



Who are LCF Conversions?

The Eolia Group has formed LCF Conversions which is the trade name for the programme to convert Boeing and Airbus 3rd Generation Medium Wide Bodied (MWB) passenger aircraft to freighters. LCF stands for Low Cost Freighter - converting passenger aircraft into freighters at costs equivalent to that of a large cabin re configuration - a fraction of the cost of undertaking a conventional full passenger to freighter conversion.

The Eolia Group was established in 2003 for the specific purpose of investing in passenger to freighter conversion programmes. Investment in a 747-400 conversion programme was the Group's first investment. This programme is managed through a joint-venture company PSF Conversions (www.psfconversions.com) and today a large number of converted aircraft are in operation with leading cargo operators.

Why the time is right for the Low Cost Freighter (LCF)

Eolia believes that the modification opportunities on the 3rd Generation MWB aircraft platforms are different and for conversion from a passenger configuration this generation of platforms requires a new approach. Simply replicating what worked in the past is likely to result in economically unrealistic solutions in part because the engineering challenge on this generation of aircraft is so much greater in relation to the original design parameters (passenger optimised).

Extensive and selected industry research together with preliminary design of the LCF concept was first commissioned by the Eolia Group in 2010. Since then the Eolia Group has secured the patented design rights (Patent no 8,011,617) and in June 2011 LCF commenced Phase 1 of the programme to develop and obtain Supplemental Type Certificates (STC's) from both the USA's Federal Aviation Administration (FAA) and the European Aviation Safety Agency (EASA) for the LCF programme. The STC's for converting the Airbus A340-300 and A340-600 aircraft to LCF freighter configuration will probably be the first LCF programmes.

Why we will deliver a successful programme

The Eolia Group is an organisation that draws on and retains services from amongst the world's leading experts in civil aircraft conversion all with extensive experience on the Airbus A300B4 and A300-600 programmes and the Boeing 737, 747, 757 and 767 conversion programmes. These have proved to be highly competitive programmes with strong customer appeal.

The LCF modification design and certification is managed by Seattle based ACE Corporation - the company has been involved in a number of successful conversion and modification programmes both with independent companies and with the leading OEM's, Airbus and Boeing. These programmes have included cargo conversions and major modifications.

LCF Conversions is working with ANCRA, a world class cargo loading system (CLS) supplier, to design, manufacture and certify (separate STC) a low weight CLS system for the LCF programme. The CLS system for the LCF conversion is based on the use of components already proven to be highly reliable in other cargo operations which, when installed in aircraft as part of the LCF conversion, results in reduced weight and cost (and increased payload).





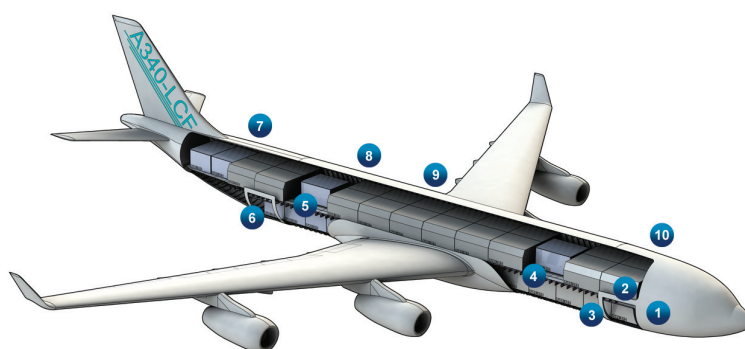
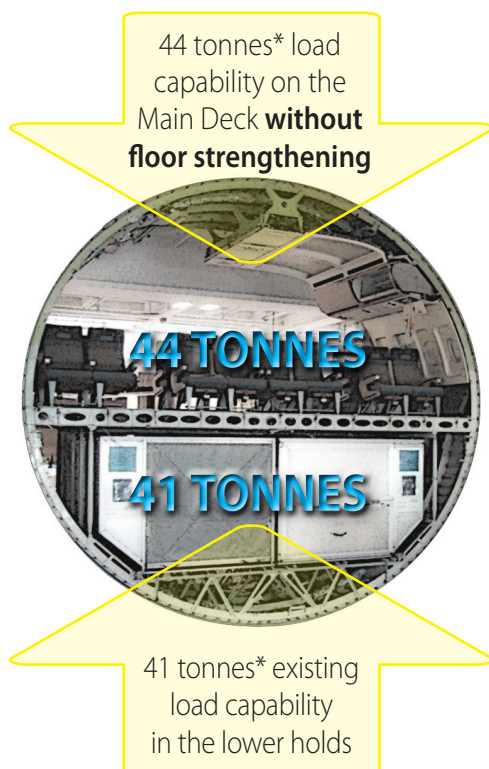
The A340-300 LCF

65 Tonnes Gross Payload Over Ranges > 5,000 nm



Exceptional Payload and Range Capabilities

Exploiting the inherent load capability



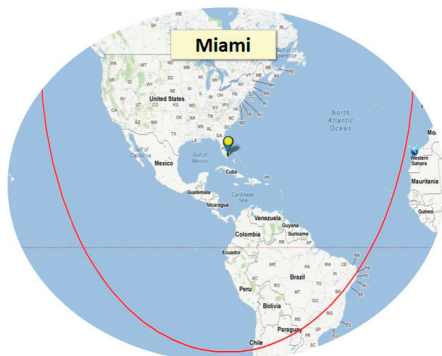
- ① Supernumerary Area / Intercom / Emergency Equipment / Lavatory / Galley
- ② Cargo Loading System
- ③ Fwd Cargo Door - CLS Modification
- ④ Forward Lift
- ⑤ Aft Lift
- ⑥ Aft Cargo Door - CLS Modification
- ⑦ MD Lights
- ⑧ Systems: ECS / Smoke Detection / Water & Waste / Drain / Oxygen
- ⑨ Interior Configuration: MD Class "E" / Doors Deactivation / Window Plugs Optional
- ⑩ 9G Barrier / Smoke Barrier / Acces Door

* Tonnages shown refer to the sum total of all permissible loads by individual pallet position. Compartment limits and aircraft Maximum Zero Fuel Weight will restrict total aircraft payload to ~65 tonnes.

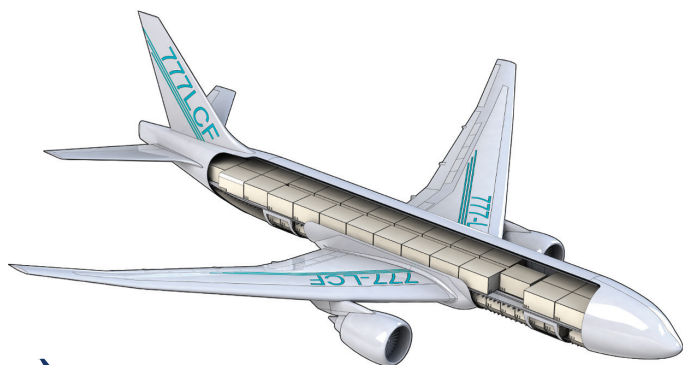


The B777-200 LCF

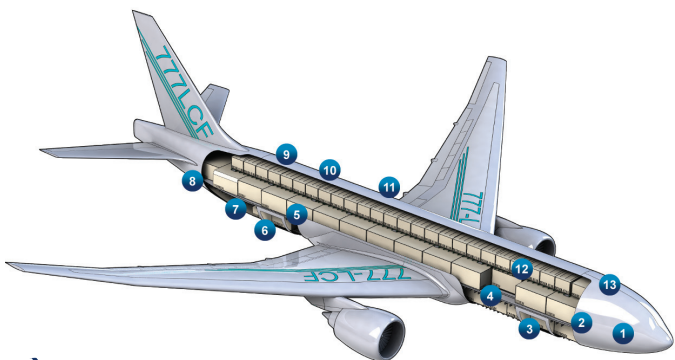
70 Tonnes Gross Payload - **GMF** and 65 Tonnes Gross Payload - **UL** Over Ranges > 3,000 nm



The B777-200 LCF is offered in two configurations:
GMF - General Market Freighter without Upper Lobe and **UL** - Upper Lobe



The B777-200 LCF - GMF
General Market Freighter without Upper Lobe



The B777-200 LCF - UL
with Upper Lobe

- 1 Supernumerary Area / Intercom / Emergency Equipment / Lavatory / Galley
- 2 Upper Lobe Forward Lift
- 3 Fwd Cargo Door - CLS Modification
- 4 Forward Lift
- 5 Aft Lift
- 6 Aft Cargo Door - CLS Modification
- 7 MD Cargo Loading System
- 8 Upper Lobe Aft Lift
- 9 MD Lights
- 10 Interior Configuration: MD Class "E" / Doors Deactivation / Window Plugs Optional
- 11 Systems: ECS / Smoke Detection / Water & Waste / Drain / Oxygen
- 12 Upper Lobe Powered CLS
- 13 9G Barrier / Smoke Barrier / Acces Door

The innovative LCF conversion programme builds on the inherent Lower Deck cargo capability of 3rd generation Medium Wide Body passenger aircraft such as the A340 and B777 by extending their exceptional Lower Deck cargo carrying capability up onto the Main Deck (utilising the same pallets/containers that can be accommodated on the Lower Deck) without the complication and expense of installing a conventional large freight door.

The LCF conversion is designed to make full use of the existing Lower Deck cargo doors to load conventional ULD pallets and containers onto the Main Deck and into the Lower lobe.

Today some 50% of all air cargo world-wide is transported in the Lower Deck of passenger aircraft, and this percentage is growing. But it does not follow that the other 50% is incompatible with Lower Deck door dimensions; to quote one airline now moving out of dedicated freighter aircraft operations, "90% of our freighter cargo could have been carried in the Lower Deck". So the vast majority of air cargo can be configured for loading into an LCF freighter.

Two patented Main Deck LCF platform lifts move cargo between the Lower and the Main Decks - the lift platforms become an integral, load bearing part of the Main Deck floor during flight.

