The United States of America Department of Transportation

Hederal Aviation Administration

GLIDER

Type Certificate

IMPORT

Number G13EU

This certificate issued to FLUG- UND FAHRZEUCNERKE AG, Altenrhein, Switzerland certifies that the type design for the following product with the operating limitations and conditions therefor as specified in the Tederal Aviation Regulations and the Type Certificate Data Sheet, meets the airworthiness requirements of Part 21.29 of the Tederal Aviation Regulations.

HBV "Diamant"
DIAMANT 16.5

This certificate, and the Type Certificate Data Sheet-which is a part hereof, shall remain in effect until surrendered, suspended, reveked, or a termination date is otherwise established by the Administrator of the Federal Aviation Administration.

Date of application: 6 June 1966

Date of issuance: 7 June 1967

HBV "Diamant"

Amended:

1 July 1969

DIAMANT 16.5

By direction of the Administrator.

(Signaluro).

Walter R Haldeman

(Gillo) -

Chief, Aircraft Certification Staff
Europe, Africa and Middle East Region

This certificate may be transferred if endorsed as provided on the reverse hereof.

Any alteration of this certificate and/or the Type Certificate Data Sheet is punishable by a fine of not exceeding \$1,000, or imprisonment not exceeding 3 years, or both.

FAA FORM 8110-9 (7-67) Superscores FAA FORM 331

Data Pertinent to all Models

Serial Nos. Eligible

The Swiss Federal Air Office Certificate of Airworthiness for Export endorsed as noted below under "Import Requirements" must be submitted for each individual glider for which application for certification is made.

Certification Basis

FAR 21.29 - FAR 21.23, FAA Basic Glider Criteria Handbook of 1962. Type Certificate No.Cl3EU issued June 7, 1967 Date of Application for Type Certificate: June 6, 1966

Import Requirements

A U.S. Airworthiness Certificate may be issued on the basis of a Certificate of Airworthiness for Export signed by a representative of the Swiss Federal Air Office, containing the following statement: "The glider covered by this certificate has been examined and found to comply with FAR 21.23, FAA Basic Glider Criteria Handbook of 1962 and conforms to Type Certificate No.Gl3EU."

Equipment

The basic required equipment as prescribed in the applicable airworthiness regulations (See Certification Basis) must be installed in the glider for certification. In addition, the following is required:

a) For Model Diamant 16.5: Swiss Federal Air Office approved Sailplane Flight and Maintenance Manual Report No.FV-818.

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

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

Model HBV "DIAMANT"

- a) "Cloud flying": Permitted only when the following instruments are installed:
 - 1. Sensitive Altimeter
 - 2. Variometer
 - 3. Compass
 - 4. Electric Turn and Bank
 - 5. Clock
- b) "No acrobatic maneuvers including spins approved".
- c) "When flying in rough air do not exceed 90 knots".
- d) "Night flying is prohibited".

Model DIAMANT 16.5

a) This sailplane must be operated in compliance with the Approved Sailplane Flight Manual.

Footnote:

All placards required in the Approved Sailplane Flight Manual must be installed in the appropriate locations.

- 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 colours.
- NOTE 4. Maintenance, inspections and repairs must be accomplished in accordance with Swiss Federal Air Office approved Flug- and Fahrzeugwerke AG, Flight and Maintenance Manual, Report No. FV-812 for the Model HBV DIAMANT and Report No.FV-818 for the Model DIAMANT 16.5; and Repair Manual, Report No. FV-816, for the Model HBV DIAMANT and Model DIAMANT 16.5 dated May 27, 1968.
- NOTE 5. Major repairs must be performed in accordance with repair methods approved by the Flug- and Fahrzeugwerke AG, Altenrhein.

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DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION

TYPE CERTIFICATE DATA SHEET NO.G13EU

G13EU Revision 1 FLUG- & FAHRZEUGWERKE AG HBV DIAMANT DIAMANT 16.5

July,

This Data Sheet which is a part of Type Certificate No.G13EU 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

Flug- und Fahrzeugwerke AG Altenrhein 9422 S T A A D

Switzerland

I Model HBV DIAMANT, approved June 7, 1967

Glide or dive 145 knots Air Speed Limits (LAS) Airplane tou 81 knots Auto-winch tow 81 knots

Spoilers extended 145 knots

C. C. Range

(+10") to (+15.4")

Datum

Wing leading edge at root rib

Leveling Means

Tangent on wing rib at root

Maximum Weight

660 lbs.

No. of Seats

1

Baggage

None

Control Surface Movements

UP 100 Elevator Down Right 30° 300 Left Rudder Aileron 90 UP 21° Flaps neutral UP 210 UP 170 Flaps up Down 150 Flaps down Down 100 15° UP Down Flaps

130 knots

II Model DIAMANT 16.5 approved 1 July, 1969 Model Diamant 16.5 same as MBV Diamant except for redesigned wing.

Glide or dive Air Speed Limits (IAS) Airplane tow

80 knets 80 knots Auto-winch tow 130 knots Spoilers extended

C.G. Range

(+9.5") to (+16.0")

Datum

Wing leading edge at root rib

Leveling Means

The fuselage reference line BL, which is parallel to a line defined by the following points:
Point "A" on the upper fuselage surface centerline at the

aft edge of the canopy, and point "B" 1 3/8 inches above the upper fuselage surface centerline 40 inches aft of point "A".

Maximum Weight

: 860 lbs Without water ballast With water ballast in the wings: 900 lbs

Number of seats

Baggage

None

Control surface movements

UP 10° 10° Elevator 30° 300 Left Right Rudder Aileron UP 21° UP 15° UP 23° Flaps neutral Down 15° 4° Down Flaps down Down Flaps up 12.50 150 Flaps Down