

**DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION**

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| G47EU |
| Revision 1 |
| SCHLEICHER |
| ASK 21 |
| February 8, 1984 |

TYPE CERTIFICATE DATA SHEET NO. G47EU

This data sheet which is a part of type certificate No. G47EU 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 Alexander Schleicher, Segelflugzeugbau
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Federal Republic of Germany

I. - Model ASK 21, approved 18 October, 1983.

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| Airspeed limits (I.A.S.) | Vne (Never exceed) | 174 mph | 280 km/h | 151 kts |
| | Vb (In rough air) | 124 mph | 200 km/h | 108 kts |
| | Va (Maneuvering) | 112 mph | 180 km/h | 97 kts |
| | Air Brakes | 174 mph | 280 km/h | 151 kts |
| | Max. speed aero tow | 112 mph | 180 km/h | 97 kts |
| | Max. speed winch tow | 93 mph | 150 km/h | 81 kts |

C.G. range 9.2 in. to 18.4 in. (234 mm to 469 mm) aft of datum.

Empty Weight C.G. See Section 6 of the Schleicher AKS 21 Flight Manual approved by the Luftfahrt-Bundesamt (LBA).

Datum Wing leading edge of the straight center part of the wing.

Leveling means Wedge on the rear top edge of fuselage 1000:52 horizontal.

Maximum weight 1320 lb (600 kg).

Minimum Crew One pilot.

No. of seats Two seats.
Front seat 46.6 + 49.2 in (1185 - 1250 mm) in front of datum
Rear seat 3.1 in (80 mm) in front of datum

Maximum Baggage 2 times 22 lb (2 x 10 kg) 7.9 in (200 mm) behind datum.

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| Control surface movements | Aileron | Up | 4.33 in ± 0.4 in (110 ± 10 mm) |
| | | Down | 1.8 in ± 0.2 in (45 ± 5 mm) |
| | | Distance from hingeline = 9.4 in (240 mm) | |
| | Elevator | Up | 3.5 in ± 0.2 in (90 ± 5 mm) |
| | | Down | 2.56 in ± 0.2 in (65 ± 5 mm) |
| | | Distance from hingeline = 14.8 in (230 mm) | |
| | Rudder | 7.1 ± 0.8 in. (180 ± 20 mm) | |
| | | Distance from hingeline = 14.8 in (375 mm) | |
| Airbrakes gap: min. = 1.0 max. = 1.3 in (25 - 35 mm) | | | |
| Tow release max. force: 26 lbs (12.5 daN) | | | |
| (both releases connected) | | | |

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| Rated Load for Winch and Aero Towing | Winch launch Airplane tow | 1870 lbs (850 daN) 1320 lbs (600 daN) |
| Serial Nos. eligible | See Import Requirements. | |
| Certification basis | FAR 21.29, effective 1 February, 1965 including Amendments 21-1 through 21-53. Airworthiness Requirements for Sailplanes and Powered Sailplanes LFSM dated 1975. Section 5(e)(6) of Advisory Circular 21.23-1, dated 12 January 1981. Joint Airworthiness Requirements for Sailplanes and Powered Sailplanes (JAR-22), dated 1 April 1980, including Amendment No. 1, dated 18 May 1981. Date of Application for Type Certificate: 1 October 1982. | |
| 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 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 G47EU and is in condition for safe operation." Serial numbers 21 131, 21 174 and 21 179 are eligible for a United States standard Airworthiness Certificate when modified in accordance with LBA APPROVED ALEXANDER SCHLEICHER ASK 21 Technical Note No. 9, dated 24 February 1983, and when other import requirements of this TCDS are satisfied. | |
| Equipment | The basic required equipment as prescribed in the applicable airworthiness regulations must be installed in the glider for certification. In addition the Schleicher ASK 21 Flight Manual, LBA-approved dated 1 March 1983 is required. | |
| Service Information | ALEXANDER SCHLEICHER ASK 21 Technical Information (Service Bulletins), published in the English language for U.S. Type Design that carry a statement "Approved by the LUFTFAHRT-BUNDESAMT" (LBA) may be interpreted as "F.A.A. approved". Available documents for the Model SCHLEICHER ASK 21: - Flight Manual dated 9 March 1983. - Instructions for continued airworthiness dated 9 March 1983. | |

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 original certification.
- NOTE 2. The placards listed in Section II of the LBA-approved SCHLEICHER ASK 21 Flight Manual must be displayed.
- NOTE 3. Section 5 of the SCHLEICHER ASK 21 Instructions for Continued Airworthiness, is FAA- approved and it specifies mandatory replacement times, and structural repair procedures. These airworthiness limitations may not be changed without FAA approval.
- NOTE 4. All external portions of the glider exposed to sunlight must be painted with white gelcoat. Wing tips, nose of fuselage and rudder may be painted with an additional color.
- NOTE 5. Information essential for the proper operation, maintenance and inspection of the glider is contained in the SCHLEICHER ASK-21 Flight Manual, and Instructions for Continued Airworthiness.

- NOTE 6. Major structural repairs must be accomplished at FAA certificated repair stations rated for composite aircraft structure work, in accordance with Schleicher repair methods or using other methods acceptable to the Administrator.
- NOTE 7. The approved flight and navigation instruments, for VFR-Day operations for the Model ASK-21 are listed on page 8 of the LBA-approved Schleicher ASK-21 Flight Manual dated 9 March 1983.

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