmental protection is not just the law but also the right thing to do. It is a continual process and starts with deliberate planning. Always be alert to ways to protect our environment during training and missions. In doing so, you will contribute to the sustainment of our training resources while protecting people and the environment from harmful effects.

Safety: In a training environment, leaders must perform a risk assessment in accordance with FM 5-19, Composite Risk Management. Leaders will complete a DA Form 7566 COMPOSITE RISK MANAGEMENT WORKSHEET during the planning and completion of each task and sub-task by assessing mission, enemy, terrain and weather, troops and support available-time available and civil considerations, (METT-TC). Note: During MOPP training, leaders must ensure personnel are monitored for potential heat injury. Local policies and procedures must be followed during times of increased heat category in order to avoid heat related injury. Consider the MOPP work/rest cycles and water replacement guidelines IAW FM 3-11.4, NBC Protection, FM 3-11.5, CBRN Decontamination.

Prerequisite Individual Tasks : None

Supporting Individual Tasks : None

Supported Individual Tasks :

Task Number	Title	Proponent	Status
061-320-5308	Operate a Gun Laying Positioning System (GLPS)	061 - Field Artillery (Individual)	Approved

Supported Collective Tasks :

Task Number	Title	Proponent	Status
06-4-5021	Prepare Howitzer for Conduct of Fire Missions (Non-Paladin)	06 - Field Artillery (Collective)	Approved