



CERTIFICATION OF THE GFC 600H FOR THE BELL 505 IS EXPECTED IN 2020

News / Business aviation, Manufacturer



Garmin International, Inc. announced it will certify the GFC™ 600H flight control system for the Bell 505 Jet Ranger X helicopter. The attitude-based (AHRS-derived) flight control system boasts a number of helicopter-tailored features, including attitude hold, Garmin Helicopter Electronic Stability and Protection (H-ESP™), dedicated return-to-level (LVL) mode, hover assist, as well as overspeed and low speed protection. Certification of the GFC 600H for the Bell 505 is expected to be complete in the first-half of 2020 and available at that time through select Garmin dealers as a retrofit installation.

“With the GFC 600H, we’re excited to provide a flight control system for the Bell 505,” said Carl Wolf, Garmin vice president of aviation sales and marketing. “The state-of-the-art GFC 600H combines our expertise in safety-minded technology for helicopters with our industry-leading flight control experience to deliver a system that essentially affords the pilot the option to fly hands-off, which would be unheard of without an autopilot.”

The GFC 600H contains advanced AHRS technology and redundant, cross-checking sensors to support smooth handling throughout the flight envelope. Attitude hold reduces pilot workload by

maintaining a specified attitude, while also providing inputs to help stabilize the helicopter when hand-flying. Designed with the pilot in mind, its cyclic-mounted trim controls allow for seamless control of the system without taking a hand off of the helicopter flight controls during basic operations.

The GFC 600H features a console-mounted mode controller with push-button controls that interface with the Garmin integrated flight deck on the Bell 505. With the GFC 600H, aircraft navigation is effortless as the system uses navigation information from the integrated flight deck to automatically fly approaches, provide enroute navigation guidance and search and rescue patterns. Additional autopilot modes include altitude hold, altitude select, vertical speed, indicated airspeed and heading select. Integrated servos control the pitch and roll axes of the aircraft, and the optionally available yaw servo provides yaw axis control and smooth flight control adjustments when the pilot moves the collective.

Garmin H-ESP helps the pilot remain within a safe flight envelope when hand-flying the helicopter. H-ESP works in all modes – even when the system is not engaged – and can be manually disabled to allow for maneuvering flight. The GFC 600H also features a dedicated level mode that can be engaged by the pilot to return to straight-and-level flight, helping to avoid a potential loss-of-control scenario. For example, in the event the pilot inadvertently enters the clouds, Garmin H-ESP can engage to assist in maintaining the helicopter in a safe flight attitude.

Hover assist mode is capable of automatically detecting a hover condition and provides flight control inputs to help maintain position over the ground. With the optional yaw axis control, the GFC 600H will also hold heading while in a hover. In addition to hover assist mode, groundspeed hold is also available and allows the pilot to input a forward or sideways command, which can be particularly useful during taxi and take-off.

The GFC 600H on the Bell 505 is night vision goggle (NVG) compatible. Supplemental Type Certification (STC) for the Bell 505 is expected in the first-half of 2020 and will be available at that time through the Bell production line and Garmin Authorized Dealers for retrofit installations. For additional information, visit: www.garmin.com/helicopters.

23 AUGUST 2019

ARTICLE LINK:

<https://50skyshades.com/news/manufacturer/certification-of-the-gfc-600h-for-the-bell-505-is-expected-in-2020>