

# GPS Inertial Navigation Assembly (GINA)



AN/ASN-166

GINA is the predecessor to the Embedded GPS Inertial (EGI) program. GINA was procured as a Nondevelopmental Item (NDI) to support T-45s mission to train the next generation of warfighters in the use of INS, GPS, and GPS/INS hybrid systems.

- Replacement for standard Attitude and Heading Reference System (AHRS)
- Strapdown INS (RLG technology) (<1nmi/hr)
- RF GPS Embedded Module (GEM3) - Precise Positioning Service (PPS) capable, unclassified when keyed
- Synchro Interface (Isolated -z- leg can be grounded)
- 1553 messages based on standard AHRS and ICD-GPS-059
- RS-422, HaveQuick, Ship Inertial Navigation System (SINS)
- ~85% common with Litton EGI

## PROGRAM SPONSORS

SPAWAR (PMW/PMA-I87) - Development Phase

T-45 Program Office (PMA-273) - Production Phase

SSC San Diego is the Program Management Agent for the program and performs supporting functions such as

- Competitive procurement with bid samples
- Extensive laboratory testing
- Central Engineering Activity - GPS performance and interface testing
- Strapdown System Evaluation Laboratory (SNSSEL) - Inertial and Hybrid performance
- Mobile Laboratory - Dynamic performance

## USERS

T-45s

LCAC

AWACS