



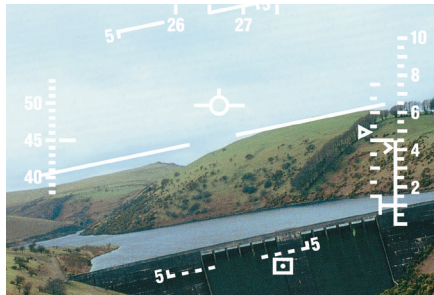
TERPROM® TERRAIN AWARENESS AND WARNING SYSTEM (TAWS)

MISSION PROVEN, GPS- DENIED NAVIGATION AND SITUATIONAL AWARENESS

Meets growing demand from the military transport community for enhanced situational awareness

Today's aircraft have to fly demanding missions safely, day and night, in all weather. Traditionally, forward-looking radar has been used to help achieve this, but as an active sensor, it can potentially alert the enemy. The TERPROM® Terrain Awareness and Warning System (TAWS) from Collins Aerospace is a true tactical tool that combines a highly accurate navigation capability with a digital terrain map, providing flight safety and situational awareness functionality with no forward emissions.

TERPROM® TAWS is a fourth-generation ground proximity warning system that provides controlled flight into terrain (CFIT) protection using terrain referenced



navigation together with digital terrain and obstruction map databases. It also provides predictive and reactive ground collision avoidance warnings to enable optimal CFIT protection across the entire mission envelope, meeting the requirements of TSO-C92c and TSO-C151a. TERPROM is the only TAWS specifically designed as a low-level tactical system.

TERPROM can be supplied as a software suite supported by appropriate map memory storage or as a self-contained line replaceable unit (LRU).

KEY FEATURES

- Terrain referenced navigation
- Predictive ground collision avoidance system
- Obstruction warning and cueing
- Reactive GCAS
- Terrain awareness display
- Database terrain following

KEY FEATURES

Terrain referenced navigation

- Uses accurate, drift-free navigation relative to an on-board terrain database
- Uses Kalman filter fusion of data from existing aircraft sensors
- Provides precise and reliable navigation
- Not dependent on GPS

Predictive ground collision avoidance system

- Generates both audio and visual ground proximity warnings
- Scans ahead in the terrain database and predicts appropriate avoidance maneuvering

Obstruction warning and cueing

- Provides directional cues to connected obstructions, such as power lines or pylons and fixed obstructions
- Enables visual identification and appropriate evasive maneuvering

Reactive GCAS

- Uses radar altimeter, barometric altimeter and true airspeed
- TSO-C92c Mode 1–4

Terrain awareness display

- Displays a visual interface of the terrain as a series of color bands
- Allows easy identification of potential threats from the terrain
- TSO-C151a

Database terrain following

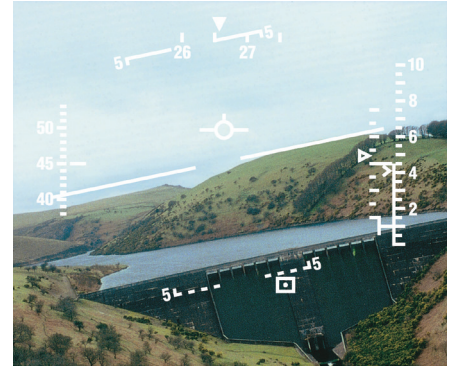
- Enables terrain following
- Uses no active sensors and emits forward emissions
- Provides awareness of the terrain beyond the immediate horizon, enabling identification of a smooth flight profile

LRU options

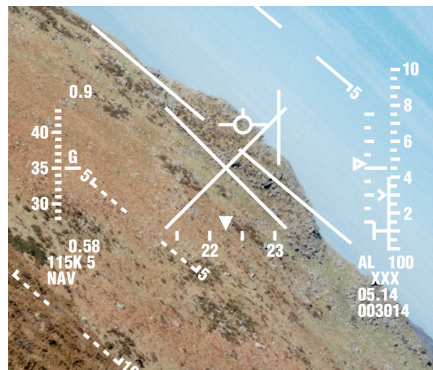
- A/V outputs
- 1553/ARINC bus support
- Onboard map storage

Additional functionality

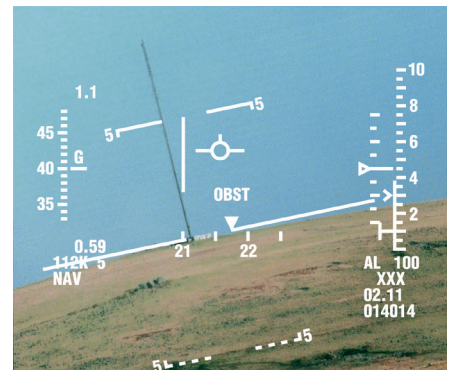
- Instrument landing warning system (TSO-C92c)
- Altitude callout (TSO-C92c)
- Bank angle warning
- Reactive wind-shear warning (TSO-C117a)
- Passive ranging



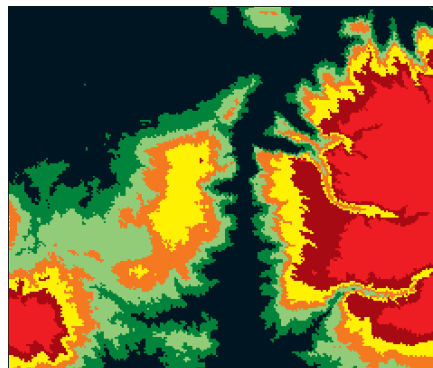
Terrain referenced navigation



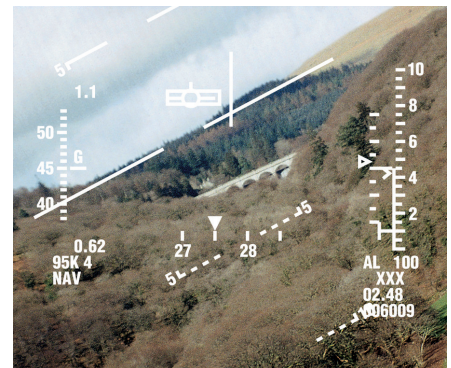
Predictive ground collision avoidance system



Obstruction warning and cueing



Terrain awareness display



Database terrain following

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