

GARMIN RECEIVED CERTIFICATION OF THE GFC 600 DIGITAL AUTOPILOT IN BEECHCRAFT KING AIR F90 AIRCRAFT

News / Manufacturer



Garmin has received FAA Supplemental Type Certification for the GFC 600 digital autopilot in Beechcraft King Air F90 aircraft. The GFC 600 digital autopilot is optimized for turbine aircraft, delivering superior in-flight characteristics that reduce workload and bring new operational capabilities such as Vertical Navigation, automatic Course Deviation Indicator switching when paired with a GTN Series navigator, enhanced go-around capabilities including missed approach sequencing — and much more.

The GFC 600 certification for the King Air F90 provides owners and operators with an autopilot upgrade that boasts superior integration potential with G600 and G600 TXi™ flight displays, the GI 275 electronic flight instrument, as well as the GTN and GTN Xi Series of navigators. The self-contained autopilot controller incorporates backlit keys and a bright, sunlight readable display that depicts autopilot status and mode selection. An intuitive built-in control wheel also provides convenient adjustment of aircraft pitch, airspeed and vertical speed modes. When the level button is selected, the aircraft automatically returns to straight-and-level flight.

Environmentally hardened autopilot servos designed for harsh operating conditions contain

brushless DC motors offering improved performance and reducing maintenance requirements when compared to decades-old servo designs on the market today. In addition, these servos offer more torque to help pilots better respond to demands required of turbine aircraft. Standard mark-width (6.25-inch) design of the GFC 600 mode controller ensures the autopilot controller allows for routine installation into the aircraft's avionics stack. In King Air F90 aircraft, GFC 600 will require a G600 TXi or G600 flight display.

In addition to traditional autopilot capabilities such as altitude hold, vertical speed and heading modes, the GFC 600 includes:

- Premium functions and advanced capabilities such as altitude pre-select² and indicated airspeed hold mode.
- Ability to select, couple and fly various instrument approaches, including GPS, ILS, VOR, LOC and back course approaches.³
- Built-in GPS roll steering capability eliminates the need for external roll steering converters and allows for smoother navigation tracking when installed with a compatible navigator.
- Level Mode button, which automatically engages the autopilot to restore the aircraft to straight and level flight.
- Underspeed and overspeed protection.
- Yaw Damping (YD) mode minimizes yawing oscillations while also helping to maintain coordinated flight.
- Flight Director command bars can be displayed on a flight display such as the G600 and G600 TXi.
- Coupled 'go-arounds' for pilots to fly during missed approach sequencing. A remotely installed go-around button commands the Flight Director to display the appropriate pitch attitude required for the missed approach procedure and activates a loaded missed approach when paired with a GTN 650/750 or GTN 650Xi/750Xi navigator.
- Included pitch-trim servo adds automatic trim and improved manual electric trim.
- Control wheel steering is available, which allows the pilot to adjust pitch, roll, altitude hold, vertical speed or airspeed references using the control yoke while the autopilot is engaged.

As a standard feature, pilots receive Garmin Electronic Stability and Protection with the GFC 600 digital autopilot, which works to assist the pilot in maintaining the aircraft in a stable flight condition. ESP functions independently of the autopilot and works in the background to help pilots avoid inadvertent flight attitudes or bank angles and provide airspeed protection while the pilot is hand-flying the aircraft.

With the approval of the GFC 600 digital autopilot, the King Air F90 will receive Low Bank Mode to help increase passenger comfort by automatically lowering the autopilot roll limit at higher altitudes. A separate switch may also be used by the pilot to activate/deactivate Low Bank Mode at any altitude. Additionally, GFC 600-equipped King Air F90 aircraft will feature Emergency Descent Mode.⁴ In the event an aircraft loses cabin pressurization, EDM is capable of automatically descending the aircraft to a preset altitude without pilot intervention to help avert hypoxic situations.

The GFC 600 digital autopilot for the Beechcraft King Air F90 will be available in early September through select Garmin authorized dealers. Garmin continues to add additional aircraft models to the growing STC list for the GFC 600 autopilot.

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