

CUNLIFFE-OWEN AIRCRAFT COMPANY LTD CONCORDIA



BRITISH RARELINERS presents

The Cunliffe-Owen Concordia for Flight Simulator 9

Model and Art work by Peter Larkham

Flight Dynamics by Aerophile

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Introduction by Aerophile

RARELINERS - Another in the series:-British post War Airliners that didn't quite make it!

No 4:- **CONCORDIA**

In 1945 this little known (and probably unheard of) Southampton engineering works announced the existence of their CONCORDIA medium range 10 seat 'feederliner' project which put it directly head to head in the same market as the DH104 Dove, the prototype of which had already flown.

The advertising publicity of the day described a very desirable, luxurious aircraft with a 1200 mile range. Designed as a DH89A Dragon Rapide replacement, as with the Dove, the operating costs would prove to be at least twice as high but an attractive modern metal airliner with passenger appeal was on offer!

In 1947 the first two airframes had been completed and were flying. In addition a production line of six aircraft had been laid down. These included c/n 3 for the Nawab of Bhopal (G-AKBF/VT-CQT) and two for British European Airways. Unfortunately, due to an inadequate market, by the end of the year all work was suspended and the incomplete airframes were scrapped.

The two prototypes c/n 1 Y-0222 and c/n 2 G-AKBE soldiered on for a while, the latter being the production demonstrator having carried out an extensive European sales tour and been exhibited at the 1947 S.B.A.C. show at Radlett.

In 1948 both aircraft were by now seen to be redundant and were scrapped (time and place uncertain). This was a classic case of what was probably the right aircraft produced at the wrong moment against competition from one of Britain's aviation giants. Had circumstances been different then who knows what the outcome might have been.

BUT FOR NOW THE **CONCORDIA** LIVES AGAIN!



We take great pleasure in offering for your enjoyment and interpretive flying skills a great little British Post WW2 airliner. Our FS model depicts c/n 2 G-AKBE in Company livery..
..... Chocks away!!!

FLYING THE CONCORDIA.....

There is little to say about this graceful, gentle aircraft, since if handled with a light touch, the responsive controls enable the pilot to fly for enjoyment; *(A RARE PLEASURE IN THOSE DAYS!)*.

However, a few more facts & figures.

Single engine performance

- Rate of climb at full load = 365 ft/min (111.25 m/m).
- Cruising speed at 8000 ft with one airscrew feathered = 150mph (130.26 kts)
(241.41 kmh)

Twin engine performance

- Take off speed = 98 kts
- Take off over 50ft screen in still air = 574 yds from starting point at full load
- Landing speed = c.85mph (74kts) (136.8kmh).
- Landing over 50ft screen in still air = 679 yds at full load.
- Rate of climb at full load = 1420ft/min.
- Absolute ceiling = c.20000ft.

Happy Landings.....Aerophile 2007.

MODEL CONTENTS

Animations

All the expected aircraft surfaces animation

- Passenger door
- Passenger Toilet
- Fully animated prop feathering
- Cowl Flaps *

*Please ensure the cowling gills are closed before take –off

Modelled in FSDS 3 241 parts 35,880 polygons

Lighting

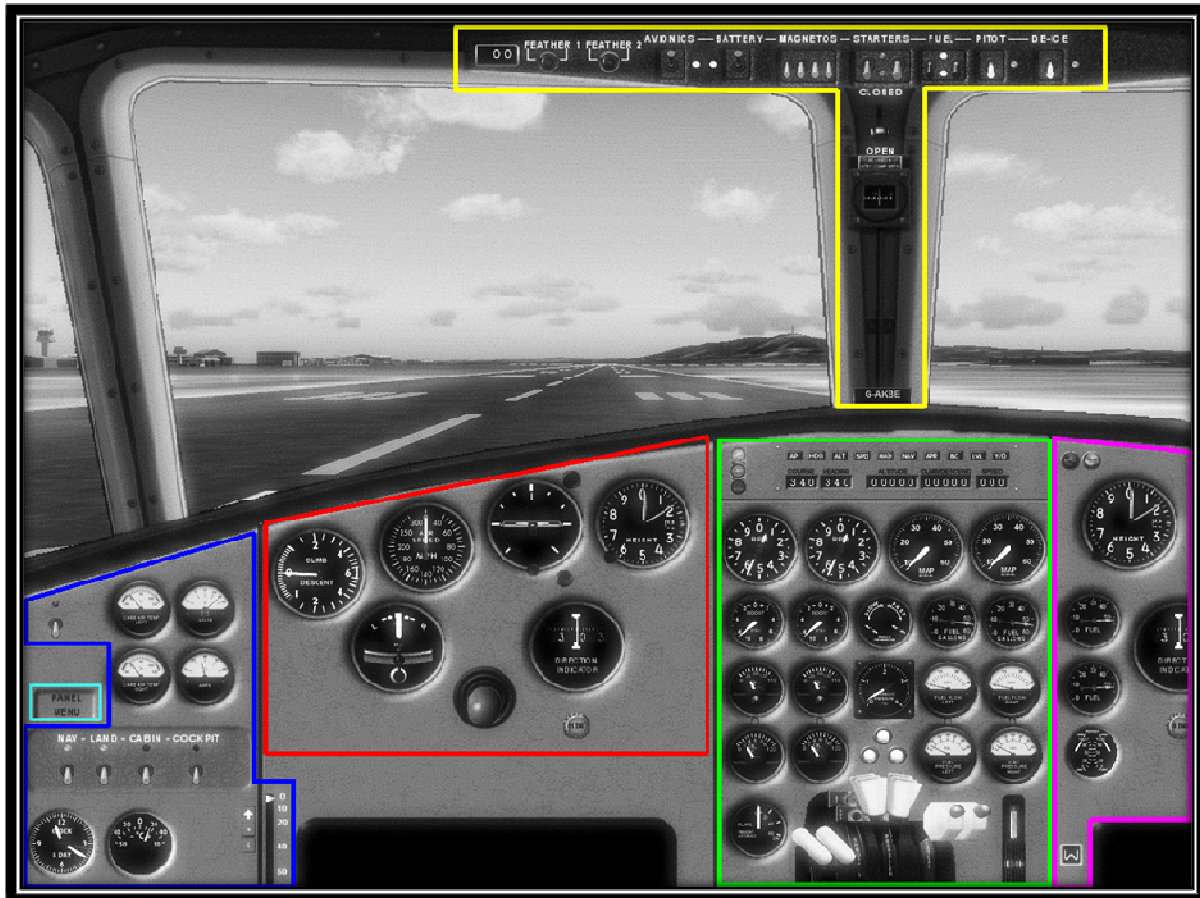
All the usual nav lights etc

- Cabin Lighting
- UV Cockpit
- Gear bay maintenance lighting *



*Please note, if you just use the L key to switch on all the lights some of the passenger cabin lighting doesn't work. The gear bay maintenance lighting should only be used on the ground and is available via a pop up panel from the panel menu

Flight Deck Layout



PANEL MENU	LIGHTS/ANCILLARY	MAIN SIX	ENGINE START/OTHER	CENTRE CONSOLE	CO-PILOT PANEL
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Panel Menu



- 1 – Air Traffic Control
- 2 – Radio
- 3 – Maintenance Lighting
- 4 – Throttles Display/Hide
- 5 – Map
- 6 – Pre-Flight Checklist

Lights+Ancillary Equipment



- PD – Open/Close Passenger door switch/indicator
- 1 – Carburettor Air Temperature (left and Right)
- 2 – Voltage
- 3 – Amperage
- 4 – Navigation, Landing, Cabin and Cockpit lights



Main Six



- 1 – Vertical Speed Indicator
- 2 – Airspeed Indicator (MPH)
- 3 – Artificial Horizon Indicator
- 4 – Altimeter
- 5 – Heading Gyro
- 6 – Turn and Bank Indicator
- 7 – Heading Gyro knob adjustment
- 8 – Yoke stem

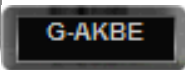
Engine Start/Other



All of the above are self explanatory perhaps with the exception of the analogue display on the extreme left which is the trim meter



Cowling flaps lever with compass below
Registration Identity plate



Centre console



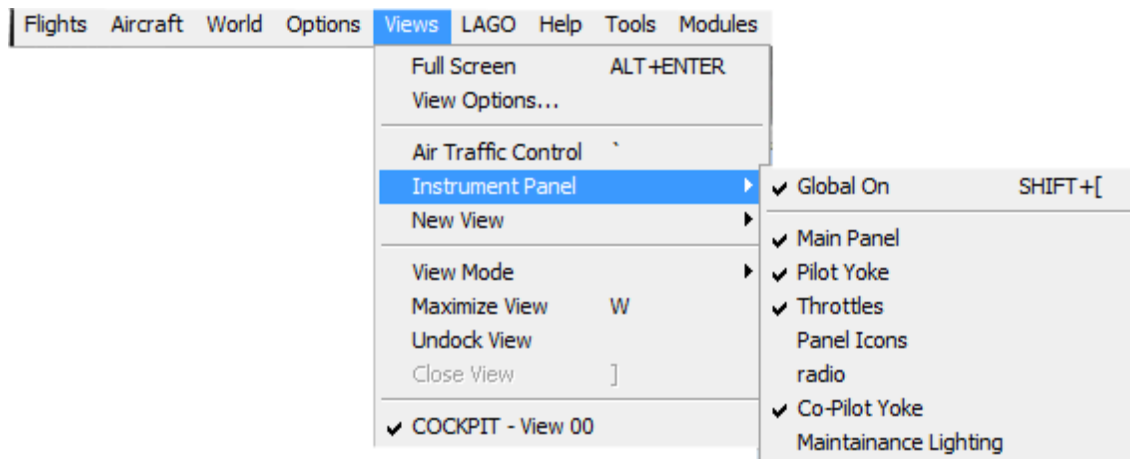
- 1 - OMI
- 2 - Auto Pilot
- 3 - RPM Left/Right
- 4 - Manifold Pressure
- 5 - Boost Pressure
- 6 - Synchroscope
- 7 - Fuel Tank Left/Right
- 8 - Oil Pressure Left/Right
- 9 - Hydraulic Pressure
- 10 - Fuel Flow Left/Right
- 11 - Oil Temp Left/Right
- 12 - Gear Indicator Lights
- 13 - Fuel Pressure Left/Right
- 14 - Flaps Indicator
- 15 - ECU
- 16 - Landing Gear Lever

Co-Pilot Panel



- 1 – Stall Speed Indicator
- 2 – Over speed Indicator
- 3 – Altimeter
- 4 – Heading Gyro
- 5 - Auxiliary Fuel Gauges
- 6 – Cowl flaps indicator
- 7 – Co-pilot Yoke Display/Hide

The 2D panel displays both animated yokes when the aircraft first loads the small icon that looks like a W when clicked will hide or display the Co-pilot's yoke. Only the Cowl flaps indicator gauge is obscured when the Co pilot yoke is displayed. There is no icon to remove the Pilot's yoke though this too can be removed if so desired as in the picture below by removing the tick mark by the pilot yoke option on the right pop out panel.



Ancillary Panels

COMMUNICATIONS



Radio COMM 1
Navigation 1
Automatic Direction Finder (ADF)
Direction Marker (DME)
DF Loop Indicator

Maintenance Lighting



Maintenance Lighting Gear Bay

These lights should only be used on the ground with the engines off and are merely there for engineers to inspect the wheel wells.

Cabin View

While viewing the 2D cockpit if you press the down arrow on your keyboard the following picture will display showing you the genuine passenger cabin



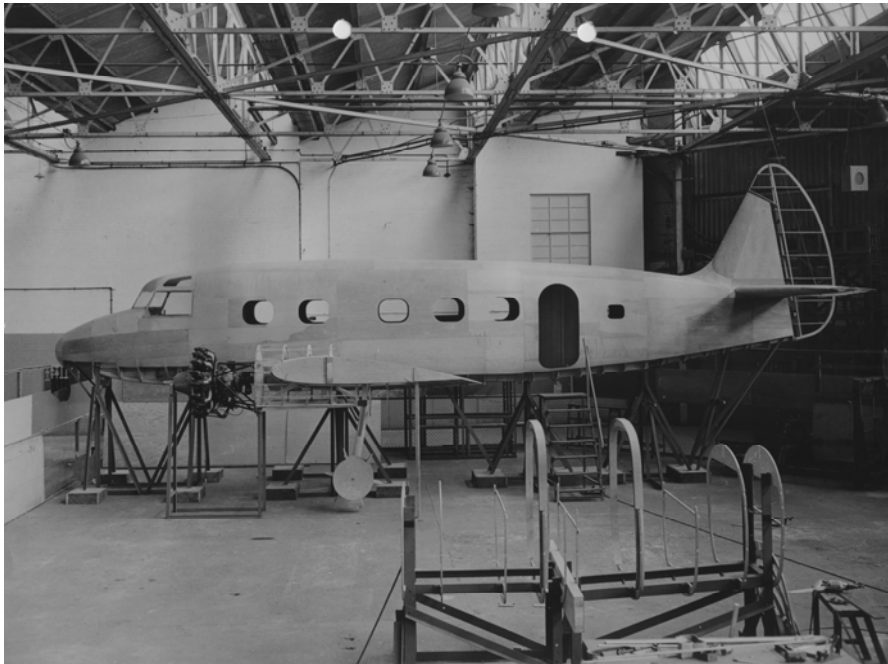
Project Material



Close up shot of port side Alvis Leonides on the prototype Y-0222.

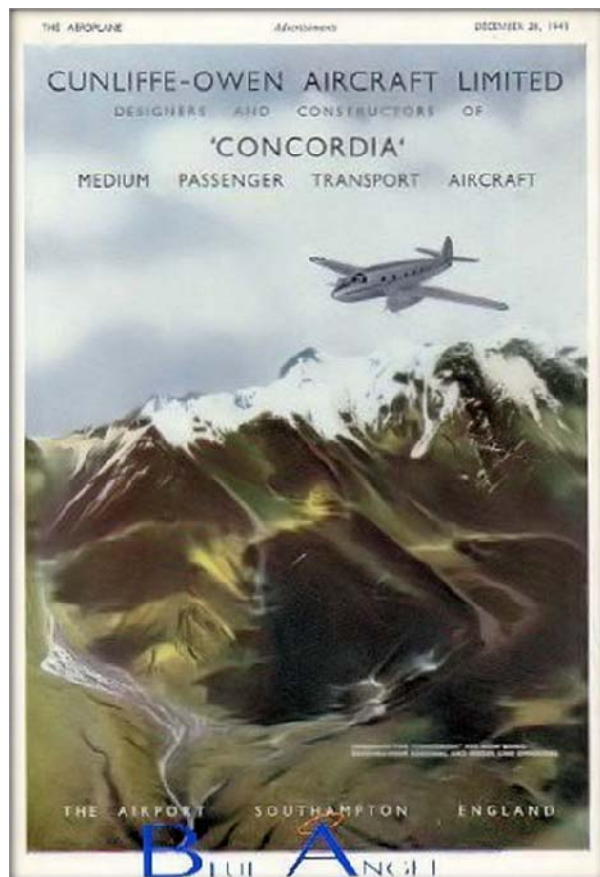


Y-0222 in flight



Early wooden mock-up

Marketing Advertisements



Acknowledgements



We consider that this is one of the singularly most important parts of our documentation due to the amount of external help that goes into producing the final product and here the contributors get a worthy mention.

- John Larkham – My father, who without his various aviation contacts and vast aeronautical knowledge the models would probably not behave as accurately as intended. For the months of work developing and tweaking the flight dynamics for all the models I produce, Thanks dad.
- Mike Hooks that doyen of air historians for supplying much of the photographic material that made this project easier to model thank you Mike

Gauge Credits

A huge Thank you to all the talented gauge designers listed below, and to those who are not known.

Detlev Rohmer
Microsoft
Blue-sky Software Development
And to all the various XML coders

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Thank you

Peter Larkham

Coming very shortly (I hope) – another rare British classic aircraft

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