

757 BUILT TO PRECISION

FLEET replacements in Europe and rapid e-commerce growth in China have kept the production lines rolling in the Boeing 757-200 passenger-to-freighter (P2F) conversion market.

None more so than for US-based Precision Aircraft Solutions, which will undertake 20 such narrowbody conversions this year, and expects to do the same number in 2016 and 2017, after which the order book will “gracefully decline” during the following five to ten years, says company president Gary Warner.

Not that Precision is resting on its ailerons. It is already examining the business case for alternative future conversion programmes beyond the 757-200.

Warner started his career at British Aerospace in the development of missile systems. He then moved from the military to the commercial field and was closely involved with Airbus’ A300B4-100/200 passenger to freighter conversion programme.

He joined Precision Conversions in 2003 as VP of corporate development, and worked through the 757-200 P2F programme development, seeing the supplemental type certificate (STC) being issued in mid-2006. “We’ve been modifying 757s ever since,” he says. Warner was made president of the Portland, Oregon-based company in September 2012.

In June this year, Precision was awarded the P2F conversion of four Rolls-Royce-powered 757s for Chinese delivery services company SF Express.

The same month saw Precision contracted to begin a 757 P2F conversion for privately owned leasing company, VX Capital Partners.

Eric Adema, principal of San Francisco-based VX, says: “Due to the high demand for freighters in the Precision 757 weight and volume class, we believe that now is the time to move forward with the 757 as a natural extension of our B737-400 freighter fleet portfolio. This new 757 development gives operators a great performance and

tonnage spectrum to choose from.”

Global express parcel and logistics giant DHL is another regular customer whose air network providers currently operate 16 Precision-converted aircraft in India, Australia, North America, Panama and Bahrain.

In May this year, Precision began a 757 passenger-to-freighter conversion for DHL, which is in the process of replacing a portion of its European 757-200 Rolls-Royce C powered aircraft. This latest version of the P2F 757 will have more efficient engines and greater parts availability than the original RB211-535C-powered airframes which came with the earlier passenger versions acquired from British Airways.

Thus P2F demand for the narrowbody workhorse 757 remains strong.

Says Warner: “We are looking at 20 aircraft inputs for conversion this year and we expect to see the same next year and the year after, plus we are doing other business outside of conversions such as airline engineering support and kitting. This is certainly an exciting phase in the growth of the company, and I see this as being the start of the golden years for Precision.”

The turnaround time per aircraft is about 95 days or fewer for a straight conversion job, but if the client wants to make best use of time on the ground for additional heavy maintenance and avionics upgrades, then the turnaround can be up to 115 days.

Thereafter, the lifespan of the converted freighter is extended by an average of 20+ years, although FedEx achieved far more than that with its Boeing 727 fleet.

Precision holds the STC for the 757-200 P2F and P2Combi conversion, doing its own engineering, purchasing, kitting and logistics. It has contracts with specific maintenance, repair and overhaul (MRO) operators around the world, including three in the US: HAECO Americas (formerly TIMCO Aviation Services) in Greensboro, NC; Flightstar Aircraft Services in Jacksonville, FL; and AeroTurbine in Goodyear, Arizona.

In China there is HAECO Xiamen which



was the TAEKO (Taikoo Aircraft Engineering Co) facility.

In addition to 10 conversions for SF express, HAECO Xiamen completed two 757 P2F conversions for Air China Cargo in 2014, with those freighters going to work for China Postal Airlines. “We have a significant footprint in China with the 757PCF, and have freighters operating in every continent,” adds Warner.

“Our business is going extremely well. We have converted more than fifty aircraft, have seven aircraft in work, and an order book through to the end of the year.”

There is a growing demand for the 757 P2F in China, says Warner: “It started with a tremendous amount of interest in the Boeing 737 freighter, and that was primarily driven for two reasons, one being crew availability. The other reason being that existing operators inside China were chartering those aircraft to the likes of SF Airlines.

“But once SF Airlines determined it needed its own fleet of aircraft, larger gauge planes like the 757 became a priority, because of the higher volume and payload which work well on those high capacity routes. The country as a whole does not have enough freighters currently to be able to satisfy the demand coming from business and consumers.

“We are seeing more aircraft being required inside China. The smaller freighters are still in use, but are too small for some



Gary Warner, President, Precision Aircraft Solutions

routes required by the emerging integrators."

There remains interest in the 767 freighter inside of China, but it is extremely limited, says Warner.

A growing Chinese middle class with money to spend and a desire for foreign goods is pumping the e-commerce market and, from that, the need for freighters to deliver the goods, literally overnight. Hence the rapid growth of SF Airlines and others.

In the larger Asia region, Precision sees airlines such as Raya of Malaysia looking to the 757, and the carrier is in the process of taking an existing Precision P2F. Blue Dart in India, an operator linked to DHL, will fly 757s between the major cities.

But the 757-200 P2F sector can see the sun setting on a programme that has a price tag of around \$4.6m per conversion. The reasons are complicated.

The feedstock of 'freighter-convertible' 757 passenger aircraft is sizeable, but with certain provisos, says Warner.

"Yes, there are still plenty available, with around 300 aircraft out there. It comes down to what the customers are willing to accept in terms of aircraft age and flight cycles. But I believe that there are still a good six to ten years left in the programme.

"I feel that the next three years will be great and thereafter a graceful decline, in the same way we have seen in other conversion programmes.

"In total, Precision is looking at around 130-150 757 conversions [by programme end]."

Warner continues: "We are researching the next Precision Converted Freighter No 2. We are looking at alternative programmes right now."

Warner will not elaborate on the specifics of alternative programmes at this stage, but hopes to make an announcement by the end of 2015.

Precision holds the STC for a combi version of the 757-200 but this is very much "a niche within a niche" despite some recent inquiries, and while a 757-300 P2F would garner a lot of interest, there are again provisos.

"The Dash 300 is one of the programmes we are looking at, but it is certainly not the only one. The issue with the 300s is that there is a very small fleet of these aircraft, with only two or three operators, and the variant remains very popular among passenger operators.

"So it is going to be problematic for them to become available. The 757-300 would make an excellent freighter but we just don't think that those aircraft are going to become available soon."

Precision is thumbing through the list of narrowbody airframes, for example the 737-700/800 and the Airbus A320/321: "We are looking at all of those, to assess which one is the right product for the market."

Airbus foresees a significant market demand for narrowbody passenger aircraft to be converted to freighters — more than 600 over the next 20 years.

In its latest forecast, Boeing said that, of the 2,170 projected freighter deliveries, 1,130 will replace retiring airplanes, with the remainder expanding the fleet to meet projected traffic growth. More than 60% of deliveries will be freighter conversions, nearly 85% of which will be standard-body passenger airplanes.

A projected 840 new production freighters, valued at \$240bn, will be delivered, of which more than 70% will be in the large-freighter category.

There are no narrowbody production freighters anymore, but any entry by Precision into another narrowbody conversion market will bring it up against established competition. "Yes, there are people already in those markets, but what we found with the 757 is that we have a different approach, in general, to doing the modifications. We are not a large MRO and we are not a standalone engineering company.

"We did not have the baggage that other conversion companies have when coming into these programmes, so we feel confident in how nimble we can be with the expertise we have inside the company. We just want to make intelligent decisions on what we do next."

Continues on page 12

Kraft lands Boeing role

KURT Kraft has been appointed to head Boeing's freighter conversion and modification services.

Kraft will have responsibility for all modification programs including avionics, flight decks, interiors and freighter conversions.

Kraft previously served as director of 787 engineering at Boeing South Carolina and succeeds Dan da Silva, who becomes VP of Strategic Regulatory Policy for Boeing Capital Corp.

Boeing's Freightier Conversion and Modifications group helps customers incorporate the latest efficiency upgrades or transition an airplane for a new and different purpose. ■

NCA axes B747-8F quartet order

NIPPON Cargo Airlines (NCA) has cancelled an order with Boeing for four B747-8 freighters, worth \$1.5bn, but still has two more set for delivery, the US plane maker has confirmed.

NCA, one of the launch customers for the 747-8 freighter in 2005, currently operates five Boeing 747-400Fs and eight 747-8Fs, according to its website.

The 747-8 freighter version, with a 140 tonne payload capacity, has a list price of \$380m and is Boeing's second-most expensive aircraft.

In June this year, Volga-Dnepr signed a memorandum of understanding with Boeing to further its fleet expansion with 20 additional B747-8 freighters, with a list price value worth \$7.4bn.

The additional 20 airplanes will be acquired through a mix of direct purchases and leasing over the next seven years, the

companies said in a joint statement.

The order is expected to become firm by the end of this year.

In July, Boeing reported an increase in the number of freighter aircraft delivered during the first half of the year, but also confirmed that it will scale back production of 747-8s.

The reasons behind the NCA decision remain unclear but most observers believe that weakening demand in Asia was a key factor behind the move. ■



Continued from page 11

Warner will hold back on any announcement until the Precision team feels comfortable "that all the pieces fit together", including customer preference and requirements, the performance of the aircraft and its residual value.

Warner observes that fuel efficient engines are the highest proportion of the value of any currently available passenger planes, a serious consideration when looking at the feedstock for conversion. There are also other technology differences.

"The classic planes have been driven

primarily by structures, and now on more modern aircraft you have to consider systems impacts as well, especially with the Airbus family, which tend to have more integrated systems."

For Precision, there is no focus on the widebody sector for P2Fs. "For the time being we will hold off doing a widebody, unless somebody comes forward with interest."

The Precision boss says that going on forecasts alone for making a business decision could be "problematic", and that "a good level head is required", when consid-



ering what the future market is going to look like.

"But I see some good numbers being put out there for narrowbody freighters." ■

flysaa.com/saacargo



WE HAVE THE CAPACITY



SAA Cargo is the leading African cargo airline and provides seamless air freight solutions globally in line with SAA's vision of being the catalyst for African growth.

For more information email SAACargoReservations@flysaa.com

**SOUTH AFRICAN AIRWAYS
CARGO**

STAR ALLIANCE



**BRINGING THE WORLD TO AFRICA
TAKING AFRICA TO THE WORLD**