*European Aviation Safety Agency*

# EASA
# TYPE-CERTIFICATE
# DATA SHEET

## PAC 750XL

## Type Certificate Holder:
## PACIFIC AEROSPACE CORPORATION Ltd

Hamilton Airport
Private Bag HN 3027
Hamilton
NEW ZEALAND

## Manufacturer:
## PACIFIC AEROSPACE CORPORATION Ltd

Hamilton Airport
Private Bag HN 3027
Hamilton
NEW ZEALAND

Issue 1: 12 April 2006

List of effective Pages:

| Page | 1 | 2 | 3 | 4 | 5 | 6 | 7 | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Issue | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | | | | | | |

# CONTENT

## SECTION A: 750XL



## Change Record

# SECTION A: 750XL

## A.I. General

Data Sheet No.: EASA.IM.A.081 Issue: 01 Date: 12 April 2006

| | | |
|---|---|---|
| 1. | a) Type:<br>b) Model: | 750XL<br>(reserved) |
| 2. | Airworthiness Category: | CS23 Normal Category |
| 3. | Type Certificate Holder: | PACIFIC AEROSPACE CORPORATION Ltd<br>Hamilton Airport<br>Private Bag HN 3027<br>Hamilton<br>NEW ZEALAND |
| 4. | Manufacturer: | PACIFIC AEROSPACE CORPORATION Ltd<br>Hamilton Airport<br>Private Bag HN 3027<br>Hamilton<br>NEW ZEALAND |
| 5. | Certification Application Date:<br>a. To NZ-CAA :<br>b. To EASA : | <br>25-Jan-2000<br>22-Oct-2004 |
| 6. | NZ-CAA Type Certification : | TC A-14 dated 23-July-2003 |
| 7. | EASA Type Certification Date: | 12 April 2006 |

## A.II. Certification Basis

| | | |
|---|---|---|
| 1. | Reference Application Date for<br>a. EASA certification : | <br>22-Oct-2004 |
| 2. | Certification Basis: | As defined in CRI A-1, latest issue |
| 3. | Airworthiness Requirements: | CS 23 initial Issue |
| 4. | Requirements elected to comply: | None |
| 5. | EASA Special Conditions: | CRI A-5, Parachuting<br>CRI F-1, Protection from the effects of HIRF<br>CRI F-2, Protection from the direct effects of lightning strike<br>CRI F-3, Protection from the indirect effects of lightning strike |
| 6. | EASA Exemptions: | None |
| 7. | EASA Equivalent Safety Findings: | CRI C-2, Airspeed limitations |
| 8. | EASA Environmental Standards: | ICAO Annex 16, Volume 1, Part 2, Chapter 10<br>ICAO Annex 16, Volume 2, Part 2, Chapter 2<br>(See note 1) |

## A.III. Technical Characteristics and Operational Limitations

1. Type Design Definition: Set of drawings according to Master Drawing Index : PAC Drawing No.11-00001-1

2. Description: Single-turbo-propeller engine, 2 seats, low wing airplane, aluminium and steel structure, fixed tricycle landing gear, normal empennage

3. Equipment: Equipment list, POH, Section 6.3

4. Dimensions:

| | |
|---|---|
| Span | 12.80 m (42 ft) |
| Length | 11.84 m (38.1 ft) |
| Height | 4.04 m (13.3 ft) |
| Wing Area | 24.88 m² (267.8 ft²) |

5. Engines: Pratt & Whitney PT6A-34
Certification basis : Transport Canada Type Certificate E-15 (See note 2)

| Power Setting | Torque psi | Max ITT ℃ | Gas Gen RPM % Ng | Prop RPM % Np | Oil Press psi | Oil Temp ℃ | Shaft Horse-Power |
|---|---|---|---|---|---|---|---|
| Takeoff | 64.5 (2) | 790 | 101.6 | 91.2 | 85-105 | 10-99 | 750 (31℃) |
| Maximum Continous | 54 | 740 | 101.6 | 91.2 | 85-105 | 10-99 | 633 |
| Maximum Climb | 54 | 740 | 101.6 | 91.2 | 85-105 | 0-99 | 633 |
| Maximum Cruise | 64.5 (2) | 790 | 101.6 | 91.2 | 85-105 | 0-99 | 750 |
| | 54 | 740 | 101.6 | 91.2 | 85-105 | 0-99 | 633 |
| Idle | - | 685 | 52-54 | - | 40 | -40 - 99 | - |
| Maximum Reverse | 64.5 (2) | 790 | 101.6 | 86 | 85-105 | 0-99 | - |
| Transient | 68.4 (5) | 850 (3) | 102.6 (3) | 100 | 85-105 | 0-99 | - |
| Starting | - | 1090 (3) (4) | - | - | - | -40 | - |

(1) All limits are based on sea level (2) 5 minute time limit (3) These values are limited to two secs
(4) Starting temperatures above 850℃ should be inv estigated for cause (5) Time limited to 20 secs

6. Propellers: Hartzell Propeller Inc. Type HC-B3TN-3D/T10282NS+4
FAA Type Certificate P15EA
(See note 2)
Maximum Diameter: 2692 mm / 106 in
Minimum Diameter: 2692 mm / 106 in
Number of Blades: 3
Low Pitch: 18.5°
Feathered: 86.3°
Maximum Reverse: -8.1°

7. Fluids:

7.1 Fuel: Refer to POH, Section 2.5

7.2 Oil: Refer to POH, Section 2.5

8. Fluid capacities:

8.1 Fuel: Four structural wing tanks

| Tanks | Total capacity | Unusable | Usable |
|---|---|---|---|
| Front Left Tank (includes sump tank) | 284 litres, 499 lbs<br>75 U.S. gallons | 10 litres, 18 lbs<br>3 U.S. gallons | 274 litres, 481 lbs<br>72 U.S. gallons |
| Front Right Tank | 293 litres, 515 lbs<br>77 U.S. gallons | 10 litres, 18 lbs<br>3 U.S. gallons | 283 litres, 497 lbs<br>74 U.S. gallons |
| Rear Left Tank | 142 litres, 249 lbs<br>37.5 U.S. gallons | 0 | 142 litres, 249 lbs<br>37.5 U.S. gallons |
| Rear Right Tank | 142 litres, 249 lbs<br>37.5 U.S. gallons | 0 | 142 litres, 249 lbs<br>37.5 U.S. gallons |
| Total | 861 litres, 1512 lbs<br>227 U.S. gallons | 20 litres, 36 lbs<br>6 U.S. gallons | 841 litres, 1476 lbs<br>221 U.S. gallons |

8.2 Oil: Total capacity 8.7 liters

9. Air Speeds:

| | |
|---|---|
| $V_{NE}$ (Never Exceed speed) | 170 KIAS |
| $V_{NO}$ (Max. structural cruising speed) | 140 KIAS |
| $V_A$, $V_O$ (Manoeuvring speed) | |
| 7500 lbs (3395 kg) | 131 KIAS |
| 6500 lbs (2941 kg) | 122 KIAS |
| 5500 lbs (2489 kg) | 112 KIAS |
| 4500 lbs (2036 kg) | 101 KIAS |
| $V_{FE}$ (Maximum flaps extended speed) | |
| Flaps 20° | 130 KIAS |
| Flaps 40° | 120 KIAS |

10. Maximum Operating Altitude: 20000 ft

11. Kinds of operation: Day & night VFR when appropriate equipment is installed and operating correctly
Refer to approved POH, Section 2.2

12. Maximum Masses:

| | |
|---|---|
| Take-Off | 3395 kg (7500 lbs) |
| Landing | 3225 kg (7125 lbs) |

13. Centre of Gravity Range:

Fwd limit : 2.55 m (100.46 in) aft of datum at 1905 kg (4209 lbs)
2.62 m (103.18 in) aft of datum at 2553 kg (5639 lbs)
2.83 m (111.55 in) aft of datum at 3395 kg (7500 lbs)

Aft Limit : 3.19 m (125.6 in) aft of datum at all weights

Straight line between points given.

14. Datum: Station 0.00 (2.545m (100.21 in) forward of wing leading edge)

15. Levelling Means:

Longitudinally : Two bolts on fuselage upper longerons forward of LH main door.

Laterally : Top of inner wing main spar.

16. Minimum Flight Crew: 1 (Pilot)

17. Maximum Passenger Seating Capacity: 1

18. Baggage / Cargo Compartment

Cargo operations are allowed only if PAC modification PAC/XL/0208 or other EASA approved restraint system is installed.

| | |
|---|---|
| Compartment Station 2.08 m (82 in) aft of datum to 2.92 m (115.0 in) | 543 kg (1200 lbs) |
| Compartment Station 3.00 m (118.0 in) aft of datum to 4.22 m (166.0 in) | 543 kg (1200 lbs) |
| Compartment Station 4.22 m (166.0 in) aft of datum to 6.10 m (240.0 in) | 362 kg (800 lbs) |

19. Wheels and Tires

19.1 Nose landing gear

| | |
|---|---|
| Wheel base | 3.17 m (10.5 in) |
| Tire | 8.50 x 6 in |

19.2 Main landing gear

| | |
|---|---|
| Track | 3.68 m (12.1 in) |
| Tire | 8.50 x 10 in |

20. Control Surface Movements

| | | |
|---|---|---|
| Elevator relative to tailplane : | Up | 30° |
| | Down | 8.5° |
| Elevator tab relative to tailplane : | Up | 10.5° |
| | Down | 27.5° |
| Rudder relative to fin : | Right | 25° |
| | Left | 20° |
| Rudder tab relative to rudder : | Right | 13° |
| | Left | 13° |
| Ailerons relative to wing : | Up | 23° |
| | Down | 9.5° |
| Ailerons tab relative to ailerons : | Up | 15° |
| | Down | 20° |
| Flaps relative to wing : | Up | 0° |
| | Take-off | 21° |
| | Landing | 40° |

For all control surfaces except flaps, a tolerance of ± 0.5°is applied. A tolerance of ± 1° is applied to the flaps in the up and take-off positions, and +1°/ -0° in the landing position.

21. Serial numbers eligible : 101 and up

## A.IV. Operating and Service Instructions

Pilot Operating Handbook (POH) and EASA approved Flight Manual must be at revision 3, approved by NZCAA on 9 April 2006, or later approved revision.

Maintenance Manual PAC 750XL rev 3 of March 2004 with Chapter 4 “Airworthiness limitations” EASA approved dated 5 April 2006 and following revisions.

## A.V. Notes

1. Approved Noise Levels in accordance to:

ICAO Annex 16, Vol. 1, App. 6, Chap. 10: 86.8 dB(A) for a limit of 88dB(A)

2. The EASA type certification standard includes that of Transport Canada TCDS based on individual EU member state acceptance or certification of this standard prior to 28 September 2003. Other standards confirming to TC/TCDS standards certificated by individual EU member state prior to 28 September 2003 are also acceptable.

## CHANGE RECORD

Issue 1 12 April 2006; Initial Issue