

**DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION**

G4EA
Revision No. 8
K & L Soaring, LLC
SGS 1-35
SGS 1-35C
SGS 1-35A
September 5, 2007

TYPE CERTIFICATE DATA SHEET NO. G4EA

This data sheet which is a part of type certificate No. G4EA 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 K & L Soaring, LLC
 1411 Beranek Rd.
 Cayuta, New York 14824

Type Certificate Holder Record Schweizer Aircraft Corporation
 County Airport
 P.O. Box 147
 Elmira, New York 14902

I - Model SGS 1-35, 1 PCLM, (Utility and High Performance) Approved April 25, 1974

II - Model SGS 1-35C, 1 PCLM (High Performance) Approved June 10, 1976 (Notes 1, 2, 3, 5, 6, 7)

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|-----------------|---------------------------------------|------------|-------------|
| Airspeed limits | Va (Maneuvering) | 88 m.p.h. | (77 knots) |
| (CAS) | Vlo (Gear Operating) | 139 m.p.h. | (121 knots) |
| | Vne (Glide or Dive) | 139 m.p.h. | (121 knots) |
| | Vta (Airplane tow, flaps -8° to +18°) | 99 m.p.h. | (86 knots) |
| | Vfe (Flaps Extended) | 99 m.p.h. | (86 knots) |
| | Vfu (Flaps 0° to -8°) | 139 m.p.h. | (121 knots) |

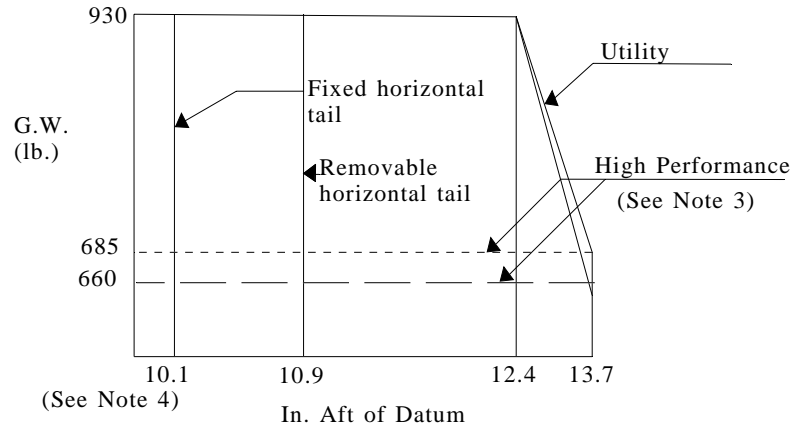
III - Model SGS 1-35A, 1 PCLM, (High Performance and Utility) Approved April 17, 1978, (Notes 1, 2, 3, 5, 8)

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|-----------------|--------------------------------------|------------|-------------|
| Airspeed limits | Va (Maneuvering) | 88 m.p.h. | (77 knots) |
| (CAS) | Vlo (Gear Operating) | 139 m.p.h. | (121 knots) |
| | Vne (Glide or Dive) | 139 m.p.h. | (121 knots) |
| | Vta (Airplane tow flaps -7° to +14°) | 99 m.p.h. | (86 knots) |
| | Vfe (Flaps Extended) | 99 m.p.h. | (86 knots) |
| | Vfu (Flaps 0° to -7°) | 139 m.p.h. | (121 knots) |

Specifications Pertinent to All Models

| | | | |
|-----------------------------------|--|------------------------|------------------------|
| Center of Gravity (C.G. Range) | | | |
| Category | Weight | Forward C.G. | Aft. C.G. |
| High Performance | 660 lb. & 685 lb. (NOTE 3) | *Sta. 75.28 in. (25%) | Sta. 78.90 in. (38.5%) |
| | | **Sta. 76.09 in. (28%) | Sta. 78.90 in. (38.5%) |
| | | *Sta. 75.28 in. (25%) | Sta. 77.56 in. (33.5%) |
| Utility | 930 lb. (Note 7) | **Sta. 76.09 in. (28%) | Sta. 77.56 in. (33.5%) |
| | *Limits for aircraft with fixed horizontal tail surfaces and double-spring trim system. | | |
| | **Limits for aircraft with demountable horizontal tail surfaces and either single-spring or double-spring trim system and 35192R integration system. | | |
| | Straight line variation between points given. | | |

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| Empty Weight C.G. Range | None. | | |
| Datum | Wing leading edge at root (Fuselage Sta. 65.16, Wing Sta. 11.4) | | |
| Mean Aerodynamic Chord | 26.8 in. (Leading edge of MAC 3.41 in. aft of wing leading edge at root.) | | |
| Leveling means | See aircraft weight and balance data in aircraft log book. | | |
| Maximum Weight | Utility Takeoff 930 lb. (Includes 161.5 lb. (19.3 gal.) in each water ballast tank.) (NOTE 7) Landing 685 lb. (NOTE 3.) High Performance Takeoff and Landing 685 lb. (NOTE 3.) | | |
| Water Ballast | Utility One tank each wing; 161.5 lb./tank (NOTE 7) High Performance None. | | |
| No. of Seats | 1 (-8.2) | | |
| Baggage | None. | | |
| Control Surface Movements (Min) | Elevator | 21° up | 18° down |
| | Rudder | 27° left | 27° right |
| | *Aileron | 26° up | 14° down |
| | Flap | 8° up | 80° down |
| | Flap | 7° up | 80° down (SGS 1-35A only) |
| | *Integration System Not Installed | | |

Aileron Travel with 35192R
Integration System Installed

| Flap Setting | Aileron Travel |
|--------------|-----------------|
| -8 | 28° up 0° down |
| 0 | 26° up 10° down |
| +6 | 18° up 12° down |

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| Serial No. Eligible | 1 and up (NOTE 6) |
| Certification Basis | FAR 21, effective February 1, 1965, including Amendment 21-1 through 21-38. FAR 23, effective February 1, 1965, including Amendment 23-1 through 23-12. Basic Glider Handbook dated 1962. Glider Type Certificate No. G4EA, dated April 25, 1974. Date of Application for Type Certificate, September 25, 1972. |
| Production basis | Production Certificate No. 101 |

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| Equipment: | <p>The basic equipment as prescribed in the applicable airworthiness regulations (See Certification Basis) must be installed in the glider for certification. In addition, the following items are required:</p> <p style="padding-left: 40px;">FAA Approved Sailplane Flight Manual, including:</p> <ol style="list-style-type: none"> 1. Supplement No. 1 - dated March 4, 1976 (NOTE 5) <li style="padding-left: 20px;">Supplement No. 2, Revision 1 - dated March 3, 1977 (NOTE 6) <li style="padding-left: 20px;">Supplement No. 3, - dated April 17, 1978 (NOTE 8) <li style="padding-left: 20px;">Supplement No. 4, - dated April 23, 1979 (NOTE 14) 2. Outside Air Temperature Gage (NOTE 7) 3. Revision 1 - dated October 11, 1974 (NOTE 9) 4. Revision 3 - dated September 5, 1975 (NOTE 11) 5. Revision 2 - dated April 30, 1975 (NOTE 10) 6. Revision 4 - dated January 9, 1978 (NOTE 12) 7. Revision 5 - dated October 16, 1978 (NOTE 13) |
| NOTE 1. | A suitable placard to cover the maximum and minimum pilot weights must be installed in full view of the pilot as determined from the manufacturer's weight and balance report. |
| NOTE 2. | All placards required in the Approved Sailplane Flight Manual must be installed in the appropriate locations. This sailplane must be operated as a High Performance or Utility Type Sailplane in compliance with the approved Sailplane Flight Manual. All markings and placards in this sailplane apply to operation as a High Performance sailplane. For Utility operation refer to Sailplane Flight Manual. |
| NOTE 3. | High performance category gross weight of 685 lb. is approved for aircraft having wing panels weighing 124 lb. each. Applicable to S/N 1 and subsequent. See Wt. & Balance Form (I-4636-2) for wing panel weight. Maximum landing weight of 685 lb. is approved for all aircraft. |
| NOTE 4. | C.G. forward limit, in both high performance and utility categories, of + 10.1 in. (25% MAC) is approved For aircraft with fixed horizontal tail surface and double spring trim system. |
| NOTE 5. | With Aileron Integration System installed, Schweizer Airplane Flight Manual Supplement No. 1 "Integrated Flap-Aileron Control System" required, dated March 4, 1976. |
| NOTE 6. | Model SGS 1-35C, Serial No. 59 and up, Schweizer Sailplane Flight Manual Supplement No. 2, (Revision 1 dated March 3, 1977, required). |
| NOTE 7. | Model SGS 1-35C - outside air temperature gage not required as the model has no provision for water ballast. Therefore eligible for high performance operation only. |
| NOTE 8. | Model SGS 1-35A - Serial No. 60 and up, Schweizer Sailplane Flight Manual Supplemental No. 3 required, dated April 17, 1978. |
| NOTE 9. | Model SGS 1-35 - added airspeed limits in knots, added to incorporate aft static system (Revision 1 to Sailplane Flight Manual, dated October 11, 1974, required). |
| NOTE 10. | Model SGS 1-35 - for aircraft with demountable horizontal tail surfaces, changed forward CG limit from Sta. 75.28 (25%) to Sta. 76.09 (28%) - (Revision 2 to Sailplane Flight Manual, dated April 30, 1975, demountable horizontal tail optional). |
| NOTE 11. | Model SGS 1-35 - added information pertinent to increase of gross weight to 685 lb. for high performance category (Revision 3 to Sailplane Flight Manual, dated September 5, 1975, information required). |
| NOTE 12. | Model SGS 1-35 - added indicated vs calibrated airspeed corrections for 35040G/35044G longer nose cap installation (Revision 4 to Sailplane Flight Manual, dated January 4, 1978, nose cap installation optional). |
| NOTE 13. | Model SGS 1-35 - added footnote <u>1</u> with references, relative to SGS 1-35 with fixed main landing gear (Revision 5 to Sailplane Flight Manual, dated October 16, 1978, fixed gear optional). |
| NOTE 14. | Model SGS 1-35 - recommended bail-out procedure w/(optional) forward hinged canopy Supplement No. 4 dated April 23, 1979). |

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