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## DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION

A00007SE Revision 22 DAHER KODIAK 100 November 18, 2019

## 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: Daher Aircraft Design, LLC

1200 Turbine Drive Sandpoint, Idaho 83864

TC Holder Record: Quest Aircraft Design, LLC. Transferred to Daher Aircraft Design, LLC on November 7, 2019

## 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,

No. 3 Jet Fuel (People's Republic of China)

Note that all fuels must conform 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 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.

Propeller and Propeller Manufacturer: Hartzell
Propeller Limits: Number of Propellers: One (1)

Propeller Limits: 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: $86.1^{\circ} \pm 0.5^{\circ}$ Low Pitch Angle: $17.5^{\circ} \pm 0.5^{\circ}$ Reverse Pitch Angle: $-10.0 \pm 0.5^{\circ}$ 

Static RPM Limits: Stabilized ground operation prohibited from

between 450 rpm and 1,050 rpm

Pitch angle limits to be measured at 30" radial distance. See Propeller TC Data Sheet P10NE for

additional details and limitations.

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** *without* Quest Service

Notice SN-025 compliance: Straight-line variation between points

Serial Numbers **100-0035** and above and Serial Numbers **100-0001** thru **100-0034** <u>with</u> Quest Service Notice SN-025 compliance:

Takeoff and flight

Forward Limits:

Aft Limits:

Aft Limits: 80.8" aft of datum (4,070 lb to 7,255 lb)
Forward Limits: 63.9" aft of datum (4070 lb to 5,000 lb)

71.0" aft of datum at 7,255 lb

69.4" aft of datum at 6,750 lb

80.8" aft of datum (3,620 lb to 6,750 lb)

63.9" aft of datum (3,620 lb to 5,000 lb)

Landing (Standard)

Aft Limits: 80.8" aft of datum (4,070 lb to 6,690 lb)
Forward Limits: 63.9" aft of datum (4070 lb to 5,000 lb)
69.3" aft of datum at 6,690 lb

Landing (Optional)

Aft Limits: 80.8" aft of datum (4,070 lb to 7,255 lb) Forward Limits: 63.9" aft of datum (4070 lb to 5,000 lb)

69.3" aft of datum at 6,690 lb 72.6" aft of datum at 7,255 lb

6,690 lb

Straight-line variation between points

Optional landing weight allowed only when the aircraft is operated per, and the required tires and vortex generators(VGs) are installed per the limitations section of the latest FAA approved KODIAK 100 POH/AFM Supplement "Oversized Tires and Landing Weight" and the supplement is incorporated into the aircraft POH/AFM.

Empty Weight C.G. Range:

None

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.

See the latest approved revision of the KODIAK 100 "Pilots Operating Handbook and FAA Approved

Flight Manual" for additional details.

Maximum Weights: Serial Numbers 100-0001 thru

Serial Numbers 100-0001 thru

100-0034 without

Notice SN-025 compliance:

Maximum Landing:

Maximum Landing:

Maximum Landing:

Maximum Takeoff:

Design Minimum Flying Weight:

Serial Numbers 100-0035 and

above and Serial Numbers 100
Maximum Landing

Maximum Landing

above and Serial Numbers 100-0001 thru 100-0034 with Quest Service Notice SN-025 compliance:

Optional: 7,255 lb

Maximum Takeoff: 7,255 lb

Maximum Zero-Fuel: 7,071 lb

Design Minimum Flying Weight: 4,070 lb

Standard:

Optional landing weight allowed only when the aircraft is operated per, and the required tires and VGs are installed per the limitations section of the latest FAA approved KODIAK 100 POH/AFM Supplement "Oversized Tires and Landing Weight" and the supplement is incorporated into the aircraft POH/AFM.

Minimum Crew: 1 Pilot

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)

Note: add weight of unusable fuel to the certificated empty weight.

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Oil Capacity: 13 qt total at 18.9" forward of datum; 9 qt drainable, 4 qt undrainable

See Pratt and Whitney Canada Service Bulletin Number 1001 for approved oil. Note: add weight of

unusable oil to the certificated empty weight.

Maximum Operating

Altitude:

14,000 feet without FAA approved oxygen system installed. 25,000 feet with FAA approved oxygen system installed.

Control Surface Movements:

10° +1°/-2° 0° 20° ±2° 35° ±2° Wing Flaps: 28° ±1° Ailerons: Up: Down:  $15^{\circ} \pm 1^{\circ}$ 30° ±2° Aileron Trim Tab: Down:  $30^{\circ} \pm 2^{\circ}$ Up: Elevator: 30° ±1° Down:  $22^{\circ} \pm 1^{\circ}$ Up: 15° ±2° Down:  $12^{\circ} \pm 1^{\circ}$ Elevator trim tab: Up: Rudder Right:  $26^{\circ} \pm 1^{\circ}$ Left:  $26^{\circ} \pm 1^{\circ}$ 

See the latest FAA approved revision of the KODIAK 100 "Airplane Maintenance Manual", or other

FAA approved data, for flap rigging instructions and setting Flaps up  $(0^{\circ})$  configuration.

Manufacturer's Serial Numbers:

The information contained herein is applicable to Serial Numbers 100-0001 and greater.

Certification Basis:

Certification Basis: Part 23 of the Federal Aviation Regulations (FAR) effective February 1, 1965, as amended by 23-1 through 23-55; FAR 34 as amended through 34-3, FAR 23.1306 for Lightning Protection, per Amdt 23-61, and FAR 36 as amended through 36-28.

Special Condition 23-207-SC for high intensity radiated fields (HIRF) protection, effective January

31, 2007.

For aircraft equipped with the Garmin GFC 700 Automatic Flight Control System: FAR 23.1308(a), per Amdt 23-57 for HIRF protection of the GFC 700 system and associated systems performing

functions whose failure would prevent continued safe flight and landing.

TC Number:

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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 "TKS Ice Protection System" 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 with Quest Service Bulletin SB-016 compliance.

Production Basis: F

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 The latest FAA Approved Revision of the KODIAK 100 "Pilots Operating Handbook and FAA Approved Flight Manual."

Certification:

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 must be subsequently maintained in accordance with the Instructions for Continued Airworthiness, and Airworthiness Limitations section, as contained in the latest FAA approved revision of the KODIAK 100 "Airplane Maintenance Manual", or other FAA approved data.

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NOTE 4:

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.

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