



**TCDS No A-14  
Revision 18  
NZSkydive Ltd  
750XL  
18 November 2022**

**TYPE CERTIFICATE DATA SHEET No A-14**

This data sheet which is part of Type Certificate No A-14 prescribes the conditions and limitations under which the product for which the Type Certificate was issued meets the airworthiness requirements of the New Zealand Civil Aviation Rules.

Type Certificate Holder: **NZSkydive Ltd.  
Trading as Pacific Aerospace Ltd  
333 Airport Road  
Hamilton  
New Zealand**

Type Certificate Holder Record: **Transferred from Pacific Aerospace Ltd to  
NZSkydive Ltd on 29/11/21.  
Transferred from Pacific Aerospace Corporation Ltd  
to Pacific Aerospace Ltd on 12/12/06.**

**I - Model 750XL (Normal category) Approved 23.7.03 (Restricted category Approved 28.9.05 (See Note 4))**

Engine: Pratt & Whitney PT6A-34 (TC E-6) (See Note 5)

Fuel: Jet A/A1 (See Approved Flight Manual for additional fuels)

Engine Limits:

| Power Setting      | Torque<br>psi | Max<br>ITT °C | Gas Gen<br>RPM %<br>Ng | Prop RPM<br>% Np<br>(RPM) | Oil Press<br>psi | Oil Temp.<br>°C | Shaft<br>Horse-<br>Power |
|--------------------|---------------|---------------|------------------------|---------------------------|------------------|-----------------|--------------------------|
| Takeoff            | 64.5 (2)      | 790           | 101.6                  | 91.2<br>(2006)            | 85-105           | 10-99           | 750<br>(31 °C)           |
| Maximum Continuous | 54            | 740           | 101.6                  | 91.2<br>(2006)            | 85-105           | 10-99           | 633                      |
| Maximum Climb      | 54            | 740           | 101.6                  | 91.2<br>(2006)            | 85-105           | 0-99            | 633                      |
| Maximum Cruise     | 64.5 (2)      | 790           | 101.6                  | 91.2 (2006)               | 85-105           | 0-99            | 750                      |
|                    | 54            | 740           | 101.6                  | 91.2 (2006)               | 85-105           | 0-99            | 633                      |
| Idle               | -             | 685           | 52-54                  | -                         | 40               | -40-99          | -                        |
| Maximum Reverse    | 64.5 (2)      | 790           | 101.6                  | 86<br>(1892)              | 85-105           | 0-99            | -                        |
| Transient          | 68.4 (5)      | 850 (3)       | 102.6 (3)              | 100 (2200)                | 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°C should be investigated for cause (5) Time limited to 20 secs

|          |    |    |    |    |    |    |    |    |
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Propeller & Limits:

Hartzell HC-B3TN-3D/T10282NS+4 (TC P15EA) or  
Hartzell HC-B3TN-3D/T10282NSK+4 (Installed by  
modification PAC/XL/0615)

Diameter : 106 in max., 106 in min.  
Feathered propeller angle :  $86.3^{\circ} \pm 1.5^{\circ}$   
Low Pitch Setting at 30" Station :  $18.5^{\circ} \pm 0.5^{\circ}$   
Maximum reverse angle :  $-8.1^{\circ} \pm 0.5^{\circ}$

or

Hartzell HC-E4N-3P/D9900 (TC P10NE)  
(Installed by Modification PAC/XL/0453)

Diameter : 100 in max., 100 in min.  
Feathered propeller angle :  $89.5^{\circ} \pm 0.5^{\circ}$   
Low Pitch Setting at 30" Station :  $19.3^{\circ} \pm 0.1^{\circ}$   
Maximum reverse angle :  $-10.0^{\circ} \pm 0.5^{\circ}$

Airspeed Limits:

$V_{NE}$  Never exceed 170 kt IAS

$V_{NO}$  Max. structural cruising 140 kt IAS

$V_A, V_O$  Manoeuvring

7,500 lbs (3,402 kgs) 131 kt IAS

6,500 lbs (2,948 kgs) 122 kt IAS

5,500 lbs (2,495 kgs) 112 kt IAS

4,500 lbs (2,041 kgs) 101 kt IAS

$V_{FE}$  Max Flap Extended

Flaps  $20^{\circ}$  130 kt IAS

Flaps  $40^{\circ}$  120 kt IAS

C.G. Range: Fwd Limit:  
(See Note 9)

100.46 ins (2.55 m) aft of datum at 4,209 lbs (1,909 kgs).

103.18 ins (2.62 m) aft of datum at 5,639 lbs (2,558 kgs).

111.55 ins (2.83 m) aft of datum at 7,500 lbs (3,402 kgs).

Aft Limit:

125.6 ins (3.19 m) aft of datum at all weights.

Straight line variation between points given.

Empty Weight C.G. Range:

None.

Datum:

Station 0.00 (100.21 ins forward of wing leading edge.)

Levelling means:

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

Laterally: Top of inner wing main spar.

Maximum Weight:

Take-off: 7,500 lbs (3,402 kgs)

Landing: 7,125 lbs (3,232 kgs)

Minimum Crew:

One

Number of seats:

Two at Station 66.5 ins (1.69m). (See Note 6 for  
additional seating.)

Maximum Cargo: 1200 lbs (544 kgs) between Stations 82.0 (2.08 m) and 115.0 (2.92 m).  
 1200 lbs (544 kgs) between Stations 118.0 (3.0 m) and 166.0 (4.22 m).  
 800 lbs (363 kgs) between Stations 166.0 (4.22 m) and 240.0 (6.10 m).

Fuel Capacity:  
 (See Note 9)

| Tank                                 | 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 |

Oil Capacity: 8.7 litres at station 13.0 (0.33 m).

Maximum Operating Altitude: 20,000 ft.

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°  |
| Aileron tab relative to aileron:    | Up       | 15°   |
|                                     | Down     | 20°   |
| Flaps relative to wing:             | Up       | 0°    |
|                                     | Take-off | 21°   |
|                                     | Landing  | 40°   |

For all control surfaces except flaps a tolerance of  $\pm 0.5^\circ$  is applied. A tolerance of  $\pm 1^\circ$  is applied to the flaps in the Up and Take-off positions, and  $+1^\circ/-0^\circ$  in the Landing position.

For aircraft manufactured prior to S/N 224 (along with S/N 225, 8001, 8002, 8003 - see note 11), the Take-off flap position tolerance is  $+4^\circ/-1^\circ$  when transitioning from Landing to Take-off position (for example in event of a balked landing).

Serial Numbers Eligible: 101 – 120, 122 and up;  
 8001 and up (See Note 11).

Drawing List:

PAC Drawing No. 11-00001-1 or  
PAC Drawing No. 11-00005-1 (See Note 7) or  
PAC Drawing No. 11-00005-2 (See Note 7) or  
PAC Drawing No. 11-00005-3 (See Note 7) or  
PAC Drawing No. 11-00007-1 (See Note 8) or  
PAC Drawing No. 11-00009-1 (See Note 10)

Certification Basis:

New Zealand Civil Aviation Rules Part 21B current on 25 January 2000 (amendment 5 dated 25 December 1997).

United States Federal Aviation Regulations:

- Part 23 effective 1 February 1965 as amended by amendment 23-1 through 23-55 dated 1 March 2002.
- Part 34 dated September 10, 1990, including Amendments 34-1 through 34-3 dated 2nd March 1999.
- Part 36 effective 1 December 1969 as amended by amendment 36-1 through 36-24 dated 8 July 2002.

The following requirements are not complied with but are compensated for by factors that provide an equivalent level of safety:

FAR 23.1505(c) – See CAA ELOS Decision memo dated 18/7/03.

Application for certification dated 25 January 2000.

– Aircraft with optional HC-E4N-3P 4-bladed propeller installed by modification PAC/XL/0453 have complied with FAR Part 36 at amendment 36-28.

– Modification PAC/XL/0448 (Extended range wing) has been certificated against FAR 23 effective 1 February 1965 as amended by amendment 23-1 through 23-61 dated 20 May 2011.

– Modification PAC/XL/0679 “Installation - Avionics and Instruments IFR-25A” as defined in 11-00005-2 aircraft are certificated against FAR 23 effective 1 February 1965 as amended by amendment 23-1 through 23-62 dated 31 January 2012.

– Modification PAC/XL/0784 “Installation - Avionics and Instruments IFR-26A (G600TXi)” as defined in 11-00005-3 aircraft are certificated against FAR 23 effective 1 February 1965 as amended by amendment 23-1 through 23-63 dated 21 March 2017.

For Restricted category Certification for the purposes of agricultural aircraft operations:

New Zealand Civil Aviation Rules Part 21B at amendment 6 dated 28 July 2003 and Part 137 at amendment 2 dated 1 April 1997.

United States Federal Aviation Regulations:

– Part 23 effective 1 February 1965 as amended by amendment 23-1 through 23-55 dated 1 March 2002 except for 23.221 as per FAA AC 21.25-1; and

– Part 34 dated September 10, 1990, including amendments 34-1 through 34-3 dated 2nd March 1999; and

– Part 36 dated December 1, 1969, including amendments 36-1 through 36-24 dated 1st March 2002. (Note: Exempted in accordance with FAR 36.1(a)(2) as a small propeller-driven aircraft designed for agricultural aircraft operations.)

The following requirements are not complied with but are compensated for by factors that provide an equivalent level of safety:

FAR 23.1505(c) – See CAA ELOS Decision memo dated 18/7/03.

FAR 23.609(b) when modification PAC/XL/0134 is embodied. See Issue paper CRI S-1 dated 22/9/05.

FAR 23.1093(b) when modification PAC/XL/0130 is embodied. See Issue paper CRI E-1 dated 19/9/05.

Application for certification dated 29 August 2005.

Equipment:

The basic required equipment as prescribed in the applicable airworthiness regulations (see certification basis) must be installed in the aircraft for airworthiness certification.

The applicable CAA approved Flight Manual is required for all operations. Included within the Flight Manual is information in the form of supplements which cover installation of optional systems and equipment that are necessary for safe operation of the aircraft.

| Aircraft                                                       | Flight Manual | Notes                                                                                          |
|----------------------------------------------------------------|---------------|------------------------------------------------------------------------------------------------|
| 11-00001-1 or<br>11-00005-1 or<br>11-00007-1 or<br>11-00009-1. | AIR 2825      | Analogue Instruments.<br>(S/N 001 to 185)                                                      |
| 11-00001-1 or<br>11-00005-1 or<br>11-00007-1 or<br>11-00009-1  | AIR 3237      | Extended range wing.<br>Analogue instruments.<br>(S/N 186 and up – New Zealand-built aircraft) |

| Aircraft         | Flight Manual | Notes                                                                                                     |
|------------------|---------------|-----------------------------------------------------------------------------------------------------------|
| with PAC/XL/0448 |               | (S/N 8001 and up – Chinese-built aircraft)<br>(See Note 11)                                               |
| 11-00005-2       | AIR 3380      | Extended range wing.<br>Digital instruments (Garmin EFIS & MVP-50T EIS).<br>(S/N 206 and up)              |
| 11-00005-3       | AIR 3970      | Extended range wing.<br>Digital instruments (Garmin G600TXi EFIS & MVP-50T EIS).<br>(S/N 224, 226 and up) |

- NOTE 1 Current weight and balance report, including list of equipment included in certified empty weight must be provided for each aircraft at the time of original airworthiness certification and at all times thereafter. Loading instructions are included in the applicable CAA approved Flight Manual.
- NOTE 2 (a) Placards and instrument markings must be displayed in accordance with the applicable CAA approved Flight Manual including relevant supplements.  
(b) Each aircraft must have a placard in clear view of the pilot that specifies the kind of operations such as VFR or IFR, DAY or NIGHT, to which the operation of the aircraft is limited by the equipment installed, and also that flight in known icing conditions is prohibited.
- NOTE 3 Instructions for continuing airworthiness of the aircraft is contained in the Pacific Aerospace Corporation Ltd Maintenance Manual for the 750XL aircraft. Service Life limits of components are given in the Airworthiness Limitations Section of Chapter 04.
- NOTE 4 When internally equipped for dispensing substances on agricultural aircraft operations the aircraft is only eligible for certification in the restricted category for the purposes of agricultural aircraft operations.  
When any of the following modifications are embodied, the aircraft is only eligible for certification in the restricted category for the purposes of agricultural aircraft operations:
- |             |                                  |
|-------------|----------------------------------|
| PAC/XL/0130 | Engine Cowl Filter Installation  |
| PAC/XL/0184 | Agricultural Hopper Installation |
| PAC/XL/0134 | Fuselage Sealing Installation    |
| PAC/XL/0602 | Installation Spray System        |
| PAC/XL/0612 | Installation 1500 litre Hopper   |
- NOTE 5 The PT6A-34AG engine is installed when modification PAC/XL/0163 is embodied. Engine specifications and limitations are identical to the PT6A-34 engine.
- NOTE 6 Additional passenger seating is installed in accordance with the following optional modifications:
1. PAC/XL/0148 – Installation of Gippsland Passenger Seats

(Requires the prior installation of PAC/XL/0001 “Mk II floor”, and PAC/XL/0019 or PAC/XL/0079 “Cabin Ventilation”.)

|             |                                    |
|-------------|------------------------------------|
| Eight seats | Two at Station 106.46 ins (2.70 m) |
|             | Two at Station 145.23 ins (3.69 m) |
|             | Two at Station 181.12 ins (4.60 m) |
|             | Two at Station 226.21 ins (5.74 m) |

The seats at Station 181.12 (4.60m) may not be installed if the standard roller door is fitted.

2. PAC/XL/0193 – Installation of Aero Twin Passenger Seats  
(Requires the prior installation of PAC/XL/0107 “Mk III floor”, and PAC/XL/0019 or PAC/XL/0079 “Cabin Ventilation”.)

|             |                                    |
|-------------|------------------------------------|
| Eight seats | Two at Station 104.34 ins (2.65 m) |
|             | Two at Station 144.43 ins (3.67 m) |
|             | Two at Station 178.32 ins (4.53 m) |
|             | Two at Station 226.76 ins (5.76 m) |

3. PAC/XL/0440 – Installation of Aero Twin Passenger Seats with Millenium crew seats. (Requires the prior installation of PAC/XL/0107 “Mk III floor”, or PAC/XL/0609 and PAC/XL/0610 “Modular Floor”, and PAC/XL/0019 or PAC/XL/0079 “Cabin Ventilation”.)

|             |                                    |
|-------------|------------------------------------|
| Eight seats | Two at Station 105.34 ins (2.68 m) |
|             | Two at Station 144.43 ins (3.67 m) |
|             | Two at Station 178.32 ins (4.53 m) |
|             | Two at Station 226.76 ins (5.76 m) |

NOTE 7 Aircraft manufactured to Drawing No. 11-00005-1, 11-00005-2 or 11-00005-3 are eligible for IFR operations. Aircraft s/n 126 and any other aircraft modified to an equivalent configuration as defined by drawing No. 11-00005-1 are also eligible for IFR operations.

NOTE 8 Aircraft manufactured to Drawing No. 11-00007-1 are eligible for SEIFR operations in accordance with New Zealand Civil Aviation Rules Part 125 and ICAO Annex 6 Paragraphs 5.4, 6.22 and Appendix 3. Aircraft modified to an equivalent configuration as defined by drawing No. 11-00007-1 are also eligible for SEIFR operations (modification PAC/XL/0500 is equivalent). Aircraft operating SEIFR must be operated in accordance with Flight Manual Supplement No 114 dated 23 March 2012 or later CAA approved revision.

NOTE 9 When modification PAC/XL/0448 (Extended range wing, serial numbers 177, 186 and up; and serial numbers 8001 and up) is embodied, the following are changed:

C.G. range:

|            |                                                            |
|------------|------------------------------------------------------------|
| Fwd Limit: | 102.18 ins (2.60 m) aft of datum at 4,209 lbs (1,909 kgs). |
|            | 104.90 ins (2.66 m) aft of datum at 5,639 lbs (2,558 kgs). |
|            | 113.27 ins (2.88 m) aft of datum at 7,500 lbs (3,402 kgs). |

Aft Limit: 124.60 ins (3.17 m) aft of datum at all weights.

Straight line variation between points given.

The fuel capacity is changed to the following:

| Tank                                    | Total capacity                              | Unusable                                  | Usable                                      |
|-----------------------------------------|---------------------------------------------|-------------------------------------------|---------------------------------------------|
| Front Left Tank<br>(includes sump tank) | 183.4 litres, 323 lbs<br>48.4 U.S. gallons  | 3.4 litres, 6 lbs<br>0.9 U.S. gallons     | 180 litres, 317 lbs<br>47.6 U.S. gallons    |
| Front Right Tank                        | 182 litres, 320 lbs<br>48.1 U.S. gallons    | 2 litres, 3.5 lbs<br>0.5 U.S. gallons     | 180 litres, 317 lbs<br>47.6 U.S. gallons    |
| Rear Left Tank                          | 461.3 litres, 812 lbs<br>121.9 U.S. gallons | 13.3 litres, 23.4 lbs<br>3.5 U.S. gallons | 448 litres, 788 lbs<br>118.3 U.S. gallons   |
| Rear Right Tank                         | 461.3 litres, 812 lbs<br>121.9 U.S. gallons | 13.3 litres, 23.4 lbs<br>3.5 U.S. gallons | 448 litres, 788 lbs<br>118.3 U.S. gallons   |
| Total                                   | 1288 litres, 2267 lbs<br>340.3 U.S. gallons | 32 litres, 56 lbs<br>8.5 U.S. gallons     | 1256 litres, 2210 lbs<br>331.8 U.S. gallons |

NOTE 10 Aircraft manufactured to Drawing No. 11-00009-1 include modifications for eligibility under Interstate Aviation Committee Type Certificate CT338-750XL.

NOTE 11 Aircraft serial numbers 101 – 120, 123, 125 – 128 were manufactured by Pacific Aerospace Corporation Ltd in New Zealand under CAANZ Aircraft Manufacturing organization certificate AM19802.

Aircraft serial numbers 122, 124, 129 to 223 and 225 (excluding 8001 and up) were manufactured by Pacific Aerospace Ltd in New Zealand under Aircraft Manufacturing organization certificate AM69602 (Serial number 121 was not produced).

Aircraft serial numbers 8001, 8002 and 8003 were manufactured in People's Republic of China by Changzhou Pan-Pacific Aviation Technology Co., Ltd. (CPAT) under Civil Aviation Administration of China (CAAC) Production Certificate PC0035A and conform to the CAAC Validation of Type Certificate VTC0272A.

Aircraft serial numbers 224, 226 and up were manufactured by NZSkydive Ltd T/A Pacific Aerospace under Aircraft Manufacturing organization certificate AM98516

- END -