Low-cost A340 freighter scheme seeks launch customer

Freighter modification specialists are scouting for a launch customer for an Airbus A340 cargo conversion initiative which would avoid the need to cut a large freight door in the fuselage.

The proposed conversion instead uses the standard lower-fuselage freight doors on the A340 and installs a pair of internal cargo lifts, forward and aft, to transfer payload between the lower and main decks.

It would create a freighter capable of transporting over 60t across a range exceeding 5,000nm (9,260km).

LCF Conversions, which is spearheading the effort, estimates it is 12 months from securing a supplementary type certificate, but has reached the stage where it can start searching for a customer.

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The development had initially been directed at Boeing 777-200s, but suitable airframes are still too expensive and difficult to obtain.

However, the A340-300 is likely to be a more affordable candidate, with airframes available for around $15 million - partly owing to the lack of an Airbus conversion programme to extend the type's service life.

LCF claims the modification - designed by its partner, Seattle-based ACE Corporation - would cost around $6.5 million and take only six weeks, avoiding the high expenditure typically associated with large-door conversions and which would make such modification uneconomical.

"The A340 fleet is in serious trouble over its residuals," says LCF chief executive Cliff Duke, whose background has included extensive work on Airbus A300 conversions while at BAE Systems, as well as modifications to Boeing 747-400s.

"We see that we could have a real opportunity with the A340."
Only 218 A340-300s were built, but Duke believes this provides adequate feedstock for a low-cost conversion scheme, the economic model for which does not depend on take-up from large integrators such as UPS or FedEx.

"We don't need to have hundreds of aircraft to make this work," he says. The conversion scheme is aimed at a niche market and could eventually serve as a springboard to similar 777 modifications.

LCF's lift system, which is central to the A340 conversion, would avoid "invasive structural changes" to the aircraft, says Duke, which include the need to strengthen the main deck.

The company admits that this results in a floor-loading limitation on the main deck, but insists that it would still enable more than 40t of freight to be carried in this cabin - and accommodate most standard cargo loads - while the lower deck alone is capable of housing around 39t.

LCF also accepts that the absence of a large freight door limits containers and pallets to the dimensions of the lower-fuselage cargo door, which has a height of 1.63m (64in). But it claims that the quantity of cargo transported in lower holds means that the industry is "increasingly" adapting to configuring loads compatible with lower-fuselage access.

The company's analysis indicates that a full cargo offloading and reloading could be achieved in around 75min.

It is working with cargo systems specialist Ancra International to develop a low-weight cargo-loading system, which will also be part of the modification. While the new-build Airbus A330 freighter required a substantial nose-gear redesign to level the type's fuselage for loading, the proposed A340 conversion will not need a similar change.

Duke says the company is six weeks into the search for a launch customer and is "in discussion" with a number of end-users. "We're getting great interest," he says, and states that other A340 variants could be adapted. LCF will pursue European as well as US certification for the scheme.

Conversion of the A340, Duke adds, could also be carried out in a manner that would permit the A340 to be returned to passenger configuration if necessary, should the customer specify a need.

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