

FEDERAL AVIATION AGENCY

A8EU
DE HAVILLAND
DH 82A
February 7, 1966

TYPE CERTIFICATE DATA SHEET NO. A8EU

This data sheet which is a part of type certificate No. A8EU 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 Cliff Robertson
c/o Gadbois Business Management
9201 Wilshire Boulevard
Beverly Hills, California

I - De Havilland Model DH 82A 2POLB (Normal and Utility Category), approved February 7, 1966.

Engine	Bristol Siddeley Gipsy Major 1, or 1F, or 1C or 1J.
Fuel	Gipsy Major 1 - Minimum grade 69 Octane. Unleaded.
	Gipsy Major 1F - Minimum grade 69 Octane (Maximum lead content 3.33 milliliters (mls) Tetraethyl lead (TEL)/US gallon.
	Gipsy Major 1C - Minimum grade 77 Octane. Maximum lead content 3.33 mls. TEL/US gallon.
	Gipsy Major 1J - Minimum grade 80 Octane. Maximum lead content 3.33 mls. TEL/US gallon.
Engine limits	Gipsy Major 1 - Maximum continuous (Sea level) 2100 rpm (122 b.h.p.)
	and 1F Maximum take-off 2100 rpm (122 b.h.p.)
	Maximum overspeed, full throttle, (5 minutes limit) 2350 rpm.
	Gipsy Major 1C - Maximum continuous (Sea level) 2100 rpm (130 b.h.p.)
	Maximum take-off 2100 rpm (130 b.h.p.)
	Maximum overspeed, full throttle, (5 minutes limit) 2400 rpm.
	Gipsy Major 1J - Maximum continuous (Sea level) 2400 rpm (142 b.h.p.)
	Maximum take-off 2400 rpm (142 b.h.p.)
	Maximum overspeed, full throttle, (5 minutes limit) 2550 rpm.

Propellers

Gipsy Major 1, 1F and 1J

Propellers Fixed Pitch			
<u>Manufacturers</u>	<u>Drg. No.</u>	<u>Diam. (ft)</u>	<u>Pitch. (ft)</u>
WESTLAND	67104A/X4	7.00	4.77
"	67104A/X10	7.00	4.60
"	67104A/X12	7.00	5.18
"	67104A/X14	7.00	4.52
"	67575A/X1	7.00	4.71
"	84723A/X1	7.00	4.84
"	A66016/X4	7.00	4.58
"	A66938/X2	7.50	3.52
"	A104940/X2	7.42	3.52
"	A104940/X3	7.42	3.70
"	A104943/X3	7.17	3.62
"	C66969/X1	5.92	4.50
DE HAVILLAND	DH5212/D	6.17	5.42
"	DH5218/B	6.50	5.10

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Propellers (cont'd)

Gipsy Major 1, 1F and 1J (cont'd)

Propellers				
Fixed Pitch				
	<u>Manufacturers</u>	<u>Drg. No.</u>	Diam. (ft)	Pitch. (ft)
"		DH5220/B	6.33	5.08
"		DH5220/G	6.33	4.58
"		DH5220/H	6.33	4.92
"		DH5220/L	6.33	4.75
"		DH5220/M	6.33	4.50
"		DH5220/P	6.33	4.58
"		DH5232/A	6.50	5.10
"		DH5232/B	6.50	5.30
"		DH5234/A	6.75	5.08
"		DH5234/B	6.75	4.95
"		DH5234/J	6.75	4.40
	HORDERN RICHMOND	6.84	3.53	
	LANG	LA506/3	6.50	4.35
"		LA594/2	6.50	4.35
"		LA596	6.50	5.00
"		LA604	6.50	4.58
	AIRSCREW-WEYROC	Z973	6.23	5.50
"		Z978	5.85	5.50
"		Z8010	6.84	3.53
"		ZD5220/1	6.33	4.83

Gipsy Major 1C

WESTLAND	B104951/X2	6.75	5.02
DE HAVILLAND	DH5220/P	6.33	4.58
AIRSCREW-WEYROC	Z8010	6.84	3.53
WESTLAND	A66875/X4	6.50	5.84

Airspeed limits

Maximum Structural cruising 115 m.p.h. (100 knots)
 Never exceed 160 m.p.h. (139 knots)

C.G. range

(+7.0) to (+13.5) when anti-spinning strips are not fitted.
 When anti-spinning strips are fitted on each side of the rear fuselage
 (+7.0) to (+15.3) under ordinary flight conditions, (+7.0) to (+13.5)
 under instrument flight rule conditions.

Datum

Leading edge of lower mainplane at root.

Leveling means

Longitudinal: Straight-edge on the studs on the outside of the fuselage right hand top longeron.
 Lateral: Straight-edge clamped to underside of left hand and right hand top longerons in the front cockpit.

Maximum weight

1825 lbs. (Normal Category) 1770 lbs. (Utility Category)

No. of seats

2 (1 at +16.0, 1 at +46.0)

Maximum baggage

50 lb (+75.0)

Fuel capacity

or 23 U.S. gal. (1 tank in upper mainplane at -8.3),
 29 U.S. gal. (1 tank in upper mainplane at -8.3).
 12 U.S. gal. auxiliary (1 tank in fuselage at -11.66)

Oil capacity

2.5 U.S. gal. (-13.3)

Control surface movements

Elevator: Up $11 \frac{1}{2} \pm 3 \frac{3}{4}$ inches at T.E.
 Down $8 \pm 1 \frac{1}{2}$ inch at T.E.
 Rudder: $14 \frac{1}{2}$ inches left and right at T.E.
 Ailerons: 8 inches up at T.E.
 1 $\frac{1}{4}$ inches down at T.E.
 Slat travel: $3 \frac{1}{4}$ inches

Certification basis	FAR 21.29 (FAA letter August 19, 1965) Type Certificate No. A8EU issued February 7, 1966. Date of Application for Type Certificate December 11, 1965.												
Import Requirements	A U.S. Airworthiness Certificate may be issued on the basis of a United Kingdom Certificate of Airworthiness for Export in the Transport Category (Passengers) signed by a representative of the Ministry of Aviation containing the following statement: "The airplane covered by this certificate has been examined, and found to meet the airworthiness requirements of the United Kingdom and conforms to Type Certificate No. A8EU."												
Serial Nos. eligible	A United Kingdom Certificate of Airworthiness for Export endorsed as noted under Import Requirements, must be submitted for each individual aircraft for which application for U.S. Airworthiness Certificate is made. The U.K Certificate of Airworthiness for Export is valid as a basis for issuance of the U.S. airworthiness certificate for a period of 60 days. If application for U.S. certification is made after 60 days from the date of issuance of the U.K. export certificate, this certificate must be reissued.												
Equipment	The basic required equipment as prescribed in the applicable airworthiness regulations (see certification basis) must be installed in the aircraft for certification.												
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 aircraft at the time of original certification.												
NOTE 2.	<p>The following placards must be displayed:</p> <p>(1) "Speed must not exceed 139 knots (160 m.p.h.)</p> <p>(2) Engine limitations:</p> <p>(a) Gipsy Major 1 or 1F. "Normal full r.p.m. 2100 Max. permissible for not more than 5 mins. 2350 r.p.m."</p> <p>(b) Gipsy Major 1C. "Normal full r.p.m. 2100 Max. permissible for not more than 5 mins. 2400 r.p.m."</p> <p>(c) Gipsy Major 1J. "Normal full r.p.m. 2400 Max. permissible for not more than 5 mins. 2550 r.p.m."</p> <p>(3) "Smoking prohibited."</p> <p>(4) "Normal Category Maximum design weight 1825 lbs. No acrobatic maneuvers including spins approved."</p> <p>(5) "Utility Category Maximum design weight 1770 lbs. No acrobatic maneuvers approved except those listed below</p> <table> <tr> <th><u>Maneuver</u></th><th><u>Entry Speed</u></th></tr> <tr> <td>Chandelles</td><td>120 m.p.h. (105 knots)</td></tr> <tr> <td>Lazy Eights</td><td>120 m.p.h. (105 knots)</td></tr> <tr> <td>Steep Turns</td><td>92 m.p.h. (80 knots)</td></tr> <tr> <td>Stalls (except whip stalls)</td><td>Slow deceleration</td></tr> <tr> <td>Spins</td><td>Slow deceleration</td></tr> </table>	<u>Maneuver</u>	<u>Entry Speed</u>	Chandelles	120 m.p.h. (105 knots)	Lazy Eights	120 m.p.h. (105 knots)	Steep Turns	92 m.p.h. (80 knots)	Stalls (except whip stalls)	Slow deceleration	Spins	Slow deceleration
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Stalls (except whip stalls)	Slow deceleration												
Spins	Slow deceleration												
NOTE 3.	The airplane must be assembled in accordance with the rigging instructions of the De Havilland Maintenance Manual.												
NOTE 4.	The airplane must be flight checked after assembly.												

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