DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

G57EU
Revision 2
Burkhart Grob
Model G 103 C Twin III SL

March 22, 1993

TYPE CERTIFICATE DATA SHEET No. G57EU

This data sheet which is part of Type Certificate No. G57EU 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:

BURKHART GROB LUFT- UND
RAUMFAHRT GmbH & Co. KG
Am Flugplatz
D-8939 Mattsies
Federal Republic of Germany

I. Model G 103 C TWIN III SL (Utility Category), approved February 13, 1992.

Engine.

Bombardier-ROTAX- Type 505A.

Fuel.

See Flight Manual Section 2.4.

Engine Limits.

Max. power	43 HP (31.6 KW)
Max. permitted RPM	6800 RPM
Max. continuous power	43 HP (31.6 KW)
Max. continuous RPM	6400 RPM (For Propeller 1)
Max. continuous RPM	6800 RPM (For Propeller 2)

Propeller and Propeller Limits.

Propeller 1: MT-Propeller-Entwicklung MTV-24-M/158-16
Propeller 2: Technoflug Leichtflugzeugbau KS-1C-158-R-108

Airspeed Limits. (I.A.S.).

Maximum Airspeeds			
In Calm Air			
Never exceed (V_{NE})	134 kts	154 mph	248 km/hr
In Rough Air (V_{RA})	94 kts	109 mph	175 km/hr
Maneuvering (V_A)	94 kts	109 mph	175 km/hr
Aero Tow (V_T)	76 kts	87 mph	140 km/hr
Winch Tow (V_W)	76 kts	87 mph	140 km/hr
Min powerplant extension/ retraction (V_{POMIN})	48 kts	56 mph	90 km/hr
Max powerplant extension/ retraction (V_{POMAX})	59 kts	68 mph	110 km/hr

C.G. Range.

11.02 in. to 19.29 in. (280 mm to 490 mm) aft of datum.

Empty Weight C.G.

See Maintenance Manual Section 7, Page 6.

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Empty Weight.	1080 lbs (490 kg).
Datum.	Wing leading edge at the root rib.
Leveling Means.	See Maintenance Manual Section 7, Page 3.
Maximum Weight.	1565 lbs (710 kg).
Minimum Crew.	1 pilot
No. of Seats.	2-fixed seats with Seat 1 located 44.57 in. (1132 mm) forward of datum and Seat 2 located 1.38 in. (35 mm) behind datum.
Baggage.	Maximum 22 lb. (10 kg) at 31.89 in. (810 mm) aft of datum.
Fuel Capacity.	Total contents: Fuselage tank 8.7 U.S. gal (33 l) Wing tank 12.4 U.S. gal (47 l) * Non-Useable 0.53 U.S. gal (2 l) * Note: As standard only with Propeller 1.
Control Surface Movements.	Aileron Up 2.95 ± 0.31 in. (radius 8.46 in) Down 1.97 ± 0.20 in. The radius is the distance measured from the hingeline of the aileron at the inboard edge of the aileron. Elevator Up 4.02 ± 0.31 in. (radius 9.45 in.) Down 2.91 ± 0.24 in. The radius is the distance measured from the hingeline of the elevator at the inboard edge of the elevator. Rudder Right 9.25 ± 0.39 in. (radius 17.72 in.) Left 7.87 ± 0.20 in. The radius is the distance measured from the hingeline of the rudder at the base of the rudder. Airbrake At inner level Up 5.0 in.
Rated Load on Winch and Auto Tow (Weak Link).	Maximum 935 daN (2061 lbf.).
Serial Nos. Eligible.	As of Serial # 35001
Import Requirements.	a. To be considered eligible for operation in the United States, each aircraft manufactured under this type certificate must be accompanied by a certificate of airworthiness for export or certifying statement endorsed by the exporting foreign civil airworthiness authority which states (in the English language): This aircraft conforms to its U.S. type design (type certificate number G57EU) and is in a condition for safe operation. b. An airplane maintenance manual in compliance with JAR 22.1529 must be furnished before delivery of the first airplane or issuance of standard certificate of airworthiness whichever occurs later.

Certification Basis.

1) 14 CFR Sections 21.29, 21.183(c), and JAR-22 (Joint Airworthiness Requirements for Sailplanes and Powered Sailplanes), dated 27 June 1989 (Change 4 of the English original edition) including "Orange Papers" Amendment 22/90/1 dated 12 February 1991 and Amendment 22/92/1 for propeller 2.

Additional Requirements.
Standards for Structural Substantiation of Sailplane and Powered Sailplane Components Consisting of Glass or Carbon Fiber Reinforced Plastics, Issue May 1986.
Standards for the Substantiation of the Electrical System of Motorgliders, issue 22 November 1990.

Equivalent Level of Safety Findings.
JAR 22.51 (Take-off Speed)

Additional Requirements on Request of the Applicant.
NPA 22G-45, NPA 22D-55

2) Noise Requirements:
Lärmschutzforderungen für Luftfahrzeuge (LSL), Issue 1 January 1991.

3) Section 611(b) of the FAA Act of 1958.

Equipment.

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

Service Information.

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

Available Documents for GROB Model G 103 C TWIN III SL Series:

Flight Manual (POH) G 103 C TWIN III SL, Issue December 1991, and subsequent revisions, LBA approved.

Maintenance Manual G 103 C TWIN III SL, including "LBA Approved" Airworthiness Limitation Section.

Repair Manual G 103 C TWIN III SL

For Engine:
- Manual for ROTAX-Engine Type 505A
- Repair Manual for ROTAX-engine Type 501 and 505
- Spare Parts List for ROTAX Engine Type 505 - 505A, No. 744

Service Information.
(Continued)

For Propeller 1:

- Operation- and Installation Manual No. E-309 Mechanical Variable Pitch Propeller MTV-24-(),
- Overhaul Manual and Parts List No. E-310 for the Mechanical Variable Pitch Propeller

For Propeller 2:

- Operation and Installation Manual No. P3 for the Two Blade Composite Propellers with Fixed Pitch KS 1 G ()(), KS 1 C ()(), LBA approved.

Operating Manual for Tow Releases Series E-85 Nose Tow Release, LBA approved.

Operating Manual for Safety Two Releases Series Europa G 88 Safety Tow Release, LBA approved.

NOTES.

NOTE 1. The placards listed in Section 9 of the Maintenance Manual GROB G 103 C TWIN III SL must be displayed.

NOTE 2. Service Life Limited components: See Maintenance Manual Section 11.

NOTE 3. All components which are exposed to sunlight (with the exception of the areas for registration marks and colored warning paint) must have a white surface.

NOTE 4. Major structural repairs must be accomplished at FAA certified repair stations rated for composite aircraft structure work, in accordance with GROB repair methods approved by FAA.

NOTE 5. Motorgliders of this model are certified for flight in accordance with Visual Flight Rules (VFR day).

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