



HALO 275

CENTEX AEROSPACE GWI STC SERIES

KING AIR 200 & 250

14,000 POUNDS

MAX TAKEOFF WEIGHT

***Fly Farther,
Faster and Safer***

— With the HALO 275 Conversion for the King Air 200 —



— IN GOD WE TRUST —

CENTEX
AEROSPACE INCORPORATED

"Making Aviation Better!"

“ The Beechcraft 200/250 Series King Air is the most successful turbine-powered business aircraft in history and CenTex Aerospace has made it even better with the HALO 275 Conversion!! ”

Defining the HALO 275

The HALO 275 conversion raises the maximum takeoff weight of King Air 200/250 series aircraft with high flotation gear from 12,500 to 14,000 pounds resulting in a 1,500 pound increase in payload capacity. The FAA Normal category weight limit of 12,500 pounds is exceeded by certifying the 200/250 series King Air in the Commuter Category.

Fly Farther

The weight increase allows more payload that can be more passengers, baggage, fuel, or a combination of these three. The 1,500 pound increase equates to an additional two and a half hours of flight time, or, seven more passengers plus baggage.

Fly Faster

The conversion provides an increase in the maximum operating Mach number, M_{mo} . The original M_{mo} is increased from 0.52 to 0.58 Mach. It allows faster cruise speeds at high altitudes and faster descents. This new feature is a real benefit for airplanes with -52 and -61 engines.

Fly Safer

Five new safety systems are installed during the conversion. These new safety systems raise the King Air to a new level of safety.



HALO 275 Information Chart STC # SA11103SC

	200	B200* B200GT
Increase Max Ramp Weight	12,590 to 14,090	12,590 to 14,090
Increase Max Takeoff Weight	12,500 to 14,000	12,500 to 14,000
Max Landing Weight	12,500 to 13,500	12,500 to 13,500
Max Zero Fuel Weight	No Change 10,400	11,500
Payload Increase	1,500	1,500

*Max zero fuel weight applies to Model B200 series with serials BB-1439, BB-1444 & after, BL-139 & after

HALO 275 STC Kit: \$125,500.00

The Halo 275 STC kit includes the STC, installation drawings and instructions, AFM Supplement, instructions for continued airworthiness documents, and the required parts and components (except engine fire extinguisher cylinders and common hardware items) for converting and operating a King Air 200/250 series airplane at a maximum takeoff weight of 14,000 pounds. Retail price does not include cost of engine fire extinguisher cylinders, which must be supplied by the installer.

Less \$3,000 for airplanes already equipped with engine fire extinguishing system.

Less \$3,000 for airplanes with Pro Line 21 or Pro Line Fusion avionics which are already equipped with an aural over-speed warning.

Estimated installation labor hours: 200 hours

High Flotation landing gear required



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More Than Double the Range!

The flexibility to fly farther is a real advantage. The HALO 275 conversion more than doubles the range for a fully loaded King Air B200 by allowing 1,500 pounds more fuel to be carried. The comparison on the right shows how the numbers stack up. The chart below illustrates the advantage of greater range!

Basic Flight Information

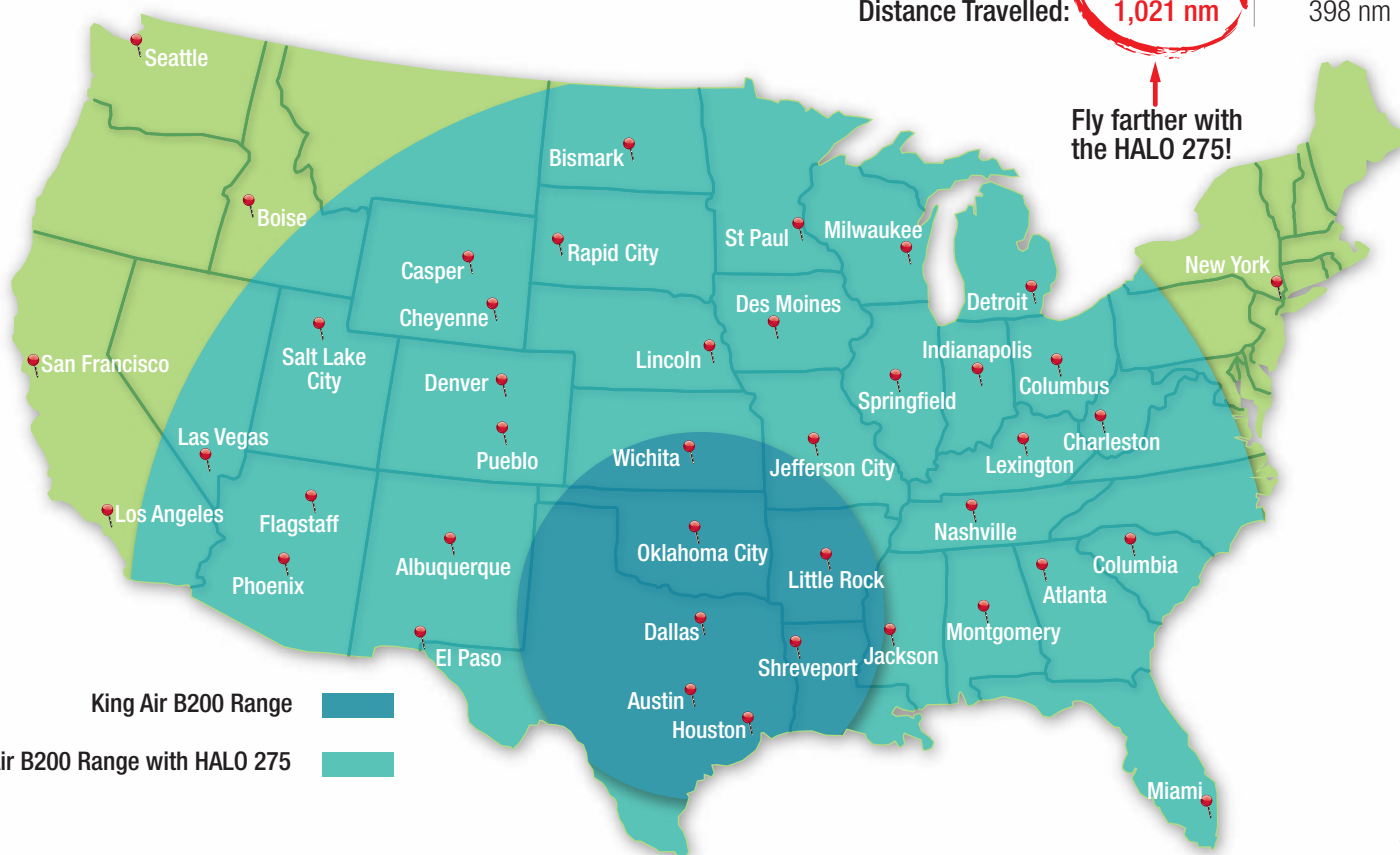
Cruise Altitude:	24,000 ft.
Temperature:	ISA
Wind:	None
Zero Fuel Weight:	11,000 lbs.*
Fuel:	B200 – 1,500 lbs. B200 with HALO 275 – 3,000 lbs.
Takeoff Weight:	B200 – 12,500 lbs.

*Pilot, copilot, nine pax, and bags

HALO 275

B200

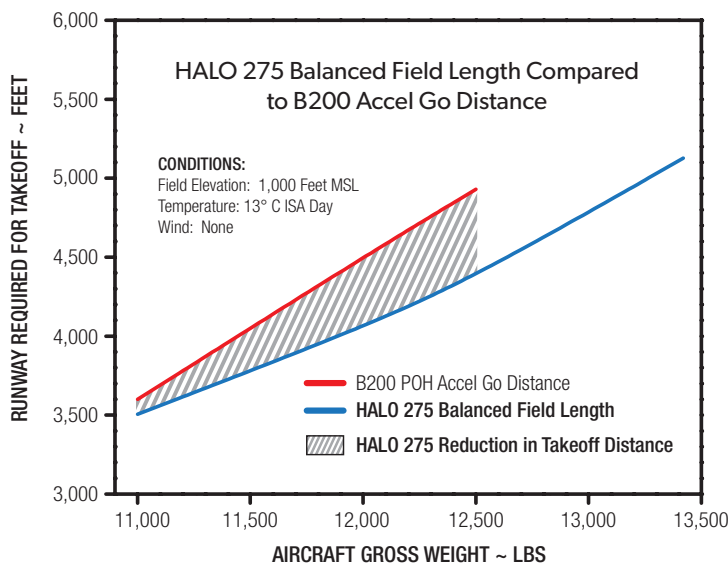
Takeoff Weight:	14,000 lbs.	12,500 lbs.
Available Fuel Cap.:	3,000 lbs.	1,500 lbs.
Takeoff and Climb		
Time:	18 min.	15 min.
Fuel Used:	235 lbs.	210 lbs.
Distance:	53 nm	48 nm
Cruise		
Cruise Speed:	276 kt.	280 kt.
Time:	3:14 hr:min	59 min
Fuel Used:	2,110 lbs.	640 lbs.
Distance:	893 nm	275 nm
Descend and Landing		
Time:	16 min.	16 min.
Fuel Used:	155 lbs.	160 lbs.
Distance:	75 nm	75 nm
Reserve		
Time:	45 min.	45 min.
Fuel Required:	500 lbs.	500 lbs.
Total		
Flight Time:	3:48 hr:min	1:30 hr:min
Distance Travelled:	1,021 nm	398 nm



HALO 275 Performance and Configuration Options

Takeoff Performance — *It's Better Than You Think!*

“Balanced field length” is another moniker for the runway distance sufficient to 1) abort a takeoff and stop the airplane on the runway, or, 2) continue the takeoff and reach a height of 35 feet in the event of an engine failure just before decision speed. Airplane certification regulations require that the relationship between outside air temperature, pressure altitude, gross weight, and the resulting takeoff “balanced field length” be provided for Commuter category airplanes. This requirement increases safety because the contingency of an engine failure is included in the takeoff distance. The HALO 275 AFM Supplement provides easy-to-use tables containing balanced field lengths and takeoff speeds. The takeoff speeds have been optimally selected to shorten the balanced field length as much as possible. The result is shorter runways can be utilized without compromising the added safety that “balanced field” takeoff operations provide.



Effect of Icing — *It's Better to Know Before Finding Out!*

The HALO 275 AFM Supplement provides the performance charts and tables you need to predict rate-of-climb and net climb gradient for flight operations in icing conditions. These new data makes it easier to ensure safe operation in icing conditions, even in the event of an engine failure. Additionally, the conversion includes an update to the stall warning system that greatly improves the accuracy of the stall warning when there is ice on the wings. These new features make operating your King Air 200/250 in icing conditions safer.



Option 1 or Option 2 — *The Choice is Yours!*

There are two options available in the HALO 275 conversion.

Option 1 — Normal Category:

MTOW is unchanged at 12,500 lbs. Safety systems are fully operational. No change to the Beechcraft POH performance data.

Option 2 — Commuter Category:

MTOW increases to 14,000 lbs. HALO 275 AFMS performance data are applicable. Option 2 gives you all the benefits of the HALO 275 conversion. BE-200 type rating is required.

Changing from Option 2 to Option 1 is Simple!

If needs dictate operating the airplane in normal category, a change back to Option 1 is a simple four step process.

1. Remove the Commuter Category placard and AFMS 006-2 from the cockpit,
2. Place AFMS 006-1 in the cockpit,
3. Make an entry in the airplane's records stating the airplane is now modified in accordance with STC SA11103SC Option 1,
4. Change the Airworthiness Certificate to show the airplane is in Normal Category.

Whichever option you choose, you still have the benefits of the safety systems provided by the HALO 275 conversion.

Training

Simulator based flight training is currently available at TRU Simulation+Training in Tampa, FL (www.truesimulation.com), FlightSafety International in Wichita, KS (www.flightsafety.com), and FlyRight Inc. in Concord, NC (www.flyrightinc.com) using their FAA-approved, full motion simulators.

In-aircraft flight training is also available at CenTex Aerospace in Waco, TX and Executive Flight Training in Beaufort, SC (www.kingairtraining.com).



Increased Safety

Safety Systems Make Your King Air 200/250 Safer

FAA regulations require safety systems normally found on jet transport airplanes to be installed on Commuter Category airplanes. The HALO 275 conversion adds five new systems to the King Air 200/250 making it a much safer airplane to operate. Here is a description of what these systems provide.

Trim Out-of-Range Warning System: An aural warning sounds to alert the pilot that the elevator trim tab is not set within the takeoff range when the airplane is on the ground and engine power is advanced for takeoff. This is a new feature for the King Air 200/250 series airplanes.

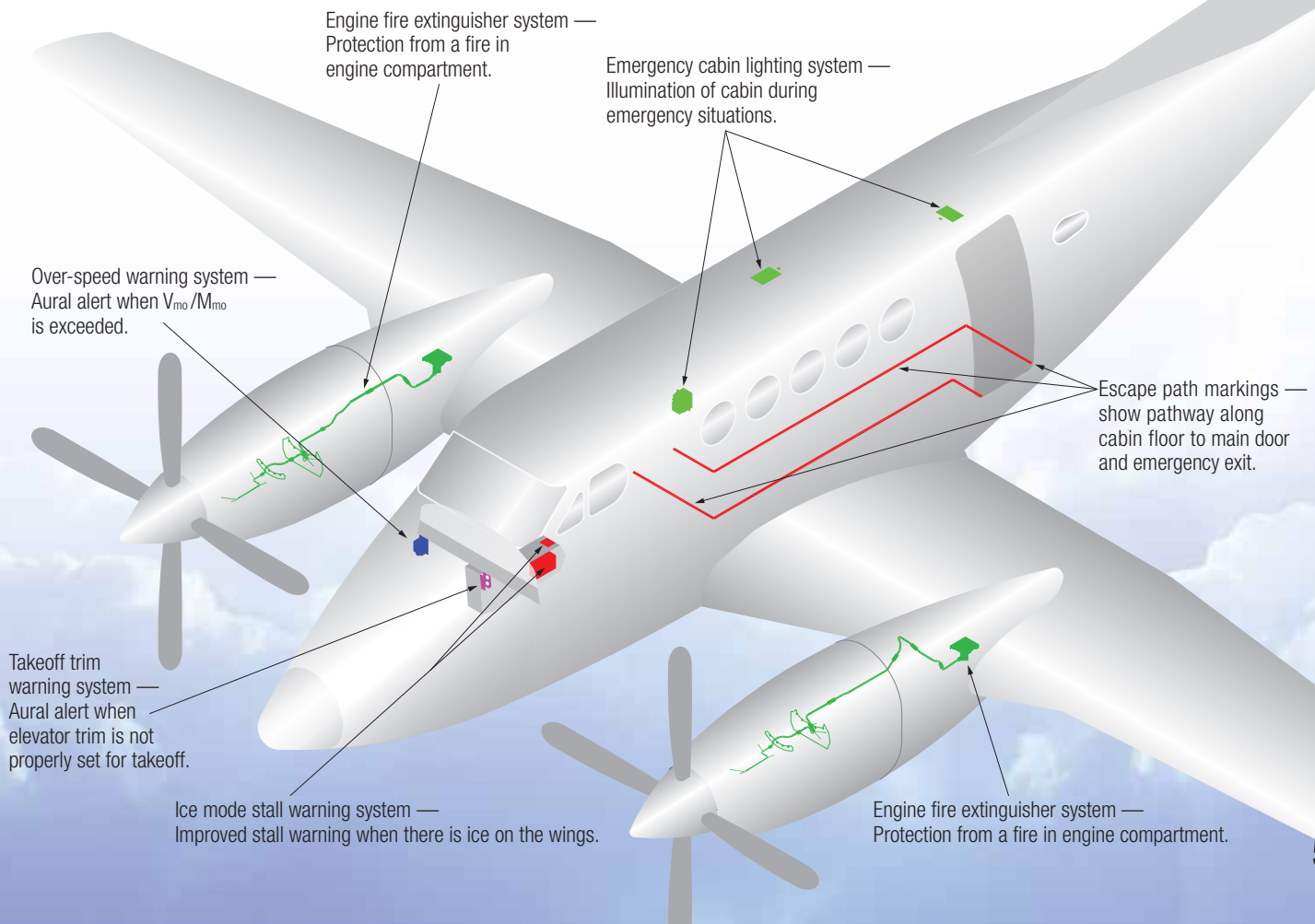
Over-Speed Warning System: An aural warning sounds to alert the pilot that airspeed has exceeded the maximum operating airspeed or maximum operating Mach number. This is a new feature for the King Air 200 series airplanes, except those with the Rockwell Collins Pro Line 21 or Pro Line Fusion avionics suite.

Stall Warning System Ice Mode: The aural stall warning system is updated to add an “ice mode” that automatically activates when the surface de-ice system is first operated. It remains in operation until the pilot manually switches back to the normal mode after the airplane exits icing conditions and the wings are free of ice.

In the ice mode, stall warning occurs at a lower angle-of-attack that compensates for the reduction in stall angle-of-attack caused by ice on the wings and tail. This is a new advanced safety system for the King Air 200/250 series airplanes and is only found on airplanes with the HALO 275 conversion.

Engine Fire Extinguisher System: Engine compartment fire extinguishing capability is required by Commuter category regulations and is added by the Halo 275 conversion, if not already present. This system complements the standard King Air 200/250 fire detection system providing complete detection and protection from an engine fire. System status annunciators and activation switches are added to the glareshield allowing the pilot to test the system and activate it when needed.

Cabin Emergency Lighting System: A cabin lighting system consisting of two LED flood lamps and a battery pack is installed to provide lighting in the cabin in the event of a loss of electrical power. Also, a g-switch activates the flood lamps should the aircraft experience deceleration beyond normal operations, such as a crash landing. This is a new feature for the King Air 200/250 series airplanes. The cabin emergency lighting system also can be used to aid in normal loading or unloading of passengers or cargo.



Limitations, Life Limits, and Inspection Schedules

The Halo 275 STC does not change any of the structural limitations that currently apply to the aircraft. Life limits and inspection schedules also remain unchanged. The CenTex Halo 275 ICA manual identifies the applicable life limit and inspection information for your aircraft as required by the Beechcraft maintenance manuals and the BLR Aerospace ICA manual for aircraft equipped with BLR winglets. The CenTex ICA also provides information for the equipment installed by the STC.

Is My King Air Compatible?

With many of the King Air 200/250 series airplanes modified with one or more STCs, CenTex Aerospace engineered the HALO 275 to work seamlessly with the many popular STCs sold by Raisbeck Engineering, BLR, and Blackhawk as well as Garmin G1000, Rockwell Collins Pro Line 21 and Pro Line Fusion avionics.

The HALO 275 is also compatible with Hartzell's three and four blade propellers and McCauley's three, four, and five blade propellers. Engine compatibility includes Pratt & Whitney Canada PT6A-41, -42, -52, and -61 engines.

Below is a list of STCs which have been found to be compatible with the HALO 275 conversion.

1. SA2698NM-S, Raisbeck Hartzell HC-D4N-3A/D9383K Quiet Turbofan Propellers
2. SA2698NM-S, Raisbeck Hartzell HC-D4N-3A/D9515K Swept Blade Turbofan Propellers
3. STC SA3366NM, Raisbeck Ram Air Recovery System
4. SA3831NM, Raisbeck Inboard Leading Edges
5. SA3591NM, Raisbeck Aft Body Strakes
6. SA4175NM, Raisbeck MLG Doors
7. SA3857NM, Raisbeck Storage Lockers
8. SA3683NM, Raisbeck Exhaust Stack Fairings
9. SA00433AT, Blackhawk PWC PT6A-42 Engine Conversion
10. SA10824SC, Blackhawk PWC PT6A-52 Engine Conversion
12. SA02130SE, BLR Hartzell HC-E4N-3A/NC9208K Propellers
13. SA01615SE, BLR Winglets
14. SA02131SE, BLR Ultimate Performance Package
15. SA2451CE, Commuter Air Tech. Super 60 (Cargo) Pod
16. SA10842SC, Enhanced Aero PWC PT6A-52 Engine Conversion

17. SA01535WI-D, Garmin G1000 Avionics (GDC 7400 ADC required)
18. SA02738CH, L-3 Comm ESI-1000 Standby Instrument
19. SA1036GL, McCauley 4HFR34C7 (54,55,71)/94LA-0 Propellers
20. SA01157CH, McCauley 5HFR34C1008/96LTA-0 Propellers
21. SA757GL, Parker Cleveland Wheels and Brakes
22. SA02715CH-D, Standard Aero PWC PT6A-52 Engine Conversion
23. SA2671CE, Aviation Fabricators stretcher installation.
24. SA2633CE, SA4157SW, SA02468LA, SA00635WI, Aviation Fabricators cabin seats
25. SA03289CH, Elliott Aviation Mid-Continent MD302 Electronic Standby Indicator.
26. SA03209NY, MT-Propeller MTV-27-1-E-C-F-R(P)/CFR225-55f
27. SA00273WI, LifePort stretcher, patient loading, and support system
28. SA00882CH, Spectrum Aeromed air ambulance conversion
29. SA10478SC, Hawker Beechcraft Services FDR & CVR
30. SA01213CH, Spectrum Aeromed air ambulance conversion
31. SA02235LA, LifePort Patient Loading and Utility System
32. SA2300CE, Avcon Industries Aeropak Cargo Pod
33. SA01769WI, Rockwell Collins, Inc. Installation of Pro Line Fusion



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- Commuter Air Technology
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- National Airways Corporation
- R&O Aircraft Center
- Stevens Aviation
- Textron Aviation



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