TYPE-CERTIFICATE

DATA SHEET

NO. EASA.IM.A.632

for
KODIAK 100 SERIES

Type Certificate Holder
Daher Aircraft Design LLC

1200 Turbine Drive
Sandpoint, ID 83864
United States of America

For models: Kodiak 100

TE.CERT.00048-002© European Union Aviation Safety Agency. All rights reserved. ISO9001 Certified.
Proprietary document. Copies are not controlled. Confirm revision status through the EASA-Internet/Intranet.

An agency of the European Union

Intentionally left blank

TE.CERT.00048-002© European Union Aviation Safety Agency. All rights reserved. ISO9001 Certified.

Proprietary document. Copies are not controlled. Confirm revision status through the EASA-Internet/Intranet.

An agency of the European Union

© European Union Aviation Safety Agency. All rights reserved. ISO9001 Certified.
Proprietary document. Copies are not controlled. Confirm revision status through the EASA-Internet/Intranet.

An agency of the European Union

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	Kodiak Aircraft Company, Inc. (US Production Certificate 728 NM)
4. EASA Type Certification Application Date	18th March 2015
5. State of Design Authority	Federal Aviation Administration (US)
6. State of Design Authority Type Certificate Date	30th May 2007
7. EASA Type Certification Date	6th April 2017

A.II. EASA Certification Basis

1. Reference Date for determining the applicable requirements	7th 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 (or any approved design change deemed equivalent by EASA) .
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.

TE.CERT.00048-002© European Union Aviation Safety Agency. All rights reserved. ISO9001 Certified.

Proprietary document. Copies are not controlled. Confirm revision status through the EASA-Internet/Intranet.

An agency of the European Union

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

9.1 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.
9.2 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
9.3 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

TE.CERT.00048-002© European Union Aviation Safety Agency. All rights reserved. ISO9001 Certified.

Proprietary document. Copies are not controlled. Confirm revision status through the EASA-Internet/Intranet.

An agency of the European Union

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:	3207 kg (7071 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

TE.CERT.00048-002© European Union Aviation Safety Agency. All rights reserved. ISO9001 Certified.

Proprietary document. Copies are not controlled. Confirm revision status through the EASA-Internet/Intranet.

An agency of the European Union

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".*

TE.CERT.00048-002© European Union Aviation Safety Agency. All rights reserved. ISO9001 Certified.

Proprietary document. Copies are not controlled. Confirm revision status through the EASA-Internet/Intranet.

An agency of the European Union

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)

TE.CERT.00048-002© European Union Aviation Safety Agency. All rights reserved. ISO9001 Certified.

Proprietary document. Copies are not controlled. Confirm revision status through the EASA-Internet/Intranet.

An agency of the European Union

A.IV. Operating and Service Instructions

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

A.V. Operational Suitability Data (OSD)

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

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) No965/2012 (as amended) have been identified in CRI O-02.

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).

TE.CERT.00048-002© European Union Aviation Safety Agency. All rights reserved. ISO9001 Certified.

Proprietary document. Copies are not controlled. Confirm revision status through the EASA-Internet/Intranet.

An agency of the European Union

SECTION ADMINISTRATIVE

I. Acronyms & Abbreviations

AFM	Airplane Flight Manual
Amdt.	Amendment
AMM	Airplane Maintenance Manual
CS	Certification Specifications
EASA	European Union 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

Until 6th November 2019:

Quest Aircraft Design LLC
1200 Turbine Drive
Sandpoint, ID 83864
United States of America

From 7th November 2019:

Daher Aircraft Design LLC
1200 Turbine Drive
Sandpoint, ID 83864
United States of America

© European Union Aviation Safety Agency. All rights reserved. ISO9001 Certified.
Proprietary document. Copies are not controlled. Confirm revision status through the EASA-Internet/Intranet.

An agency of the European Union

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	
Issue 04	14 November 2017	Updated Note 7	
Issue 05	05 February 2020	MZF Weight updated (FAA TCDS Rev.21) TC Holder changed to Daher (FAA TCDS Rev.22) Manufacturer data updated	Issue 02, 05/02/2020
Issue 06	05 November 2020	Added clarification in Section A.III Para 1 allowing EASA approved alternatives to Field Service Instruction FSI-148, Standby Battery System.	

-END-