TYPE-CERTIFICATE
DATA SHEET

EASA.A.565

G 120TP

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

For models: G 120TP-A

Issue 03: 30 January 2018
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SECTION A:  MODEL G 120TP-A

A.I.  General

1. Data Sheet No.: EASA.A.565
2.  a) Type: G 120TP
   b) Model: G 120TP-A
   c) Variant: --
3. Airworthiness Category: Utility
   Aerobatic
4. Type Certificate Holder: GROB AIRCRAFT SE
   LETTENBACHSTRASSE 9
   86874 TUSSENAUSEN-MATTSIES
   GERMANY
5. Manufacturer: GROB AIRCRAFT SE
   LETTENBACHSTRASSE 9
   86874 TUSSENAUSEN-MATTSIES
   GERMANY
7. (Reserved)
8. (Reserved)
A.II. **EASA Certification Basis**

1. Reference Date for determining the applicable requirements: 17. June 2010

2. Airworthiness Requirements: CS-23, Amendment 1, issued 12 February 2009

3. Special Conditions: CRI F-52 Protection from Effects of HIRF
   CRI F-54 Protection from Effects of Lightning strikes, Indirect Effects
   *If equipped i.a.w. ÖAM 565-17:*
   CRI B-52 Human Factors – Integrated Avionics Systems

4. Exemptions: None

5. Deviations: None

   *If equipped i.a.w. ÖAM 565-17:*
   CS 23.1321(d) (4): CRI F-102 Location of Heading Indicator PFD

7. Requirements elected to comply: None

   CS-36, Amendment 2
   CS-34, Original issue

9. (Reserved)

10. (Reserved)
A.III. Technical Characteristics and Operational Limitations

1. Type Design Definition: Doc.-No: DE-120TPA-000100 Master Document Index, Revision 0 or later approved revision

2. Description: Two seat side by side trainer aircraft. Single engine turbo-propeller, low wing monoplane in composite construction, retractable landing gear, normal tail plane

3. Equipment: Refer to Equipment list in AFM, Section 6

4. Dimensions: Span 10.31 m (33.83 ft)

Length 8.42 m (27.64 ft)

Height 2.64 m (8.68 ft)

Wing Area 13.52 m² (145.53 ft²)

5. Engine:

5.1.1 Model: Rolls Royce 250-B17F

5.1.2 Type Certificate: FAA E10CE

5.1.3 Limitations: MCP 380 SHP

MTOP 450 SHP (5 min.)

Rated Prop Shaft Speed 2030 RPM

6. Load factors: Utility Category

-1.76 / +4.4 (flaps up)

0 / +3.8 (flaps down)

Aerobatic Category

-4.0 / +6.0 (flaps up)

0 / +3.8 (flaps down)

7. Propeller:

7.1 Model: MT-Propeller MTV-5-1-D-C-F-R(A)/CFR210-56

7.2 Type Certificate: LBA 32.130/103

7.3 Number of blades: 5

7.4 Diameter: 2.10 m (82.68 in.)

7.5 Sense of Rotation: Clockwise
8. Fluids:
   8.1 Fuel: Refer to AFM, Section 2 for engine fuels
   8.2 Oil: Refer to AFM, Section 2 for engine oil
   8.3 Coolant: Not applicable

9. Fluid capacities:
   9.1 Fuel: Total 351.0 litres (92.7 U.S. gallons)
                Usable 341.4 litres (90.2 U.S. gallons)
   9.2 Oil: Min 5.0 litres (5.3 U.S. quarts)
              Max 11.0 litres (11.6 U.S. quarts)
   9.3 Coolant system capacity: Not applicable

10. Air Speeds: Utility Category
        \( V_{MO} \) 235 KCAS (238 KIAS)
               (SL to 13000 ft)
        \( M_{MO} \) 0.45 (13000 ft to 25000 ft)
        \( V_{O} \) 142 KCAS (143 KIAS)
        \( V_{FE-TO} \) 150 KCAS (151 KIAS)
        \( V_{FE} \) 113 KCAS (114 KIAS)
        \( V_{LE} \) 180 KCAS (182 KIAS)
        \( V_{LOE} \) 180 KCAS (182 KIAS)
        \( V_{LOR} \) 135 KCAS (137 KIAS)

        Aerobatic Category
        \( V_{MO} \) 235 KCAS (238 KIAS)
               (SL to 13000 ft)
        \( M_{MO} \) 0.45 (13000 ft to 20000 ft)
        \( V_{O} \) 162 KCAS (164 KIAS)
        \( V_{FE-TO} \) 150 KCAS (151 KIAS)
        \( V_{FE} \) 113 KCAS (114 KIAS)
        \( V_{LE} \) 180 KCAS (182 KIAS)
        \( V_{LOE} \) 180 KCAS (182 KIAS)
        \( V_{LOR} \) 135 KCAS (137 KIAS)

11. Maximum Operating Altitude:
    Utility Category 25000 ft
    Aerobatic Category 20000 ft
12. Allweather Operations Capability:

VFR day and night, IFR

Flight into known icing conditions is prohibited

13. Maximum Weights:

Utility Category

<table>
<thead>
<tr>
<th>Mode</th>
<th>Weight (kg)</th>
<th>Weight (lb)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Take-off</td>
<td>1515</td>
<td>3340</td>
</tr>
<tr>
<td>Landing</td>
<td>1440</td>
<td>3175</td>
</tr>
</tbody>
</table>

*From S/N 11037 or if equipped i.a.w. OSB 565-018*

<table>
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<tr>
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*If equipped i.a.w. OCN 565-74 or OSB 565-094:*

<table>
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<tr>
<th>Mode</th>
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<th>Weight (lb)</th>
</tr>
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<tbody>
<tr>
<td>Take-off</td>
<td>1625</td>
<td>3582</td>
</tr>
<tr>
<td>Landing</td>
<td>1545</td>
<td>3406</td>
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</table>

Aerobatic Category

<table>
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<tr>
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14. Centre of Gravity Range:

Utility Category

<table>
<thead>
<tr>
<th>Range Type</th>
<th>C.G. Location (m)</th>
<th>C.G. Location (MAC)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Most forward C.G.</td>
<td>2.676</td>
<td>(25% MAC)</td>
</tr>
<tr>
<td>Most aft C.G.</td>
<td>2.732</td>
<td>(29% MAC)</td>
</tr>
</tbody>
</table>

*To 2.766 m (31.5% MAC) aft of datum for 1170 kg to 1370 kg*

<table>
<thead>
<tr>
<th>Range Type</th>
<th>C.G. Location (m)</th>
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<td>(29% MAC)</td>
</tr>
</tbody>
</table>

*To 2.766 m (31.5% MAC) aft of datum for 1370 kg to 1515 kg*

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<th>C.G. Location (m)</th>
<th>C.G. Location (MAC)</th>
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*Aerobatic Category*

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<th>C.G. Location (m)</th>
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<tr>
<td>Most aft C.G.</td>
<td>2.732</td>
<td>(29% MAC)</td>
</tr>
</tbody>
</table>
15. Datum: 2.335 m in front of wing leading edge at 1.150 m outside the symmetry axis

16. Control surface deflections: Refer to AMM, Section 6

17. Levelling Means: Canopy frame bottom edge

18. Minimum Flight Crew: 1 Pilot

19. Maximum Passenger Seating Capacity: 1 Seat

20. Baggage/Cargo Compartments: Location 3.800 m aft of datum
    max. Baggage. weight
    Utility 50 kg (110 lb)
    Aerobatic no baggage allowed

21. Wheels and Tyres: Nose Wheel Tyre Size 5.00-5
    Main Wheel Tyre Size 15x6.0-6

22. (Reserved):
A.IV. **Operating and Service Instructions**

1. Flight Manual: Airplane Flight Manual GROB G 120TP-A, Doc.-No. 1T-120TPA-1, Issue 1, Revision 0 or later approved revision  
   *If equipped i.a.w. OÄM 565-17:* Airplane Flight Manual GROB G 120TP-A, Doc.-No. 1T-120TPAD-1, Issue 1, Revision 0 or later approved revision

2. Maintenance Manual: Airplane Maintenance Manual GROB G 20TP-A, Doc.-No. 1T-120TPA-2, Issue 1, Revision 0 or later approved revision


4. Illustrated Parts Catalogue: Illustrated Parts Catalogue GROB G120TP-A, Doc.-No. 1T-120TPA-4

A.V. **Notes:**

1. This TCDS, Section A applies to S/N 11002 and following model G 120TP-A aeroplanes.
2. Paint schemes have to be approved by the TC holder or National Airworthiness Authority.
ADMINISTRATIVE SECTION

I. Acronyms

AFM     Airplane Flight Manual
AMM     Airplane Maintenance Manual
C.G.    Centre of Gravity
CRI     Certification Review Item
HIRF    High Intensity Radiated Field
IFR     Instrument Flight Rules
IPC     Illustrated Parts Catalogue
MCP     Maximum Continuous Power
MTOP    Maximum Takeoff Power
OÄM    Optional Änderungsmitteilung (Optional Change Note)
OCN    Optional Change Note
OSB    Optional Service Bulletin
TCDS    Type Certificate Data Sheet
VFR     Visual Flight Rules
VFE-TO  Maximum Flaps Extended Speed, Takeoff Configuration
VFE     Maximum Flaps Extended Speed, Landing Configuration
VLE     Maximum Landing Gear Extended Speed
VLOE    Maximum Landing Gear Extension Speed
VLOR    Maximum Landing Gear Retraction Speed
VMO     Maximum Operating Speed
MHO     Maximum Operating Mach Number
VLO     Maximum Manoeuvring Speed

II. Type Certificate Holder Record

<table>
<thead>
<tr>
<th>TC Holder</th>
<th>Period</th>
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<tbody>
<tr>
<td>GROB Aircraft AG</td>
<td>Until 01-Sep-2017</td>
</tr>
<tr>
<td>Lettenbachstrasse 9</td>
<td></td>
</tr>
<tr>
<td>86874 Tussenhausen-Mattsies</td>
<td></td>
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<tr>
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</table>
## IV. Change Record

<table>
<thead>
<tr>
<th>Issue</th>
<th>Date</th>
<th>Changes</th>
<th>TC Issue No. &amp; Date</th>
</tr>
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<tbody>
<tr>
<td>Issue 01</td>
<td>06 May 2013</td>
<td>Initial Issue</td>
<td>01 May 2013</td>
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<tr>
<td>Issue 02</td>
<td>11 December 2014</td>
<td>Major change “G 120TP-A Digital Cockpit” implemented with optional change note OAM 565-17 and administrative update to include Major Change “Increased Maximum Landing Weight” implemented from S/N 11037 and through OSB 565-018 and to correct some typos</td>
<td>02. Dec 2014</td>
</tr>
<tr>
<td>Issue 03</td>
<td>30 January 2018</td>
<td>Major change “Maximum Mass Increase” implemented with optional change note OCN 565-74, Change of corporate form of Type Certificate Holder and of Production Organisation and administrative update</td>
<td>tbd</td>
</tr>
</tbody>
</table>