



APPROVAL FOR NEW G5000 FEATURES AND UPGRADES FOR THE CITATION EXCEL AND CITATION XLS

News / Business aviation



Garmin continues to make significant investments and add valuable enhancements to the G5000® integrated flight deck upgrade in the Citation Excel and Citation XLS. New software-enabled features¹ include stabilized approach monitoring, steep approach certification and reactive windshear detection, as well as optional takeoff and landing data (TOLD) calculations. New hardware approvals for these aircraft include the Garmin Attitude and Heading Reference System (AHRS), the GRA™ 5500 radar altimeter and the GTS™ 8000, which all address third-party product obsolescence for these aircraft.

“Given the tremendous success and demand of the G5000 integrated flight deck upgrade in the Citation Excel and Citation XLS, we’re excited to introduce new features that will add significant capability to this upgrade,” said Carl Wolf, vice president of aviation sales and marketing. “With the G5000, owners and operators receive zero-time avionics that yield a lower cost of operation, along with situational awareness tools that streamline cockpit

operations, all of which make the G5000 upgrade in these popular aircraft an absolute must.”

Takeoff and Landing Data (TOLD)

Vital takeoff and landing performance data within the G5000 on the Citation Excel/XLS streamline flight deck operations and simplify pre-flight calculations. The optional TOLD function calculates required V-speeds, runway lengths and power settings. Data entry is simplified as the G5000 integrated flight deck automatically populates airport and runway information from the flight plan, as well as winds, temperatures and barometric pressure information. In the event takeoff or landing parameters are exceeded, a warning is populated on the primary flight display (PFD). Additionally, a TOLD Consistency Monitor within the G5000 routinely monitors aircraft configuration, such as flap setting, to ensure the crew is operating within the parameters selected.

Additionally, the optional TOLD feature for the Citation Excel/XLS includes a Load Emergency Return function. In the event the aircraft requires an immediate return to the departure airport, pilots have the option to select Load Emergency Return on the touchscreen controller to automatically load landing data. Optional SurfaceWatch™ complements TOLD calculations, by providing visual and aural notifications that are designed to help prevent pilots from taking off or landing on the wrong runway, on a runway that is too short or on a taxiway.

Stabilized Approach Monitoring

An additional layer of redundancy and protection is provided with the Stabilized Approach function. While on approach, the G5000 monitors the aircraft to ensure it's operated in a stabilized manner. Aural annunciations such as “speed,” “course,” “glidepath” and “sink rate” notify the flight crew if the aircraft is exceeding predetermined speed, course or vertical descent rates while on approach to the runway.

Steep Approach Capability

Due to terrain, obstacles or local noise ordinances, select airports require aircraft to fly steeper than normal glidepath angles on approach to the runway. Steep approach certification² allows the G5000 in the Citation Excel/XLS to fly these unique approaches and glidepath angles. This certification also inhibits unnecessary alerts from the Terrain Awareness and Warning System (TAWS) while on approach to these select airports and runways.

Reactive Windshear

Using airspeed, vertical speed and other data in the flight deck, the G5000 in the Citation Excel/XLS can identify whether the aircraft is flying in a windshear condition and provides the appropriate caution or warning notifications for crew action.

Additional upgrades for the G5000

In addition to new software-enabled features, new hardware options are now available with the G5000 in the Citation Excel/XLS, including:

- Modern, solid-state digital Garmin AHRS provides operators with an economical path to upgrade expensive, legacy AHRS that are no longer supported by the third-party manufacturer.
- The GTS 8000 TCAS II System can now be paired with the G5000 and uses Garmin's patented CLEAR CAS™ (Correlated Location Enhanced ADS-B Receiver Collision

Avoidance System) technology to correlate active traffic and Automatic Dependent Surveillance-Broadcast (ADS-B) In traffic targets so pilots can more easily identify pertinent threats.

- The Garmin GRA 5500 radar altimeter can now replace antiquated third-party radar altimeters.
- Controller Pilot Data Link Communications (CPDLC) datalink message recording is now supported with an upgraded L3 cockpit voice recorder.

25 AUGUST 2020

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