

**DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION**

A00067CE Revision 3 GROB Aircraft SE G 120TP-A July 19, 2021
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TYPE CERTIFICATE DATA SHEET NO. A00067CE

This Data Sheet which is a part of Type Certificate No. A00067CE prescribes conditions and limitations under which the product for which the Type Certificate was issued meets the airworthiness requirements of the Federal Aviation Regulations.

Type Certificate Holder: GROB Aircraft SE
Lettenbachstrasse 9
86874 Tussenhausen-Mattsies
Germany

Type Certificate Holder Record: GROB Aircraft AG transferred TC A00067CE to GROB Aircraft SE on September 01, 2017.

I. Model G 120TP-A (Utility and Aerobatic Category), approved November 04, 2015

<u>Engine</u>	One Rolls Royce Corporation	250-B17F, TCDS E10CE
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<u>Fuel</u>	ASTMD-1655:	JET A, JET A-1
	MIL-DTL-83133:	JP-8
	MIL-DTL-5624:	JP-5
	UK Defence Standard 91-91:	Semi- and Fully Synthetic
	GOST 10277-86:	Grades TS-1 and RT
	STAS 5639-88:	Grade TH
	GSTU 320.00149943.007-97:	Grade RT (Ukraine)
	GSTU 320.00149943.011-99:	Grade TS-1(Ukraine)
	GB 6537-94 and -2006:	Grade No. 3

See Airplane Flight Manual for required fuel system icing inhibitor additive.

<u>Engine Limits</u>	Maximum take-off power	450 shp (335.6 kW) @ 2030 rpm
	Maximum transient RPM	2233 rpm
	Maximum continuous power	380 shp (283.4 kW)
	Maximum continuous RPM	2132 rpm

<u>Propeller</u>	MT-Propeller Entwicklung GmbH	MTV-5-1-D-C-F-R(A) hub CFR210-56 blade
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<u>Propeller Limits</u>	Maximum Diameter	82.68 in (2.10 m)
	Propeller Maximum RPM Limit	2233 rpm
	Low Pitch	8° ± 0.2°
	High Pitch	79° ± 1°
	Pitch Radius at	31.1 in (790 mm)

<u>Airspeed Limits</u>	V _{MO} (maximum operating speed)	235 KCAS (238 KIAS) (SL to 13000 ft)
	M _{MO} (maximum operating Mach number)	0.45 (13000 ft to 25000 ft)
	V _O (maneuvering speed)	
	Utility Category	142 KCAS (143 KIAS)
	Aerobatic Category	162 KCAS (164 KIAS)

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Airspeed Limits, continued

V _{FE-TO}	(flaps extended speed, takeoff)	150 KCAS (151 KIAS)
V _{FE}	(flaps extended speed, full flaps)	113 KCAS (114 KIAS)
V _{LE}	(maximum speed landing gear extended)	180 KCAS (182 KIAS)
V _{LOE}	(maximum speed landing gear extension)	180 KCAS (182 KIAS)
V _{LOR}	(maximum speed landing gear retraction)	135 KCAS (137 KIAS)

C.G. Range

Utility Category		
Forward Limits:	105.4 in (2676 mm) (25% MAC) aft of datum for 3340 lbs (1515 kg)	
Aft Limits:	107.6 in (2732 mm) (29% MAC) aft of datum to 108.9 in (2766 mm) (31.5 MAC) aft of datum for 2579 lbs (1170 kg) to 3020 lbs (1370 kg)	
	108.9 in (2766 mm) (31.5% MAC) aft of datum for 3020 lbs (1370 kg) to 3340 lbs (1515 kg)	
If equipped per Note 6:		
Forward Limits:	105.4 in (2676 mm) (25% MAC) aft of datum for 2579 lbs (1170 kg) to 3417 lbs (1550 kg)	
	105.4 in (2676 mm) (25% MAC) aft of datum to 105.6 in (2683 mm) (25.5% MAC) aft of datum for 3417 lbs (1550 kg) to 3582 lbs (1625 kg)	
Aft Limits:	107.6 in (2732 mm) (29% MAC) aft of datum to 108.9 in (2766 mm) (31.5% MAC) aft of datum for 2579 lbs (1170 kg) to 3020 lbs (1370 kg)	
	108.9 in (2766 mm) (31.5% MAC) aft of datum for 3020 lbs (1370 kg) to 3340 lbs (1515 kg)	
	108.9 in (2766 mm) (31.5% MAC) aft of datum to 108.6 in (2759 mm) (31.0% MAC) aft of datum for 3340 lbs (1515 kg) to 3582 lbs (1625 kg)	
Aerobatic Category		
Forward Limits:	105.4 in (2676 mm) (25% MAC) aft of datum for 3175 lbs (1440 kg)	
Aft Limits:	107.6 in (2732 mm) (29% MAC) aft of datum for 3175 lbs (1440 kg)	
Straight-line variation between points		

Empty Weight C.G. Range

See Airplane Flight Manual (weight and balance, Section 6)

Reference Datum

91.9 in (2.335 m) in front of wing leading edge at 45.3 in (1.150 m) outside the symmetry axis

Leveling Means

Canopy frame bottom edge

Maximum Weight

Utility Category	3340 lbs (1515 kg)
	3582 lbs (1625 kg), see Note 6
Aerobatic Category	3175 lbs (1440 kg)

		3340 lbs (1515 kg), see Note 6
<u>Minimum Crew</u>	1 Pilot, on right seat	
<u>Number of Seats</u>	2 Seats	
<u>Maximum Baggage</u>	110 lbs (50 kg) 150.4 in (3820 mm) aft of datum	
<u>Fuel Capacity</u>	92.7 U.S. gallons (351 liters) total 105.4 in (2676 mm) aft of datum 90.2 U.S. gallons usable (341.4 liters) (see AFM page 2-10.) 47.6 U.S. gallons (180.2 liters) left wing tank 105.9 in (2690 mm) aft of datum 45.1 U.S. gallons (170.6 liters) right wing tank 104.8 in (2662 mm) aft of datum Add unusable fuel to empty weight of airplane.	
<u>Oil Capacity</u>	11.6 U.S. quarts (11.0 liters) 59.8 in (1519 mm) aft of datum	
<u>Maximum Operating Altitude</u>	Utility Category	25000 ft
	Aerobatic Category	20000 ft
<u>Control Surface Movements</u>		(inches from neutral)
	Aileron	UP 4.02 + 0.16 / - 0.24
		DOWN 4.02 + 0.16 / - 0.24
	Elevator	UP 4.09 ± 0.20
		DOWN 3.78 ± 0.20
	Trim tab	UP 0.47 ± 0.08
	(elevator neutral)	DOWN 0.79 ± 0.08
	Rudder	LH 10.35 ± 0.39
		RH 10.35 ± 0.39
	Flaps	UP 0
		DOWN 12.09 + 0.20/ - 0.39
<u>Serial Numbers Eligible</u>	Serial number 11082 and on.	
<u>Import Requirements</u>	<p>The FAA can issue a U.S. airworthiness certificate based on an Export Certificate of Airworthiness (Export C of A) signed by a representative of the German civil airworthiness authority, the Luftfahrt-Bundesamt (LBA), on behalf of the European Community. The Export C of A should contain the following statement: 'The aircraft covered by this certificate has been examined, tested, and found to comply with U.S. airworthiness regulations 14 CFR Part 23 approved under U.S. Type Certificate No. A00067CE and to be in a condition for safe operation.'</p> <p>Refer to the applicable bilateral agreement to verify eligibility for import into the United States of both new and used aircraft based on the scope of the agreement, to identify any required statements by the exporting authority on the export certificate of airworthiness (or equivalent document), and for procedures for coordinating exceptions to conformity statements on these documents. Refer to FAA Order 8130.2, <i>Airworthiness Certification of Aircraft</i>, for requirements for issuance of an <i>airworthiness certificate</i> for imported aircraft.</p>	
<u>Certification Basis</u>	<p>Type certification under 14 CFR Section 21.29 including the following requirements:</p> <ul style="list-style-type: none"> - 14 CFR 23, effective February 01, 1965, including Amendments 23-1 through 23-61 - 14 CFR Section 34, effective September 10, 1990, including Amendment 34-1 through Amendment 34-5A - 14 CFR Section 36, effective December 01, 1969, including Amendments 36-1 through Amendment 36-29 	

Equivalent Level of Safety (ELOS) findings per the provisions of 14 CFR Part 21.21(b)(1) as follows:

- ELOS ACE-15-13: 14 CFR §23.777 (g), Location of Landing Gear Control Lever; Refer to FAA letter dated August 18, 2015

Certification Basis, continued

Compliance with optional ditching provisions has not been established. Compliance not shown for 14 CFR Part 23.1419: not approved for flight in known icing operations.

Type Certificate No. A00067CE issued November 04, 2015

Date of application April 25, 2014

Approved for Day, Night, VFR, IFR

The EASA originally type certificated this aircraft under its Type Certificate No. EASA.A.565. The FAA validated this product under U.S. Type Certificate No. A00067CE.

Equipment

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

In addition, the following items of equipment are required:

- Airplane Flight Manual GROB G 120TP-A, Doc. No. 1T-120TPA-1, Issue 1, Revision 7, or later approved revision.
- If equipped in accordance with option OÄM 565-17: Airplane Flight Manual GROB G 120TP-A, Doc. No. 1T-120TPAD-1, Issue 1, Revision 2 or later approved revision.

See Note 5 for options and modifications approved as of the date of original type certification, November 04, 2015.

Service Information

Service bulletins, aircraft flight manuals, maintenance and overhaul manuals, structural repair manuals, and vendor manuals which contain a statement that the document is approved by the EASA, are accepted by the FAA and are considered FAA approved. (These approvals pertain to the design data only.)

NOTES

- Note 1. Current weight and balance data together with a list of equipment included in the certificated empty weight, and loading instructions, when necessary, must be provided for each powered aircraft at the time of original certification. The certificated empty weight and corresponding center of gravity locations must include the following:
- a) unusable fuel of 17.0 lbs (2.6 U.S. gallons) at 106.9 in (2716 mm) aft of datum
 - b) engine oil of 19.8 lbs (9.5 U.S. quarts) at 59.8 in (1519 mm) aft of datum
- Note 2. The placards listed in Section 2 of the EASA-approved Airplane Flight Manual 1T-120TPA-1 or 1T-120TPAD-1 (if equipped in accordance with option OÄM 565-17) must be displayed.
- Note 3. FAA approved Airworthiness Limitations for inspection time limits and maintenance checks are included in Chapter 4 of the Aircraft Maintenance Manual (AMM) Document No. Doc.-No. 1T-120TPA-2, latest FAA approved revision. Service Life Limited components airframe: 15,000 flight hours for G 120TP-A
- Note 4. Changes to the factory delivered paint schemes have to be coordinated with the TC holder or the FAA's Certificate Management Office responsible for this type certificate.

NOTES, continued

Note 5. Approved Options and Modifications as of date of original type certification:

Option Number	Description	Comment
OAM 565-01	Air Condition System	Initial TC
OAM 565-02	Electric Rudder Trim	
OAM 565-03	Electric Aileron Trim	
OAM 565-04	Becker ADF	
OAM 565-05	Flight Data Recording Unit	
OAM 565-06	UHF KFS599A	
OAM 565-07	Oxygen System	
OAM 565-08	Duplicated Instruments, Panel Arrangement B	
OAM 565-09	Additional LH Power Lever	
OAM 565-14	Reduced Power	Major Change
OAM 565-17	Digital Cockpit Baseline	Major Change: Identified as "Digital Cockpit"
OAM 565-18	Additional two Displays combined with OAM 565-17	
OAM 565-19	Becker ADF combined with OAM 565-17	
OAM 565-20	UHF combined with OAM 565-17	
OAM 565-21	Avidyne TAS combined with OAM 565-17	
OAM 565-22	Flight Data Recorder combined with OAM 565-17	
OAM 565-24	Radar Altimeter combined with OAM 565-17	
OAM 565-25	Cowling with Doors	Minor Change
OAM 565-26	Oxygen Indication combined with Digital Cockpit	Minor Change
OAM 565-27	Rudder trim indication combined with Digital Cockpit	Minor Change
OAM 565-28	Aileron trim indication combined with Digital Cockpit	Minor Change
OAM 565-29	S-Tec elevator trim servo	Minor Change
OAM 565-30	Increased Maximum Empty Weight	Major Change
OAM 565-31	Sandel device SN3500 add MOD A and software version A4.06	Minor Change
OAM 565-32	Optional Stormscope L3 WX-500 combined with Digital Cockpit	Minor Change
OAM 565-34	Optional Turn & Slip Indicator Mid Conti for analogue cockpit	Minor Change

Note 6. If equipped with option OCN 565-74 or OSB 565-094, 'Maximum Mass Increase'.

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