

Control Surface Movements.

Elevator Up and down 1.61 in \pm 0.197 in.
 measuring distance from control-surface axis 5.43 in.
 Rudder Right 4.61 in. \pm 0.35 in.
 Left 4.61 in. \pm 0.35 in.
 measuring distance from control-surface axis 10.63 in.
 Aileron at flap setting \emptyset Up 1.30 in. \pm 0.12 in.
 Down 0.55 in. \pm 0.08 in.
 measuring distance from control-surface axis 3.19 in.
 Flaps setting -2: 0.79 in. \pm 0.098 in.
 setting +2: 1.16 in. \pm 0.098 in.
 measuring distance from control-surface axis 5.55 in.
 Airbrakes
 Airbrake leading edge up 4.72 in \pm 0.197 in.
 measuring distance from airbrake-axis 4.72 in.

Weak Link for Towing.

1433 lb. (Airplane/Auto/Winch Tow)

Serial Numbers Eligible.

A Federal Republic of Germany Certificate of Airworthiness for Export endorsed as noted below under "Import Requirements" must be submitted for each individual glider for which application for standard airworthiness certification is made.

Import Requirements.

A U.S. Standard Airworthiness Certificate may be issued on the basis of a Certificate of Airworthiness for Export signed by a representative of the Federal Republic of Germany Luftfahrt Bundesamt (LBA), containing the following statement:

"The glider covered by this certificate has been examined, tested, and found to conform to the type design approved under FAA Type Certificate No. G38EU and is in condition for safe operation".

Mosquito Serial Nos. 1 through 92 are eligible for a U.S. Standard Airworthiness Certificate when modified in accordance with LBA-approved Glasflugel Technical Note 303-1 and other import requirements of this TCDS are satisfied.

Certification Basis.

FAR 21.29 and 21.23, effective February 1, 1965.
 Type Certificate issued on June 21, 1978.
 Application for Type Certificate June 3, 1976.

Validation Basis.

Type Certificate G38EU was issued pursuant to FAR 21.29(a)(ii) in validation of the Luftfahrt Bundesamt (LBA) certification of compliance with the Federal Republic of Germany "Airworthiness Requirements for Sailplanes", Edition: October 1975, which were found to provide a level of safety equivalent to the aforementioned FAA certification basis.

Equipment.

The basic required equipment as prescribed in the applicable airworthiness regulations (see Certification Basis) must be installed in the glider for standard airworthiness certification. In addition, and as listed on the Master Equipment List No. 1, LBA-approved February 24, 1978, the following equipment must be installed:

1. Instruments (non-cloud flying):
 - (a) Airspeed indicator marked as follows:

Red Radial and placard	13000 ft.	135 kts	155 mph
	24000 ft.	113 kts	130 mph
	36000 ft.	92 kts	106 mph
Yellow Arc		124 mph	155 mph
		108 kts	135 kts
Green Arc		58 mph	124 mph
		51 kts	108 kts
White Arc		48 mph	124 mph
		42 kts	108 kts
Yellow Mark		46 kts	53 mph
 - (b) Altimeter
 - (c) Magnetic Compass

2. Additional Instruments for cloud flying:
 - (a) Turn and bank indicator
 - (b) Variometer
3. "Mosquito" Flight and Service Manual approved by the LBA (West Germany) February 24, 1978, or later approved revisions.
4. Parachute, or a cushion with a thickness of 4 in. in compressed state.

NOTES

NOTE 1. Current weight and balance report including list of equipment in certificated empty weight, and loading instructions when necessary, must be provided for each glider at the time of the original airworthiness certification.

NOTE 2. The following information must be provided on placards installed in full view of the pilot:

- (1) "This glider must be operated in compliance with the operating limitations stated in the form of placards, markings, and manuals."
- (2) "Cloud flying: permitted only when the following instruments are installed:
 - (a) Airspeed indicator
 - (b) Altimeter
 - (c) Magnetic compass
 - (d) Turn and bank
 - (e) Variometer"
- (3) "The following acrobatic maneuvers are approved and the limitations, minimum equipment and procedures for acrobatic flight are given in the LBA, February 1978. approved Airplane Flight Manual or later revisions.

Spin: Entry speed VIN 37 mph (32 knots)
NMAX +3g to 4g

Note: Height loss on spin
80 - 100 m (260 - 330 ft.)
+ pull out

Inside Loop: Entry speed VIN 108 kts (124 mph)
NMAX : + 3g to + 4g

Stall Turn (Hammerhead): Entry speed 108 kts (124 mph)
NMAX : + 3g
V vertical climb 65 kts (75 mph)

Lazy Eight: Entry speed VIN = 97 kts (112 mph)
NMAX = 3.5g

Aerobatic maneuvers are only approved without water ballast and maximum weight 838 lb. (380 kg)

(4) "Night flying is prohibited"

(5) "Maneuvering speed	108 kts	124 mph
Airplane tow speed	81 kts	93 mph
Auto-winch tow speed	81 kts	93 mph
Stall speed-dive brakes closed	43 kts	50 mph
Maximum speed at positive flap settings	108 kts	124 mph"

(6) "Maximum weight: 992 lb"

(7) "Weak Link - Airplane/Auto/Winch Tow 1433 lb.

- NOTE 3. All external portions of the glider exposed to sunlight must be painted white.
Registration and competition numbers must be painted blue-gray or in any other light color.
- NOTE 4. Information essential for the proper operation, maintenance, inspection and repair of the glider is contained in the Glasflugel "Flight-and Service Manual, Sailplane Type Mosquito. Glasflugel should be consulted for all major repairs.
- NOTE 5. The following release-manuals belong to the Sailplane:
Operation and maintenance instruction for towing hook "Bugkupplung E 72 and E 75", Edition May 1975.

Operation and maintenance instruction for towing hook "Sonderkupplung S 72 and SH 72", Edition May 1975.

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