



TYPE-CERTIFICATE DATA SHEET

NO. EASA.IM.A.632

for
KODIAK 100 SERIES

Type Certificate Holder
Quest Aircraft Design LLC

1200 Turbine Drive
Sandpoint, ID 83864
United States of America

For models: Kodiak 100



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SECTION A: KODIAK 100 SERIES

A.I. General

1. Type/ Model/ Variant	
1.1 Type	Kodiak 100 Series
1.2 Model	Kodiak 100
1.3 Variant	N/A
2. Airworthiness Category	Normal
3. Manufacturer	Quest Aircraft Design LLC.
4. EASA Type Certification Application Date	18 th March 2015
5. State of Design Authority	Federal Aviation Administration (US)
6. State of Design Authority Type Certificate Date	30 th May 2007
7. EASA Type Certification Date	6 th April 2017

A.II. EASA Certification Basis

1. Reference Date for determining the applicable requirements	7 th April 2005 (FAA Application Date)
2. Airworthiness Requirements	CS-23 Original Issue
3. Special Conditions	
– B-52	Human Factors - Integrated Avionics System
– E-11	Cold Soaked Fuel
– E-52	Turbine Engine Installation
– F-52	Protection from effect of HIRF
– F-54	Protection from the effects of lightning strike; indirect effects
4. Exemptions	None
5. (Reserved) Deviations	None
6. Equivalent Safety Findings	None
7. Environmental Protection	ICAO Annex 16, Volume 1 see EASA Type Certificate Data Sheet Noise ref TCDSN IM.A.632.
8. Operational Suitability Certification Basis	
8.1 Master Minimum Equipment List	CS-GEN-MMEL Initial Issue



A.III. Technical Characteristics and Operational Limitations

1. Type Design Definition
KODIAK 100 Master Drawing List (Quest report # 100-101-000) Rev.62 or later approved revisions
Aircraft serial numbers 100-001 through 100-0034 must have Quest Service Notice SN-025 installed in order to allow operation at the 7,255 lb maximum takeoff weight.
All serial numbers of KODIAK 100 aircraft must be equipped with Field Service Instruction FSI-148, Standby Battery System.
2. Description
Kodiak 100A Basic Data (Doc. 101-000-010 Rev.01)
3. 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 Approved Revision of the KODIAK 100 "Pilots Operating Handbook and FAA Approved Flight Manual."
4. Dimensions
Length: 10,42 m (34.2 ft)
Span: 13.72 m (45.0 ft)
Height: 4,48m (14.7 ft)
5. Engine
5.1. Model Pratt and Whitney Canada, Inc. PT6A-34
5.2 Type Certificate CA E-6 (Transport Canada)
6. Propeller
6.1 Model Hartzell HC-E4N-3P(Y)/D9511FSB
6.2 Type Certificate EASA.IM.P.133
6.3 Number of blades 4
6.4 Diameter 95" minimum, 96" maximum; no further tolerance permitted
6.5 Sense of Rotation
6.6 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.



7. Fluids

7.1 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*

7.2 Oil

*See Pratt and Whitney Canada Service Bulletin
Number 1001 for approved oil.*

*Note: add weight of unusable oil to the certificated
empty weight.*

7.3 Coolant

N/A

8. Fluid capacities

8.1 Fuel

One 160 gallon (605,7 liters) tank in each wing at
83.4" (2,12 m) aft of datum; 157.5 gallons (596,2
l)usable, 2.5 gallons (9,5 l)unusable
(320 gallons/1211,4 liters total; 315 gallons/1192,4 l
usable, 5 gallons/19l unusable)

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

8.2 Oil

13 qt (12,3 liters) total at 18.9" (0,48 m) forward of
datum; 9 qt (8,5 l) drainable, 4 qt (3,8 l) undrainable

8.3 Coolant system capacity

N/A

9. Air Speeds

V_O: 143 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}: 180 KCAS (182 KIAS)

10. Approved Operations Capability

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 without 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.

11. Maximum Operating Altitude

- 4267m (14000 ft) without approved oxygen system installed.
- 7620m (25000 ft) with approved oxygen system installed.

12. Maximum Masses

Maximum Ramp:	3314 kg (7305 lb)
Maximum Landing	
Standard:	3035 kg (6690 lb)
Optional:	3291 kg (7255 lb)
Maximum Takeoff:	3291 kg (7255 lb)
Maximum Zero-Fuel:	2944 kg (6490 lb)
Design Minimum Flying Weight:	1846 kg (4,070 lb)

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 approved KODIAK 100 POH/AFM Supplement "Oversized Tires and Landing Weight" and the supplement is incorporated into the aircraft POH/AFM.

13. Centre of Gravity Range

Takeoff and flight

Aft Limits:	2.05 m aft of datum (1846 kg to 3291 kg)
Forward Limits:	1.62 m aft of datum (1846 kg to 2268 kg) 1.80 m aft of datum at 3291 kg

Landing (Standard)

Aft Limits:	2.05 m aft of datum (1846 kg to 3035 kg)
Forward Limits:	1.62 m aft of datum (1846 kg to 2268 kg) 1.76 m aft of datum at 3035 kg

Landing (Optional)

Aft Limits:	2.05 m aft of datum (1846 kg to 3291 kg)
Forward Limits:	1.62 m aft of datum (1846 kg to 2268 kg) 1.76 m aft of datum at 3035 kg



1.84 m aft of datum at 3291 kg

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 approved KODIAK 100 POH/AFM Supplement "Oversized Tires and Landing Weight" and the supplement is incorporated into the aircraft POH/AFM.

14. Datum The forward face of the firewall represent the datum 0.0 meters.

15. Control surface deflections

Wing Flaps:	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°

See the latest FAA approved revision of the KODIAK 100 "Airplane Maintenance Manual", or other approved data, for flap rigging instructions and setting Flaps up (0°) configuration.

16. Levelling 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.

17. Minimum Flight Crew 1 pilot

18. Maximum Passenger Seating Capacity Up to 9 seats total, including 1 seat 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"

19. Baggage/ Cargo Compartments As defined in latest approved revision of the KODIAK 100 "Pilots Operating Handbook and FAA Approved Flight Manual".



20. Wheels and Tyres

Standard Tire Sizes	Nose	6.50 x 8, 8-ply, tube type
	Main	8.50 x 10, 8-ply, tube type
Optional Tire Sizes	Nose	22 x 8.00, 6-ply, tube type
	Main	29 x 11.0, 10-ply, tubeless

21. (Reserved)



A.IV. Operating and Service Instructions

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| 1. Flight Manual | KODIAK 100 <i>"Pilots Operating Handbook and FAA Approved Flight Manual" AM901.0</i> - Rev. 18 or later approved revision.
Including the KODIAK 100 POH/AFM Supplement AM901.107 <i>"EASA CERTIFIED AIRPLANES"</i> (at latest approved revision). |
| 2. Maintenance Manual | KODIAK 100 <i>"Airplane Maintenance Manual" AM902.0</i> - Rev. 22 or later approved revision. |
| 3. Structural Repair Manual | KODIAK 100 <i>"Airplane Structural Repair Manual" AM907.0</i> - Rev. 00 or later approved revision |
| 4. Weight and Balance Manual | Refer to the approved <i>"Pilots Operating Handbook and FAA Approved Flight Manual"</i> . |
| 5. Illustrated Parts Catalogue | KODIAK 100 <i>"Illustrated Parts Catalog" AM906.0</i> - Rev. 03 or later approved revision |

A.V. Operational Suitability Data (OSD)

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|---|--|
| 1. Master Minimum Equipment List (MMEL) | Document AM908.0 - Rev.00 or later approved revision |
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A.VI. Notes

- 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 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 approved revision of the KODIAK 100 “Airplane Maintenance Manual”, or other approved data.
- Note 4. The airplane shall be manufactured in accordance with the latest approved revision of the KODIAK 100 “Master Drawing List”, or other approved data.
- Note 5. Parachuting configuration and operations are not approved.
- Note 6. (Reserved)
- Note 7. Requirements for operations under Commission Regulation (EU) No965/2072 (as amended) have been identified in CRI O-02. This CRI will be dealt as post TC activity.
- Note 8. The Kodiak 100 is eligible for SET-IMC operation according to Commission Regulation (EU) 2017/363 when the appropriate equipment and instruments required by the operating requirements (Commission Regulation (EU) No. 965/2012 as amended apply) are installed, approved and operating as defined by the approved Master Minimum Equipment List (MMEL) or Minimum Equipment List (MEL).



SECTION ADMINISTRATIVE

I. Acronyms & Abbreviations

AFM	Airplane Flight Manual
Amdt.	Amendment
AMM	Airplane Maintenance Manual
CS	Certification Specifications
EASA	European Aviation Safety Agency
ft	feet
IAS	Indicated Airspeed
ICAO	International Civil Aviation Organization
kg	kilograms
km/h	kilometres per hour
KCAS	Calibrated Air Speed (knots)
KIAS	Indicated Air Speed (knots)
POH	Pilot Operating Handbook
TCDS	Type Certificate Data Sheet
TCDSN	Type Certificate Data Sheet Noise

II. Type Certificate Holder Record

N/A

III. Change Record

Issue	Date	Changes	TC Issue No. & Date
Issue 01	11 May 2017	Initial Issue	Initial Issue, 06/04/17
Issue 02	05 July 2017	Removal of Note 6 and corresponding update of Section A.IV (Operating and Service Instructions)	
Issue 03	17 August 2017	Added Note 8	

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