

ASCEND

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The emerging generation of converted freighters: fleet trends and challenges ahead

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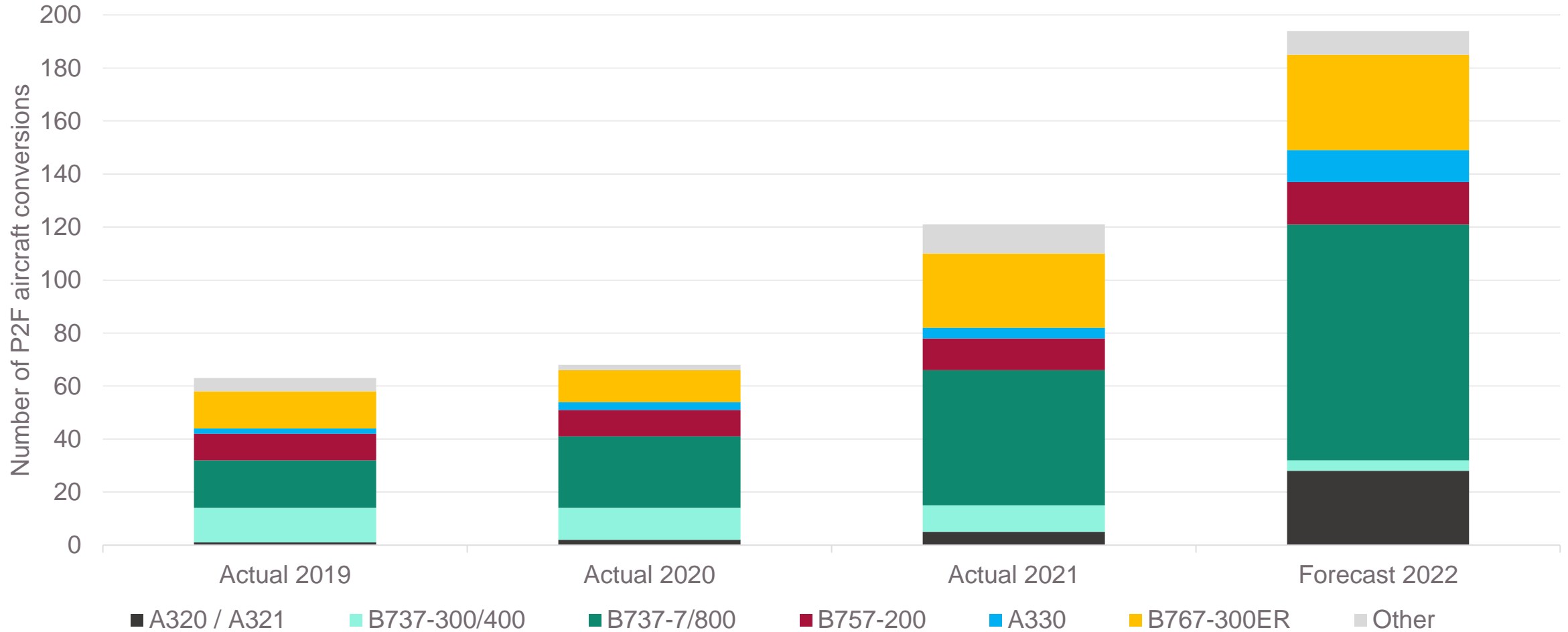
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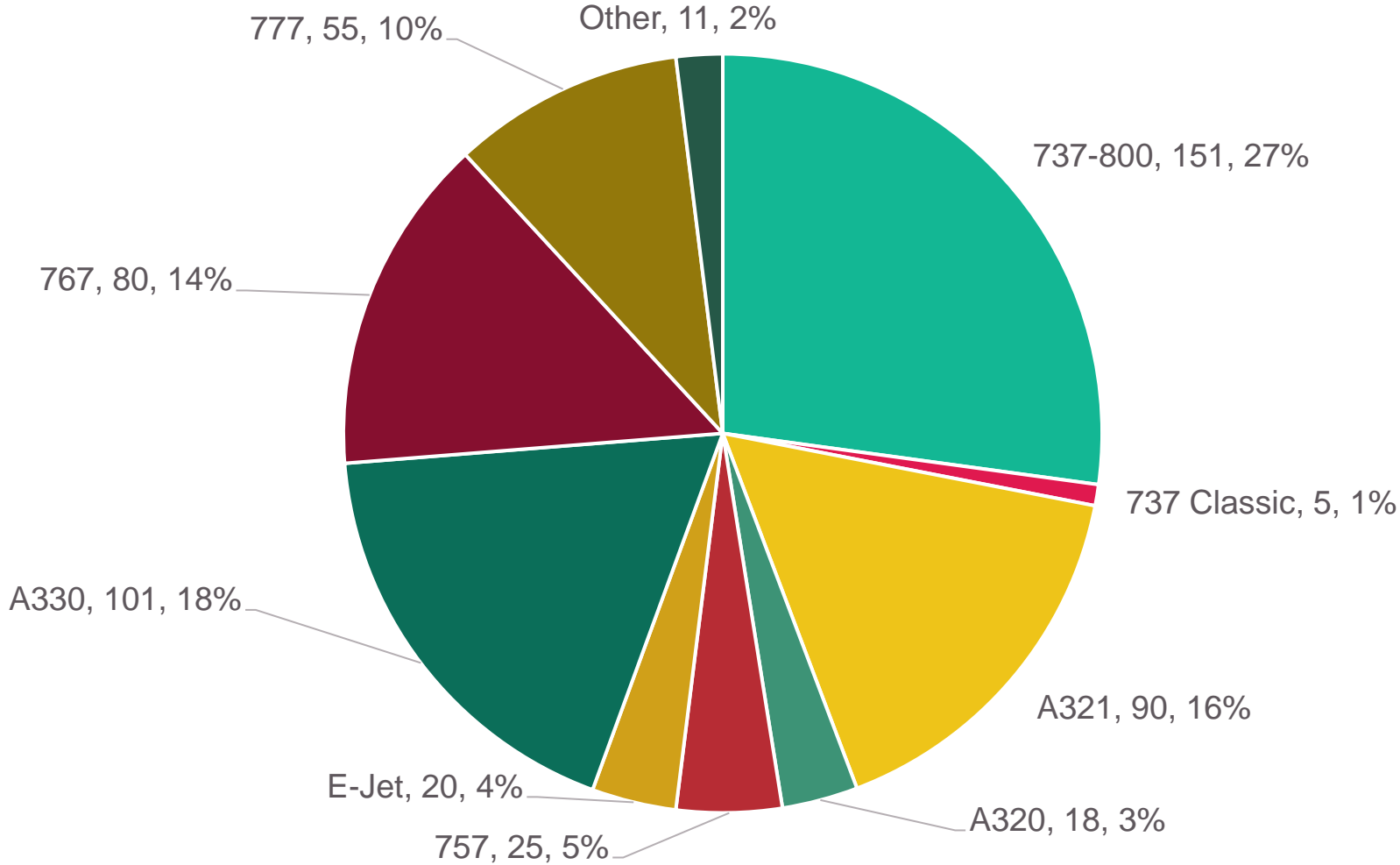
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Passenger to freighter conversions to set another record in 2022



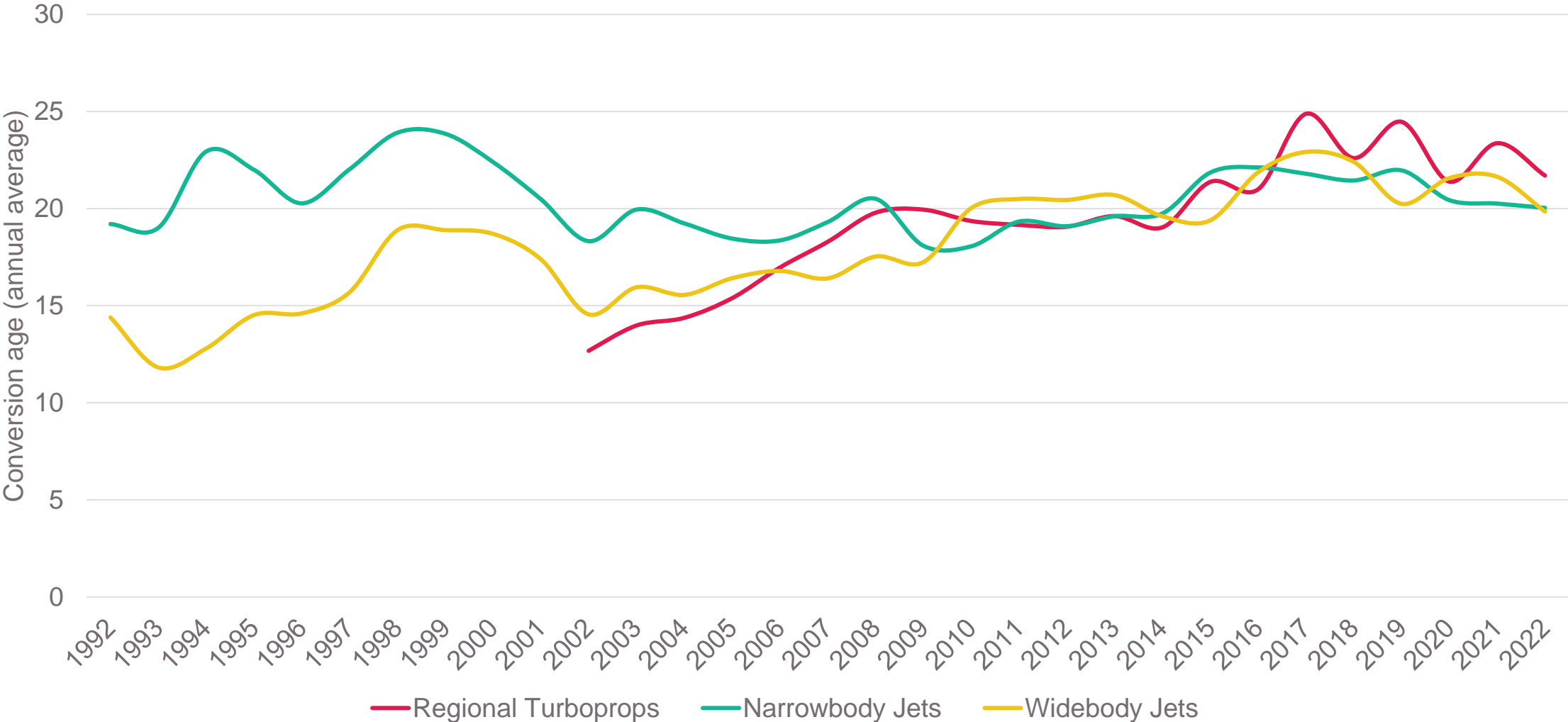
Source: Cirium Fleets Analyzer and forecast

Known conversion backlog now over 500 units (Sept 2022)



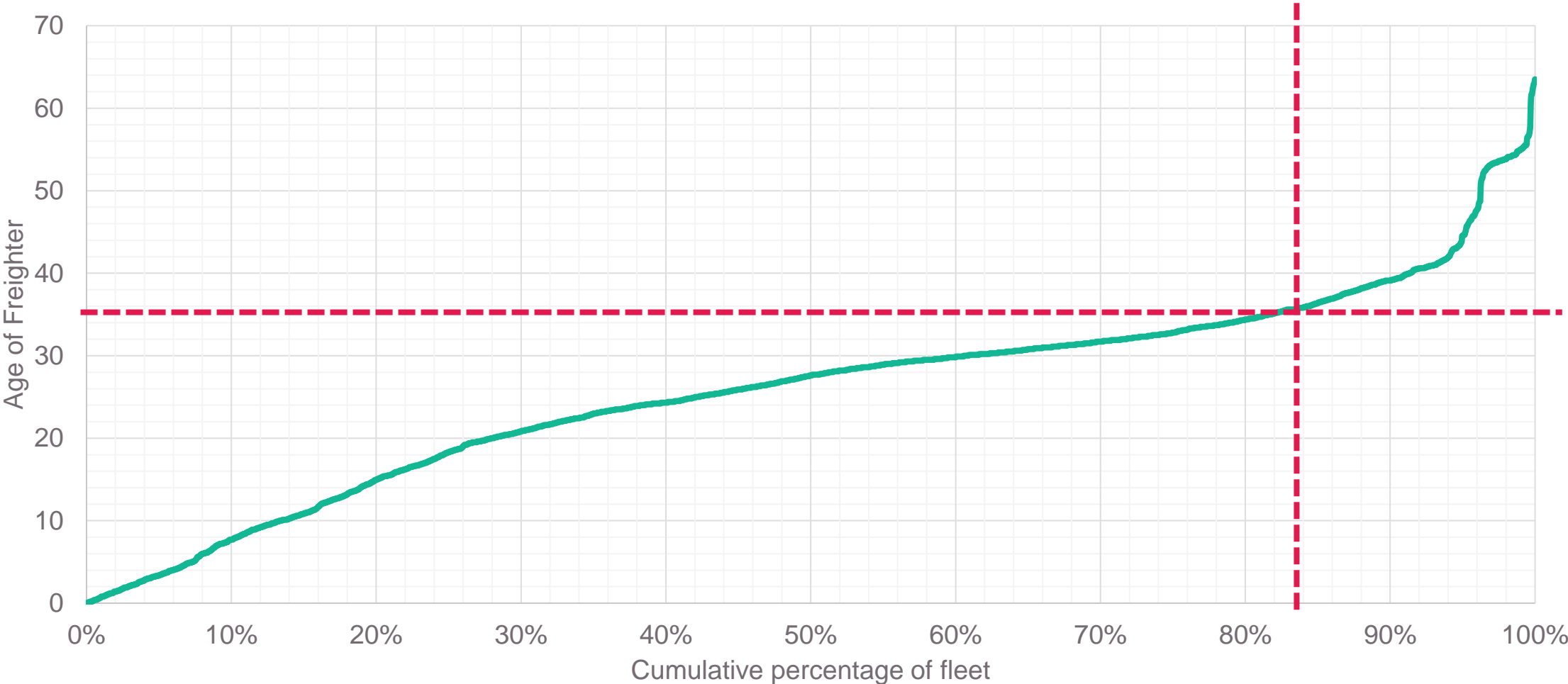
Source: Cirium Fleets Analyzer and Ascend by Cirium analysis. Commercial Sector, Primary Use Freight / Cargo

Passenger to freighter average conversion age right around 21 year mark



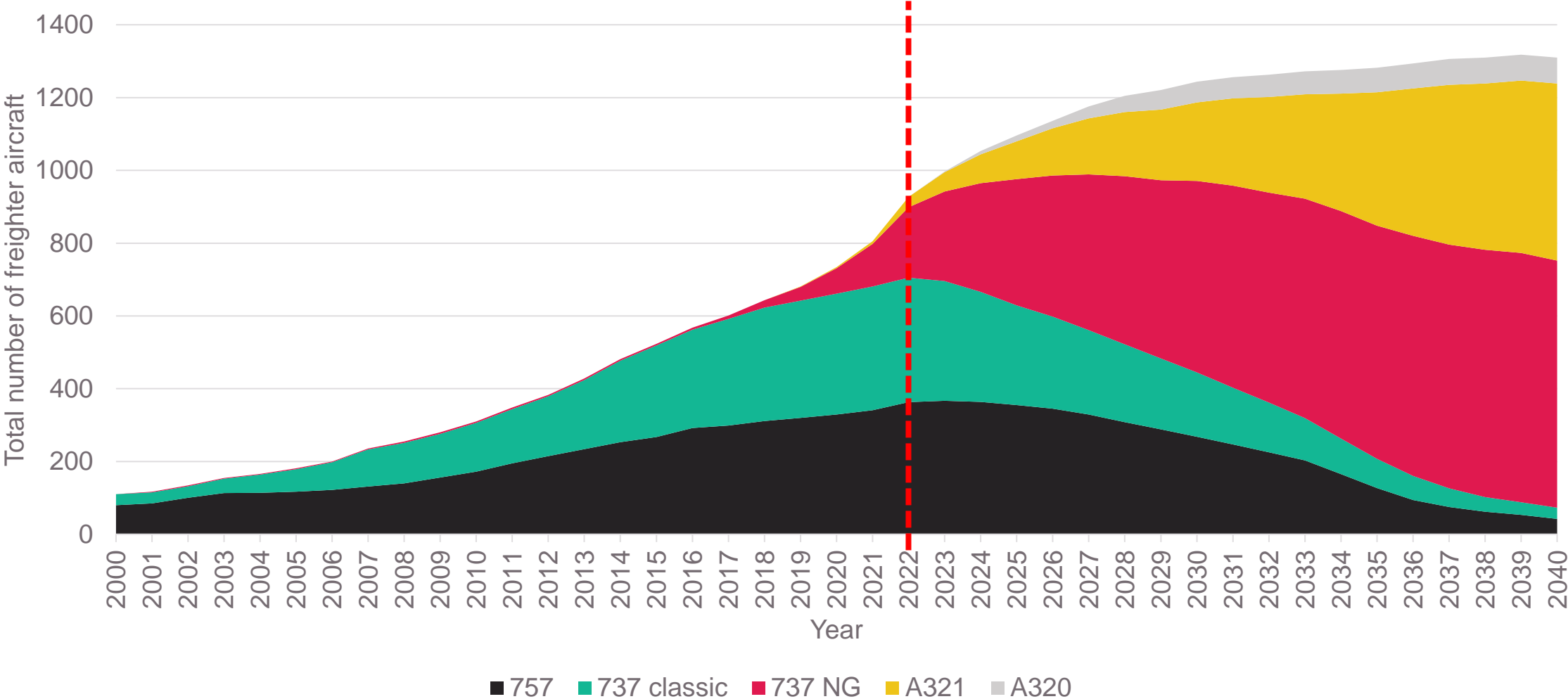
Source: Cirium Fleets Analyzer. Commercial Sector, Primary Use Freight / Cargo. Note; removed RJs and 1992-2001 data on TPs due to no meaningful data sample size

More than 15% of total fleet is older than average retirement age (c. 500 aircraft)



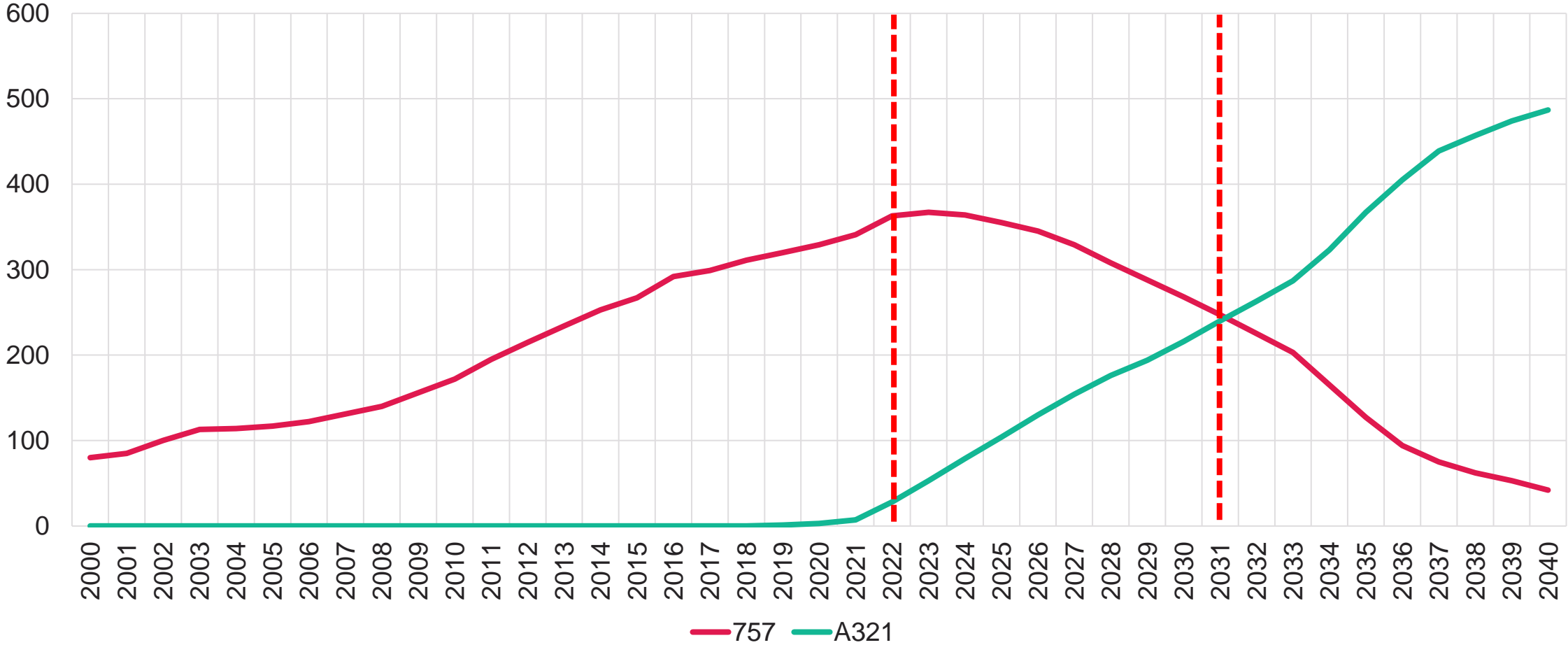
Source: Cirium Fleets Analyzer. Commercial Sector, Primary Use Freight / Cargo, In-service and in-storage

Major transition of key single-aisle freighters to next generation has commenced



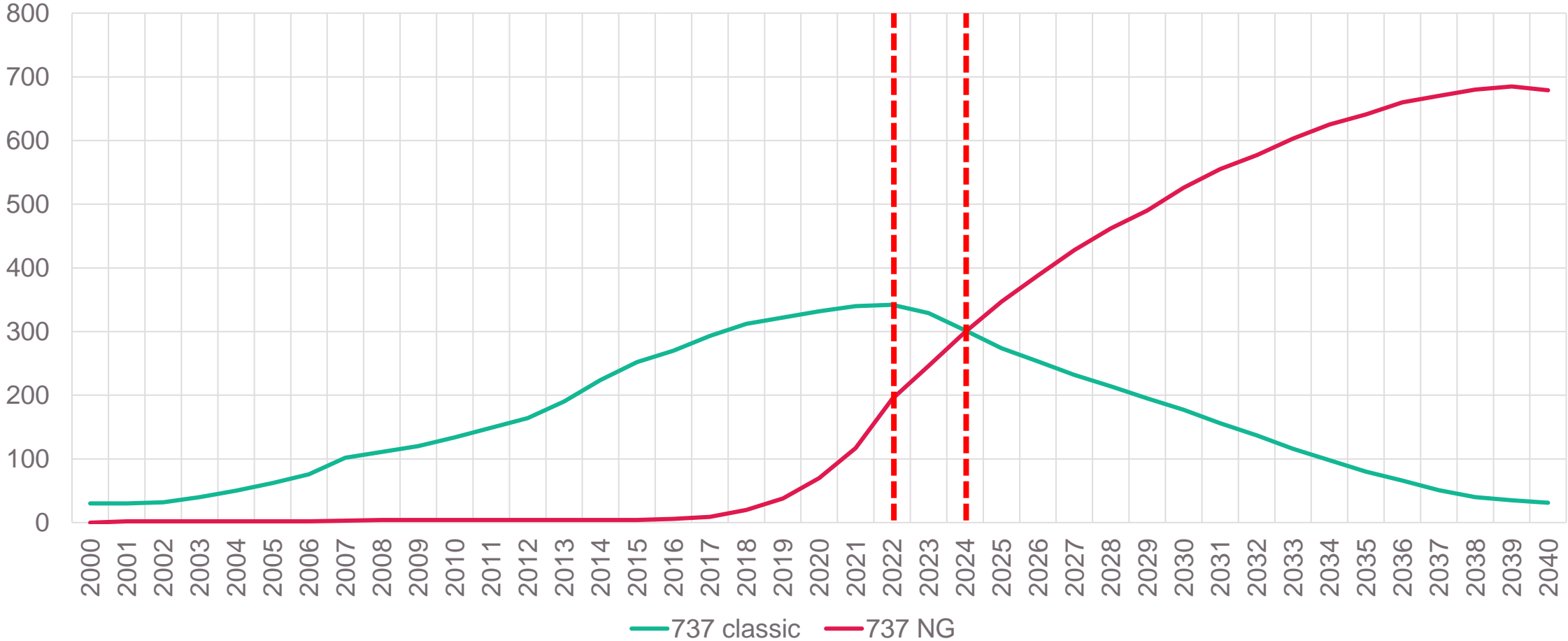
Source: Cirium Fleets Analyzer historical data. and Cirium Fleet Forecast from Q4 2021

The 757 fleet transitions to A321 gradually, crossover is 2031



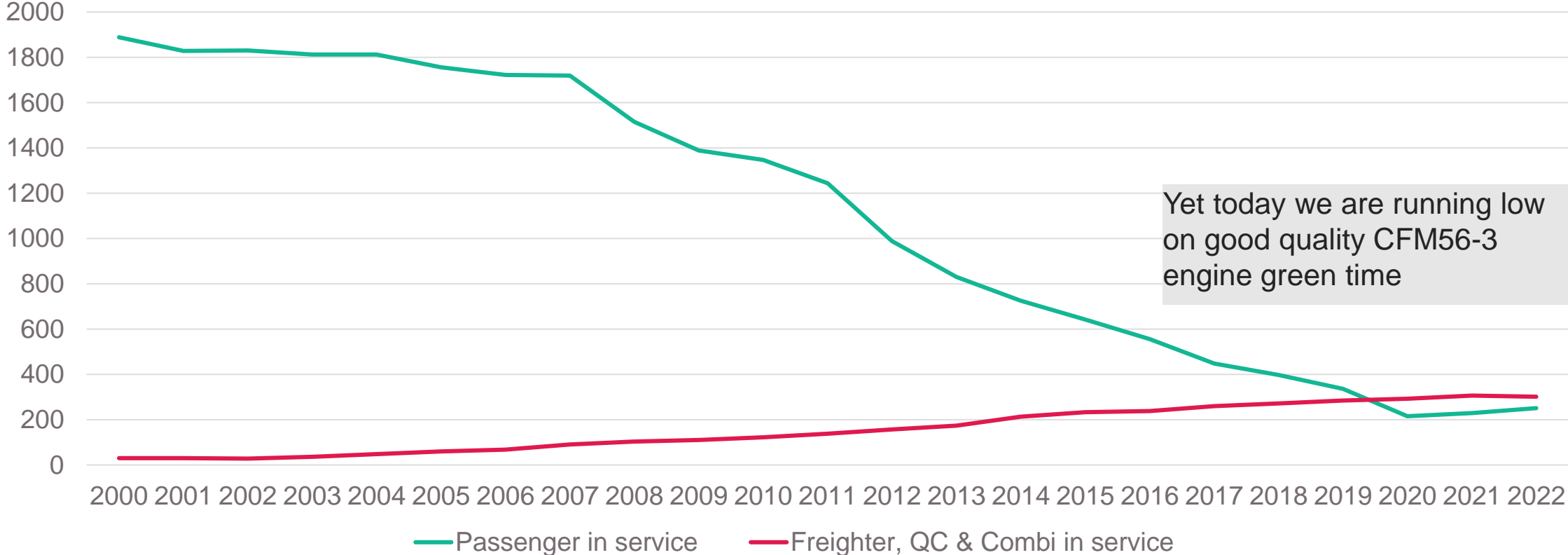
Source: Cirium Fleets Analyzer historical data. and Cirium Fleet Forecast from Q4 2021

The 737 Classic to NG transition occurs much quicker – crossover is in 2024 due to the fast ramp-up and multiple STCs (and smaller 737 Classic fleet)



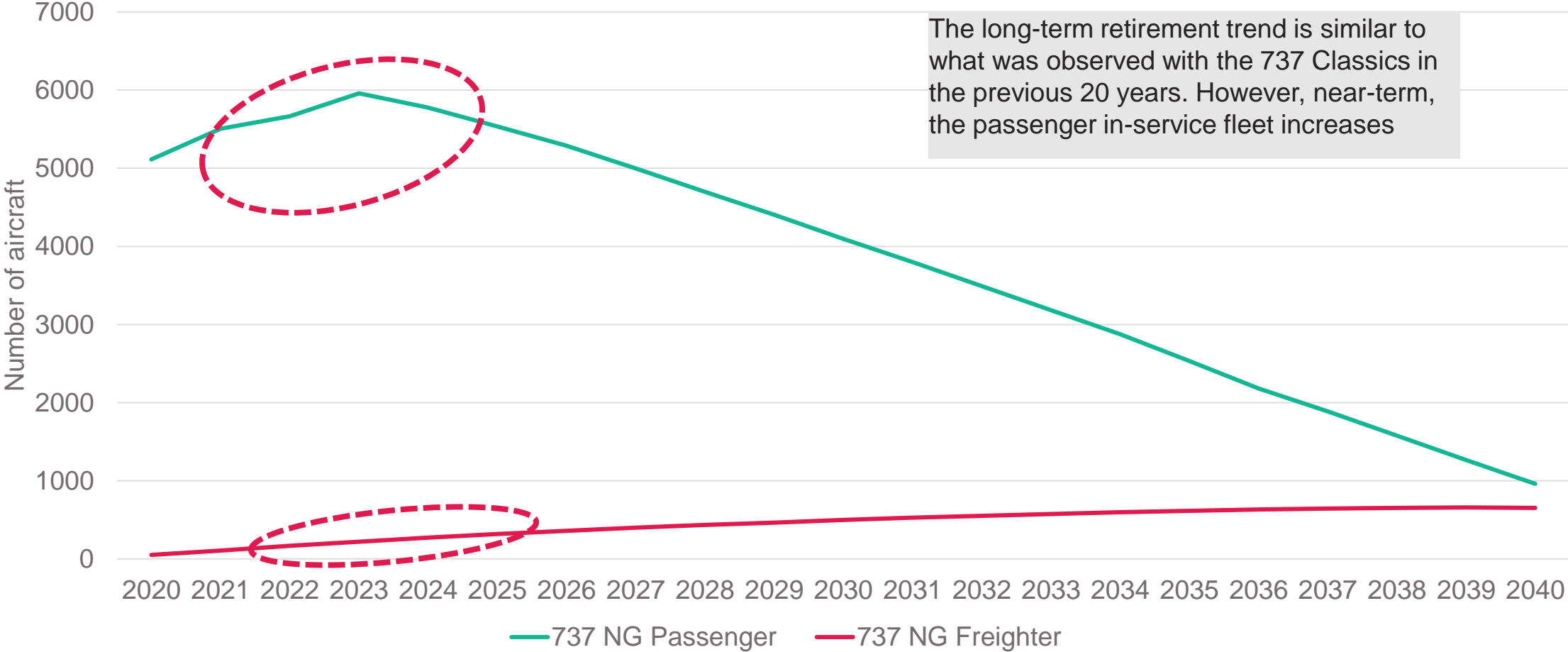
Source: Cirium Fleets Analyzer historical data. and Cirium Fleet Forecast from Q4 2021

73% of the 737 Classic fleet was retired or parked over the last 22 years to support the remaining 27% in-service with engine green time and spare parts



Source: Cirium Fleets Analyzer historical data.

By 2040, 72% of today's active 737 NG fleet will be gradually retired, but we have a near-term problem as more return to service



Source: Cirium Fleets Analyzer historical data. and Cirium Fleet Forecast from Q4 2021

Sourcing the right green-time engines will be a challenge near-term

✚ **737 Max production rates still below target 31 per month, and less than half of 2019**

- ✚ More 737-800 leases are being extended
- ✚ Passenger operators are seeking new leases on 737-800s
- ✚ Bidding wars between:
 - ✚ freight converters seeking feedstock
 - ✚ lessors seeking to lease to passenger airlines
 - ✚ part-out companies looking to create green time

✚ **Aircraft parted-out at their lowest since 2019**

✚ **A321 less of a problem** – slower conversion rate and 2 engine suppliers. CFM56-5B still widely available

✚ **What does the engine green time and aircraft feedstock shortage mean for values near-term?**