TYPE-CERTIFICATE
DATA SHEET

NO. EASA.A.565

for
GROB G 120TP

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

For models: G 120TP-A
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SECTION A: 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. Manufacturer: GROB AIRCRAFT SE
   LETTENBACHSTRASSE 9
   86874 TUSSENAUSEN-MATTSIES
   GERMANY

5. EASA Certification Application Date: 17. December 2009

6. (Reserved)

7. EASA Type Certification Date: 06 May 2013
## 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
   - If equipped i.a.w. OCN 565-83 with MCN 565-684: CS-ACNS, Issue 1
   - If equipped i.a.w. OÄM 565-17: CS-ACNS, Issue 3

3. **Special Conditions:**
   - SC-F23.1309-02 Protection from Effects of HIRF
   - SC-F23.1309-03 Protection from Effects of Lightning strikes, Indirect Effects
   - If equipped i.a.w. OÄM 565-17: SC-B23.div-01 Human Factors – Integrated Avionics Systems

4. **Exemptions:** None

5. **Deviations:**
   - If equipped i.a.w. OCN 565-83 with MCN 565-684: Deviation CS-ACNS#1

6. **Equivalent Safety Findings:**
   - CS 23.777(g) Location of Landing Gear Control Lever
   - If equipped i.a.w. OÄM 565-17: CS 23.1321(d)(4): Location of Heading Indicator PFD

7. **Requirements elected to comply:** None

8. **Environmental Standards:**
   - 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

*If equipped i.a.w. OCN 565-107:*

Flight into known or forecast icing conditions is approved

13. Maximum Weights:

**Utility Category**

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

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

<table>
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<th>Utility Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Take-off</td>
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</table>

*If equipped i.a.w. OCN 565-74 or OSB 565-094:*

<table>
<thead>
<tr>
<th></th>
<th>Utility Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Take-off</td>
<td>1625 kg (3582 lb)</td>
</tr>
<tr>
<td>Landing</td>
<td>1545 kg (3406 lb)</td>
</tr>
</tbody>
</table>

**Aerobatic Category**

<table>
<thead>
<tr>
<th></th>
<th>Aerobatic Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Take-off</td>
<td>1440 kg (3175 lb)</td>
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<tr>
<td>Landing</td>
<td>1440 kg (3175 lb)</td>
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*If equipped i.a.w. OCN 565-74 or OSB 565-094:*

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</tr>
<tr>
<td>Landing</td>
<td>1515 kg (3340 lb)</td>
</tr>
</tbody>
</table>

14. Centre of Gravity Range:

**Utility and Aerobatic Category**

<table>
<thead>
<tr>
<th></th>
<th>Utility and Aerobatic Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Most forward C.G.</td>
<td>2.676 m (25% MAC) aft of datum</td>
</tr>
<tr>
<td>Most aft C.G.</td>
<td>2.732 m (29% MAC) aft of datum to 2.766 m (31.5% MAC) aft of datum for 1170 kg to 1370 kg</td>
</tr>
<tr>
<td></td>
<td>2.766 m (31.5% MAC) aft of datum for 1370 kg to 1515 kg</td>
</tr>
<tr>
<td></td>
<td>2.766 m (31.5% MAC) aft of datum for 1370 kg to 1625 kg</td>
</tr>
</tbody>
</table>

*If equipped i.a.w. OCN 565-74 or OSB 565-094:*

| Most forward C.G.            | 2.676 m (25% MAC) aft of datum for 1170 kg to 1550 kg |
|                              | 2.676 m (25% MAC) aft of datum to 2.683 m (25.5% MAC) aft of datum for 1550 kg to 1625 kg |

| Most aft C.G.                | 2.732 m (29% MAC) aft of datum to 2.766 m (31.5% MAC) aft of datum for 1170 kg to 1370 kg |
|                              | 2.766 m (31.5% MAC) aft of datum for 1370 kg to 1515 kg |
|                              | 2.766 m (31.5% MAC) aft of datum to 2.759 m (31.0% MAC) aft of datum for 1515 kg to 1625 kg |
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 version  
   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 version


4. Illustrated Parts Catalogue: Illustrated Parts Catalogue GROB G120TP-A, Doc.-No. 1T-120TPA-4 (not part of ICA)

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

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AFM</td>
<td>Airplane Flight Manual</td>
</tr>
<tr>
<td>AMM</td>
<td>Airplane Maintenance Manual</td>
</tr>
<tr>
<td>C.G.</td>
<td>Centre of Gravity</td>
</tr>
<tr>
<td>CRI</td>
<td>Certification Review Item</td>
</tr>
<tr>
<td>HIRF</td>
<td>High Intensity Radiated Field</td>
</tr>
<tr>
<td>IFR</td>
<td>Instrument Flight Rules</td>
</tr>
<tr>
<td>IPC</td>
<td>Illustrated Parts Catalogue</td>
</tr>
<tr>
<td>MCP</td>
<td>Maximum Continuous Power</td>
</tr>
<tr>
<td>MTOP</td>
<td>Maximum Takeoff Power</td>
</tr>
<tr>
<td>OÄM</td>
<td>Optional Änderungsmittleitung (Optional Change Note)</td>
</tr>
<tr>
<td>OCN</td>
<td>Optional Change Note</td>
</tr>
<tr>
<td>OSB</td>
<td>Optional Service Bulletin</td>
</tr>
<tr>
<td>TCDS</td>
<td>Type Certificate Data Sheet</td>
</tr>
<tr>
<td>VFR</td>
<td>Visual Flight Rules</td>
</tr>
<tr>
<td>VFE-TO</td>
<td>Maximum Flaps Extended Speed, Takeoff Configuration</td>
</tr>
<tr>
<td>VFE</td>
<td>Maximum Flaps Extended Speed, Landing Configuration</td>
</tr>
<tr>
<td>VLE</td>
<td>Maximum Landing Gear Extended Speed</td>
</tr>
<tr>
<td>VLOE</td>
<td>Maximum Landing Gear Extension Speed</td>
</tr>
<tr>
<td>VLOR</td>
<td>Maximum Landing Gear Retraction Speed</td>
</tr>
<tr>
<td>VMO</td>
<td>Maximum Operating Speed</td>
</tr>
<tr>
<td>M(\text{MO})</td>
<td>Maximum Operating Mach Number</td>
</tr>
<tr>
<td>V(\text{O})</td>
<td>Maximum Manoeuvring Speed</td>
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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 Lettenbachstrasse 9 86874 Tussenhausen-Mattsies Germany</td>
<td>until 01-Sep-2017</td>
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<tr>
<td>GROB Aircraft SE Lettenbachstrasse 9 86874 Tussenhausen-Mattsies Germany</td>
<td>since 01-Sep-2017</td>
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## Change Record

<table>
<thead>
<tr>
<th>Issue</th>
<th>Date</th>
<th>Changes</th>
<th>TC Issue No. &amp; Date</th>
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<tbody>
<tr>
<td>Issue 01</td>
<td>06 May 2013</td>
<td>Initial Issue</td>
<td>01 May 2013</td>
</tr>
<tr>
<td>Issue 02</td>
<td>11 December 2014</td>
<td>Major change “G 120TP-A Digital Cockpit” implemented with optional change note OÄM 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>01 Sep 2017</td>
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<tr>
<td>Issue 04</td>
<td>08 March 2024</td>
<td>Major Change “Extension of aerobatic CG range” implemented with change note MCN 565-859 Major change “Ice Protection System” implemented with optional change note OCN 565-107 and administrative update</td>
<td>01 Sep 2017</td>
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