

## Portable GPS Flight Inspection System



The portable GPS flight inspection system (GFIS) developed by NXT, Inc., allows any helicopter or light fixed-wing aircraft to be used as a GPS Non-Precision approach flight inspection aircraft.

### System Features

The GFIS offers the following features:

- Ø **Simple aircraft installation**
- Ø **Inspection and certification of GPS Non-Precision approaches**
- Ø **High accuracy, real time differential GPS (DGPS) positioning**
- Ø **No ground-based operator required**
- Ø **Notebook computer processing, control and display**
- Ø **Adaptation of U.S. FAA-proven GPS-NP inspection software**
- Ø **Upgradeable to dual-frequency DGPS positioning**

## System Overview

The GFIS comprises an airborne equipment unit, a ground equipment unit and an accessory case.

### Airborne Unit

The airborne component consists of:

- IBM Thinkpad notebook computer or equivalent**
- GPS receiver (12-channel)**
- 5-watt synthesized netlink radio data system (SNRDS)  
UHF data link**
- All necessary cables and antennas**
- Compact carry-on-board case**

### Ground Unit

The ground component, which is remotely activated and controlled from the aircraft, consists of:

- GPS and UHF units identical to the airborne component**
- Internal battery charger**
- All necessary cables and antennas**
- Locking weather-proof case**

### Accessory Case

The accessory case is a locking case that provides:

- Storage space for all Antennas, Tripods, Cables  
and Other accessories**



## Equipment Characteristics

### Airborne Unit

External 115/230V ac (50-400Hz), 12V dc or 28V dc or  
internal 3-hour battery operation

Contained in 13"x18"x8" carry case

### Ground Unit

External 115/230V ac (50-400Hz), 12V dc or 28V dc or,  
internal 5-hour battery operation

Contained in 13"x18"x8" lockable carry case

### Accessory Case

Lockable 14"x49"x5" case

## GFIS Accuracy

Two Sigma Accuracy	GFIS	TSO-C129 Receiver Requirement
XTK & ATK position error	3 ft. + 15 ppm*	330 ft.
Waypoint displacement error	3 ft. + 20 ppm*	835 ft.