

**DEPARTMENT OF TRANSPORTATION  
FEDERAL AVIATION ADMINISTRATION**

A44EU  
Revision 2  
Rust (de Havilland)  
DHC-1 Chipmunk  
Mk 21  
Mk 22  
Mk 22A

July 10, 2014

**TYPE CERTIFICATE DATA SHEET NO. A44EU**

This data sheet which is a part of Type Certificate No. A44EU 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                      Robert E. Rust, Jr.  
2382 Highway 92 South  
Fayetteville, Georgia 30215

Type Certificate Holder Record              Robert E. Rust transferred TC A44EU to Robert E. Rust, Jr. September 30, 2005

**I. Model DHC-1 Chipmunk Mk 21, 2 PCLM, (Normal and Utility Category), approved November 18, 1977.**  
**Model DHC-1 Chipmunk Mk 22A, 2 PCLM, (Normal and Utility Category), approved November 18, 1977.**

(Model names were misidentified in Revisions 0 and 1 of this data sheet and in airworthiness directives as DH.C1 Chipmunk 21 and DH.C1 Chipmunk 21A.)

Engine	Rolls-Royce (1971) Ltd. Gipsy Major 10 MK2																														
Fuel	Minimum grade 80 octane (maximum lead content 4.58 milliliters TEL/US gallon)																														
Engine limits	Maximum takeoff 2,550 rpm (145 bhp) (5 minutes limit) full throttle. Maximum continuous (sea level) 2400 rpm (142 bhp) Maximum weak mixture, 3000 ft. and above (26 in Hg) 2300 rpm (120 bhp) Maximum overspeed (20 seconds), full throttle 2675 rpm																														
Propellers	<table border="0"> <tr> <td>Fairey Aviation Ltd.</td> <td>A66753/X1</td> <td>Diam.</td> <td>(ft.)</td> <td>6.75</td> </tr> <tr> <td></td> <td></td> <td>Pitch</td> <td>(ft.)</td> <td>5.01</td> </tr> <tr> <td></td> <td>A67889</td> <td>Diam.</td> <td>(ft.)</td> <td>6.75</td> </tr> <tr> <td></td> <td></td> <td>Pitch</td> <td>(ft.)</td> <td>5.01</td> </tr> <tr> <td></td> <td>D104967/X1</td> <td>Diam.</td> <td>(ft.)</td> <td>6.75</td> </tr> <tr> <td></td> <td></td> <td>Pitch</td> <td>(ft.)</td> <td>5.01</td> </tr> </table>	Fairey Aviation Ltd.	A66753/X1	Diam.	(ft.)	6.75			Pitch	(ft.)	5.01		A67889	Diam.	(ft.)	6.75			Pitch	(ft.)	5.01		D104967/X1	Diam.	(ft.)	6.75			Pitch	(ft.)	5.01
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Airspeed limits (IAS)	Never exceed                                      155 knots (179 mph) Maneuvering speed                                      117 knots (135 mph) Wing flaps shall not be extended above 93 knots (107 mph) nor beyond 15° position at greater than 71 knots (82 mph).																														
C.G. range	(-6.8 inches) to (-0.77 inches) Distances shown are plus (+) <u>behind</u> and minus (-) ahead of the datum.																														
Empty weight C.G. range	None																														
Maximum weight	2100 lb.																														
No. of seats	2 (1 at 0.0 inches and 1 at +33.6 inches)																														

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Maximum baggage	40 lb. in fuselage locker at +50.0 inches			
Fuel capacity	28.8 U.S. gallons (24 Imp gallons) at -12.0 inches, one tank of 14.4 U.S. gallons (12 Imp gallons) in each wing			
Oil capacity	2.4 U.S. gallons (2.0 Imp gallons) at -45.6 inches.			
Control surface	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	$38^{\circ} \pm 2^{\circ}$	Down $15^{\circ} \pm 2^{\circ}$
	Rudder		$31^{\circ} \pm 2^{\circ}$	Left and right of center line

## **II - Model DHC-1 Chipmunk Mk 22, 2 PCLM, (Normal and Utility Category), Approved November 18, 1977.**

(Model name was misidentified in Revisions 0 and 1 of this data sheet and in airworthiness directives as DH.C1 Chipmunk 22.)

This aircraft is identical to the DHC-1 Chipmunk Mk 21 and Chipmunk Mk 22A except for revised fuel capacity as follows:

Fuel capacity	21.6 U.S. gallons (18 Imp gallons) at -12.0 inches, one tank of 10.8 U.S. gallons (9 Imp gallons) in each wing
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### **DATA PERTINENT TO ALL MODELS**

Datum	42.0 inches aft of the firewall measured on the horizontal datum line.
Leveling means	Longitudinal: Straight-edge across two pegs at port side of front cockpit 7.0 inches below top of longeron and 6.0 inches and 42.0 inches aft of the firewall, or when pegs not fitted, use top surface of either canopy rail. Lateral: Straight edge across canopy rails at front cockpit.
Import requirements	A U.S. Airworthiness Certificate may be issued on the basis of a United Kingdom Certificate of Airworthiness for Export in the General Purpose Category signed by a representative of the Civil Aviation Authority containing the following statement: "The aircraft covered by this certificate has been examined, tested, and found to meet the airworthiness requirements of the United Kingdom current at the time of first application for a United Kingdom Certificate of Airworthiness in respect of a DHC-1 Chipmunk aircraft and conforms to U.S. Type Certificate No. A44EU.
Certification basis	14 CFR Part 21.29 (FAA letter of January 19, 1977). Type Certificate No. A44EU issued November 18, 1977. Date of application for Type Certificate, August 23, 1977.
Serial Nos. eligible	C1-0198, C1-0281, C1-0390, C1-0482, C1-0611, C1-0615, C1-0710, C1-0713, C1-0714, C1-0748, C1-0824, C1-0895, and C1-0907.  Other serial numbers will only be eligible by amending type certificate A44EU through the FAA Atlanta Aircraft Certification Office. Serial numbers which could potentially be added are C1-001 through C1-1014 (all of United Kingdom manufacture only).  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 a U.S. Airworthiness Certificate is made. The UK 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 UK 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.

<u>Engine Accessories</u>		<u>Weight</u>	<u>Arm</u>
Starter*, Type S7 MK2 (Coffman) Plessey Part No. CK2821, (Post Modification H.22)		20 lb.	(-45)
or			
Starter*, electric, Rotax Part No. CO 225 (Post Modification H85)		18 lb.	(-45)
<i>*Optional equipment alternative to hand starting.</i>			
Generator, Rotax Part No. B.1804		11 lb.	(-48)
Vacuum pump, Plessey Part No. B3X MK1		5 lb.	(-54)
<u>Landing Gear</u>			
Wheels, Dunlop Part No. AH9389 or Dunlop Part No. AH51981 (post modification H260)	6 lb.		(+22)
Tires, Dunlop Part No. 1A-TR19 size 6.00 -6 1/2, or Dunlop Part No. DB 3065 or			
DN 3065 size 6.00 - 6 1/2	5 lb.		(+22)
Tube Dunlop Part No. 1A-3	2 lb.		(+22)
Hydraulic Brakes, Dunlop Part No. AH9220	2 lb.		(+22)
Tail Wheel, Dunlop Part No. AHO 5047	2 lb.		(+186)
or Dunlop Part No. AH9869	2 lb.		(+186)
Tire, Dunlop Part No. WP-R11 size 3.00 - 3 1/2	2 lb.		(+186)
Tube, Dunlop Part No. WP-2	1 lb.		(+186)
<u>Electrical Equipment</u>			
Batteries 2 of 12 v 15AH (lead acid)	43 lb.		(+78)

Service Information                      Service bulletins, structural repair manuals, vendor manuals, AFMs, and overhaul and maintenance manuals, which contain a statement that the document is approved by the United Kingdom Civil Aviation Authority, are accepted by the FAA and are considered FAA approved. (These approvals pertain to the design data only).

- 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                      The following placards must be displayed:
- Those placards which are required to be displayed in accordance with the UK Civil Aviation Authority Flight Manual for the DHC-1 Chipmunk Mk 21 (or DHC-1 Chipmunk Mk 22 or DHC-1 Chipmunk Mk 22A when applicable).
- NOTE 3                      The safe fatigue lives determined in accordance with the aircraft manufacturer's (de Havilland Support Limited) Technical News Sheet CT(C1) No. 138 Issue 6 must not be exceeded.
- NOTE 4                      Aerobatics, including spinning, as specified in the UK Civil Aviation Authority approved Flight Manual may only be performed when Modification H.231 is installed (for spin recovery refer to the Flight Manual).
- NOTE 5                      The aircraft must be operated in compliance with the UK Civil Aviation Authority approved Flight Manual for DHC-1 Chipmunk Mk 21 (or DHC-1 Chipmunk Mk 22 or DHC-1 Chipmunk Mk 22A) with FAA Supplement dated November 18, 1977 (Noise).
- NOTE 6                      When a propeller of other than 6.75 to 6.76 feet diameter and other than 5.01 feet pitch is fitted, the performance data in the Flight Manual is not valid.
- NOTE 7                      The aircraft must be assembled in accordance with the instructions in the de Havilland Chipmunk Maintenance and Repair Manual Publication C.M.R.-1 and must be flight checked after assembly.

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