

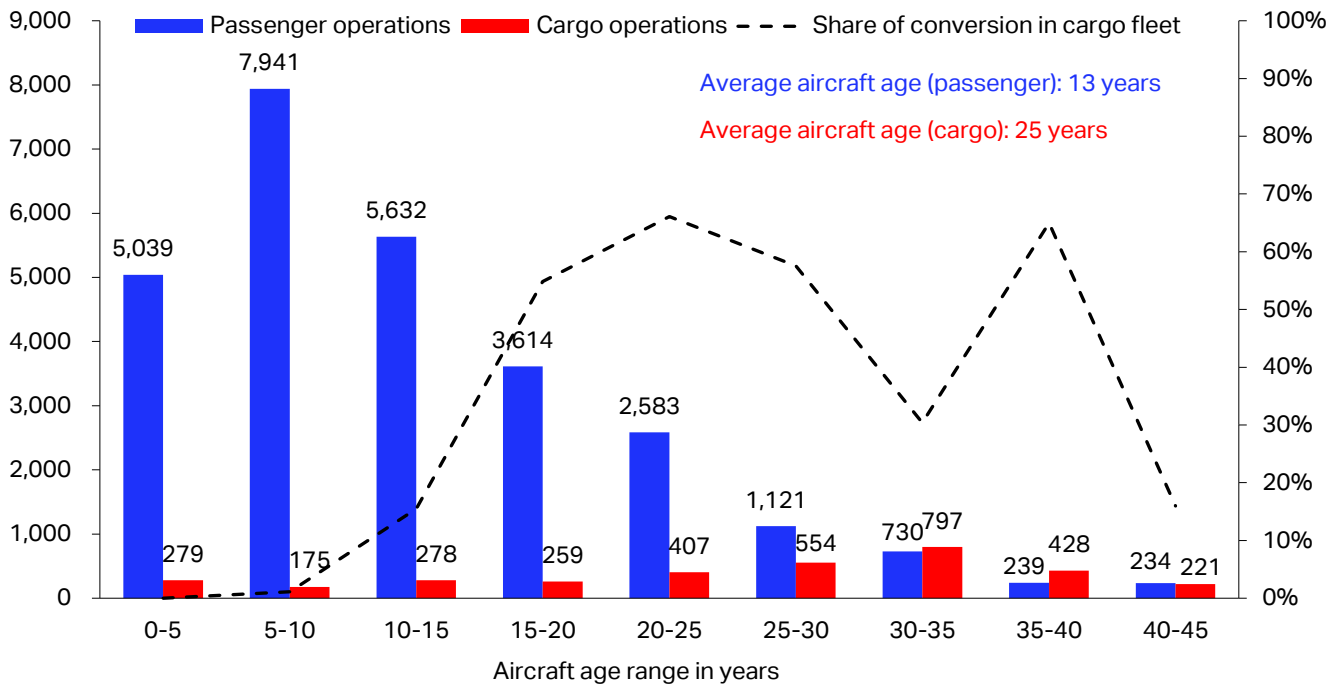


Chart of the Week

15 March 2024

The older cargo fleet hampers emissions reductions

Number of in-service aircraft for passenger versus cargo operations by aircraft age



Source: IATA Sustainability and Economics, Cirium Fleet Analyzer

- Aircraft in service in passenger operations are, on average, 13 years old. The average age of aircraft flying cargo is significantly higher, at 25 years. As dramatic as that might sound, it should be noted that the in-service cargo fleet represents a relatively small share of the global in-service fleet (including both passenger and cargo) at about 12.5%.
- A contributing factor to the higher average age of the cargo fleet is the high proportion of freight aircraft that are converted from used passenger aircraft (dotted line in the chart above). This conversion rate reaches 66% for certain age categories, and the average share of conversion is as high as 34%.
- Apart from the diverging averages between passenger and cargo fleets, a simple comparison of the most populated age group highlights the stark difference in the age profile. The highest number of in-service aircraft in the passenger fleet falls in the age range between 5 and 10 years, with as many as 7,941 aircraft. The cargo fleet's most populated age range is that between 30 and 35 years, with 797 aircraft.
- The longer lifespan of cargo aircraft means that the pace of fleet replacement is slower than in the passenger fleet. As older aircraft are less fuel efficient and generate more carbon dioxide (CO₂) emissions per revenue tonne kilometer (RTK) than newer aircraft, progress on decarbonization will be delayed, all other things being equal.
- While air cargo is only responsible for about [15% of commercial aviation's CO₂ emissions](#), it is still crucial that air cargo operators are not left behind in the industry's quest to decarbonize, especially given the increased strategic importance of air cargo business since the Covid-19 pandemic.

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