

## AGÊNCIA NACIONAL DE AVIAÇÃO CIVIL - BRASIL

TYPE CERTIFICATE DATA SHEET № EP-8706

Type Certificate Holder:

**SCHEMPP-HIRTH FLUGZEUGBAU Gmbh** 

Postfach 1443 Krebenstrasse 25

D-7312

Kirchheim/Teck

**GERMANY** 

EP-8706-01

Sheet 01

DISCUS-b

September 2006

This data sheet, which is part of Type Certificate No. 8706, prescribes conditions and limitations under which the product, for which the Type Certificate was issued, meets the airworthiness requirements of the Brazilian Aeronautical Regulations.

## I – MODEL "DISCUS-b" (Utility Category) approved 19 June 1987.

AIRSPEED LIMITS (IAS) Never exceed (V<sub>NE</sub>) 250 km/h (135kt)

Maneuvering speed (V<sub>A</sub>) 200 km/h (108 kt)

Maximum permitted speeds:

in rough air (V<sub>B</sub>)
 on aerotow (V<sub>T</sub>)
 on winch tow (V<sub>W</sub>)
 with airbrakes extended
 200 km/h (108 kt)
 180 km/h (97 kt)
 150 km/h (81 kt)
 250 km/h (135 kt)

MAXIMUM WEIGHT 525 kg (1157 lb) with water ballast

240 kg (529 lb) of non-lifting parts

WEIGHT OF PILOT
Minimum: 70 kg (154.3 lb)
Maximum: 110 kg (243.5 lb)

(with parachute) Maximum: 110 kg (242.5 lb)

TRIM BALLAST If pilot's weight is less than minimum weight trim ballast must

be used - Refer to page 21 of the Brazilian Authority

approved "DISCUS a and b" Sailplane Flight manual.

WATER BALLAST Water integral tanks located in the wing leading edge, with

total capacity 184 kg.

**CG RANGE** 260 mm (10.24 in) to 400mm (15.75 in)

**DATUM** Wing leading edge at wing root rib.

**LEVELING MEANS** Slope of rear top surface of fuselage:

100 to 4.4 tail down.

Nº OF SEATS 1

MAXIMUM BAGGAGE 2.0 kg

**CONTROL SURFACES** Rudder to both sides:

 $160 \pm 20$ mm  $(6.30 \pm 0.79 in)$ 

SCHEMPP September 2006 EP-8706-01 Page 2/3

### **CONTROL SURFACES (Cont.)**

Measured 340mm (13.39 in) from hinge axis.

Elevator up  $47 \pm 5 \text{mm} (1.85 \pm 0.16 \text{ in})$ 

down  $47 \pm 5$ mm  $(1.85 \pm 0.16 in)$ 

Measured 157mm (6.18 in) from hinge axis.

Aileron up  $65 \pm 5$ mm (2.56  $\pm 0.20$  in)

down  $35 \pm 5$ mm  $(1.38 \pm 0.20 in)$ 

Measured 162mm (6.38 in) from hinge axis.

# AERO TOW AND WINCH LAUNCH MAXIMUM CABLE STRENGHT

680 kg (1 499 lb)

#### **CERTIFICATION BASIS**

Brazilian Requirements for Airworthiness Certification - RBHA 1330 and RBHA 1111/01 chapters 7 and 10, Amendment 1, effective 15 December 1976.

Type Certificate nº 8706 issued on 19 June 1987.

The application for Type Certification is dated 28 October 1986.

#### Validation:

The Type Certificate nº 8706 was issued in accordance with the RBHA 1111/01 article 10.2 in validation of the Type Certificate issued by LUFTFAHRT BUNDESAMT of Federal Republic of Germany in the basis of:

The Joint Airworthiness Requirements for Sailplanes and Powered Sailplanes (JAR 22) issued on 15 December 1982; and

The preliminary directions for the stress analysis of component for sailplanes and powered sailplanes built from glass fiber and carbon fiber reinforced plastics, issued January 1981.

#### **REQUIREMENTS FOR IMPORT**

A Brazilian Airworthiness Certificate may be issued in the basis of the Export Certificate of Airworthiness issued by LUFTFAHRT BUNDESAMT including the following statement: "The sailplane covered by this Certificate was inspected, tested and was found to comply with the Brazilian approved type design as defined by the ANAC Type Certificate nº 8706 and is in condition for safe operation".

## **EQUIPMENT REQUIRED**

The following equipments must be installed in the sailplane:

- 1. Instruments and basic equipments:
- a) Airspeed indicator;
- b) Altimeter;
- c) Variometer;
- d) Magnetic compass;
- e) Side slip indicator; and
- f) Safety harness.
- 2. Additional instruments for cloud flying:
- a) Artificial horizon.
- 3. Brazilian Flight Manual. (see NOTE 5)

SCHEMPP September 2006 EP-8706-01 Page 3/3

## NOTES:

NOTE 1 A weight and balance report listing all equipment included in the empty weight must be supplied with each sailplane, including instructions for weight and balance

calculations if applicable.

NOTE 2 For sailplane not supplied with instruments for cloud flying, the following placard

must be installed:

"THIS SAILPLANE IS NOT EQUIPPED FOR CLOUD FLYING".

NOTE 3 The following aerobatic maneuvers are approved, without water ballast, in

accordance with Flight Manual:

a) Inside loops;

b) Stalled turns;

c) Spins; and

d) Lazy eight.

NOTE 4 All external portions of the glider exposed to sunlight must be painted white except

the registration marks and optional anti-collision markings.

NOTE 5 The original issue of the Brazilian Flight Manual corresponds to the German LBA-

approved A.F.M. up to revision no 3, with exception of pages 16 and 17, which list

instruments as required by Brazilian Regulations.

CLÁUDIO PASSOS SIMÃO

Gerente Geral, Certificação de Produtos Aeronáuticos (Manager, Aeronautical Products Certification)