TYPE CERTIFICATE DATA SHEET No. 2023T06

Type Certificate Holder:

EPIC AIRCRAFT, LLC.
22590 Nelson Road
Bend, Oregon 97701

State of Design Reference Document: FAA TCDS A00059SE, Revision 3, dated 24 Aug 2021.

EA-2023T06

EPIC AIRCRAFT

E1000

04 December 2023

This data sheet, which is part of Type Certificate No. A00059SE, prescribes conditions and limitations under which the product, for which the Type Certificate was issued, meets the airworthiness requirements of the Federal Civil Aviation Regulations.

I - MODEL E1000 (Utility Category), approved on 04 December 2023.

ENGINE

Engine Manufacturer: Pratt and Whitney Canada, Corp.
Number of Engines: One (1)
Engine TC Number: E26NE (ANAC EM-9410)
Engine Model Designation: PT6A-67A

FUEL

Primary Fuel: Jet A
Alternate Fuels: JP-8, Any other fuel which complies with the latest revision of Pratt & Whitney Service Bulletin 14004

FUEL CAPACITY

One 526 l (139 US gal) tank in each wing at 4,59 m (180,9 in) aft of datum when full and 4,52 m (178,0 in) aft of datum when empty; (1 052 l (278 US gal) total; 999 l (264 gal) usable, 53 l (14 gal) unusable).
Note: add weight of unusable fuel to the certificated empty weight.

ENGINE LIMITS

Maximum Takeoff Power: 1,200 horsepower at 1,700 rpm, subject to ambient temperature and pressure conditions.

See the latest approved revision of the E1000 "Pilots Operating Handbook and FAA Approved Flight Manual", SK05000001 (Serial Numbers – S/N K003-K010), or SK05001101 BRAZIL (S/N K011 and on, or S/N K003-K010 with Epic SB-0017 incorporated) and Engine TC Data Sheet E26NE (ANAC EM-9410) for additional details and limitations.

OIL

Engine & Gearbox:
Pratt & Whitney Maintenance Manual, Document No. 3135622, lists approved brand oils

OIL TEMPERATURE

See POH/AFM

ENGINE OIL CAPACITY

Maximum System Capacity 11,35 l (3 US gal), Usable Capacity 9,4 l (2,5 US gal)
Any oil conforming to MIL-PRF-23699G, Type II (5cSt) and as specified in the latest revision of Pratt and Whitney Service Bulletin 14001. Note: add weight of unusable oil to the certificated empty weight.

PROPPELLER LIMITS

Propeller Manufacturer:	Hartzell
Propeller Limits: Number of Propellers:	One (1)
Propeller TC Number:	P10NE (ANAC EH-9107)
Propeller Model Designation:	HC-E4A-3D/E10477SK/D-5500-1P
Diameter Limits:	2, 64 m (104 in) min., 2,67 m (105 in) max.
High Pitch Angle:	79.6° ± 0.5°
Low Pitch Angle:	19.0° ± 0.2°
Reverse Pitch Angle:	-17.5° ± 0.5°
Static RPM Limits:	Stabilized operation on the ground between 350 and 950 RPM is prohibited.

See Propeller TC Data Sheet P10NE (ANAC EH-9107) for additional details and limitation

(5-Blade Modification)

Propeller Manufacturer:	Hartzell
Number of Propellers:	One (1)
Propeller TC Number:	P20NE (EH-2009T05)
Propeller Model Designation:	HC-E5A-3A/NC10245B()/105820()
Diameter Limits:	2, 64 m (104 in) min., 2,67 m (105 in) max.
High Pitch Angle:	80.0° ± 0.5°
Low Pitch Angle:	14.7° ± 0.2°
Reverse Pitch Angle:	-17.5° ± 0.5°
Static RPM Limits:	Stabilized operation on the ground between 400 and 900 RPM is prohibited.

See Propeller TC Data Sheet P20NE (ANAC EH-2009T05) for additional details and limitations.

AIRSPEED LIMITS

MMO:	0.6 Mach
VMO:	270 KIAS (270 kcas)
VO:	170 KIAS (170 kcas)
VFE (T/O):	180 KIAS (180 kcas)
VFE (FULL):	130 KIAS (130 kcas)
VLO:	150 KIAS (150 kcas)
VLE:	150 KIAS (150 kcas)

For others speed limits refer to the POH/AFM

CENTER OF GRAVITY RANGE DESIGN C.G. LIMITS

Aft:	4,40 m (173,5 in) aft of datum at 3 629 Kg (8 000 lb)
	4,37 m (172,0 in) aft of datum at 2 585 Kg (5 700 lb)
	4,32 m (169,9 in) aft of datum at 2 268(5 000 lb)
Forward:	4,39 m (172,8 in) aft of datum at 3 629 Kg (8 000 lb)
	4,30 m (169,4 in) aft of datum at 3447 Kg (7 600 lb)
	4,14 m (163,0 in) aft of datum 2 585 Kg to 2 268 Kg (5,700 lb to 5,000 lbs)

Straight-line variation between points.

EMPTY WT. CENTER OF GRAVITY RANGE

None

MAXIMUM WEIGHT (see NOTE 1)

	Kg (lb)
Maximum Takeoff:	3 629 (8 000)
Maximum Landing:	3 447 (7 600)

MINIMUM CREW FOR ALL FLIGHTS

One Pilot

NUMBER OF SEATS

Up to 6 seats total in accordance with latest approved revision of the E1000 "Pilots Operating Handbook and FAA Approved Flight Manual", SK05000001 (S/N K003-K010), or SK05001101 BRAZIL (S/N K011 and on, or S/N K003-K010 with Epic SB-0017 incorporated).

CABIN LOADING

Reference Weight and Balance Data in POH/AFM for approved seating and cargo configurations.

MAXIMUM BAGGAGE

As defined in latest approved revision of the E1000 "Pilots Operating Handbook and FAA Approved Flight Manual", SK05000001 (S/N K003-K010), or SK05001101 BRAZIL (S/N K011 and on, or S/N K003-K010 with Epic SB-0017 incorporated).

MAXIMUM OPERATING ALTITUDE

10 363 m (34 000 ft)

CONTROL SURFACE MOVEMENTS

Wing Flaps:	Up: 0° ±0.6°	Takeoff: 12° ±2°	Full: 42.8° - 43.4°
Ailerons:	Up: 20° ±2°	Down: 15.5° ±0.5°	
Aileron Trim Tab:	Up: 17° ±2°	Down: 17° ±2°	
Elevator:	Up: 25.5°-25.8°	Down: 13.5° ±2°	
Elevator trim tab:	Up: 7.5° ±1°	Down: 19.5° ±0.5°	
Rudder:	Left: 18°-19°	Right: 18°-19.5°	
Rudder trim tab:	Left: 20° ±0.5°	Right: 5°±1°	
Rudder Limiter:	Left: 5.5°-6.5°		

See the latest FAA approved revision of the E1000 "Airplane Maintenance Manual", SK05000000, or other FAA approved data, for flap rigging instructions and setting Flaps up (0°) configuration.

S/N ELIGIBLE

K003 and on.

DATUM

2,73 m (107,62 in) forward of the forward face of the firewall.

LEVELING MEANS

Place a calibrated level between the middle row seats oriented longitudinally in the airplane.
See the latest approved revision of the E1000 "Pilots Operating Handbook and FAA Approved Flight Manual", SK05000001 (S/N K003-K010), or SK05001101 BRAZIL (S/N K011 and on, or S/N K003-K010 with Epic SB-0017 incorporated), for additional details.

CERTIFICATION BASIS

-RBAC 23 Amendment 62, which corresponds to the FAA 14 CFR Part 23, effective February 1, 1965, including Amendments 23-1 through 23-62.

Equivalent Level of Safety:

- 14 CFR Part 23.221 Spinning by installing a stick pusher/shaker in accordance with ELOS Memo No. TC11773SE-A-F-1

- 14 CFR Part 23 Amendment 23-62 errors with ELOS Memo TC11773SE-A-F-2.

ENVIRONMENTAL STANDARDS:

Noise Standards: RBAC 36, which corresponds to the FAA 14 CFR Part 36, as amended by Amendments 36-1 through 36-30.

PRODUCTION BASIS

Production Certificate FAA PC 733NM

EQUIPMENT

The basic required equipment as prescribed in the applicable airworthiness regulations (see Certification Basis) must be installed in the aircraft for airworthiness certification.

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. This is in accordance with 14 CFR 23.23, 23.25, and 23.29.

NOTE 2

All placards required by either FAA Approved Airplane Flight Manual, the applicable operating rules, or the Certification Basis must be installed in the airplane. The required approved placards are specified in the latest FAA approved revision of the E1000 "Pilots Operating Handbook and FAA Approved Flight Manual", SK05000001 (S/N K003-K010), or SK05001101 BRAZIL (S/N K011 and on, or S/N K003-K010 with Epic SB-0017 incorporated).

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 E1000 "Airplane Maintenance Manual", SK05000000, or other FAA approved data.

NOTE 4

The airplane shall be manufactured in accordance with the latest FAA approved revision of the E1000 "Master Drawing List", CK00000127, or other FAA approved data.

NOTE 5

Exterior colors are limited to those specified in the latest FAA approved revision or Epic Aircraft "Process Specification: Paint", Document No. SX51200003, or other FAA approved data.

NOTE 6

Major structural repairs must be accomplished at FAA certified repair stations rated for composite aircraft structure work, in accordance with FAA approved Epic Aircraft, LLC repair methods contained in "Airplane Maintenance Manual", SK05000000, or other methods approved by the FAA.

NOTE 7

Markings and placards. All markings and placards for passenger information, external markings for emergency, and load limits in cargo/baggage compartments must be presented in Portuguese or bilingual. The list of the internal and external placards applicable to the model E1000 and the related translation to Portuguese are presented on the document "POH/AFM, P/N SK05001101 BRAZIL, section 2.9 – Placards, original issue and on.
Any question to the approved markings and placards translations contact the TC holder or STC holder (as applicable) and/or ANAC at the following address: progcert@anac.gov.br.

NOTE 8

The designation E1000GX is a market name (commercial designation) only and corresponds to the E1000 model with EPIC Service Bulletin SB- 0017 incorporated. Aircraft with S/N K011 and on have the SB incorporated in the production line.

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LATEST CHANGE RECORD

Revision 00: Dated: 04 Dec 2023
(Original version)

This TCDS is available at ANAC website:
https://sistemas.anac.gov.br/certificacao/Produtos/EspecificacaoOrgE.asp