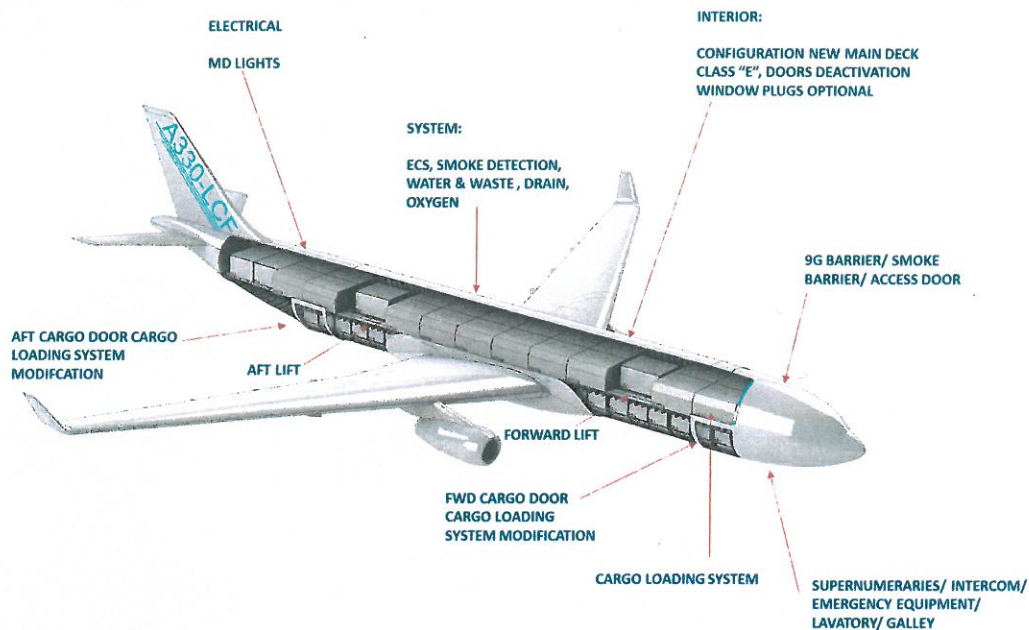


↳ The grand old Duke: converting idea to reality



LCF's idea is to use the existing cargo doors and capacity by building a lift to move cargo between the belly and maindeck (photo: LCF Conversions)

Confidence is returning to the freighter market but this is not yet reflected in growing order books for widebody freighter conversions, with the Air Cargo Management Group describing demand as 'virtually extinguished'.

In 2010, Airbus and Boeing forecast that this market could potentially average some 55 conversions per annum; by 2014 Airbus had reduced its forecast to some 30 conversions per annum and Boeing to around 20. With just four widebody conversions delivered in each of the last two years, and a current order book of just six in the pipeline (for the next 20 years), the performance is way below that experienced between 2003 and 2014, when annual production never fell below 20 widebody conversions per year. The question is: are we at the bottom of a cycle or is this a structural change in the widebody conversion market – and just how wrong are the forecasts?

Cliff Duke, founder of LCF Conversions, a promoter of two widebody conversion programmes in the past (Airbus A300 B4 and Boeing 747-400 P2F), has long warned that the ambitions of Boeing and Airbus, both in terms of their widebody conversion market forecasts, and the price they expect to achieve for their traditional P2F conversions on third-generation widebody airframes (A330 and 777), is misplaced.

Duke and the Eolia Group have developed an alternative conversion programme, LCF Conversions, to accommodate what they believe will be a more limited, niche-market demand focused on affordable, low capital cost, low-utilisation widebody lift.

The LCF philosophy is not to alter the certified limits of the passenger airframe; the third generation widebodies have significant freighter capabilities already built in (see illustration).

The concept is based on lift systems that use the existing lower hold cargo doors and cut-outs in the main deck floor to accommodate the lift platforms, which move cargo between the main and lower decks without any loss of area available on either deck for payloads.

The end result is what Duke describes as a cabin modification which opens up a number of options for the airframe as an alternative to passenger-only operations. The most attractive feature, he claims, is the ability to match and sometimes better the competing traditional P2F programmes in terms of payload/range at conversion prices in the order of \$5 to \$6 million, while retaining flexibility for additional alternative cargo/passenger configurations.

LCF has spent the last four years developing the concept. With almost one-third of the certification work now completed the company hopes to attract operators who see the benefits that such a flexible, cost-effective platform could generate, says Duke, as potential aircraft feedstock is starting to come onto the market at low prices.

Duke adds: "The future market opportunity for widebody conversions is not going to be an extrapolation of the past, for several key reasons. There are no obvious 'large' segment aircraft that would make good conversion candidates; the integrators dominate the potential widebody freighter market and are not capital-constrained, as well as having expressed a preference to buy new; the finance community has little if any appetite for financing widebody conversions." The market is changing – but only time will tell if Duke's cheap and innovative scheme will attract demand.