

SAMPLE OF WRITING ABILITY



FLY FARTHER, FASTER, and SAFER!

— With the HALO 250 Conversion for the King Air 200 —


HALO 250
CENTEX AEROSPACE GW1 STC SERIES

CENTEX[™]
AEROSPACE INCORPORATED
"Making Aviation Better!"

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

Defining the HALO 250

The HALO 250 conversion raises the maximum takeoff weight of any 200 series King Air from 12,500 to 13,420 pounds resulting in a 920 pound increase in payload capacity. The FAA Normal category weight limit of 12,500 pounds is exceeded by certifying the 200 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 920 pound increase equates to an additional hour and a half of flight time, or, five 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.

*Please note the M_{mo} is not changed on King Air 200T and B200T series airplanes.

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.

King Air 200s (includes parts and components):

HALO 250 STC Kit: \$85,000.00

Estimated installation labor hours: 200 hours
 Subtract \$3,000.00 for airplanes with fire extinguishing system
 Subtract \$3,000.00 for airplanes with Pro Line 21 avionics



HALO 250 Fact Information Chart for the Beechcraft 200 Series King Air

	200	B200 B200GT
Increase Max Ramp Weight	12,590 to 13,510	12,590 to 13,510
Increase Max Takeoff Weight	12,500 to 13,420	12,500 to 13,420
Max Landing Weight	12,500 to 13,420*	12,500 to 13,420*
Max Zero Fuel Weight	No Change 10,400	No Change 11,000
Payload Increase	920	920

*Only airplanes with high flotation landing gear, all others 12,500 lbs.

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Almost Double the Range!

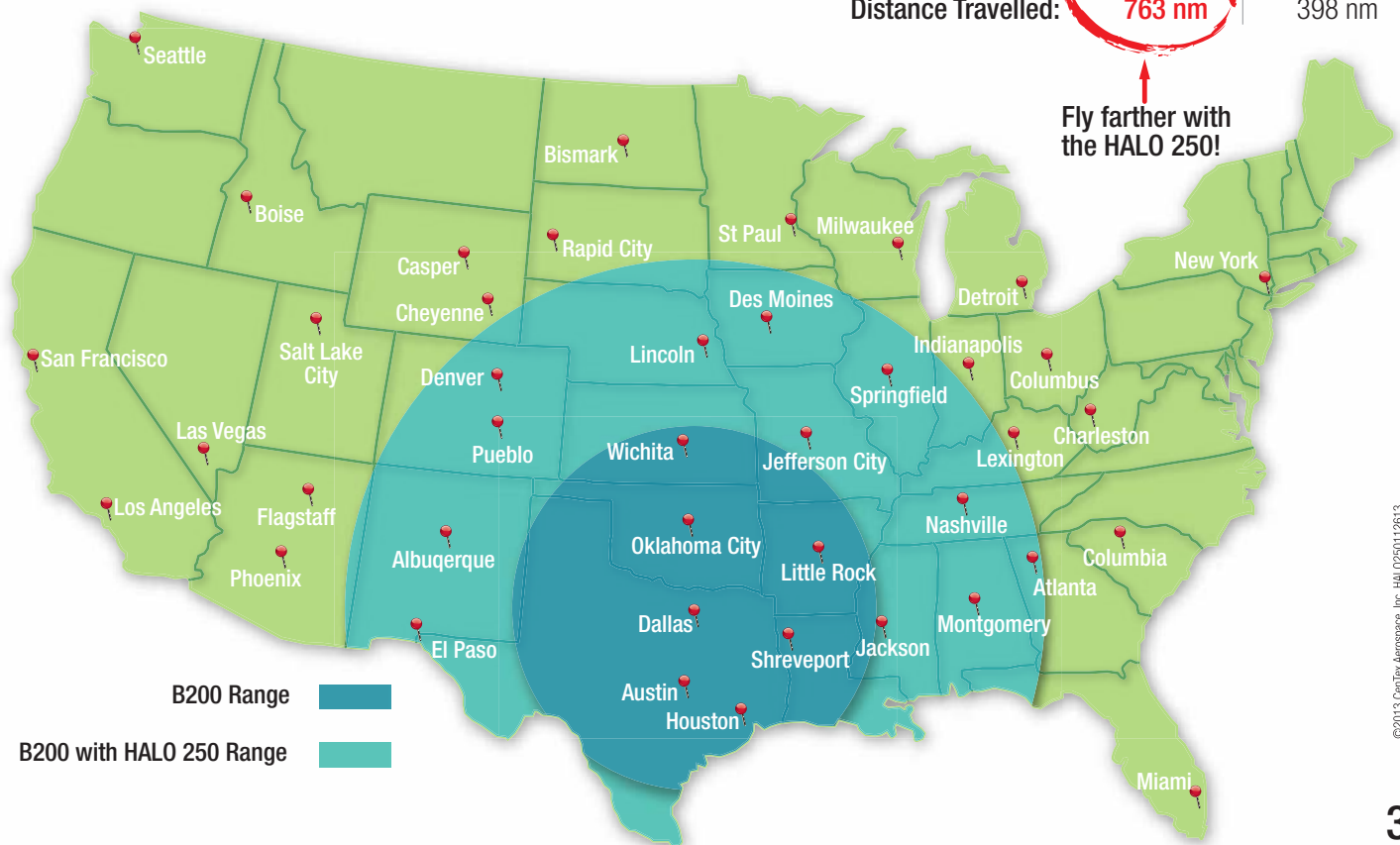
The flexibility to fly farther is a real advantage. The HALO 250 conversion nearly doubles the range for a fully loaded King Air B200 by allowing 920 pounds more fuel to be carried. The comparison on the right shows how the numbers stack up. The chart below illustrates the advantage of greater range!

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 250 – 2,420 lbs.
Takeoff Weight:	B200 – 12,500 lbs. B200 with HALO 250 – 13,420 lbs.

*Pilot, copilot, nine pax, and bags

	HALO 250	B200
Takeoff Weight:	13,420 lbs.	12,500 lbs.
Available Fuel Cap.:	2,420 lbs.	1,500 lbs.
Takeoff and Climb		
Time:	18 min.	15 min.
Fuel Used:	240 lbs.	210 lbs.
Distance:	53 nm	48 nm
Cruise		
Cruise Speed:	276 kt.	280 kt.
Time:	2:18 hr:min	59 min
Fuel Used:	1,540 lbs.	640 lbs.
Distance:	635 nm	275 nm
Descend and Landing		
Time:	16 min.	16 min.
Fuel Used:	160 lbs.	160 lbs.
Distance:	75 nm	75 nm
Reserve		
Time:	45 min.	45 min.
Fuel Required:	500 lbs.	500 lbs.
Total Flight Time:		
	2:53 hr:min	1:30 hr:min
Distance Travelled:		
	763 nm	398 nm

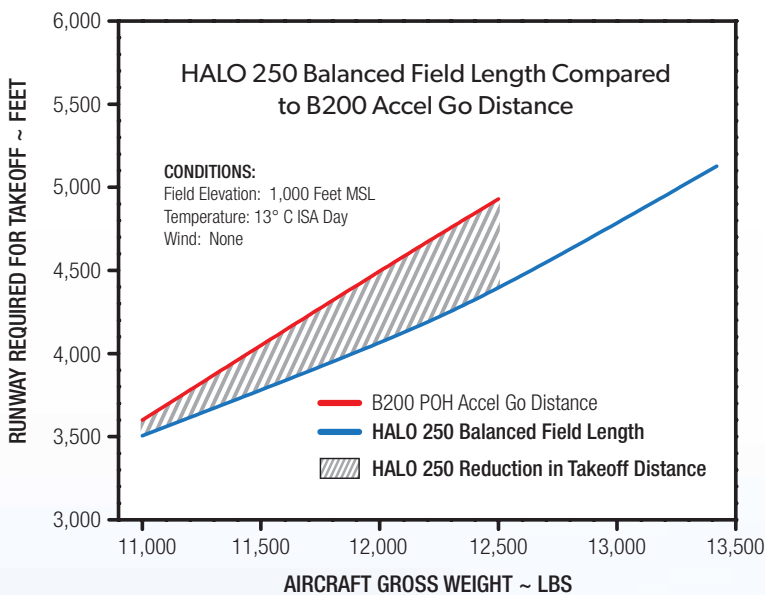


HALO 250 Performance and Configuration Options

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 250 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 250 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 in icing conditions safer.



Option 1 or Option 2 —

The Choice is Yours!

There are two options available in the HALO 250 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 13,420 lbs. HALO 250 AFMS performance data are applicable. Option 2 gives you all the benefits of the HALO 250 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 250 conversion.



Simulator based flight training is currently available at FlyRight Inc. (www.flyrightinc.com) using their FAA-approved, full motion simulator. In-aircraft flight training is also available at CenTex Aerospace Inc.



Increased Safety

New Safety Systems Make Your King Air 200 Safer

FAA regulations require safety systems normally found on jet transport airplanes to be installed on Commuter Category airplanes. The HALO 250 conversion adds five new systems to the King Air 200 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 series airplanes.

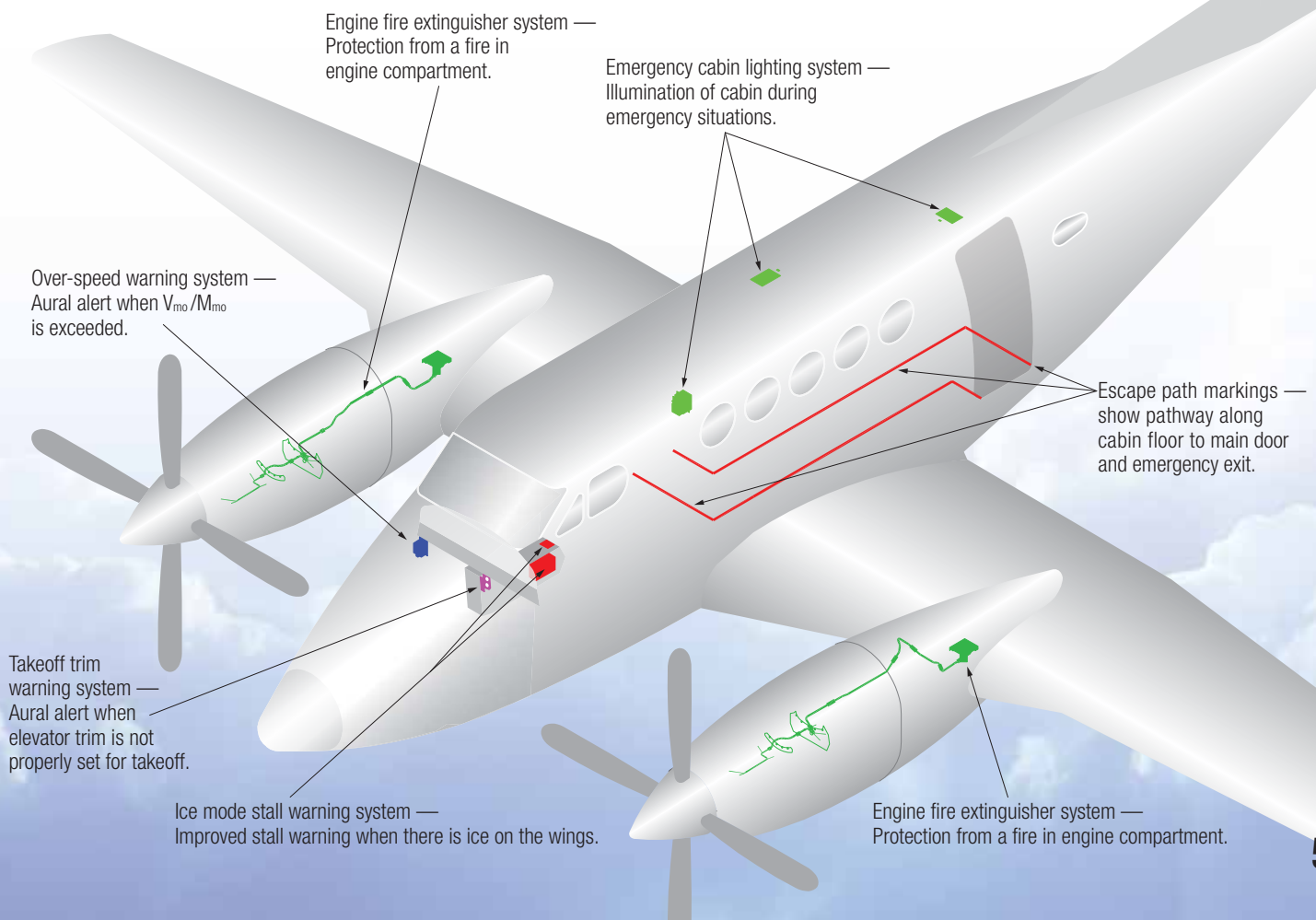
Over-Speed Warning System: An aural warning sounds to alert the pilot that airspeed has exceeded the maximum operating airspeed or maximum operating Mach number. This is a new feature for the King Air 200 series airplanes, except those with the Rockwell Collins Proline 21 avionics suite.

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 series airplanes and is only found on airplanes with the HALO 250 conversion.

Engine Fire Extinguisher System: Engine compartment fire extinguishing capability is required by Commuter category regulations and is added by the Halo 250 conversion, if not already present. This system complements the standard King Air 200 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 series airplanes. The cabin emergency lighting system also can be used to aid in normal loading or unloading of passengers or cargo.





Airframe Life Limits

Beech prescribes life limits for many different components on the King Air, including wings, empennage, cabin door, windshield, oxygen tanks, etc. These life limits are based on airplane design and dependent upon operational environment.

For some King Air 200 models, not all, utilizing the Halo 250 gross weight increase to operate above 12,500 pounds at takeoff has an effect on certain wing component life limits.

Any reduction in life limit is highly dependent on the time-in-service (TIS) of the particular airplane before modification and the operational use after modification. CenTex provides detailed airworthiness limitation information in our Halo 250 ICA Manual so that the operator will effectively and safely maintain their airplane.



Changes to Airframe Life Limits:

- NO CHANGES to life limits on King Air 200/B200 with "tension fitting" wing.
- These life limits MAY change on King Air B200 with "shear fitting" wing:
 - Outboard Wing: Current life limit of 30,000 hours is pro-rated between 30,000 and 23,000 hours depending on time-in-service (TIS).
 - Wing-to-Fuselage Attach Angles: Current life limit of 30,000 hours is pro-rated between 30,000 to 18,500 hours depending on time-in-service (TIS).

Airframe Inspection Schedule

Just as with life limits, the Halo 250 gross weight increase has an effect on certain wing inspection starting times. This effect is highly dependent on the time-in-service (TIS) of the particular airplane before modification and the operational use after modification. CenTex provides detailed wing inspection information in our Halo 250 ICA Manual.

Changes to Wing Inspection Times:

- NO CHANGES to inspection times on King Air 200/B200 with "tension fitting" wing.
- These inspection times MAY change on King Air B200 with "shear fitting" wing:
 - Center Section Belly Skin: Current inspection start time of 22,500 hours is pro-rated between 22,500 and 12,900 hours depending time-in-service (TIS).
 - Aft Spar Cap/Fittings: Current inspection start time of 27,000 hours is pro-rated between 27,000 and 23,100 hours depending time-in-service (TIS).

*See airframe inspection schedule for statement.



*“The HALO 250 conversion will not alter the inspection schedule for a high time airplane!”**”



Compatibility

Is My King Air Compatible?

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

The HALO 250 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 250 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
11. SA10737SC, Blackhawk PWC PT6A-61 Engine Conversion
12. SA02130SE, BLR Hartzell HC-E4N-3A/NC9208K Propellers
13. SA01615SE, BLR Winglets
14. SA2451CE, Commuter Air Tech. Super 60 (Cargo) Pod
15. SA00184LA, Commuter Air Tech. Wildness Tires Conversion
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. SA890GL and SA757GL, Parker Cleveland Wheels and Brakes
22. SA02715CH-D, Standard Aero PWC PT6A-52 Engine Conversion
23. SA2300CE, Avcon Industries Aeropak Cargo Pod



HALO 250 Dealer & Installation Center Network

Below is a list of authorized HALO 250 Dealers and Installation Centers throughout the world.

- Bromma Air Maintenance
- Business and Commuter Aircraft
- Commuter Air Technology
- Elliott Aviation
- Fast Air
- Hawker Beechcraft Services
- Hawker Pacific
- Landmark Aviation
- National Airways Corporation
- Stevens Aviation



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