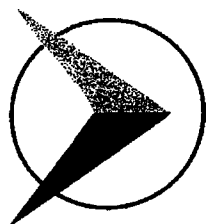


COMMONWEALTH OF AUSTRALIA



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

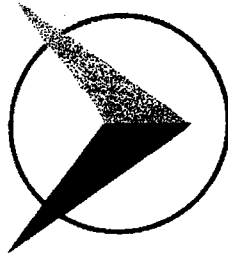
This certifies that approval has been granted in accordance with Regulation 22 of the Civil Aviation Regulations for the model CA25 and CA25N aeroplanes.

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.



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

COMMONWEALTH OF AUSTRALIA



CIVIL AVIATION
SAFETY AUTHORITY
AUSTRALIA

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) |

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| | | |
|--|---|--|
| 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) | |

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| | |
|-------------------------------|--|
| Control Surface Deflections | Elevator Up $39^{\circ} \pm 1^{\circ}$ Down $20^{\circ} \pm 1^{\circ}$ Aileron Up $13^{\circ} \pm 1^{\circ}$ Down $17^{\circ} \pm 1^{\circ}$ Rudder $27^{\circ} \pm 1^{\circ}$ 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 affixed 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. |

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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 Amendment 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:

| <u>Component</u> | <u>Maximum time in service</u> |
|--|--------------------------------|
| 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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