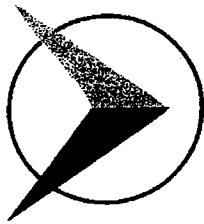


COMMONWEALTH OF AUSTRALIA



CIVIL AVIATION  
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AUSTRALIA

**CERTIFICATE OF TYPE APPROVAL**

**Number: 154-1 Issue 4**

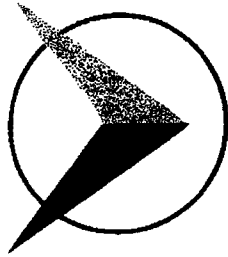
**Manufacturer:** Skyfox Aviation Ltd  
P.O. Box 910  
Caloundra Qld 4551  
Australia

This certifies that approval has been granted in accordance with Regulation 22 of the Civil Aviation Regulations for the model CA21, CA22 and CA22A 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 154-1 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.: 154-1  
Revision: 4  
Skyfox Aviation  
CA21  
CA22  
CA22A  
Date: 9 January 1998

## CERTIFICATE OF TYPE APPROVAL DATA SHEET

This data sheet, which is part of the Certificate of Type Approval No. 154-1, 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 Type Approval Holder:** Skyfox Aviation Ltd  
PO Box 910  
Caloundra Qld 4551  
Australia

**I** Model CA21 "Skyfox" (See Operating Basis)  
Approved 03 October 1990

Engine	Aeropower Model LO-126/1 or LO-122
Engine Limits	Take-off (5 minute limited) LO-126/1 3600 rpm (78 HP) LO-122 3600 rpm (75 HP) Maximum continuous 3200 rpm (70 HP)
Fuel	100/130 minimum grade aviation gasoline 97 RON minimum automobile fuel (mogas)
Oil	Aviation or motor grade oil. Above 4°C ground ambient air temperature SAE 50. Below 4°C ground ambient air temperature SAE 30.
Oil capacity	2.5 litres maximum

# COMMONWEALTH OF AUSTRALIA

No.: 154-1

Revision: 4

Propeller and Propeller Limits	Cleanweld Products (N.Z.), wooden, fixed pitch. Diameter 1524 mm (60 inches), Pitch 787 mm (31 inches). Full throttle static rpm not over 3200 rpm not under 3000 rpm.		
Control Surface Deflections	Elevator	Up $34^{\circ} + 1^{\circ}$ , $-0^{\circ}$ ,	Down $23^{\circ} \pm 1^{\circ}$
	Aileron	Up $14^{\circ} \pm 1^{\circ}$ ,	Down $17^{\circ} \pm 1^{\circ}$
	Rudder	Left $26^{\circ} \pm 1^{\circ}$ ,	Right $26^{\circ} \pm 1^{\circ}$
Manufacturers Serial No's	CA21 004 and up.		
Operating Basis	Aircraft of this model may be operated as Australian Ultralight Federation (AUF) registered aircraft to the requirements of Civil Aviation Order (CAO) 95.55, or alternatively be issued with a Certificate of Airworthiness in the Special Category. Operations under such a Certificate of Airworthiness are confined to private operations only, not in primary control zones. Certificate of Airworthiness is to be annotated accordingly.		

## II      Model CA22 "Skyfox" (AUF operations only) Approved 20 December 1991

Engine	Bombardier ROTAX Model 912 UL
Engine Limits	Take-off (3 minute limited), 5800 rpm Maximum continuous 5500 rpm
Gearbox Ratio	2.27:1
Fuel	95 RON minimum automotive fuel (mogas) 100LL aviation gasoline.
Oil	Motor grade oil, API Classification "SF", or "SG" Ambient air temperature $-15^{\circ}\text{C}$ to $10^{\circ}\text{C}$ use SAE 20W/20 $0^{\circ}\text{C}$ to $25^{\circ}\text{C}$ use SAE 30 $20^{\circ}\text{C}$ to $40^{\circ}\text{C}$ use SAE 40
Oil Capacity	3 litres maximum

# COMMONWEALTH OF AUSTRALIA

No. 154-1

Revision: 4

Coolant	100% Glycol		
Propeller and Propeller Limits	GSC TECH II: Modified in accordance with Kerr Aircraft Design EO No.240 Issue 1. Diameter 1727 mm (68 inches), Pitch 1114 mm (43.8 inches). Blade angle permanently set to 15.5 degrees, or  Cleanweld Products (N.Z.), wooden, fixed pitch. Model HO11 complying with Skyfox drawing HWP1. Diameter 1727 mm (68 inches), Pitch 1219 mm (48 inches).  Full throttle static rpm not over 2420 rpm, not under 2290 rpm.		
Control Surface Deflections	Elevator	Up $39^{\circ} + 1^{\circ}$ , $-0^{\circ}$ ,	Down $21^{\circ} \pm 1^{\circ}$
	Aileron	Up $14^{\circ} \pm 1^{\circ}$ ,	Down $17^{\circ} \pm 1^{\circ}$
	Rudder	Left $26^{\circ} \pm 1^{\circ}$ ,	Right $26^{\circ} \pm 1^{\circ}$
Manufacturers Serial No's	CA22 004 and up NOTE: Serial numbers 001 to 003 are acceptable on the basis of compliance with Skyfox Aviation Drawing List dated 20.11.91.		
Operating Basis	Aircraft of this model may only be operated as Australian Ultralight Federation (AUF) registered aircraft to the requirements of Civil Aviation Order (CAO) 95.55.		

### **III**    **Model CA22A** "Skyfox" (See Operating Basis)

Approved 20 March 1992. Same as CA22 except for engine and propeller:

Engine	Bombardier ROTAX Model 912 A
Propeller	Cleanweld Products (N.Z.), wooden, fixed pitch. Model HO11 complying with Skyfox drawing HWP1. Diameter 1727 mm (68 inches), Pitch 1219 mm (48 inches).
Manufacturers Serial No's.	CA22A 007 and up.

# COMMONWEALTH OF AUSTRALIA

154-1

Revision: 4

## Manufacturers Serial No's (cont'd)

Note (1): Model CA22 and CA22A serial numbers are in sequence. The "A" identifier indicates fitment of a ROTAX 912 A engine and Cleanweld propeller.

(2): Model CA22A aircraft are identified by a supplementary data plate.

(3): Serial number 002 is accepted on the basis of compliance with Skyfox Drawing List dated 19.3.92

Operating Basis	Aircraft of this model may be issued with a Certificate of Airworthiness in the Special Category, or alternatively be operated as Australian Ultralight Federation (AUF) registered aircraft to the requirements of Civil Aviation Order (CAO) 95.55.
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## Data Pertinent to all Models

Airspeed Limits	Never exceed	93 KIAS
	Manoeuvring	80 KIAS

Crosswind Component	Maximum for take-off and landing 12 knots
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Centre of Gravity Limits	Forward Limit: 228 mm aft of datum (21.4% MAC) at 390 kg 256 mm aft of datum (24.0% MAC) at 450 kg Variation is linear between 390 kg and 450 kg.  Aft Limit: 303 mm aft of datum (28.4% MAC) at all weights.
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Datum	Wing leading edge
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MAC	1067 mm
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Leveling Means	Longitudinal: Spirit level placed along lower door sill side beam of fuselage. Lateral: Spirit level placed across lower door sill side beam of fuselage
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# COMMONWEALTH OF AUSTRALIA

154-1  
Revision: 4

Maximum Weight	Take-off 450 kg Landing 450 kg
Number of Seats	2 at 400 mm aft of datum
Maximum Baggage in Locker	5 kg
Minimum Pilot Weight (Single occupant)	55 kg
Fuel Capacity	52 litres total 49 litres usable
Types of Operation	Day VFR only. Flight in known icing conditions prohibited.
Certification Basis	Civil Aviation Order 101.55 Issue 1 dated 7 January 1988 including Amendments 85 dated 28 February 1990 and 86 dated 1 August 1990. BCAR Section S (Advance copy dated March 1983).  NOTE: BCAR-S Sub-Section C Structure 411 not complied with. FAA AC 23-482 used in lieu and complied with.
Production Basis	Certificate of Approval Number 3315 dated 1 December 1992 for manufacture

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