

Bearborne

By ANTHONY BROWN · PHOTOS BY PAUL BOWEN





There's something about bush planes that is irresistible.

Maybe it's the way they look on the ramp. Maybe it's the sound they make. Or maybe it's just the image of what they can do and where they can go. No matter the reason, a large number of pilots find the allure of bush planes and bush flying impossible to ignore. Manufacturers of small, backcountry-capable aircraft have been kept mighty busy recently fulfilling orders for two- to five-place models with which aviators realize their fantasies of winging their way to remote strips to camp, hunt and fish. Quest Aircraft Company had quite a different concept in mind when it began designing the Kodiak in 1998. The company's founders had been contacted by the leaders of several missionary and humanitarian organizations, who informed them that they required a light,

strong, versatile turbine aircraft to replace the high-time equipment that they had in the field. Quest's answer was a ten-place, all-metal, high-wing, utility turboprop that has outstanding STOL capability while allowing cruise speeds of 190 knots true and a range approaching 1,250 nautical miles. Employing state-of-the-art CAD software, including computational fluid dynamics and finite element analysis testing modules, Quest engineers have been able to control developmental costs while decreasing the time to FAA certification, which is expected sometime in Spring 2006.

The Kodiak, which has also found favor among commercial operators and recreational pilots, will be certified with Garmin's G1000 glass cockpit. Quest intends to offer the aircraft in several

levels of interior finish, including an executive configuration. There will be a limited number of options, some of which will be floats, a cargo pod and a TKS system that will allow the airplane to be certified for flight into known icing. With its ultra-reliable PT6A-34 engine and four-blade prop, the Kodiak can take on backcountry tasks that would leave most bushplanes tied down, especially in mountainous or high desert regions or in the warm countries where Quest's primary customers ply their trade. During our test flight this fall, the airplane demonstrated itself to be completely controllable at airspeeds below 70 knots while having the ability to descend steeply into deep valleys without any concern for shock-cooling and

(continued on page 72)





Think of the Kodiak as a back-country bizjet.

without building airspeeds that might jeopardize the structure or make the transition for landing difficult to accomplish.

Neither short nor rough fields present a challenge. With beta and reverse modes and careful braking, the Kodiak can be brought to a full stop quickly, and a 19-inch prop clearance reduces the possibility that there will be nicks in the prop from errant rocks or sticks. The 750 horsepower available for takeoff makes departing equally safe, allowing a 2,000 fpm climb rate at 90 knots, enough to eliminate the need to spiral out of a valley on most occasions. In short, with a base price of \$1.111 million, the Quest Kodiak is an affordable, highly capable aircraft that is a pleasure to fly and that has the capability to perform a wide variety of missions.

WWW.QUESTAIRCRAFT.COM

QUEST AIRCRAFT KODIAK

WEIGHTS AND LOADINGS

Max. ramp weight	6,800 lbs
Max. takeoff weight	6,750 lbs
Empty weight	3,350 lbs
Useful Load	3,450 lbs
Fuel capacity (usable)	320 gal
Max. wing loading	28 lb/ft ²
Max. power loading	9 lb/hp

PERFORMANCE (WITHOUT CARGO POD)

Stall Speed (Flaps up)	78 kcas
Stall Speed (Flaps down)	60 kcas
Rate of Climb (max. cont. at SL)	1,700 ft/min
Rate of Climb (10,000 ft)	1,150 ft/min
Takeoff Ground Roll	700 ft
Braked Roll (w/o reverse)	750 ft
Certified Ceiling	25,000 ft
Cruise Performance	190 ktas

RANGE AND ENDURANCE

With 1.0 hr reserve at 174 ktas, at 10,000 ft consumption is 42 gph yielding 1,250 nm over 6.7 hours.

ENGINE AND PROPELLOR

Powerplant	P&W PT6A-34
Takeoff power @ 2,200 RPM	750 hp
Max continuous power	700 hp
Propeller	Constant speed, feathering, reversible
Diameter	96 inches
Tip clearance	19 inches

FUSELAGE

Cabin	54.00 in
Cabin height	57.00 in
Cabin length	186.00 in
Cargo volume	231 ft ³
Inside fuselage (without Pod)	240.96 ft ³
Total (with Pod)	304.35 ft ³
Overall length	33.40 ft
Seats	10

Seat pitch	31.00 in
Doors	3
Door sill height	38.00 in
Cargo door (LH side)	50 x 50 in
Cockpit doors (both sides)	38 x 38 in

FLIGHT SURFACES

Wing area	240.11 ft ²
Wing span	45.00 ft
Airfoils	Custom
Dihedral	3°
Flap type	Fowler, single-slotted
Horizontal stabilizer span	20.00 ft
Overall height	15.40 ft
Landing gear	Fixed, faired leg, no pants
Main gear	8.50 x 10 Cleveland, spring steel
Nose gear	6.50 x 10 Cleveland, air-oleo, steerable

The aircraft is intended for certification to FAR Part 23 in the Normal category, for day, night, VFR, and IFR flight operations. All information is preliminary and subject to change without notice.



PHOTO BY KELLY MAHON