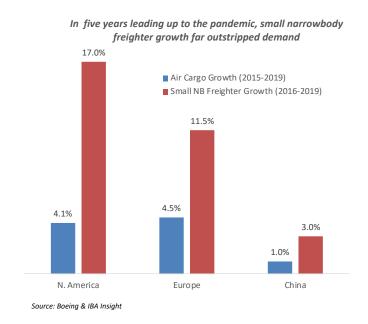


The last two years have seen an unprecedented expansion in the narrowbody freighter fleet. Covid related medical equipment, loss of passenger belly space, E-commerce growth and supply chain disruptions created the need for additional capacity. Early in the pandemic, there was a rush to meet demand by stripping the interiors of passenger aircraft in order to carry freight loaded through the passenger door — not very efficient, but high yield and kept otherwise idle crews and aircraft in operation. Soon thereafter, 737-800 lessors facing a loss of revenue in the passenger market sensed an opportunity in the freighter market and the rush was on to acquire conversion slots for this "hot" market. Speculative investors soon jumped in and for the first time in the history of narrowbody freighter conversions, slots were sold out two to three years in advance. Will the market absorb this record onslaught of additional capacity, or will this be a case of irrational exuberance (i.e. "investor enthusiasm that drives asset prices higher than those assets' fundamentals justify")?

The Boeing or Airbus forecasts, often used as an indicator of future freighter growth, 4% (Boeing) and 3.3% (Airbus), are of limited use in predicting demand for the short term. Air cargo demand has exhibited a higher degree of variability than is indicated by the long-term trend. One may ask — will the next few years look like the five years immediately preceding the pandemic or will growth return to the Airbus/Boeing long term trend forecast? Or has E-commerce created a paradigm shift of incremental demand for small narrowbody freighters? A look at the historical data may help answer these questions.

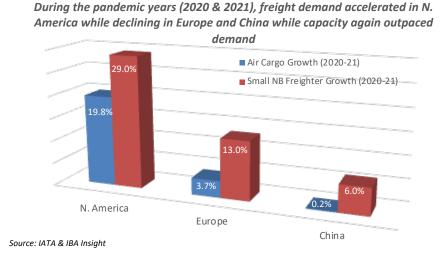


In the five years preceding the pandemic (2015-2020), regional air cargo growth ranged from 1% in China to 4.1% in North America and 4.5% in Europe. During the same time period, small narrowbody freighter fleets, primarily 737 Classics and 737NGs grew much faster than demand – 4X in the US, 3X in China and 2.6X in Europe. In Europe and the US this increase in

the fleet was mainly attributable to E-commerce, more specifically the build out of the Amazon air network.

In 2020 & 2021, domestic US demand increased dramatically with the unprecedented growth in E-commerce generated by the lack of consumer mobility and a large infusion of government stimulus. Although Europe and China

experienced
much lower
growth rates,
the
narrowbody
freighter
fleet
continued to





strongly outpace demand in all three regions.

For the period from 2015 to 2021, the narrowbody freighter fleet increased at a rate that was <u>three times</u> the rate of underlying demand (100% vs 30 With sluggish economies in the US, Europe and China, the maturation of E-commerce and the return of passenger belly capacity the market appears to be over supplied with narrowbody freighters.

Nevertheless, 737-800 conversions in 2022 are expected to top eighty units thereby almost doubling the year end 2021 fleet of one hundred and twelve aircraft. The conversion providers expect this production rate to continue into 2023 and beyond. With a limited number of retirements and a moderation in air cargo growth, speculative 737NG investors who recently decided to jump into the conversion market will struggle to achieve a compensatory return from lower than assumed lease rates and freighter aircraft values. As is the case with the passenger market recovery, it will take years for the narrowbody freighter to achieve a more balanced supply/demand market.

Fortune Aviation Services has been providing guidance to investors in the freighter market for more than 25 years. The company has been successful in identifying profitable investments for its clients through economic analysis and thoughtful market forecasts. If you would like to "look before you leap" on a freighter investment, please let us know.

Stephen J. Fortune Fortune Aviation Services LLC +1.240.401.3115 sfortune@fortuneaviation.com www.FortuneAviation.com

