

New 747 freight conversion

AD 96-01-03, which effectively grounded GATX Airlog-converted 747s has been dealt with, effectively making the STC available again. The STC has been bought by Cargo Conversions, a new company.

Rick Hatton, previously of GATX Airlog has formed a new company, Cargo Conversions LLC, to offer 747 freight conversions.

In 1987 GATX Airlog purchased a 747 freight conversion supplemental type certificate (STC) which suffered a setback after airworthiness directive (AD) 96-01-03 was issued. This effectively grounded any passenger aircraft that had been converted to freighters with the STC.

The AD was issued after the Federal Aviation Administration (FAA) decided that Airlog's original STC, which was awarded on the basis of a comparative analysis, was no longer sufficient.

Airlog's 747 freight conversion STC had used a comparative analysis process for determining required structural strength. The STC compared the loads in its modification with those in Boeing's own modification. The FAA decided that the STC may be liable to failure in the structure and so placed floor loading limits on aircraft converted with the STC through AD 96-01-03. These limits made the aircraft uneconomic to operate.

Airlog has used a finite element model (FEM) to develop service bulletins (SBs) that take care of the concerns and problems of the AD. These SBs provide the FAA with evidence that the load

paths do not pose a danger to the aircraft. This process has effectively re-validated the STC, meaning aircraft converted by it will not have any loading limitations.

Hatton's new venture will use the re-validated STCs purchased from Airlog. Cargo Conversions has made a formal agreement with Lucas Aerospace for it to supply the cargo handling system. Lucas bought Boeing's Macon GA facility which manufactures the freight handling system for its factory-built 747-400Fs. Lucas will therefore construct cargo handling systems for both new Boeing 747Fs and aircraft converted by Cargo Conversions. Lucas will also build the freight conversion kits.

Cargo Conversions has also made informal agreements with several 747 heavy maintenance facilities to provide capacity when required to carry out the conversions. One example is British Airways Engineering's facility in Wales. Any 747 maintenance facility that is capable of a heavy airframe check can perform a freight door modification.

Hatton acknowledges that there is a lot of excess 747 capacity at the moment, but makes the point that many of these freighters aircraft are either in a poor maintenance condition or are

non-desirable of their engine type. "This excess has a lot to do with the poor state of the Asian Pacific economy," says Hatton. "At some point there will be an Asia Pacific economic rebound and a lot of the excess 747 passenger capacity will get converted. There is still some positive growth in freight, but it's not in the long-haul, low-yield market. The problem is that because of the Asian Pacific situation, there is a lot of imbalance in traffic flows in and out of the Asia Pacific region.

"Traffic growth will return once the Asian economies bounce back. There are about 180 passenger-configured 747-200s throughout the airlines and these will make excellent freighters. Freight traffic forecasts are for a 5-6% annual growth rate and up to 75% of this will have to be accommodated by aircraft conversions," claims Hatton. "The continued decline in yields will favour large-capacity used aircraft. Boeing's prediction is that about 150 aircraft the size of the 747 will be needed over the next 10 years. This will generate a market of at least 10 conversions a year."

"We have had quite a lot of interest and we are being aggressive on price; offering our conversion at \$13.5 million," says Hatton. This list price is competitive with that of Israeli Aircraft Industries and with Boeing.

Hushkit price war

Raisbeck has just received FAA certification for its high gross weight 727 hushkit STC. This is for 727-200s with gross weights up to 209,500lbs maximum take-off weight. Until now Raisbeck's hushkit systems have only been suitable for aircraft with gross weights up to 177,900lbs.

The new kit adds just 9lbs of weight to the aircraft. As an introductory offer to potential customers Raisbeck is offering a the kit at a list price of \$1.3 million. This is a reduction from the original price of \$1.795 million and compares with list prices of \$1.1 million for its intermediate gross weight kit and \$0.7 million for its low gross weight kit.

In response to Raisbeck's price discounts, another 727 hushkit supplier, Feasi, has cut the list prices of its kits down to \$1.8 million for its lightweight kit and \$2.625 million for its heavyweight kit. **AC**

The effective dealing of AD 96-01-03 has allowed Cargo Conversions to place a competitive freight conversion STC on the market which will now offer more assurance than ever to potential operators. Estimates are that the market will require about 150 747 size freighters over the next 10 years.

