

CIVIL AVIATION AUTHORITY OF THE CZECH REPUBLIC

4521/61
Change 1
Schempp-Hirth výroba letadel
spol. s r. o.
O R L Í K - VT 16
18.11.2003

TYPE CERTIFICATE DATA SHEET No. 4521/61

This data sheet which is a part of Type Certificate No. 4521/61 prescribes conditions and limitations under which the product for which the type certificate was issued meets the airworthiness requirements of the Czech Republic.

Model	Application Date	Certification Date
O R L Í K - VT 16	-	30.09.1961

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Model ORLÍK - VT 16

I. General

- | | |
|-----------------------------|--|
| 1. Data Sheet No.: | 4521/61 |
| 2. Model: | ORLÍK - VT 16 |
| 3. Airworthiness category: | Normal |
| 4. Type Certificate Holder: | Schempp-Hirth výroba letadel spol. s r.o.
Pardubická 638
565 01 Choceň |
| 5. Manufacturer: | Orličan, n.p.
Choceň |
| 6. Application Date: | - |
| 7. Certificate Date: | 30.09.1961 |

II. Certification Basis

- | | |
|--------------------------------|--|
| 1. Certification Basis: | – British Civil Airworthiness Requirements, BCAR Section E, issued May 16, 1960
– Bauvorschriften für Segelflugzeuge (BSV) issued August 1939 |
| 2. Special Conditions: | None |
| 3. Exemptions: | None |
| 4. Equivalent Safety Findings: | None |

III. Technical Characteristics and Operational Limitations

1. Type Design Definition: List of drawings for O R L Í K - VT 16
2. Description: Wooden semi-shell design with plywood skin. The wing has plywood skin stabilised by styrofoam. Covering of control surfaces is made from fabrics. Floating elevator with trim tabs. Rigid undercarriage.
3. Equipment: Airspeed indicator up to 150 km/h
Altimeter
Variometer
Compass
Four-point safety harness
4. Dimensions: Span: 16,00 m
Length: 7,55 m
Height: 1,68 m
Wing Area: 12,8 m²
Aspect Ratio: 20
5. Tow hook: Nose tow release Dwg. No. VT16-Z4
6. Air Speeds: Never exceed speed V_{NE} 150 km/h
Manoeuvring speed V_A 120 km/h
Maximum speed on aerotow V_T 120 km/h
Rough air speed V_{RA} 120 km/h
7. Load factors: +4
-1,85
8. Weights: Maximum permitted take-off weight 345 kg
Maximum weight of all non-lifting parts 207 kg
9. Centre of Gravity Range: 26 – 48 % SAT
10. Datum: Root rib leading edge of the wing
11. Mean Aerodynamic Chord (MAC): 0,817 m
12. Leveling Means: Upper side of the rear part of the fuselage
13. Weak links: 500 kg
14. Minimum Flight Crew: 1
15. Number of seats 1

16. Control surface deflections:
- | | | |
|----------|------|------------|
| Ailerons | down | +15° -2° |
| | up | -33° -2° |
| Elevator | down | +11° ±0,5° |
| | up | -16° ±0,5° |
| Rudder | | ±30° -2° |
17. Wheels and Tyres:: Main wheel HP 4741-Z with 135 x 350 tyre.
18. Other Limitations: The sailplane is approved for Day VFR flight.

IV. Operating and Service Instructions

1. Flight manual and Operating and maintenance manual for sailplanes VT 16 Orlik and VT 116 Orlik 2 - in Czech language

V. Notes

None