COMMONWEALTH OF AUSTRALIA

CIVIL AVIATION
SAFETY AUTHORITY
AUSTRALIA

CERTIFICATE OF TYPE APPROVAL

Number: 154-2 Issue 3

Manufacturer: Skyfox Aviation Ltd
P.O. Box 910
Caloundra Qld 4551
Australia

This certifies that approval has been granted in accordance with Regulation 22 of the Civil Aviation Regulations for the model CA25 and CA25N aeroplanes.

This certificate is valid until suspended or cancelled by the Civil Aviation Safety Authority. The basis of certification is as prescribed in Certificate of Type Approval Data Sheet Number 154-2 issued by this Authority.

CIVIL AVIATION SAFETY AUTHORITY AUSTRALIA

Neville J. Probert
Delegate of the Authority
Date of Issue: 9 January 1998

COMMONWEALTH OF AUSTRALIA

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No.: 154-2
Revision: 5
Aircraft:
Skyfox Aviation
CA25
CA25N
Date: 9 January 1998

CERTIFICATE OF TYPE APPROVAL DATA SHEET

This data sheet, which is part of the Certificate of Type Approval No.154-2, lists the conditions and limitations under which the aircraft for which the Certificate of Type Approval was issued meets the airworthiness requirements of the Civil Aviation Safety Authority.

Certificate of Approval Holder Skyfox Aviation Ltd
PO Box 910
Caloundra Qld 4551
Australia

I Model CA25 (Normal Category)

Approved 2 June 1993

Engine	Bombardier ROTAX Model 912 A1, 912A2 or 912A3
Engine Limits	Take-off 5800 rpm (81 hp - 5 minutes) Maximum continuous 5500 rpm (79hp)
Fuel	95 RON minimum automotive fuel 100LL aviation gasoline
Propeller	Holford Propulsion Systems/Allsize Aviation Model CHP1-1, fixed pitch wooden propeller, per drawing CHP1-1 Issue 1. Diameter 1727 mm Pitch 15.5° at 1219 mm
Propeller Limits	2552 rpm maximum (5800 engine rpm, reduction drive ratio 2.273:1)

Airspeed Limits	Never exceed	93 KIAS
	Normal operating	86 KIAS
	Manoeuvring	80 KIAS
Centre of Gravity Limits	Forward Limit: 228 mm aft of datum (21.4% MAC) at 350 kg 277 mm aft of datum (26.0% MAC) at 520 kg Variation is linear between 350 kg and 520 kg Aft Limit: 320 mm aft of datum (30.0% MAC) at all weights	
Datum	Wing leading edge	
MAC	1067 mm	
Levelling Means	Longitudinal:	Spirit level placed along lower door sill side beam of fuselage.
	Lateral:	Spirit level placed across door sill side beams of fuselage.
Maximum Weight	Take-off	520 kg
	Landing	520 kg
No. of Seats	2 at 396 mm aft of datum	
Maximum Baggage in Locker	10 kg	
Minimum Pilot Weight (single occupant)	55 kg	
Fuel Capacity	55.8 litres total (26 litres per wing tank and 3.8 litres in collector tank, ungauged). 51.8 litres usable	
Minimum fuel for Take-off	10 litres per wing tank	
Oil Capacity	3 litres, (2 litres minimum)	

Control Surface Deflections	Elevator	Up 39° ± 1° Down 20° ± 1°
	Aileron	Up 13° ± 1° Down 17° ± 1°
	Rudder	27° ± 1° Left and Right
Crosswind Component	Maximum for take-off and landing 15 knots	
Types of Operation	Day VFR only Flight in known icing conditions prohibited.	
Maximum Operating Temperature	41°C.	
Serial Numbers Eligible	CA25 001 and up. Also CA22A model aircraft will be eligible when modified in accordance with Skyfox Aviation Engineering Order No. SF 35 Issue 1 dated 7 July 1993 or higher. This EO requires as part of its embodiment that a replacement data plate be afixed describing the converted aircraft as a CA22A/25.	

II **Model CA25N** (Normal Category)

Approved 7 September 1995. As per CA25 except for fitment of nose wheel and as follows:

Centre of Gravity Limits	Forward Limit: 230mm aft of datum (22.5% MAC) at 350 kg 280 mm aft of datum (26.2% MAC) at 520 kg Variation is linear between 350 kg and 520 kg Aft Limit: 320 mm aft of datum (30.0% MAC) at all weights
Crosswind Component	Maximum for take-off and landing 20 knots.
Maximum Operating Altitude	10,000 feet density altitude.
Maximum Operating Temperature	39°C.

Serial Numbers Eligible	CA25N011 and up. Serial number CA25003 when modified in accordance with C.W. Whitney EO 1380 dated 4/10/95.

Data Pertinent to all Models

Certification Basis

Civil Aviation Regulations (CAR) 21 and 22 with a design standard of JAR-VLA at Amendment VLA/92/1 dated 1/1/92. Derogation of compliance with JAR-VLA 677(a) has been accepted (refer letter F93-486 dated 31 May 1993).

For CA25N, as above except for time limited variation given for engine exhaust materials against JAR-VLA paragraphs VLA-1123 refer CASA letter F95/0989 dated 7 September 1995, and JAR-VLA paragraph VLA-1093 replaced by FAR 23.1093 Amendement 23-34.

Noise certification, compliance with ICAO Annex 16 Volume 1 Chapter 10 and FAR 36 Appendix G has been demonstrated.

Time-lifed Components

The following components have a limited fatigue life and must be retired from service on or before the times shown below:

For CA25: refer to Airworthiness Directive CAO 105 AD/CA25/1.

For CA25N:

Component	Maximum time in service
Wing Front and Rear Spars	4,000 hours
Wing Lift Struts and Carry-Through Structure	4,000 hours
Horizontal Stabiliser Spar	4,000 hours
All other Primary Structure	8,000 hours

Note: These life limits are an interim estimate only, and are currently under critical review.

Production Basis

Certificate of Approval No. 3315 (for manufacture)

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