



Controlled Flight into Terrain Prevention with HTAWS

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CFIT: An accident in which an otherwise serviceable aircraft under the control of the crew, is flown (unintentionally) into terrain, obstacles or water, with no prior awareness on the part of the crew of the impending collision.

- The IHST vision is to reduce global fatal helicopter accidents to zero.
- 60 percent of all CFIT accidents are fatal.ⁱ
- While more than 80 percent of EMS helicopter CFIT accidents occurred at night, about 70 percent of non-EMS CFIT accidents occurred during the day.ⁱⁱ
- About 80 percent of CFIT accidents occurred during non-takeoff or non-landing phase of flight (i.e., cruise).ⁱⁱⁱ
- The worldwide fixed wing fleet CFIT accident rate fell by 80 percent following the fixed wing TAWS mandate.^{iv}
- Regulatory agencies and industry leaders world-wide are advocating the use of HTAWS:

The FAA has stated, “TAWS (fixed wing) is considered by many in the airplane safety community to be the single most important safety device introduced to prevent commercial fatal accidents in the past 20 years...This technology has particular advantage for helicopter operations at low altitudes and outside of FAA-established routes...”^v

- 2013 US JHSIT Systems and Equipment Group Intervention Recommendations:^{vi}
E2020: “Install HTAWS System.”
E2030: “Train and equip with HTAWS, radar alt, EVS, SVS.”



- Operators must willingly adopt HTAWS technology: The fixed wing success of TAWS has proven that training is not the end all solution to preventing CFIT. CFIT avoidance requires a multipronged approach: Training, Equipment, and SMS.
- HTAWS with advanced alerting algorithms reduce the number of nuisance alerts – with lower performance systems the tendency is to turn off following repeated nuisance alerts.
- HTAWS with a transmission line database can help reduce the risk of wire strikes.

- Wire strike prevention devices (cutters) only help you when you hit a wire. EMF detection systems only work if there is power to the grid.
- Additional training to fly with HTAWS is generally very minimal. As with any new or unfamiliar avionics, the pilot should read and understand the information presented in the Pilot's Guide for that equipment.

Something to consider:

There could be a liability in waiting for an HTAWS mandate. Don't wait and risk the safety of your passengers, aircrew and equipment. One moment of distraction or inattention could put your company on the front page of the newspaper or the next YouTube video.



ⁱ IHST Training Fact Sheet – Controlled Flight Into Terrain

ⁱⁱ “Controlled Flight into Terrain (CFIT) Accidents in Helicopter EMS & Offshore Operations” presented by Yasuo Ishihara; International Helicopter Safety Symposium; Montreal, Canada; September 26 - 29, 2005

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^{iv} IHST “Calendar Year 2006 Report” prepared by USJHSAT; July 2010

^v US DOT FAA Status Report: Assessment of Compatibility of planned Lightsquared Ancillary Terrestrial Component Transmissions in the 1526-1536 MHz Band with Certified Aviation GPS Receivers (Redacted Version Cleared for Public Release) JANUARY 25, 2012

^{vi} http://www.ihst.org/portals/54/US_JHSAT_Compendum_Report2.pdf