

**DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION**

A00007SE Revision 15 QUEST Kodiak 100 April 17, 2012
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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.

TC Holder: Quest Aircraft Design, LLC
 1200 Turbine Drive
 Sandpoint, Idaho 83864

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

Engine:	Engine Manufacturer:	Pratt and Whitney Canada, Inc.	
	Number of Engines:	One (1)	
	Engine TC Number:	E4EA	
	Engine Model Designation:	PT6A-34	
Fuel:	Primary Fuel:	Jet A	
	Alternate Fuels:	Jet A-1, JP-1, JP-5, JP-8	
		<i>Note that all fuels must conform to Pratt and Whitney Canada Specification CPW204</i>	
Engine Limits:	Maximum Takeoff Power:	750 horsepower at 2,200 rpm, subject to ambient temperature and pressure conditions.	
		<i>See the latest approved revision of the KODIAK 100 "Pilots Operating Handbook and FAA Approved Flight Manual" and Engine TC Data Sheet E4EA for additional details and limitations.</i>	
Propeller and Propeller Limits:	Propeller Manufacturer:	Hartzell	
	Number of Propellers:	One (1)	
	Propeller TC Number:	P10NE	
	Propeller Model Designation:	HC-E4N-3P(Y)/D9511FSB	
	Diameter Limits:	95" minimum, 96" maximum; no further tolerance permitted	
	High Pitch Angle:	86.1° ± 0.5°	
	Low Pitch Angle:	17.5° ± 0.5°	
	Reverse Pitch Angle:	-10.0 ± 0.5°	
	Static RPM Limits:	Stabilized ground operation prohibited from between 450 rpm and 1,050 rpm	
		<i>Pitch angle limits to be measured at 30" radial distance. See Propeller TC Data Sheet P10NE for additional details and limitations.</i>	
Airspeed Limits:	VO:	143 kcas	(142 kias)
	VFE (10°):	139 kcas	(138 kias)
	VFE (20°):	120 kcas	(120 kias)
	VFE (35°):	108 kcas	(108 kias)
	VMO:	180 kcas	(182 kias)

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Center of Gravity (C.G.) Range:	Serial Numbers 100-0001 thru 100-0034 <i>without</i> Quest Service	Aft Limits: 80.8" aft of datum (3,620 lb to 6,750 lb)
	Notice SN-025 compliance: <i>Straight-line variation between points.</i>	Forward Limits: 63.9" aft of datum (3,620 lb to 5,000 lb) 69.4" aft of datum (5,000 lb to 6,750 lb)
Empty Weight C.G. Range:	Serial Numbers 100-0035 and above and Serial Numbers 100-0001 thru 100-0034 <i>with</i> Quest Service	Aft Limits: 80.8" aft of datum (4,070 lb to 7,255 lb)
	Notice SN-025 compliance: <i>Straight-line variation between points.</i>	Forward Limits: 63.9" aft of datum (4,070 lb to 5,000 lb) 71.0" aft of datum (5,000 lb to 7,255 lb)
Datum:	The forward face of the firewall represents datum 0.0 inches.	
Leveling Means:	Place a level on the seat tracks in the aft cabin next to the cargo door forward post. <i>See the latest approved revision of the KODIAK 100 "Pilots Operating Handbook and FAA Approved Flight Manual" for additional details.</i>	
Maximum Weights:	Serial Numbers 100-0001 thru 100-0034 <i>without</i> Quest Service	Maximum Ramp: 6,800 lb
	Notice SN-025 compliance:	Maximum Landing: 6,690 lb Maximum Takeoff: 6,750 lb <i>Design Minimum Flying Weight: 3,620 lb</i>
Minimum Crew:	Serial Numbers 100-0035 and above and Serial Numbers 100-0001 thru 100-0034 <i>with</i> Quest Service	Maximum Ramp: 7,305 lb
	Notice SN-025 compliance:	Maximum Landing: 6,690 lb Maximum Takeoff: 7,255 lb Maximum Zero-Fuel: 6,490 lb <i>Design Minimum Flying Weight: 4,070 lb</i>
Number of Seats:	Up to 10 seats total, including 2 seats located at 40" aft of datum and up to 8 additional seats located in accordance with latest approved revision of the KODIAK 100 "Pilots Operating Handbook and FAA Approved Flight Manual"	
Maximum Compartment Weights:	As defined in latest approved revision of the KODIAK 100 "Pilots Operating Handbook and FAA Approved Flight Manual".	
Fuel Capacity:	One 160 gallon tank in each wing at 83.4" aft of datum; 157.5 gallons usable, 2.5 gallons unusable (320 gallons total; 315 gallons usable, 5 gallons unusable) <i>Note: add weight of unusable fuel to the certificated empty weight.</i>	
Oil Capacity:	13 qt total at 18.9" forward of datum; 9 qt drainable, 4 qt undrainable <i>See Pratt and Whitney Canada Service Bulletin Number 1001 for approved oil. Note: add weight of unusable oil to the certificated empty weight.</i>	
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°/2° 20° ±2° 35° ±2° Ailerons: Up: 28° ±1° Down: 15° ±1° Aileron Trim Tab: Up: 30° ±2° Down: 30° ±2° Elevator: Up: 30° ±1° Down: 22° ±1° Elevator trim tab: Up: 15° ±2° Down: 12° ±1° Rudder: Right: 26° ±1° Left: 26° ±1°	
Manufacturer's Serial Numbers:	The information contained herein is applicable to Serial Numbers 100-0001 and greater.	

Certification Basis:	At TC Issuance:	Part 23 of the Federal Aviation Regulations (FAR) effective February 1, 1965, as amended by 23-1 through 23-55; and FAR 36 as amended through 36-28.
	Current:	Unchanged
	Special Conditions:	Special Condition 23-207-SC for high intensity radiated fields (HIRF) protection, effective January 31, 2007.
	TC Number:	A00007SE
	TC Issuance Date:	May 30, 2007
	TC Application Date:	April 7, 2005
	Operational Restrictions:	Day-Night, Visual Flight Rules (VFR) and Instrument Flight Rules (IFR). Flight into known icing conditions allowed when the required equipment listed in the latest FAA approved revision of the KODIAK 100 POH/AFM " <i>TKS Ice Protection System</i> " supplement is installed; installation may have been accomplished when the airplane was produced (may have required system activation in accordance with Quest Service Notice SN-043), or may have been installed in accordance with the latest FAA approved revision of Quest Field Service Instruction FSI-013. Minimum Operating OAT -25°C for Serial Numbers 100-0001 thru 100-0017 <u>without</u> Quest Service Bulletin SB-016 compliance. Minimum Operating OAT -55°C for Serial Numbers 100-0018 and above and Serial Numbers 100-0001 thru 100-0017 <u>with</u> Quest Service Bulletin SB-016 compliance.
Production Basis:	Production Certificate	728NM.
Equipment:	The basic required equipment as prescribed in the applicable airworthiness regulations (see Certification Basis) must be installed in the aircraft for airworthiness certification.	
	Additional Equipment Necessary for Type Certification:	The latest FAA Approved Revision of the KODIAK 100 " <i>Pilots Operating Handbook and FAA Approved Flight Manual.</i> "

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- NOTE 1: A current weight and balance report, including a list of equipment included in the certificated empty weight, and loading instructions when necessary must be provided for each aircraft at the time of original certification.
- NOTE 2: The placards specified in the latest FAA approved revision of the KODIAK 100 "*Pilots Operating Handbook and FAA Approved Flight Manual*" are required.
- NOTE 3: The airplane shall be manufactured in accordance with the latest FAA approved revision of the KODIAK 100 "*Master Drawing List*", or other FAA approved data. The airplane must be subsequently maintained in accordance with the Instructions for Continued Airworthiness contained in the latest FAA approved revision of the KODIAK 100 "*Airplane Maintenance Manual*", or other FAA approved data.

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