GARMIN INTRODUCES REVOLUTIONARY GFC 600H HELICOPTER FLIGHT CONTROL SYSTEM

News / Business aviation, Manufacturer

© 2015-2026 50SKYSHADES.COM — Reproduction, copying, or redistribution for commercial purposes is prohibited.

© 2015-2026 50SKYSHADES.COM — Reproduction, copying, or redistribution for commercial purposes is prohibited.

© 2015-2026 50SKYSHADES.COM — Reproduction, copying, or redistribution for commercial purposes is prohibited.

© 2015-2026 60SKYSHADES.COM — Reproduction, copying, or redistribution for commercial purposes is prohibited.

The Garmin GFC™ 600H flight control system for helicopter owners and operators is a breakthrough in cost-effective technology that reduces pilot workload and improves mission effectiveness.

Garmin International, Inc. a unit of Garmin Ltd. (NASDAQ: GRMN), today announced the GFC™ 600H flight control system for helicopter owners and operators – a breakthrough in cost-effective technology that reduces pilot workload and improves mission effectiveness. This attitude-based (AHRS-derived) flight control system boasts a number of helicopter-tailored safety features, including stability augmentation system (SAS), Garmin Helicopter Electronic Stability and Protection (H-ESP™), dedicated return-to-level (LVL) mode, hover assist, as well as overspeed and low speed protection. The GFC 600H can operate as a full-featured standalone flight control system, but also offers integration with compatible flight displays, including the Garmin G500H and G500H TXi flight displays, instruments and navigation sources.

“Garmin designed the GFC 600H to significantly reduce inflight workload, fatigue and stress levels for helicopter pilots who are often faced with complicated missions in adverse weather conditions or degraded visual environments,” said Carl Wolf, Garmin vice president of aviation sales and marketing. “The GFC 600H combines our industry-leading flight control capabilities with our helicopter experience and aviation safety technology expertise to deliver a system that ultimately allows pilots to focus more attention on accomplishing the multitude of missions they face while trusting their helicopter flight to us.”

With its advanced AHRS technology and redundant, cross-checking sensors, the GFC 600H was designed for smooth handling. The GFC 600H includes SAS that provides inputs to help stabilize the helicopter while hand-flying. The corrections provided by SAS serve to improve the helicopter’s basic handling characteristics by maintaining a commanded attitude. Designed with the pilot in mind, its cyclic-mounted trim controls allows for seamless interactions without taking a hand off of the helicopter flight controls during basic operations, including system initialization of the SAS in attitude mode, adjustments of the pitch and roll trim, and much more. While flying with SAS, pilots can easily “fly through” the flight control inputs for smooth maneuvers beyond the preset trim condition.

Thanks to the hover assist mode, the system will also automatically detect a hover condition and provide flight control inputs to help maintain position over the ground. When equipped with the optional yaw axis control, the GFC 600H will also hold heading in hover.

As a standard feature, Garmin H-ESP helps the pilot remain within a safe envelope when hand-flying the helicopter. Should the pilot exceed pre-determined pitch, roll or airspeed limitations, H-ESP provides a corrective force on the flight controls proportionate to the exceedance. H-ESP works in all modes – even when the pilot is hand-flying the aircraft with the system not engaged – and can be manually disabled to allow for maneuvering flight as needed. In potentially disorienting situations, the GFC 600H features a dedicated LVL mode that can be engaged by the pilot to automatically initiate recovery from unusual attitudes and return the aircraft to straight-and-level flight, helping to avoid a potential loss-of-control scenario.

The flight director can be displayed on an optional G500H or G500H TXi flight display to help guide the pilot’s hand-flown inputs toward the desired flight path, including heading, altitude, vertical speed, and airspeed modes. For enroute and approach navigation, the system uses guidance from a compatible Garmin navigator, such as the GTN™ 750/650 series, to automatically

© 2015-2026 50SKYSHADES.COM — Reproduction, copying, or redistribution for commercial purposes is prohibited.

fly approaches and search and rescue patterns. Additional vertical and lateral modes include altitude hold, altitude select, vertical speed, indicated airspeed and heading select.

The GFC 600H features a stack-width mode controller with push-button controls and a night vision goggle (NVG) compatible display. Its robust architecture allows for both 2-axis and 3-axis configurations to provide the features and handling characteristics needed for a helicopter. Integrated “smart” servos provide pitch and roll inputs as commanded by the system, and the available third servo and collective sensor provide yaw axis control capability and smooth flight control adjustments when the pilot moves the collective. Digitally controlled, high-torque servos allow for faster, crisper, more powerful response, which enables the GFC 600H to perform with smooth efficiency and advanced capability.

With its extensive features and advanced technology, the GFC 600H offers unprecedented value at a competitive price in a flight control system for helicopters. Initial Supplemental Type Certification (STC) for the Airbus AS350 B2/B3 is expected in Q4 2018. During the HAI HELI-EXPO in Las Vegas, Feb. 27-Mar. 1, the GFC 600H will be on display in an AS350 B2 at the Garmin static exhibit in the North Hall N8. The GFC 600H is supported by Garmin’s award-winning aviation product support team, which provides 24/7 worldwide technical and warranty support.

Garmin’s aviation business segment is a leading provider of solutions to OEM, aftermarket, military and government customers. Garmin’s portfolio includes navigation, communication, flight control, hazard avoidance, an expansive suite of ADS-B solutions and other products and services that are known for innovation, reliability, and value. For more information about Garmin’s full line of avionics, go to www.garmin.com/aviation.

23 FEBRUARY 2018

ARTICLE LINK:
https://ids.50skyshades.com/news/business-aviation/garmin-introduces-revolutionary-gfc-600h-helicopter-flight-control-system

© 2015-2026 50SKYSHADES.COM — Reproduction, copying, or redistribution for commercial purposes is prohibited.