



INTRODUCTION

The CT/4 is an ideal abinitio primary trainer.

The CT/4 is well suited for day and night flying training as well as operating in VFR and IFR operations.



CT/4A – no longer in production, this model is still in service with several operators.

CT/4B – 210 hp Continental with two blade propeller, main differences were in durability enhancements and an inverted oil system.

CT/4E – 300 hp Textron Lycoming with three blade propeller – current production model.

CT/4C – Allison 250 turbine derated to 350 hp. First flew in 1991 and awaiting future development production orders.



In the early 1960's the Victa Airtourer powered by a Teledyne Continental Motors 0-200A engine enjoyed strong acceptance within the aviation industry.

The manufacturing rights were bought by Aero Engine Services Limited and subsequently the CT/4 series evolved.

Two prototype models of the CT/4 were used to refine the design and resulted in production of the CT/4A.

Some 75 CT/4A model aircraft were built before the B model was produced totaling 113 units.

In the early 1990s the CT/4E with the 300 hp engine and the turbine variant were in development.

The CT/4 is a 2 seat single engine low wing all metal monoplane with fixed undercarriage.

Today, production of the CT/4E model is very active at the Hamilton factory, along with other successful aircraft designs of Pacific Aerospace Corporation.



A I R W O R T H I N E S S

- Certificate of Airworthiness issued by New Zealand Civil Aviation Authority.
- Certificate of Airworthiness issued by Civil Aviation Safety Authority Australia.
- The CT/4B has been certified in New Zealand by Civil Aviation Authority to FAR 23 amendment 10.
- The CT/4E has been certified in New Zealand by Civil Aviation Authority to FAR 23 amendment 36.
- CT/4E type certificate issued 17 July 1992.



GENERAL DESCRIPTION

- 2 seat single engine low wing all metal monoplane.
- Strong fixed tricycle undercarriage.
- Powered by Textron Lycoming AEIO-540L1B5 engine, certified for inverted flight.
- Hartzell constant speed propeller.
- Side by side seating in a spacious cockpit.
- Lifting and jettisonable canopy.
- Maximum all up weight is 2,600 lbs.(1 180kg).
- Fatigue life up to 14,000 hours.
- Dual engine and propeller control levers.
- Dual control columns.
- Seating is designed for back pack parachutes, canopy height allows the use of helmets.



PERFORMANCE

Assume: ISA, Nil Wind, 2 Pilots

Take off ground roll (SL) 600 ft (182m)

Landing run 553 ft (250m)

Rate of climb 1830 ft/min

Stall speed (full flap) 44kts (82 km/hr)



The manoeuvre flight load factor limits are:

Flaps UP

Aerobatic Flight +6.0g – 3.0g

Flaps DOWN

Normal Flight +2.0g – 0.0g

Wing Loading 20.2 lbs./ft sq.

Power Loading 8.7 lbs/hp
(at maximum all up weight)





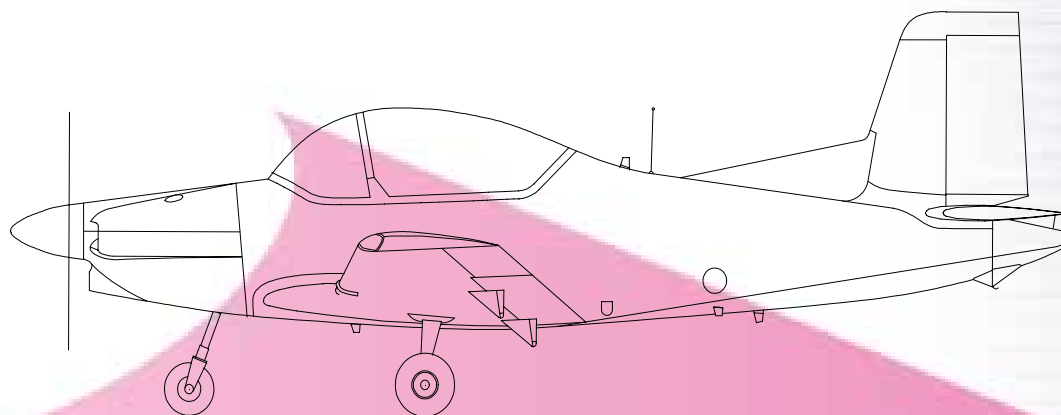
AIR SPEEDS

| | |
|-----------------------------|---------------------|
| Stalling Speed Flaps Up | 60 kts (111km/hr) |
| Stalling Speed Full Flap | 45 kts (83km/hr) |
| Stalling Speed Half Flap | 52 kts (96km/hr) |
| Manoeuvring Speed Flaps Up | 144 kts (267km/hr) |
| Manoeuvring Speed Full Flap | 63 kts (117km/hr) |
| Manoeuvring Speed Half Flap | 74 kts (137km/hr) |
| Cruising Speed | 150 kts (278 km/hr) |
| Maximum | 209 kts (388 km/hr) |



LEADING PARTICULARS

| | |
|------------------------------|---------------------|
| Propeller Ground Clearance | 8"– 28" (200–710mm) |
| Weight (empty typical) | 1780lbs (807kg) |
| Maximum Gross Weight | 2600lbs (1180kg) |
| Maximum Landing Gross Weight | 2600lbs (1180kg) |





LEADING PARTICULARS

Wing span

26.0 ft (7.92 m)

Length

23.48 ft (7.16 m)

Height

8.50 ft (2.59m)

Tailplane span

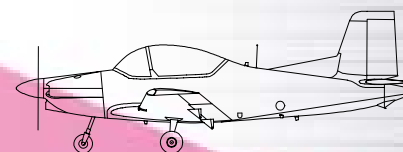
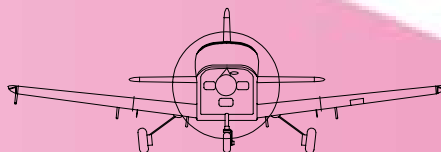
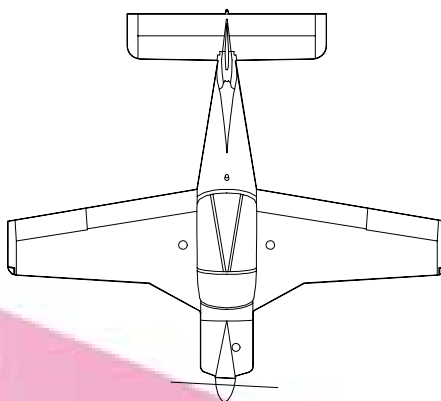
11.83 ft (3.6 m)

Wheel base

5.45 ft (1.66 m)

Wheel track

9.75 ft (2.97 m)





WEIGHTS

Two Crew – Full Fuel

| | |
|----------------|-------------------------|
| Empty Aircraft | 1750lbs (793kg) |
| Maximum Fuel | 322lbs (150kg) |
| Crew (2) | 340lbs (154kg) |
| TOTAL | 2447lbs (1109kg) |

| | |
|---------------------------|-------------------------|
| Useable fuel | 44 Imp Gal (199 litres) |
| Range | 520nm (836 km) |
| Fuel Consumption (cruise) | 14 gph (65 litres/hr) |

Fuel feed system comprises two integral wing tanks and associated valves and filters.

Fuel is gravity feed from each tank into a common collector tank.



Two versions of panel layout are available



*with flying instruments over
left panel*



*with flying instruments
in central position*

Main Landing Gear

- Two tapered spring steel cantilever legs are clamped and bolted to the secondary structure in wing to form the main landing gear.
- 6" (150mm) diameter wheel assembly incorporating hydraulic disc brake.
- Moulded fibreglass fairing.
- Positive engaging park brake.



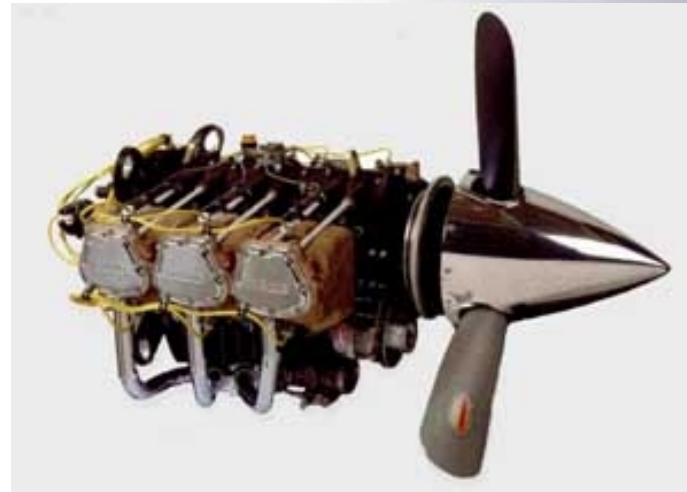
Nose Landing Gear

- Hydraulic shock strut with single sided steel nose wheel fork.
- Direct steering linkage to the rudder pedals.

- Jettisonable.
- Normal locking / unlocking, simple one handle system.
- Large canopy allowing unrestricted visibility.



- Textron Lycoming.
- AEIO-540 L1B5.
- 300 horsepower.
- Inverted oil system.
- Fuel injected.
- 1800 hours between overhauls.
- 6 cylinder piston, air cooled engine.
- Very few specialist tools required.
- Hartzell 3 blade metal propeller, variable pitch.





STANDARD SPECIFICATION

- Textron Lycoming AEIO-540-L1B5 fully aerobatic engine with inverted oil system.
- Hartzell HC-C3YF-4BF/FC7663-2R propeller.
- Low wing, integral fuel tanks feeding common collector tank.
- Two seat cockpit with optional third seat.
- Seats designed to accommodate parachutes.
- Lifting clamshell perspex jettisonable canopy.
- Sprung steel tricycle undercarriage, steerable nosewheel.
- Hydraulically operated disc wheel brakes, operated from either pilot's position.

- Park brake system.
- Conventional ailerons, rudders and elevator connected by pushrods and cables.
- Adjustable rudder pedals.
- Electrically operated rudder and elevator trims.
- Electrically operated flaps.
- 28VDC electrical system utilising a lead acid battery.
- Ground power receptacle.
- Cockpit ventilation system.



- Oil temperature and pressure gauge
- Cylinder head temperature gauge
- Manifold pressure gauge
- RPM indicator
- Accelerometer
- Fuel contents gauge and fuel computer
- Rudder and elevator trims
- Ammeter and voltmeter
- Airspeed indicator
- Altimeter
- Vertical speed indicator
- Attitude indicator
- Turn and slip indicator
- Wet compass
- Directional gyro
- Digital clock





OPTIONAL EQUIPMENT

The aircraft can be fitted with optional equipment at the customers request.

- First aid kit
- Cabin heater & demist function
- Air-conditioning
- Leather upholstery
- Fire extinguisher
- Five point harness
- Emergency locator beacon
- Customer selected avionics
- Tinted canopy and windscreen
- Third crew seat
- Customer selected paint scheme
- Nicad battery
- Instrument lights
- Cockpit rollover cage



Air-conditioning kit

- The only lifed items on the airframe are;

| | |
|-------------|--------------|
| wing splice | 11,000 hours |
| wing spar | 14,000 hours |
- The maintenance burden is 0.64 man hours per flight hour, this includes scheduled maintenance requirements.
- Tooling requirements are minimal.



Current and past operators

| | |
|--|----|
| Royal New Zealand Air Force CT/4B | 19 |
| Royal New Zealand Air Force CT4E | 13 |
| CT/4 Syndicate CT/4A | 1 |
| Private owners | 15 |
| Royal Australian Air Force CT/4B | 50 |
| British Aerospace / Ansett Australia CT/4B | 18 |
| Royal Thai Air Force CT/4A | 6 |
| Royal Thai Air Force CT/4B | 25 |
| Royal Thai Air Force CT/4E | 12 |
| Royal Thai Police CT/4A | 1 |

- Stall Warning (audio)
- Low Oil Pressure Warning light
- Low Voltage Warning light
- Simple fuel selector valve
- 25g stressed cockpit



Stall warning detector

