

DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

A26NM
Revision 7

DeHavilland
DHC-1B-2-S3
DHC-1B-2-S5

June 18, 2014

TYPE CERTIFICATE DATA SHEET A26NM

This data sheet, which is a part of Type Certificate no. A26NM, prescribes conditions and limitations under which the product for which the type certificate was issued meets the airworthiness requirements of the Federal Air Regulations.

Type Certificate Holder: William E. Lamon
3301 Videra Street
Eugene, Oregon 97405

I - Model DHC-1B-2-S3 (Normal and Acrobatic Category), Approved February 29, 1988 and Model DHC-1B-2-S5 (Normal and Acrobatic Category), Approved June 30, 1989.

Engine: DeHavilland Gipsy Major 10 Mk.1-3
(See Note 5)

Fuel: 80 Minimum Octane Aviation Gasoline

| Engine Limits: | RPM | BOOST | HP |
|------------------------------------|------|---------------|------------|
| Max takeoff and climbing (60 min.) | 2400 | Full Throttle | 142 (S.L.) |
| Max continuous (RICH MIXTURE) | 2300 | -1.5 in. Hg. | 138 (S.L.) |
| (WEAK MIXTURE) | 2100 | -4.0 in. Hg. | |
| Max for diving (20 sec.) | 2675 | Full Throttle | |

| | | | |
|-------------|------------------------|---------------------------|-----------------|
| Propellers: | DeHavilland CP-3298-18 | Diameter (ft) 6.75 + 0.01 | Pitch (ft) 5.01 |
| | Fairey Reed 94103A/X11 | Diameter (ft) 6.75 + 0.01 | Pitch (ft) 5.01 |
| | Fairey Reed A66753/X1 | Diameter (ft) 6.75 + 0.01 | Pitch (ft) 5.01 |

Airspeed Limits (TIAS): Never Exceed 174 knots (200 m.p.h.)
Flaps Extended 74 knots (85 m.p.h.)

C.G. Range: (-8.91 inches) to (-0.72 inches)
Distances shown are minus (-) ahead and plus (+) behind the datum.

Empty Weight C.G. Range: None

Maximum Weight: 2000 lb.

No. of Seats: 2 (1 at -0.75 inches and 1 at +32.6 inches)

Maximum Baggage: Refer to Weight and Balance Report

Fuel Capacity: 31 U.S. Gallons

Oil Capacity: 12½ U.S. Quarts

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|-------------------|-------------------------------------------|---------|----------------------------|
| Control Surfaces: | Ailerons | Up | $21^{\circ} \pm 2^{\circ}$ |
| | | Down | $16^{\circ} \pm 2^{\circ}$ |
| | Flaps | Takeoff | $15^{\circ} \pm 3^{\circ}$ |
| | | Landing | $30^{\circ} \pm 3^{\circ}$ |
| | Elevators | Up | $35^{\circ} \pm 2^{\circ}$ |
| | | Down | $15^{\circ} \pm 2^{\circ}$ |
| | Rudder - Measured from the center line | Left | $27^{\circ} \pm 2^{\circ}$ |
| | | Right | $27^{\circ} \pm 2^{\circ}$ |

Serial Numbers Eligible: For Model DHC-1B-2-S3 (Normal and Acrobatic Category), 126/164, 131/169, and 135-173.

For Model DHC-1B-2-S5 (Normal and Acrobatic Category), 176/214, 199/237, 209/247, and 212-250.

Other serial numbers may be added by amending Type Certificate No. A26NM.

DATA PERTAINING TO ALL MODELS:

Datum: 42 inches aft of engine firewall

Leveling Means: Top of canopy rails.

Import Requirements: After February 29, 1988, a U.S. Airworthiness Certificate may be issued on the basis of a Canadian Certificate of Airworthiness for Export in the General Purpose Category signed by a representative of the Ministry of Transport containing the following statement: "The aircraft covered by this certificate has been examined, tested, and found to meet the airworthiness requirements of Canada current at the time of first application for a Canadian Certificate of Airworthiness in respect of a DHC-1 Chipmunk aircraft and conforms to Type Certificate No. A26NM."

Certification Basis: FAR 21.29 Aircraft presently registered in the United States must meet the requirements transmitted to Mr. W. E. Lamon by FAA ANM-100S letter dated January 4, 1989, to be eligible for a U.S. Standard Airworthiness Certificate. Type Certificate no. A26NM issued February 29, 1988
Date of Application for Type Certificate: April 6, 1987

A Canadian Certificate of Airworthiness for Export endorsed as noted under Import Requirements, must be submitted for each individual aircraft for which application for a U.S. Standard Airworthiness Certificate is made.

The Canadian Certificate of Airworthiness for Export is valid as a basis for issuance of the U.S. Airworthiness Certificate for a period of 30 days. If application for U.S. Certification is made after 30 days from the date of issuance of the Canadian Export Certificate, this certificate must be reissued.

Equipment: The basic equipment required as prescribed in the applicable airworthiness regulations (see certificate basis) must be installed in the airplane for certification.

| <u>Propellers</u> | <u>WEIGHT</u> | <u>ARM</u> |
|-----------------------------------------------------------------|---------------|------------|
| DeHavilland Fixed Pitch Wood Propeller, Drawing No. CP-3298-18 | 14 lb. | (-90) |
| Fairey Reed Fixed Pitch Metal Propeller, Drawing No. 94103A/X11 | 29.7 lb. | (-90) |
| <u>Engine Accessories</u> | | |
| Starter, Rotax Part No. CO 225 | 18 lb. | (-45) |
| Generator, Rotax Part No. B-1804 | 11 lb. | (-48) |
| Vacuum Pump, Plessey Part No. B-3X Mk 1 | 5 lb. | (-54) |

| <u>Landing Gear</u> | <u>WEIGHT</u> | <u>ARM</u> |
|--------------------------------------|---------------|------------|
| Wheels, Part No. 01460 (61) | 6 lb. | (+22) |
| Tires, Goodyear 6.00 x 6 | 5 lb. | (+22) |
| Tube, Goodyear 6.00 x 6 | 2 lb. | (+22) |
| <u>Tail Wheel</u> | | |
| Part No. 0071 | 2 lb. | (+186) |
| Tire Goodyear 2.50 x 4 | 2 lb. | (+186) |
| Tube Goodyear 2.50 x 4 | 1 lb. | (+186) |
| <u>Electrical Equipment</u> | | |
| Batteries 2 of 12 v 25AH (lead acid) | 43 lb. | (+78) |

NOTE 1. For a complete list of equipment, weights and moment arms, refer to Weight and Balance Report. Values in inches shown in parenthesis after each item represent horizontal arms to the C.G. of the items measured. (Minus (-) ahead, Plus (+) aft of the datum)

The current Weight and Balance Report, including list of equipment included in certificated empty weight and approved loading instructions must be carried in each aircraft.

NOTE 2. The following placards must be displayed in front and in clear view of both pilots:

(a) Airspeed Limits:

"Never Exceed 174 knots (200 m.p.h.) TIAS
Flaps Extended 74 knots (85 m.p.h.) TIAS"

(b) Engine Limits:

| | RPM | BOOST | HP |
|------------------------------------|------|---------------|------------|
| Max takeoff and climbing (60 min.) | 2400 | Full Throttle | 142 (S.L.) |
| Max continuous (RICH MIXTURE) | 2300 | -1.5 in. Hg. | 138 (S.L.) |
| (WEAK MIXTURE) | 2100 | -4.0 in. Hg. | |
| Max for diving (20 sec.) | 2675 | Full Throttle | |

(c) "Takeoff and Land with Canopy Open" (This placard is not required if a break-out panel is provided in the sliding canopy.)

(d) "This airplane must be operated as a normal or acrobatic category airplane in compliance with the operating limitations stated in the form of placards, markings and manuals.

ACROBATIC CATEGORY

| <u>Maneuver</u> | Recommended Entry <u>Speed (Kts-IAS)</u> |
|---------------------------|---------------------------------------------|
| Roll | 110 |
| Loop | 120 |
| Half Roll off top of loop | 135 |
| Chandelle | 120 |
| Lazy Eights | Normal Cruise Speed |
| Stall | Slow Deceleration |

Flight into known icing prohibited. This airplane is certified for the following flight operations as of date of original airworthiness certificate.

DAY - NIGHT - VFR - IFR" (as applicable)

NOTE 3 Acrobatics, including spinning as specified in the Canadian Ministry of Transport approved Flight Manual for the Models DHC-1B-2-S3 and DHC-1B-2-S5, must be performed in accordance with the operating limitations specified in the Flight Manual. Refer to the Flight Manual for spin recovery procedures.

- NOTE 4 The aircraft must be operated in compliance with the Canadian Ministry of Transport approved Flight Manual, EO 05-10B-1, dated December 15, 1966, and with FAA Supplement dated February 29, 1988 (Noise), or later FAA approved revision.
- NOTE 5 The Gipsy Major 10 Mk. 2-1 Engine is interchangeable with, and may be substituted for, the Gipsy Major 10 Mk. 1-3 and C1G Engines with no change in engine limits. The Gipsy Major 10 Mk. 1-3A engine is interchangeable with the Gipsy Major 10 Mk. 1-3 engine.
- NOTE 6 Model DHC-1B-2-S3, serial number 126/164, incorporates aluminum wing and flap skins under Canadian One-Only Approval No. P77/065, dated September 8, 1977.
- NOTE 7 The aircraft must be maintained in accordance with the Royal Canadian Air Force "Description and Maintenance Instructions No. EO 05-10B-2," revised April 1, 1958, and "Structural Repair Manual No. EO 05-10B-3," dated January 15, 1957.
- NOTE 8 Night operations require an approved strobe light installation.

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