DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION

A63EU Revision 10 GROB Aircraft SE G 520 G 520T July 19, 2021

TYPE CERTIFICATE DATA SHEET NO. A63EU

This Data Sheet which is a part of Type Certificate No. A63EU 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 Ownership Record: BURKHART GROB Luft- und Raumfahrt GmbH & Co. KG transferred TC A63EU to

GROB Aerospace GmbH in December, 2006.

GROB Aerospace GmbH transferred TC A63EU to GROB Aerospace GmbH i.l. in

August, 2008.

GROB Aerospace GmbH i.l. transferred TC A63EU to GROB Aircraft AG. in February,

2009.

GROB Aircraft AG transferred TC A49CE to GROB Aircraft SE on September 01, 2017.

I. Model G 520, (Normal Category) approved September 13, 1991.

Engine GARRETT TPE 331-14F-801L

Fuel JET A, JET A1 or JET B

Engine Limits For take-off, 5 minutes, and for continuous operation, 750 SHP, 1478 r.p.m.

(NOTE: IEC-rated)

<u>Propeller and Propeller Limits</u> Hartzell HC-E4P-5/E11990K

Diameter 120 in, no cutoff permitted

Pitch settings at 42 in station:

Reverse -10.0°

Airspeed Limits Knots* m.p.h. Mach*

V_{MO} (Max. Operating Speed) 153 176 0.448 V_A (Maneuvering Speed) 124 143 0.448 V_{FE} (Flaps Extended Speed) 120 138 0.448 V_{IO} (Landing Gear Open. Speed) 138 120 0.448 V_{LE} (Landing Gear Ext. Speed) 120 138 0.448

(NOTE: * whichever is lower)

C.G. Range Refer to G 520-EGRETT Pilot's Operating Handbook page 2-7.

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Empty Weight C.G. Range

<u>Datum</u> 200 in forward of firewall front

<u>Leveling Means</u> Leveling means is achieved by positioning the airplane on jacks, locating the lateral and

longitudinal datum points on the bottom of the fuselage with a spirit level, and adjusting

the center of gravity appropriately as specified in the maintenance manual.

Maximum Weight Max. Zero Fuel 8988 lbs

None

Max. Take-Off 10362 lbs Max. Landing 9843 lbs

(refer to Note 1)

<u>Minimum Crew</u> 1 pilot

Number of Seats 1

Maximum Baggage Baggage compartments: 12

Max. permitted baggage:

Baggage compartments 1 and 4
Baggage compartments 2 and 5
Baggage compartments 3 and 6
Baggage compartments 7 and 8
Baggage compartments 9 and 10
Baggage compartment 11
Baggage compartment 12

49 lbs

<u>Fuel Capacity</u> 288 U.S. Gal. usable

Oil Capacity 7 qts. usable

Parts with limited Operation Refer to G 520-EGRETT Maintenance Manual (Chapter 4)

Control Surface Movements Refer to G 520-EGRETT Maintenance Manual (Chapter 27)

Operational Altitude Max. permitted: 25,000 ft without pressure suit

50,000 ft with pressure suit

Serial Nos. Eligible Model G 520 Serial No. 10 002 and subsequent.

Certification Basis 1. 14 CFR Sections 21.29, 21.183(c) and 14 CFR 23, effective February 11, 1965

- 1. 14 CFR Sections 21.29, 21.185(c) and 14 CFR 25, effective February 11, 1965 including amendment 23-1 through 23-34
- 14 CFR Section 36, effective November 18, 1969, including amendments 36-1 through amendment 18 dated August 18, 1989
- 3. SFAR 27, effective February 1, 1974 including Amendments 27-1 through 5
- 4. Special Conditions pursuant to 14 CFR Section 21-16 as follows:
 - No. 23-ACE-58 issued November 8, 1990.
- 5. Equivalent Levels of Safety (ELOS) findings per the provisions of 14 CFR Part 21.21(b)(1) as follows:
 - ELOS No. ACE-91-01, dated June 25, 1991.
 - ELOS No. ACE-92-01, dated April 1, 1992.
 - ELOS No. ACE-94-10, dated July 11, 1994
- 6. Section 611(b) of the FAA Act of 1958
- 7. Exemption No. 5223 granted by FAA (FAR 11.27) on September 13, 1990

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Certification Basis, continued

The German civil airworthiness authority, the Luftfahrt Bundesamt (LBA), originally type certificated this aircraft under its Type Certificate No. 2066. The FAA validated this product under U.S. Type Certificate No. A63EU. Effective September 28, 2003, the European Union Aviation Safety Agency (EASA) began oversight of this product on behalf of Germany. At this time, EASA has maintained the LBA Type Certificate Data Sheet No. 2066.

II. Model G 520T, (Normal Category) approved September 30, 1994

Engine GARRETT TPE 331-14F-801L

<u>Fuel</u> JET A, JET A-1 or JET B

Engine Limits For take-off, 5 minutes and for continuous operation, 750 SHP ¹⁾, 1478 r.p.m.

(NOTE: IEC-rated)

Propeller and Propeller Limits Hartzell HC-E4P-5/E11990K

Diameter 120 in, no cutoff permitted

Pitch settings at 42 in station:

Start lock -1.5° $\pm 0.1^{\circ}$ Flight idle $+4.5^{\circ}$ $+0.3^{\circ}/-0.0^{\circ}$ Feather $+78.5^{\circ}$ $\pm 0.1^{\circ}$

Reverse -10.0°

Airspeed Limits Knots m.p.h. Mach*
V. (Max. Operating Speed) 153 176 0.448

V_{MO} (Max. Operating Speed) 153 176 V_A (Maneuvering Speed) 118 136 0.448 V_{FE} (Flaps Extended Speed) 0.448 120 138 V₁₀ (Landing Gear Open. Speed) 120 138 0.448 V_{I.E.} (Landing Gear Ext. Speed) 120 0.448 138

(NOTE: * whichever is lower)

C.G. Range Refer to G 520T Pilot's Operating Handbook Page 2-7

Empty Weight C.G. Range None

Datum 149 in forward of firewall front

Leveling Means Leveling means is achieved by positioning the airplane on jacks, locating the lateral and

longitudinal datum points on the bottom of the fuselage with a spirit level, and adjusting

the center of gravity appropriately as specified in the maintenance manual.

Maximum Weight Max. Zero Fuel 9334 lbs

Max. Take-Off 10362 lbs Max. Landing 9773 lbs

(refer to Note 1).

Minimum Crew 1 pilot

Number of Seats 2

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Maximum Baggage

Baggage compartments: 14

Max. permitted baggage:

Baggage compartments 1 and 4 150 lbs each Baggage compartments 2 and 5 225 lbs each Baggage compartments 3 and 6 225 lbs each 150 lbs each Baggage compartment 7 150 lbs each Baggage compartments 9 and 10 Baggage compartments 11 and 12 150 lbs each 525 lbs Baggage compartment 13 49 lbs Baggage compartment 14

Fuel Capacity

348 U.S. Gal. usable

Oil Capacity

7 qts usable

Max. permitted:

Parts with Limited Operation

Refer to G 520T Maintenance Manual (Chapter 4)

Control Surface Movements

Refer to G 520T Maintenance Manual (Chapter 27)

Operational Altitude

25,000 ft without pressure suit 50,000 ft with pressure suit

Serial Nos. Eligible

Model G 520T Serial No. 10 200 and subsequent

Certification Basis

- 14 CFR Sections 21.29, 21.183(c) and 14 CFR 23, effective February 11, 1965 including amendment 23-1 through 23-34, and amendment 23-42, section 23.831
- 2. SFAR 27, effective February 1, 1974 including Amendments 27-1 through 5
- 3. 14 CFR Section 36, effective November 18, 1969, including amendments 36-1 through amendment in effect at the time of U.S. Type Certification
- 4. Special Conditions pursuant to 14 CFR Section 21-16 as follows:
 - No. 23-ACE-66 (57FR9513 issued March 19, 1992)
- 5. Equivalent Levels of Safety (ELOS) findings per the provisions of 14 CFR Part 21.21(b)(1) as follows:
 - ELOS No. ACE-91-01, dated June 25, 1991.
 - ELOS No. ACE-92-01, dated April 1, 1992.
 - ELOS No. ACE-94-10 dated July 11, 1994
 - ELOS No. ACE-95-2 dated December 29, 1994
- Exemptions approved by FAA (FAR 11.27) including No. 5223 dated September 13, 1990
- 7. Section 611 (b) of the FAA Act of 1958

The German civil airworthiness authority, the Luftfahrt Bundesamt (LBA), originally type certificated this aircraft under its Type Certificate No. 2066. The FAA validated this product under U.S. Type Certificate No. A63EU. Effective September 28, 2003, the European Union Aviation Safety Agency (EASA) began oversight of this product on behalf of Germany. At this time, EASA has maintained the LBA Type Certificate Data Sheet No. 2066.

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Data Pertinent to all Models

Import Requirements

The FAA can issue a U.S. Standard Airworthiness Certificate based on an Export Certificate of Airworthiness (Export C of A) signed by a representative of the 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. A63EU and to be in a condition for safe operation.'

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, Airworthiness Certification of Aircraft, for requirements for issuance of an airworthiness certificate for imported aircraft.

Equipment

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

Service Information

Each of the documents listed below must state that it is approved by EASA or – for approvals made before September 28, 2003 – by the LBA.

- Service bulletins
- Structural repair manuals
- Vendor manuals
- Aircraft flight manuals
- Overhaul and maintenance manuals.

The FAA accepts such documents and considers them FAA-approved unless one of the following conditions exists:

- The documents change the limitations, performance, or procedures of the FAA approved manuals; or
- The documents make an acoustical or emissions changes to this product's U.S. type certificate as defined in 14 CFR § 21.93.

The FAA uses the post type validation procedures to approve these documents. The FAA may delegate case-by-case approval to EASA on behalf of the FAA for the U.S. type certificate. If this is the case it will be noted on the document.

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 aircraft at the time of original certification. The certificated empty weight and corresponding center of gravity locations must include the following:

- G 520 a) unusable fuel of 47 lbs (242 in (6147 mm) aft of datum)
 - b) engine oil of 17 lbs (139 in (3531 mm) aft of datum)
- G 520T a) unusable fuel of 47 lbs (242 in (6147 mm) aft of datum)
 - b) engine oil of 16.75 lbs (87.6 in (2225 mm) aft of datum)
- NOTE 2. All placards listed in Section 2, of the approved Pilot's Operating Handbook G 520 and G 520T must be installed in the appropriate locations. Each airplane must be supplied with a placard that specifies the kind of operations to which the operation of the airplane is limited by its installed equipment.

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The following placard must be displayed on the instrument panel in full view of the pilot:

"THE MARKINGS AND PLACARDS INSTALLED IN THIS AIRPLANE CONTAIN OPERATING LIMITATIONS WHICH MUST BE COMPLIED WITH WHEN OPERATING THIS AIRPLANE IN THE NORMAL CATEGORY. OTHER OPERATING LIMITATIONS WHICH MUST BE COMPLIED WITH WHEN OPERATING THIS AIRPLANE IN THIS CATEGORY ARE CONTAINED IN THE AIRPLANE FLIGHT MANUAL".

NOTE 3. G 520 <u>Airworthiness Limitations.</u>

Chapter 04 of the G 520 EGRETT Maintenance Manual includes the Airworthiness Limitation Section 4-00-00. This section is FAA approved and specifies maintenance required under paragraphs 43.16 and 91.403 of the Federal Aviation Regulations unless an alternative program has been FAA approved.

G 520T Airworthiness Limitations.

Chapter 04 of the G 520T Maintenance Manual includes the Airworthiness Limitation Section 4-00-00. This section is FAA approved and specifies maintenance required under paragraphs 43.16 and 91.403 of the Federal Aviation Regulations unless an alternative program has been FAA approved.

Note that Section 4-00-00 may not be changed without FAA-approval.

- NOTE 4. The airframes of the G 520 and G 520T were demonstrated to be damage tolerant. Every 3,000 flight hours the "Significant Structure Items Inspection" and prior to 15,000 flight hours the "Airframe Major Inspection" must be performed. This may provide the necessary clearance for further flight.
- NOTE 5. Major structural repairs must be accomplished by a properly certificated mechanic in accordance with data approved by the FAA.
- NOTE 6. The G 520 and G 520T are approved for the following types of operations:

VFR DAY and NIGHT IFR DAY and NIGHT Flight into known icing

...END...