



The
SA GROUP



Terrain Awareness & Warning System For Helicopters

Helicopter Terrain Awareness & Warning System **Garmin HTAWS**

- ▶ Graphical and audible alerting
- ▶ Enhances flight safety
- ▶ Improves situational awareness

Garmin HTAWS



The Garmin HTAWS is developed for the GNS 530W and GNS 430W series navigators and adds graphical and audible alerts of potential terrain and obstacle conflicts to these existing Garmin Navigation Systems.

Garmin has incorporated three new helicopter specific databases for HTAWS. The obstacle database adds nearly 30,000 additional low altitude obstacles. The new terrain database has been enhanced to show higher resolution.

The navigation database lets operators navigate to over 7,000 heliports without having to create user waypoints at those locations.

Key Features



The HTAWS system has forward looking terrain avoidance (FLTA) capability with visual and aural advisories to keep pilots advised of hazardous terrain.

It incorporates a new five color terrain scale (red, orange, yellow, green and black), and also gives terrain voice alerts when descending below 500 feet. Voice callouts operate in all HTAWS modes, and Garmin's technology allows the pilot to select multiple callouts, in one hundred foot intervals, descending from 500 to 100 feet above ground level (AGL).

In addition, Garmin's HTAWS offers a reduced protection (RP) mode that allows low-level operations with minimal alerting while continuing to provide terrain and obstacle protection.

- ▶ **Forward Looking Terrain Avoidance (FLTA)**
Visual and aural advisories to keep pilots advised of hazardous terrain.
- ▶ **Voice Callouts (VCO)**
Audibly announcements on the helicopter's height when descending below 500 ft.
- ▶ **Reduced Protection Mode (RP)**
Uses for low-level operations to minimize alerting while continuing to provide protection.
- ▶ **Helicopter Specific Databases for HTAWS**
- ▶ **Annunciations display on the Garmin G500H large PFD and MFD.**

Complete turn-key solutions

Scandinavian Avionics provides a complete turn-key solution for your helicopter:

- ▶ **Equipment**
Supply of the Garmin HTAWS and other required equipment.
- ▶ **Certification**
Supply of existing STC or development of new STC depending on the aircraft type.
- ▶ **Installation**
Installation of the Garmin HTAWS solution at one of our facilities around the world or at any other EASA Part 145 approved facility.
- ▶ **Training**
Garmin HTAWS familiarization training

If you need more information or are interested in discussing your possibilities with the Garmin HTAWS, please feel free to contact us.



Scandinavian Avionics provides complete turn-key avionics solutions, including avionics logistics and parts support, maintenance (MRO), certification, design & engineering, installation, product development, training and consultancy services with the primary business platforms being larger helicopters, corporate aircraft, regional airliners and defense electronics.

Scandinavian Avionics is the headquarters of The SA Group – an experienced avionics organization with divisions in Sweden, Norway, Greece, Malaysia, Bahrain and India. Since the foundation in Billund, Denmark in 1978, core values like quality, reliability and flexibility have been deeply rooted in the organization and are the main reasons for the excellent reputation among aircraft operators around the world today.