

# Type Certificate

Number: VA513

Pursuant to regulation 21.013A of the Civil Aviation Safety Regulations 1998, this type certificate is issued in respect of the Airborne Edge XT aircraft.

Entitlement has been established for this aircraft in the primary category, pursuant to regulation 21.024. Type certificate data sheet VA513 forms part of this type certificate, and describes the basis of certification, and limitations on the Edge XT aircraft.

This certificate is valid until it is suspended or cancelled by the Civil Aviation Safety Authority.

Date of Application

23 March 2004

Date of Issuance

2 April 2004 (Provisional Type Certificate)

Issue 2

2.Th

16 December 2004

Eugene Paul Holzapfel Delegate of the Authority

Safe Skies for All



No VA513

Revision 6

Aircraft Airborne Edge XT Date 20 August 2015

# TYPE CERTIFICATE DATA SHEET

This data sheet forms part of Type Certificate No. VA513, and lists the conditions and limitations under which Edge XT aircraft meet the airworthiness requirements of the Civil Aviation Safety Authority, Australia.

Certificate Holder AirBorne WindSports Pty Ltd

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Redhead 2290 NSW Australia

<u>I. Model Edge XT 912 - B / Streak 3 - B</u>. Approved in Primary Category on 16 December,

2004.

Base XT 912–B

Engine Rotax 912 UL 2, 80 hp 4 stroke

Engine Limits Take Off (max 5 minutes) 5800 rpm

Maximum Continuous 5500 rpm

Fuel En228 Premium/Regular.

Super grade gasoline, lead free, minimum RON 90.

**AVGAS** 

Fuel Capacity Total fuel 70 litres

Usable fuel 67 litres

Oil Capacity 3 litres (2 litres minimum)

Cooling System. 100% Evans NPG+ liquid coolant. No water is permitted in the

radiator. Refer to Note 2.

Radiator Cap release pressure 1.2 bar

Propeller Bolly BOS 3, Specification C or D.

Composite blades, ground adjustable pitch Diameter 1676 ±5 mm

Pitch limits  $20^{\circ} \pm 0.5^{\circ}$  at 610 mm radius.

Levelling Means Propeller hub face (vertical) for setting propeller pitch.

Wing Streak 3 - B

Wing Area 13.5 m<sup>2</sup> (projected)

Wing Datum

Line joining the centre of leading edge nose bolt heads.

Base Hang Point Limit 1245 mm +/- 15mm aft of wing datum at all weights.

Airspeed Limits  $V_{NE}$  never exceed speed 85 KIAS (knots IAS)  $V_{A}$  manoeuvring speed 80 KIAS

V<sub>SO</sub> stalling speed MTOW 35 KIAS (65 kph IAS)

Number of Seats Two. Solo flight permitted from front seat only.

Maximum Weights Take-off and Landing

- up to and including serial number XT912B-092 445 kg

(See Note 5.)

- serial number XT912B-093 and subsequent 450 kg

Maximum total pilot weight 200 kg

Front Seat Pilot Weight Range 55 - 100 kg.

Maximum weight in rear seat 100 kg

Maximum Baggage 4 kg in under front seat storage – 2 kg per seat bag.

Crosswind Component Maximum for take-off and landing – 12 knots.

Serial numbers eligible XT 912-B trike base - XT912B-01 and subsequent.

Streak 3-B wing - S3-01 and subsequent.

Type Design Data The model XT 912–B/Streak 3–B consists of an XT 912 - B base

fitted with a Streak 3 - B wing. These components are defined by:

XT 912-B trike base Drawing list 12/062/DS Issue 1.3
Streak 3-B wing Drawing list 12/030/DS Issue 1.2
Outback option Drawing list 12/062/DS Issue 1.3
Tundra option Drawing list 12/062/DS Issue 1.3

(see Note 5)

# Additional Type Data

# Approved Flight Manual

- for serial numbers up to and including XT912B-092, Pilot's Operating Handbook part number 106727, dated 14 December 2004, or
- for serial numbers XT912B-093 and subsequent, *Pilot's Operating Handbook* part number 107164, dated 21 September 2005.
- for the Outback or Tundra options, Pilot's Operating Handbook part number 107164, dated 2 February 2007 is required.

(See Note 5).

#### Service Manuals

 XT 912 Maintenance Manual, part number 106724 Issue 1.1, dated 21 September 2005 or for Outback or Tundra options, part number 108346 Issue 1.3, dated February 2007

- Streak 3 Maintenance Manual, part number 106725.

#### IA. Model Edge XT 912 - B / Cruze.

Approved in Primary Category on 21 September,

2005.

Base XT 912–B.

The base on this model is identical to the base on the XT 912-B/Streak 3-B, except for

on the AT 712-b/streak 3-b, except

placarding and flight manual.

- See Model XT 912-B/Streak 3-B for engine, fuel, propeller, oil,

cooling and levelling data.

Wing Cruze

Wing Area 14.4 m<sup>2</sup> (projected)

Wing Datum Line joining the centre of leading edge nose bolt heads.

Base Hang Point Limit 1245 mm +/- 15mm aft of wing datum at all weights.

Airspeed Limits V<sub>NE</sub> never exceed speed 73 KIAS (knots IAS) V<sub>A</sub> manoeuvring speed 73 KIAS

V<sub>SO</sub> stalling speed MTOW 34 KIAS (62 kph IAS)

Number of Seats Two. Solo flight permitted from front seat only.

Maximum Weights Take-off and Landing 450 kg

Maximum total pilot weight 200 kg

Front Seat Pilot Weight Range 55 - 100 kg.

Maximum weight in rear seat 100 kg

Maximum Baggage 4 kg in under front seat storage – 2 kg per seat bag.

Crosswind Component Maximum for take-off and landing – 12 knots.

Serial numbers eligible XT 912-B trike base XT912B-093 and subsequent.

(See Note 4.)

Cruze wing CZ-001 and subsequent.

Type Design Data

The model XT 912–B/Streak–B consists of XT 912 - B base fitted

with a Cruze wing. These components are defined by:

XT 912 - B trike base
Cruze wing
Outback option
Tundra option

Drawing list 12/062/DS Issue 1.3

Additional Type Data Approved Flight Manual

- *Pilot's Operating Handbook* part number 107164, dated 21 September 2005,

or for Outback or Tundra options,

- *Pilot's Operating* Handbook part number 107164, dated 2 February 2007.

#### Service Manual

- XT 912 Maintenance Manual,

part number 106724 Issue 1.1, dated 21 September 2005

or for Outback or Tundra options,

part number 108346 Issue 1.3, dated February 2007

and

- Streak 3 & Cruze Maintenance Manual, Issue 1.1, dated 21 September 2005.

<u>II. Model Edge XT 582 / Cruze</u>. Approved in Primary Category on 21 September,

2005.

Base XT 582

Engine Rotax 582 UL DCDI/mod 99, 64 hp, 2 stroke

Engine Limits Take Off (max 5 minutes) 6800 rpm

Maximum Continuous 6500 rpm

Fuel En228 Premium/Regular.

Super grade gasoline, lead free, minimum RON 90.

AVGAS.

Fuel Capacity Total fuel 70 litres

Usable fuel 67 litres

Oil Capacity 2 litres

Propeller Bolly BOS 3, Specification C or D.

Composite blades, ground adjustable pitch Diameter 1706 ±5 mm

Pitch limits  $19^{\circ} \pm 0.5^{\circ}$  at 610 mm radius.

Levelling Means Propeller hub face (vertical) for setting propeller pitch.

Wing Cruze. The wing on this model is identical to the wing on

the XT 912-B/Cruze.

- See model XT 912-B/Cruze for wing data.

Base Hang Point Limit 1245 mm +/- 15mm aft of wing datum at all weights.

Airspeed Limits  $V_{NE}$  never exceed speed 73 KIAS (knots IAS)  $V_{A}$  manoeuvring speed 73 KIAS

V<sub>SO</sub> stalling speed MTOW 34 KIAS (63 kph IAS)

Number of Seats Two. Solo flight permitted from front seat only.

Maximum Weights Take-off and Landing 450 kg

Maximum total pilot weight 200 kg

Front Seat Pilot Weight Range 55 – 100 kg.

Maximum weight in rear seat 100 kg

Maximum Baggage 4 kg in under front seat storage – 2 kg per seat bag.

Crosswind Component Maximum for take-off and landing – 12 knots.

Serial numbers eligible XT 582 trike base XT582B-001 and subsequent.

Cruze wing CZ-001 and subsequent.

Type Design Data

The model XT 582/Cruze consists of XT 582 base fitted with a

Cruze wing. These components are defined by:

XT 582 trike base Drawing list 12/062/DS Issue 1.3
Cruze wing Drawing list 12/030/DS Issue 1.2
Outback option Drawing list 12/062/DS Issue 1.3
Tundra option Drawing list 12/062/DS Issue 1.3

(see Note 5)

#### Additional Type Data

#### Approved Flight Manual

- *Pilot's Operating Handbook* part number 107271, dated 21 September 2005, or
- for Outback or Tundra options, *Pilot's Operating Handbook* part number 107271, dated 2 February 2007.

#### Service Manual

- XT 582 Maintenance Manual, part number 107282, Issue 1.0, dated 21 September 2005,

or for Outback or Tundra options,

- XT 582 Maintenance Manual, part number 108347 Issue 1.3, dated February 2007,

and

- Streak 3 & Cruze Maintenance Manual, Issue 1.1, dated 21 September 2005.

# **Data Pertinent to All Models**

#### **Certification Basis**

Type Certificate Number VA513 has been issued on the basis of compliance with regulation 21.024 of the Civil Aviation Safety Regulations 1998. The certification standard is:

Part 21 of the Civil Aviation Safety Regulations 1998, and

British Civil Airworthiness Requirements Section S, Issue 2, dated 31 August 1999.

Air Services Australia has determined that the Edge XT 912 models meet the noise standard specified in CAO 101.55, with a corrected noise level of 62.7 dB(A)(s)max at 1000 feet.

Operational Limits Australian registration of the Edge XT type is limited to the RAA

and HGFA registers.

Production Basis Production Certificate PC-510188.

Equipment The CASA Approved Flight Manual, incorporated into the *Pilot's* 

*Operating Handbook*, must be carried aboard the aircraft at all times. Other required minimum equipment is as detailed in the

Pilot's Operating Handbook.

Rigging In accordance with the CASA Approved *Pilot's Operating* 

Handbook.

Placards Approved placards are listed in the CASA Approved Flight

Manual. These placards are required to be fitted.

Notes

1. Microair 760 VHF transceiver is approved for use in Airborne Edge XT aircraft in accordance with CASR 21.305(c).

2. [deleted]

- 3. Unless otherwise stated, later revisions to CASA approved documentation are accepted as meeting type data requirements.
- 4. XT912 bases, serial numbers up to and including XT912B-092 may be upgraded to allow fitment of the Cruze wing by incorporation of Airborne Service Bulletin 004.
- 5. XT912-B bases, serial numbers up to and including XT912B-092 may be upgraded to 450 kg Take Off and Landing Weight by incorporation of Airborne Service Bulletin 005. For these serial numbers, incorporation of this service bulletin is mandatory prior to incorporating of either the Outback or Tundra options. Aircraft incorporating Service Bulletin 005 must use the *Pilot's Operating Handbook* part number 107164.
- 6. Revision 4 adds the "C" Spec propeller, and adds the Outback option, incorporating the instrument 'binnacle and wide wheels.
- 7. Revision 5 adds the Tundra option, including wide wheels, full cockpit pod, and engine bonnet (XT-912 models only).
- 8. Revision 6 consolidates previous Streak and Cruse wing MDLs, 04/021/DS Issue 2.3, and 04/220/DS Issue 1.0 into a single new wing MDL, 12/030/DS Issue 1.2; and the base drawing lists 04/219/DS Issue 1.0, 04/019/DS Issue 1.0,

06/202/DS Issue 1.0 and 12/062/DS Issue 1.2 into a single new base MDL, 12/062/DS Issue 1.3.

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