

**DEPARTMENT OF TRANSPORTATION  
FEDERAL AVIATION ADMINISTRATION**

A00007SE  
Revision 1  
(July 20, 2007)  
QUEST  
Kodiak 100  
Original Issue Date:  
May 31, 2007

**TYPE CERTIFICATE DATA SHEET A00007SE**

This data sheet, which is part of Type Certificate No. A00007SE, prescribes conditions and limitations under which the product for which the type certificate was issued meets the airworthiness requirements of the Federal Aviation Regulations.

Provisional Type Certificate Holder: Quest Aircraft Design, LLC  
1200 Turbine Drive  
Sandpoint, Idaho 83864

**I - Model Kodiak 100 (Normal Category), Approved May 31, 2007**

Engine: Pratt and Whitney Canada, Inc. PT6A-34, Engine Type Certificate E4EA.

Fuel: Jet A, Jet A-1, JP-1, JP-5, and JP-8 Fuels conforming to Pratt and Whitney Canada Specification CPW204.

Engine Limits: Maximum takeoff power = 750 horsepower at 2,200 rpm, subject to ambient temperature and pressure conditions. See Airplane Flight Manual and Engine Type Certificate Data Sheet E4EA for additional limitations.

Propeller: Hartzell Model HC-E4N-3P(Y)/D9511FSB, Propeller Type Certificate P10NE  
Hartzell Spinner Assembly, Part No. D-630-6(P)

Propeller Limits: Minimum diameter = 95 inches  
Maximum diameter = 96 inches  
Low Pitch =  $17.5^\circ \pm 0.5^\circ$   
High Pitch =  $86.1^\circ \pm 0.5^\circ$   
Reverse =  $-10.0 \pm 0.5^\circ$   
Pitch limits measured at 30 inches radial distance.  
Stabilized ground operation is prohibited between 450 and 1050 RPM.  
See Propeller Type Certificate Data Sheet P10NE for additional

Airspeed Limits:

$V_o$ (6,750 lbs)	144 KCAS (142 KIAS)
$V_{FE}$ (10°)	139 KCAS (138 KIAS)
$V_{FE}$ (20°)	120 KCAS (120 KIAS)
$V_{FE}$ (35°)	108 KCAS (108 KIAS)
$V_{MO}$	<u>180 KCAS (182 KIAS)</u>

C.G.Range: Straight line variation between points.

Aft Limits	80.775 inches aft of datum from 3,620 lbs to 6,750 lbs
Forward Limits	63.896 inches aft of datum from 3,620 lbs to 5,000 lbs then to 69.414 inches aft of datum at 6,750 lbs.

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Datum:	The forward face of the firewall represents datum 0.00 inches.	
Leveling Means:	Place a level on the seat tracks in the aft cabin next to the cargo door forward post. See " <i>Pilots Operating Handbook and FAA Approved Flight Manual</i> ", Document No. 100-000-901 AFM.	
Weight limits:	Maximum ramp = 6,800 lbs. Maximum takeoff weight = 6,750 lbs. Maximum landing weight = 6,690 lbs. Design minimum flying weight = 3,620 lbs.	
Minimum Crew:	1 Pilot.	
No. of Seats:	Up to 10 seats total, including 2 seats located at 40 inches aft of datum and up to 8 additional seats located in accordance with Document No. 100-000-901 AFM..	
Maximum Baggage/Cargo:	As defined in Document No. 100-000-901 AFM.	
Fuel Capacity:	320 gallons total; 315 gallons useable. (Two 160 gallon tanks in wings at 83.4 inches aft of datum).	
Oil Type and Capacity:	See Pratt & Whitney Canada Engine Service Bulletin Number 1001 for type of oil. 9 qts drainable, 13 qts total.	
Maximum Operating Altitude:	14,000 feet without FAA approved oxygen system installed. 25,000 feet with FAA approved oxygen system installed.	
Control Surface Movements:	Wing Flaps	0° ±0°, 10° +1° or -2°, 20° ±2°, 35° ±2°, Ailerons: Up 30° ±2° Down 15° ±1° Aileron Trim Tab: Up 30° ±2° Down 30° ±2° Elevator: Up 30° -0°+2° Down 15° ±2° Elevator trim tab: Up 15° ±2° Down 25° ±2° Rudder: Right 26° ±2° Left 26° +0°, -2°
Additional Limitations:	Minimum operating temperature:	-25° Celsius
	Airframe life limit:	1,000 flight hours.
	Kinds of operations allowed:	Day, Night, Visual Flight Rules (VFR), and Instrument Flight Rules (IFR).
Required Maintenance:	The airplane must be maintained in accordance with the instructions for continued airworthiness contained in the latest FAA approved revision of " <i>Airplane Maintenance Manual</i> ", Document No. 100-000-921.	
Required Equipment:	The basic required equipment as prescribed in the applicable airworthiness regulations (see Certification Basis) must be installed in the aircraft for airworthiness certification.  In addition to the above required equipment, the following equipment is also required: The latest FAA Approved Revision of " <i>Pilots Operating Handbook and FAA Approved Flight Manual</i> ", Document No. 100-000-901 AFM.	
Design Data:	The airplane shall be manufactured in accordance with the latest FAA approved revision of " <i>Master Drawing List</i> ", Document No. 100-101-000, or other FAA approved data.	
Serial Numbers Eligible:	100-0001 and 100-0002	

Certification Basis: Part 23 of the Federal Aviation Regulations (FAR) effective February 1, 1965, as amended by 23-1 through 23-55. FAR 36 as amended through 36-28. Application for type certificate dated April 7, 2005.

Special Conditions: Special Condition 23-207-SC for high intensity radiated fields (HIRF) protection, effective January 31, 2007.

Production Basis: None.

NOTE 1: A current weight and balance report with a list of equipment included in the certificated empty weight must be provided for each aircraft at the time of original airworthiness certification.

NOTE 2: The placards specified in the latest FAA approved revision of "*Pilots Operating Handbook and FAA Approved Flight Manual*", Document No. 100-000-901, must be displayed.

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