



## The 757-200 Freighter

Steve Tanis **introduces Precision Conversions' 757-200 freighter conversion programme.**

2007 PROVED TO BE A COMPLEX YEAR for the freighter conversion market, mainly due to the lack of available candidate aircraft. Several factors contributed to the overall feedstock issue but, in particular, the transformation of major North American passenger carriers over the last several years has limited the number of aircraft available on the secondary market. Passenger carriers continue to focus on trimming operating costs, utilising existing capacity and realigning aircraft in order to meet market demands and achieve profitability. Generally speaking, aircraft become viable options for freighter conversion upon reaching an age of 15 years or older; however, due to economic conditions and lack of sufficient new aircraft replacements, older aircraft are being held in passenger service longer than expected. In the case of the fuel-efficient 757-200, it continues to perform the exact mission for which it was intended: carrying passengers efficiently. With a potential North American economic downturn on the horizon, airlines will continue to maximise operating efficiencies. Meanwhile, demand for new-generation freighters remains strong, and cargo carriers are feeling the pressure to continually gain operating efficiencies.

Caught in the middle of this situation is the highly flexible, short-to-medium-range 757-200. The number of required 757-200 freighters is estimated at between 425 and 475 over the next 18 years. That is almost half of the current 1,030 757-200s in service. In comparison there were just over 600 727 aircraft converted to freighters, from a total fleet of 1,831. The 727, like the DC-8 and 707, is rapidly becoming obsolete and will need to be replaced in the next few years. With oil prices hovering at \$100 per barrel, the trend is absolutely heading towards maximum flight efficiency in cargo operations. However, both passenger and cargo airlines recognise that a systematic removal of operational waste will contribute to their future success and longevity. This includes using more fuel-efficient, new-generation aircraft, even if acquiring those aircraft requires greater capital expense. Despite the severe feedstock issue presented in 2007, deals were made and aircraft were acquired and ultimately converted. The most active of the 757-200 conversion companies, however, was Precision Conversions. The company had a total of nine aircraft undergoing modification in 2007. This was a

significant increase over 2006. Progressively since Precision Conversions received its STC for the full 15-pallet-position 757-200PCF in 2005, the interest has continued to increase. Precision Conversions expects to have roughly the same number of conversions in work for 2008, followed by a sharp increase in the 2009/2010 timeframe.

## The 757-200PCF programme

Precision Conversions currently has 16 aircraft around the world with seven cargo carriers. The success of Precision Conversions' 757-200PCF programme can be directly attributed to the distinct advantages its conversion has over other 757-200 freighters. First and foremost is the fact that the 757-200PCF is capable of holding 15 full pallet positions. The extra position translates into extra revenue-generating capacity for an operator. Equally, the owner of the aircraft can offer a lease at a premium because of the maximum utility offered in terms of both low operating empty weight (OEW) and the extra cargo volume (positions) that are provided by the Precision Conversions 757-200PCF.

In comparison, when the conversion companies began offering a 12-pallet solution for the 727-200 it made the earlier and lower-volume/payload 727s less desirable, almost immediately. A point to note is that maximum payload and volume give operators and leasing companies maximum flexibility. No one ever says they want to haul less payload and less volume. When you have the maximum allowable utility, you can always haul less if business dictates, but when you have an asset that is less than the maximum utility available, you are always limited as to what you can do with that asset.

A further advantage of the 757-200PCF is that it has the lowest operating weight of any 757 conversion on the market today. Even with the additional pallet capability, the average basic empty weight of all the Precision Conversions 757-200PCFs converted to date comes in at 116,114lb. The favourable operating features and characteristics draw the attention of significant operators such as DHL/European Air Transport. In October 2007, Precision Conversions delivered the first full 15-pallet position to DHL/European Air Transport. It is being operated by Blue Dart Aviation, based in Chennai, India.

Precision Conversions is working on making its baseline 757-200PCF even more productive. The company expects to receive its STC for a weight upgraded 757-200HP (High Payload)

version in 2008. Brian McCarthy, Precision Conversions' VP marketing and sales, says, "We will soon be able to offer our current and new customers a high-payload variant which meets the needs of a niche, yet important, high-density market... This baseline product expansion will be a significant driving factor for further interest in our freighter."

Precision Conversions has gained approvals from the FAA, CAAC, EASA and ANAC (of Brazil) for both the Pratt & Whitney- and Rolls-Royce powered 757-200 conversions.

## Future outlook

Precision Conversions admits that 2008 will be a challenging year due to the ongoing feedstock issues. However, there are several potential scenarios that could pave the way for further expansion of the 757-200PCF programme. As mentioned earlier, indicators of the North American economy are showing a decline for 2008. Whether this will simply be a slowdown or a recession is yet to be seen but, in either case, the slowing economy would place additional pressures on domestic airlines, forcing them to constrict their growth (a process they have already commenced). At the same time, they will be receiving new replacement aircraft and will be able to retire older aircraft. The North American major passenger carriers are currently operating 530 757-200 aircraft. An economic downturn along with aircraft deliveries would effectively solve the current feedstock shortage for not only the B757 but also other platforms.

At the dawn of 2008, the 757 values for 20-year-old aircraft were falling between \$11m and \$15m, and once a conversion is added to the price tag the aircraft is at the top end of economic viability. A flood of 757 aircraft on the secondary market will help to reduce those values and ultimately make the aircraft available to a whole host of operators that can benefit from the aircraft operating efficiencies. The 'sweet spot' base value for the 757-200 is roughly \$9m to \$11m. A wave of conversion activity will be triggered when aircraft reach these values.

If the predictions for the 757-200 conversion market hold true, then the industry will need to convert roughly 23 to 26 aircraft per year for the next 18 years. For this reason, Precision Conversions is prepared for 20-aircraft-per-year production cycles. 2008 will prove to be an interesting year for the passenger-to-freighter conversion market, for as we all know the entire industry outlook can change in the blink of an eye.

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