

#### **TERPROM® DIGITAL TERRAIN SYSTEM**

# MISSION PROVEN, GPS-DENIED NAVIGATION AND SITUATIONAL AWARENESS

### Enables helicopters to fly demanding missions more safely and effectively in all weather conditions, day and night

Traditional, forward-looking radar has a downside of potentially alerting an enemy with its forward electronic emissions. The Collins TERPROM® Digital Terrain System combines a highly accurate navigation capability with a digital terrain map providing situational awareness, flight safety and air-to-ground ranging functions with no forward emissions.

Today's helicopters operate closer to the ground. When they seek cover, maneuverability requires a higher level of situational awareness and more advanced pull-up warnings.



TERPROM® features Advanced Terrain Avoidance Cueing (ATAC), which provides sufficient time for the pilot to take any necessary action and provides predictive obstruction and wire threat advisories to the crew. Integrating TERPROM® with other onboard sensors also creates the ability to fly nap of the earth, automatically and safely, within reach.

Other features such as predictive ground collision avoidance system, database terrain following (DBTF) and air to ground ranging are available, making TERPROM® the most versatile tactical ground proximity warning system for helicopters.

#### **KEY FEATURES**

- · Terrain referenced navigation
- Predictive ground collision avoidance system
- Advanced Terrain Awareness Cueing (ATAC)
- · Obstruction warning and cueing
- · Terrain awareness display
- Passive ranging
- · Database terrain following
- Terrain and threat avoidance



#### **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

#### Advanced terrain awareness cueing

- Enables intuitive, dynamic visualization of the terrain
- Provides information both ahead and on either side of the aircraft

#### **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

#### 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

#### Passive air-to-ground ranging

- Provides three separate functions: horizontal, line of sight and coordinate ranging
- Allows locations of point of interest on the ground to be determined and passed on to sensor and weapon systems

 Supports multiple functions, including attacking targets of opportunity with guided or ballistic weapons, threat visibility calculation and intelligence gathering

#### LRU options

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

#### Terrain and threat avoidance

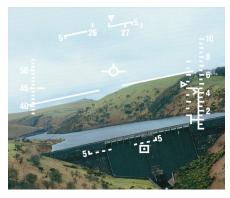
- Real-time prediction of an optimum route through the terrain to a future waypoint
- Minimizes exposure to terrain threats



Predictive ground collision avoidance system



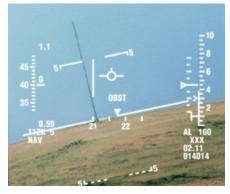
Wires warning and cueing



Terrain referenced navigation



Advanced terrain awareness cueing



Obstruction warning and cueing

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