

**DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION**

A00067CE Revision 1 GROB Aircraft AG G120TP-A December 04, 2015

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 AG
 Lettenbachstrasse 9
 86874 Tussenhausen-Mattsies
 Germany

I. Model GROB G120TP-A (Utility and Aerobatic Category), approved November 04, 2015

<u>Engine</u>	One Rolls-Royce Corporation 250-B17F, TCDS E10CE	
<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
<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 aircraft	142 KCAS (143 KIAS)
	aerobatic aircraft	162 KCAS (164 KIAS)
	V _{FE-TO} (flaps extended speed, takeoff)	150 KCAS (151 KIAS)

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<u>Airspeed Limits, continued</u>	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)
<u>C.G. Range.</u>	Utility aircraft	105.4 in. (2676 mm) aft of datum at 3340 pounds (1515 kg)
<u>Most Forward C.G.:</u>		105.4 in. (2676 mm) aft of datum at 2579 pounds (1170 kg)
	Aerobatic aircraft	105.4 in. (2676 mm) aft of datum at 3175 pounds (1440 kg)
		105.4 in. (2676 mm) aft of datum at 2579 pounds (1170 kg)
<u>Most rearward C.G.:</u>	Utility aircraft	108.9 in. (2766 mm) aft of datum at 3340 pounds (1515 kg)
		108.9 in. (2766 mm) aft of datum at 3020 pounds (1370 kg)
		107.6 in. (2732 mm) aft of datum at 2579 pounds (1170 kg)
	Aerobatic aircraft	107.6 in. (2732 mm) aft of datum at 3175 pounds (1440 kg)
		107.6 in. (2732 mm) aft of datum at 2579 pounds (1170 kg)
	Straight-line variation between points	
<u>Empty Weight C.G. Range</u>	See Airplane Flight Manual (weight and balance, Section 6)	
<u>Reference Datum</u>	91.9 in. (2.335 m) in front of wing leading edge at 45.3 in. (1.150 m) outside the symmetry axis.	
<u>Leveling Means</u>	Canopy frame bottom edge	
<u>Maximum Weight</u>	Utility Category	3340 pounds (1515 kg)
	Aerobatic Category	3175 pounds (1440 kg)
<u>Minimum Crew</u>	1 Pilot, on right seat	
<u>Number of Seats</u>	2 Seats	
<u>Maximum Baggage</u>	110 pounds (50 kg) 150.4 in. (3820 mm) aft of datum	

Fuel Capacity 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.

Oil Capacity 11.6 U.S. quarts (11.0 liters) 59.8 in. (1519 mm) aft of datum

Maximum Operating Altitude Utility Category 25000 ft
 Aerobatic Category 20000 ft

Control Surface Movements

		(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 (elevator neutral)	UP	0.47	± 0.08
	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

Serial Numbers Eligible Serial numbers 11082 and on.

Import Requirements The FAA can issue a U.S. airworthiness certificate based on an EASA Export Certificate of Airworthiness (Export C of A) signed by a representative of the EASA 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.'

Certification Basis Type certification under 14 CFR Section 21.29 including the following requirements:

- 14 CFR 23, effective February 1, 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 1, 1969, including Amendments 36-1 through Amendment 36-29.

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.

Equivalent Safety Items:

Equivalent levels of safety finding made per the provisions of 14 CFR Part 21.21(b)(1) for:

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

Type certificate A00067CE issued November 04, 2015.

Date of application April 25, 2014.

Certification Basis;
continued

Approved for Day, Night, VFR, IFR.

The European Aviation Safety Agency (EASA) originally type certificated this aircraft under its type certificate Number EASA.A.565. The FAA validated this product under U.S. Type Certificate Number 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 G120TP-A, Doc. No. 1T-120TPAD-1, Issue 1, Revision 2 or later approved revision.

For approved options, see Note 5.

Service Information

Service bulletins, structural repair manuals, vendor manuals, AFMs and overhaul and maintenance 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.)

- 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 (2.5 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 G120TP-A
- Note 4. Changes to the factory delivered paint schemes have to be coordinated with the Federal Aviation Administration's Certificate Management Office responsible for this type certificate.

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

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

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