

## King Air efficiency, redefined.

The STC'd Garmin G1000 retrofit suite is clearly more than just an avionics facelift. It offers a whole new level of communication between pilots and their aircraft. What's more, recent upgrades and updates to Garmin's supplemental type certificates for the King Airs include an array of new software and optional equipment enhancements that promise to give pilots even more ways to enhance cockpit safety, efficiency, capability and ease of operation.

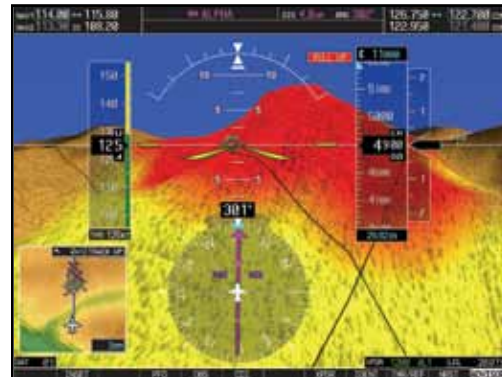
Consolidating all the primary flight, navigation, weather, terrain, traffic, radio frequency and engine data readouts once scattered across a myriad of instruments – the G1000 glass retrofit package is anchored by a 15-inch "big picture" Multi-Function Display (MFD), flanked by 10-inch Primary Flight Displays (PFDs) at the pilot and copilot positions. These vivid, high-resolution XGA (1024 x 768 pixel) color screens offer wide side-to-side viewing angles, advanced backlighting, and crystal-sharp readability, even in bright sunlight. On the pilot and copilot PFDs, a graphical 3-axis flight display synthesizes aircraft attitude, airspeed, climb rate, altimeter and horizontal course/heading information – as well as Flight Director command bar cues and mode information, when coupled with Garmin's GFC 700 automatic flight control system. Pilots moving up to turbine class operations will especially appreciate the added peripheral cues provided by the wall-to-wall horizon reference on the full-screen PFD attitude displays.

Better still, with the optional addition of Garmin's SVT™ synthetic vision technology<sup>1</sup>, pilots can now fly with a realistic 3-D view of topographic features surrounding their aircraft. Using sophisticated graphics modeling, Garmin SVT tracks the navigation system's terrain-alerting database to recreate this "virtual reality" landscape on the pilot and copilot PFDs. Ground and water features, airports, runways, obstacles, traffic and more: The SVT display looks so real and lifelike, it's almost like having a clear-day "out-the-window" view of one's flight situation – even in solid IFR or nighttime VFR conditions.

Meanwhile, looking toward the center of the panel, pilots will find essential engine and fuel systems data displayed on the G1000's big multi-tasking MFD – along with detailed moving-map graphics showing the aircraft's current position in relation to ground features, chart data, nav aids, flight plan routings, and more.

Preloaded Garmin SafeTaxi® and initial FliteCharts® database come standard with the package. The FliteCharts provide electronic versions of AeroNav terminal procedures and approach plates for over 2,900 U.S. airports. And SafeTaxi makes ground ops easier by offering detailed airport diagrams for over 950 locations, combined with automatic display of your aircraft's exact location on the field.

As an alternative, pilots can optionally enable Jeppesen-style ChartView™ instrument approach plates and airport surface charts for the G1000 (subscription required). ChartView has the ability to overlay a geo-referenced aircraft symbol on the electronic approach chart, providing a helpful visual crosscheck of your progress inbound.



Optional Garmin SVT™ synthetic vision technology provides a 3-D view of potentially hazardous topography – highlighted by an amber or red color overlay where flight-into-terrain risks exist.



Optional ChartView™, powered by Jeppesen, lets pilots accurately overlay their aircraft's position on approach procedures and airport diagrams. Standard Instrument Departure and Arrival charts (SIDs and STARs) are also provided.



Built-in Garmin SafeTaxi™ airport diagrams help pilots identify runways, taxiways, hangars and aircraft location on over 950 U.S. airports.

## What's included in the G1000 Retrofit for your King Air:

- LCD flight displays – dual 10-inch PFDs; large 15-inch MFD
- Dual integrated radio modules, providing WAAS-certified GPS; VHF navigation with ILS; and VHF communication with 16-watt transceivers and 25 kHz or 8.33 kHz channel spacing
- Dual Mode-S transponders with Extended Squitter (Extended-squitter version is optional on C90)
- Dual solid-state Attitude and Heading Reference Systems (AHRS)
- Dual RVSM-compliant digital air data computers
- Three-axis digital Automatic Flight Control System
- Four-color digital weather radar with stabilization
- Integrated Class-B TAWS terrain alerting with worldwide terrain and U.S. obstacles database
- XM Satellite Radio datalink receiver (subscription required)
- FliteCharts™ and SafeTaxi™
- Dual engine monitoring computers
- Dual digital audio panels
- Pedestal-mounted FMS controller
- Modular rack-mounted LRUs
- Ethernet data-bus connectivity
- All-new metal instrument panel
- RVSM certification\*

## Available G1000 options for the King Air Retrofit:

- Garmin ESP™ Electronic Stability and Protection system\*
- Iridium-based worldwide weather, SatPhone and text messaging\*
- Garmin Datalogger with WiFi (ramp) connectivity\*
- Garmin SVT™ synthetic vision technology
- XM Satellite Radio wireless remote controller
- Jeppesen-format ChartView™ electronic charts
- Class A TAWS terrain alerting\*
- GTS 820 TAS or GTS 850 TCAS I for active traffic alerting

\*King Air 200 and 300/350 series only

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G1000® for the Beechcraft King Air line

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The King Air's 3-screen configuration features a big 15-inch Multi-Function Display (MFD) flanked by dual 10-inch Primary Flight Displays (PFDs). A Garmin autopilot mode controller, FMS keypad and dual audio panels complete the package.

Back in 1964, when the very first Beechcraft King Air rolled off the production line in Wichita, the future of business air travel was once and forever set into motion. At the time, we were still five years away from the first moon landing. Computers were the size of refrigerators. And no one had even heard of cellphones, laptops, Wi-fi, e-mails, websites, MP3s, datalinks or GPS satellites.

## [ Aviation's first family of turboprops gets a fresh new look on the flight deck. ]

Yet, anyone with an ounce of vision could see that this new King Air was a machine destined to bring business travelers face-to-face with a world of new opportunities. The airframe was incredibly versatile, comfortable, reliable, rugged and fuel-efficient. And it has remained so to this day. With each passing year, the Beech turboprop lineup has continued to evolve – adding performance and mission capability, while continuing to keep passengers fresh and relaxed in those big, roomy “squared oval” pressurized cabins that have long set the standard for travel comfort in business aviation.

Today, the King Air line has been in continuous production longer than any other turbine business aircraft. It represents the largest, most successful family of twin turboprops in aviation history – numbering well over 6,000 aircraft and totaling 20+ million flight hours.

What's more, for King Air owners who want to fly with a more evolved “glass flight deck” avionics system, there's now a Garmin G1000™ retrofit option for every King Air model in today's Beechcraft lineup.

The top-of-the-line King Air 300/350 series is joining the C90 and 200/B200 airframes already being “Garminized” at authorized installation centers industry-wide. Replacing outdated mechanical dials and instruments with state-of-the-art flat-panel displays, Garmin's fully integrated G1000 package is a “fountain of youth” for your favorite King Air's aging avionics. No other STC'd upgrade comes close – for anything close to the price.

Garmin G1000: It's the clear-as-glass choice for giving your King Air a fresh new lease on life.

### More data on demand.

The G1000's MFD map display is designed to interface with a growing array of remote sensors and tracking systems, making it easy for pilots to overlay graphical weather, lightning, traffic, terrain and other avoidance system advisories. Sensor functions are selectable, letting the pilot add or deselect overlays, and thus “build at will” the map view he or she prefers for any given phase of flight. Class B TAWS terrain alerting comes standard, with TAWS-A as an available option. Also standard is weather data link capability, via XM Satellite Radio and the XM WX Satellite Weather receiver (subscription required). With the XM link, NEXRAD weather, METARs, TAFs, TFRs, winds aloft, echo tops, surface precipitation, lightning strikes, storm cell data, and more, can be received and displayed anywhere in the U.S., regardless of altitude.

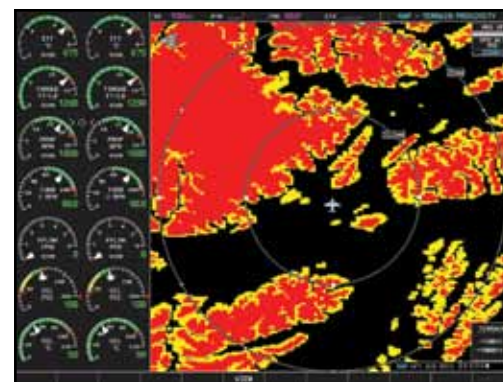
Garmin's data link capability is the ideal supplement to the tactical weather guidance provided by the 6.5-kilowatt GWX 68™ onboard digital weather radar – which is also included in the standard retrofit packages. This fully stabilized 4-color radar features pilot-adjustable horizontal scans from 20 to 90 degrees – plus a useful vertical scanning mode to help analyze storm tops, gradients and cell buildup activity at various altitudes.

If you're flying globally, you can still have access to quality on-demand satellite weather data on a worldwide scale via the optional GSR™ 56 Iridium network transceiver<sup>1</sup> (subscription required). Radar and satellite imagery are available for the U.S., Southern Canada and Western Europe. Plus, the Garmin Iridium transceiver can also be used to provide global voice/data connectivity, as well as text messaging.

Using the GSR 56, you can send text messages from virtually anywhere. Or make worldwide Iridium-based calls from your King Air's cockpit or cabin while in-flight or on the ground.

### Using datalinks to save downtime.

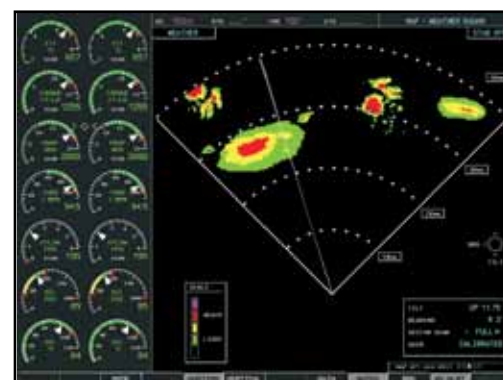
Another useful option for King Air owners who want their service crews to have instantaneous access to maintenance and operational data is the Garmin GDL™ 59<sup>1</sup>. It's a flight parameter recorder that uses a high-speed Wi-Fi transceiver to synch with “hot spots” that are within range of the aircraft while it's on the ground at Wi-Fi equipped airport ramps. The GDL 59 supports transmission of such logged data reports as: engine trend and exceedance data, system maintenance data crew advisory system (CAS) messages, and more. After landing, the information may be downloaded via Wi-Fi to your local service facility on the field. Or, if you need to have parts and technicians ready and waiting when you arrive, you can also use the optional GSR 56 Iridium network transceiver to send the information ahead while you're still in-flight and enroute<sup>1</sup>.



Built-in terrain elevation database is enhanced with full Class B TAWS alerting functionality to provide an extra margin of safety in recognizing potential terrain/obstacle conflict situations. Class A TAWS is available as an option.



Weather datalink capability, via XM Satellite Radio and its XM WX Satellite Weather service, provides the G1000 with color NEXRAD, METARs, TAFs, lightning, and other U.S. data displays (subscription required).



For onboard weather analysis, the King Air package features Garmin's fully stabilized GWX 68™ digital color radar. At 6.5 kilowatts, it packs the power to penetrate serious weather.

### High-tech flight control.

With its ultra-smooth 3-axis servo control inputs, Garmin's all-digital GFC 700 flight control system provides the G1000 with a superior level of integration and response – combining sophisticated modes and functions, AHRS-based situational reference, and dual-channel, self-monitoring safety features once found only on high-end business jets.

Using prestored King Air reference data to optimize performance over the entire airspeed regime, this advanced flight director/autopilot system offers precise lateral and vertical navigation guidance for all phases of flight. Airspeed holds, VNAV profiles, automatic nav-to-nav captures, coupled holding patterns, procedure turns, Go-Arounds, and more – the list of capabilities is unprecedented in this class of autopilot. Pilots will appreciate the positive, consistent response afforded by airspeed-scheduled trim – as well as the silky smooth roundouts and vertical intercepts that the system's advanced software modeling provides on climbs and descents.

These progressive flight control features bring an awesome level of support to the G1000's WAAS-certified GPS navigation technology. Thanks to WAAS – the FAA's Wide Area Augmentation System – thousands of previously fair-weather-only airports now have the potential to offer GPS-guided “glidepath” approaches down to ILS-comparable minimums (as low as 200-ft. decision height, 1/2-mile visibility) – without reference to ground-based navigation aids of any kind. Suddenly, the world of IFR is open to more all-weather landing options than ever. And your G1000-equipped King Air is all set to make the transition without missing a beat.

### Attitude enhancement with ESP™.

Another safety-enhancing option available with the King Air G1000 retrofit is Garmin's ESP™ (Electronic Stability and Protection) system<sup>1</sup>. This electronic monitoring and exceedance-correcting technology works to assist the pilot in maintaining the aircraft in a safe, flight stable condition – helping to prevent excursions beyond normal flight envelope parameters that might lead to loss of control, should the pilot become distracted, disoriented or incapacitated during flight.

In addition to pitch and roll correction, ESP also offers high and low airspeed protection whenever pilots are hand-flying their aircraft. If the ESP-equipped King Air is approaching VNE or VMO with the autopilot turned off, ESP will engage and apply back-pressure to the control yoke to increase the aircraft's pitch attitude and prevent a further increase in airspeed. ESP has built-in parameters to help prevent the aircraft from exceeding G-limit load factors upon pullout. At the other end of the airspeed spectrum, ESP uses angle of attack/lift sensor inputs on the King Air to provide low airspeed or stall protection that provides a gentle pitch-down control force through the control yoke when the aircraft's wing approaches its critical angle of attack. The ESP system is designed to augment, not overpower, the pilot's control of the aircraft. Yet, by proactively helping to keep the aircraft flying within its design limits, Garmin believes ESP can have a significant and immediate effect on safety-of-flight for King Air pilots and their passengers.

### Extra peace-of-mind comes standard.

Other key features that are offered as standard with the G1000 avionics suite include dual integrated solid-state Attitude and Heading Reference Systems (AHRS), and dual integrated RVSM-capable digital air data computers. For the higher-flying King Air 200 and 300/350 series, Garmin's G1000 installation will also include Reduced Vertical Separation Minimums (RVSM) certification, enabling full operational access to the now-more-restrictive upper flight levels. Better still, no matter where you fly with your G1000-equipped King Air, you can count on the extra-solid confidence and security that come from knowing you're backed by Garmin's top-ranked warranty protection and worldwide product support network.

### Find out more online

To learn more about G1000 system retrofit requirements under Garmin's Approved STC List – and to locate the Garmin factory-authorized King Air installation centers in your area – check out our website: [www.garmin.com](http://www.garmin.com). For a fraction of the cost of factory new, you could soon be flying the King Air flight deck of the future.

<sup>1</sup>Sold separately. NOTE: Garmin ESP™ stability augmentation, Class A TAWS, GSR 56 Iridium transceiver, and GDL 59 datalogger are only available on the King Air 200 and 300 series airframes.

## GARMIN G1000 FEATURES AT A GLANCE

- Large-format LCD displays – 10-inch PFDs; 15-inch MFD
- Fully integrated CNI suite with dual WAAS-certified GPS
- Optional SVT™ synthetic vision on PFD depicts terrain data in 3-D
- All-digital, dual-channel Garmin flight control system
- Moving-map MFD with engine/fuel gauge cluster, checklist capability
- Onboard digital 4-color weather radar
- Class-B TAWS alerting, worldwide terrain and obstacle database for the U.S. and Europe (TAWS-A capability is optional)
- XM WX satellite weather and XM Radio
- FliteCharts® and SafeTaxi®
- ChartView™ powered by Jeppesen (optional)
- Optional ESP (Electronic Stability and Protection)
- Optional global connectivity (worldwide weather, Iridium SatPhone, text messaging, and more)
- Optional Datalogger with WiFi (ramp) connectivity
- RVSM certification (King Air 200 and 300/350 series)
- Interfaces for traffic, lightning, ADF and DME
- Dual solid-state AHRS referencing
- Full reversionary display capability
- Award-winning Garmin product support and 2-year warranty