quota of standard goods on express flights, the constructional disadvantages of the A380F will matter less. UPS managers plan to fly a single A380F to destinations where two or more flights are currently necessary.

Meanwhile, the arrival of the A380F also brings new challenges in terms of delivering on aircraft turnaround. The lion’s share of ground time is spent building up and loading pallets and ULDs. Handling times of around 15 hours from delivery are possible with current 747 freighters, structured roughly as follows: eight to 12 hours for building up pallets/ULDs; three hours for calculating load sheets; and three hours for physical loading/unloading.

However, to utilise the A380’s extra 50% cargo volume effectively, new dispatch concepts are required; there is potential for chaos on the airport ramp and confused warehouse management within cargo terminals. At distribution centres, high bay racks are common and such a concept could minimise the need for expensive stock areas and also help manage a much speedier turnaround on the ground.

**Growth market**

The good news for Airbus is that the express and logistics market is one of the biggest growth markets worldwide. Airbus estimates the demand for freighters through to 2023 to be around 3,100 aircraft, of which 20% will be widebody freighters. During the same period, Airbus also forecasts that some 60% of today’s freighter fleet will be decommissioned.

Similarly, Airbus envisages a surge in passenger-to-freighter conversions, particularly in the small and medium freighter segments. The proportion of conversions in these segments currently stands at around 75% of all freighter aircraft, although this will likely rise to 90%, it says. Importantly, the number of new widebody freighters delivered during this period will also grow by as much as 50%, believes Airbus.

Boeing roughly concurs in its own forecasting and also points to an above average rise in the number of widebody freighters (with transport on freighters with a loading capacity less than 50 tonnes gradually replaced by cheaper road feeder services). It is against this background that Boeing launched its 747-8 programme that comprises a passenger aircraft—a modernisation of its celebrated 747-400—and a freighter version. Carriers such as Cargolux and Nippon Cargo Airlines were quick to sign up for the latter.

The new 747-8 freighter will be some six metres longer than the 747-400F and offer a total payload capacity of 140 tonnes—comparable to that of the A380F. It will also, says Boeing, provide 16% more cargo revenue volume than the -400 and offer 22% lower trip costs than the A380F.

Key technologies from the Dreamliner project, Boeing’s new 787 series, will be adopted so that the 747-8 sets new standards regarding stiffness and noise.

Boeing’s new and improved competitor freighter looks like the better alternative at present; it already has some 30 747-8F aircraft on order for three different customers, while Airbus now has 10 A380Fs on order from one customer. But if Airbus manages to resolve its teething troubles, the A380 still has a good chance to enjoy greater market penetration.

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