

# CT-4E AIRTRAINER



**X-Plane 8.64/9.70 (Separate Packages)**

**Author: Barry Roberts**

**Email: [xplanebaz@aapt.net.au](mailto:xplanebaz@aapt.net.au)**

**Version: 1.1**

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Data for this project came from a range of sources including the **TYPE CERTIFICATE DATA SHEET No A-10**

The Cockpit animations were create by and with many thanks to SeaRider (X-Plane.Org)  
<http://forums.x-plane.org/index.php?showuser=18078>

and

**Animated flight controls pack V1**

<http://forums.x-plane.org/index.php?app=downloads&showfile=11260>

Pilot object from **Pilot Collection 1.1** by Bertrand AUGRAS for XPFR

<http://forums.x-plane.org/index.php?app=downloads&showfile=6187>

Modifications including paint designs are welcome however a courtesy email or PM (X-Plane.org) would be welcomed with appropriate credits.

## **Installation:**

Copy the entire aircraft folder into the aircraft folder in your X-Plane Aircraft folder, any subdirectory as desired

## Liveries:

There are four different liveries for the CT-4E.

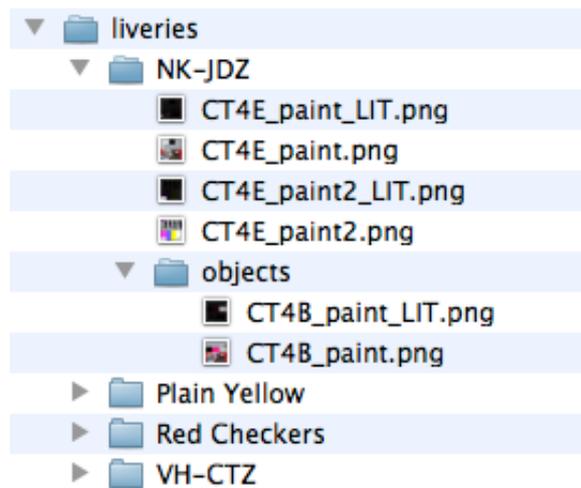
### XP9.70

Use the Open Livery Menu Option to select the livery you wish to use.

### XP8.63

You need to manually replace the current livery for the desired one by replacing files. This needs to be done to and from the following locations from the files in the Liveries folder

| <i>From</i>   | <i>File</i> ⇨  | <i>To</i>  |
|---|--|--|
| <b>Liveries Model Folder</b><br>eg NK-JDZ   | CT4E_paint.png<br>CT4E_paint_LIT.png<br>CT4E_paint2.png<br>CT4E_paint2_LIT.png | <b>CT-4E Folder</b>                                    |
| <b>Objects Folder</b><br>contained within selected Liveries Model Folder<br>eg NK-JDZ | CT4B_paint.png<br>CT4B_paint_LIT.png   | <b>Objects Folder</b><br>contained within CT-4E Folder |



## Revision Information

|          |   |
|----------|---|
| 1/6/2012 | Minor alterations to the fuselage object. |
|----------|---|

## History

<http://www.aerospace.co.nz/aircraft/ct-4/development-history>

The CT-4 Airtrainer was born out of two situations that occurred in the early 1970's.

Firstly the failure of the T6/24 Airtourer to meet the Royal Australian Air Force (RAAF) requirement for a basic trainer. Secondly the foresight of the AESL management of the time to exercise an already held option on the production rights to the Victa Aircruiser and adapt it into what we know as the CT-4 Airtrainer.

The adaptation was no small task as the Aircruiser was a non-aerobatic 4 place touring aircraft. However AESL, being a small, energetic and flexible company, achieved the task in short time. The first CT-4 Airtrainer s/n 001 ZK-DGY successfully first flew in February 1972 in time to meet RAAF tender requirements.

The major difference between the Aircruiser and the CT-4 Airtrainer was the many structural changes required to make the CT-4 aerobatic and able to withstand the "G" loadings associated with aerobatic operation.

More visible changes, such as a lifting "jettisonable" canopy, revised seating and interior, were also undertaken amongst many other minor changes.

The CT-4E was undertaken in the hope of securing an USAF contract. Using ex Breco and ex RAAF airframe s/n 065 the development was successful, but the contract hopes not.

In May 1992 production once again stopped.

Nothing further happened until 1996 when under the new Aeromotive ownership of PAC the Aeromotive Group was successful in securing a contract to lease of 13 CT-4E Airtrainers to the RNZAF. Production recommenced with a new serial number sequence for the CT-4E starting at s/n 200.

The RTAF, ever watchful, soon placed an order for 12 CT-4E aircraft and these were produced during 1999 and 2000. In the middle of the RTAF order s/n 216 was reconfigured from RTAF specifications and is now proudly operated by Aerotec Flight Training in Queensland, Australia.

The RTAF ordered a further 4 CT-4Es and these were produced in 2001 followed in 2002 by 2 Aircraft for DSTA in Singapore.



## Specifications

### Type

Two-seater fully aerobatic training aircraft.

### Wings

Low-wing monoplane.

### Dimensions External

Wing span: 26 ft (7.92 m)  
Length overall: 23.48 ft (7.16 m)  
Height overall: 8.5 ft (2.59 m)  
Wheel track: 9.75 ft (2.74 m)  
Wheelbase: 5.45 ft (1.66 m)  
Propeller diameter: 6 ft 3 in (1.9 m)

### Areas

Wings, gross: 129 ft<sup>2</sup> (7.92 m<sup>2</sup>)  
Ailerons (total): 11.56 ft<sup>2</sup> (3.52 m<sup>2</sup>)  
Trailing-edge flaps (total): 22.60 ft<sup>2</sup> (3.52 m<sup>2</sup>)



### Weights

Weight empty: 1780 lb (807 kg)  
Max T/O weight: 2600 lb (1180 kg)

### Performance

|                                       |               |
|---------------------------------------|---------------|
| Max never-exceed speed                | 209 knots IAS |
| Max cruising speed (75% power)        | 147 knots     |
| Cruising speed (65% power):           | 120 knots     |
| Stalling speed, wheels and flaps down | 45 knots CAS  |
| V <sub>x</sub> (best angle of climb)  | 75 knots      |
| V <sub>y</sub> (Best rate of climb)   | 95 knots      |
| Max demonstrated crosswind component  | 20 knots      |
| Range, standard fuel, 75% power       | 521 nm        |

### Links and Information

<http://www.aerospace.co.nz/>

[http://www.caa.govt.nz/aircraft/Type Cert Data Sheets/A-10 PAC CT4.pdf](http://www.caa.govt.nz/aircraft/Type%20Cert%20Data%20Sheets/A-10_PAC_CT4.pdf)

Comments and feedback welcome  
xplanebaz@aapt.net.au