airline fleet rationalization

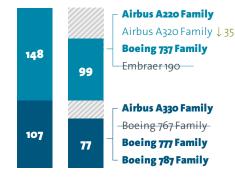
IN THE TIME OF COVID-19 AND THE IMPLICATION FOR AIRPORTS

Part 1: North American Airline Fleets are Changing

The COVID-19 pandemic has brought about significant change in the industry, none more so than with aircraft fleets. The last several months has been witness to an expedited rate of aircraft retirements across North American airlines, which alone have retired over 330 aircraft in the last four months. Global retirements could be as high as 2,500. These aircraft cover all sizes and ages, but most retirements have been focused on older aircraft, including advancing the retirement date on several fleet types. Some of the reasons that airlines are using this opportunity to reevaluate their fleets include:

- Older aircraft require more unscheduled maintenance, training, and aircraft modifications/cabin upgrades to allow them to continue flying
- Operating fewer fleet types minimizes risk, maximizes efficiency, and maximizes versatility
- Airline mergers and acquisitions from the last decade have created some incompatible fleets, such as different engine types on United and legacy Continental Boeing 757s
- Underutilization of certain fleet types during recovery is expected, such as the Boeing 757 serving thinner trans-Atlantic international routes from the East Coast

SUMMARY OF AIRCRAFT RETIREMENTS FOR THE LARGEST NORTH AMERICAN AIRLINES





Air Canada, which had already planned to retire the Embraer 190 and Boeing 767, expedited their retirements and added the Airbus A319 fleet to the list of retirements. The A319s and EMB-190s are being replaced with the A220-300, of which Air Canada began taking deliveries in early 2020. These retirements, however, leave Air Canada with a fleet gap between their 76-seat Q400, CRJ-900, and EMB-175 aircraft and the 137-seat A220-300, which was previously filled by the 97-seat EMB-190 and 120-seat A319.



-Boeing 757 Family
-Embraer 190 Family

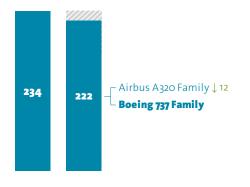
Airbus A330 Family ↓ 9
-Boeing 767 Family

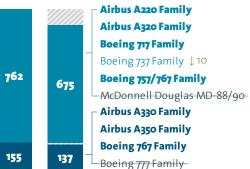
Boeing 777 Family

Boeing 787 Family



American Airlines retired five complete fleet types in May, resulting in the removal of over 150 aircraft. For a sense of scale, this is equivalent to retiring the entire fleet of Spirit Airlines. The Boeing 757 and 767 aircraft were older and slated for replacement by the A321 and B787 over the next few years. The earlier retirement of these fleet types is expected to save American money, including training efficiencies and streamlined maintenance. The resulting narrowbody fleet becomes more simplified with just two cockpit types, variants of the Airbus A320 and the Boeing 737.





Alaska

Alaska Airlines, which operates a smaller fleet than American and Delta, has also explored expedited fleet retirements to reduce costs from operating a dual-manufacturer fleet. In late 2019, Alaska announced they would not renew the leases on over 60 Airbus family aircraft it inherited from the 2016 Virgin America merger. Many of these leases were set to expire over the next few years, but Alaska decided to return all 10 A319s plus 2 A320s immediately as a first step toward fleet simplification, despite many of these aircraft being younger than their 737 counterparts.

▲ DELTA

Delta Air Lines accelerated the retirement of the MD-88/90 fleet as a result of the pandemic. These aircraft are slated to be replaced by the more efficient A220, of which Delta already operates over 30. More surprisingly, Delta announced the retirement of their 18 Boeing 777-200s, many of which had recently received significant cabin upgrades costing over \$100 million. These aircraft provided the range required to reach long-haul destinations such as Johannesburg (JNB), but the fleet size was relatively small. Delta chose to simplify their long-haul fleet around fewer aircraft families, in this case the A330 and A350. While the current A350s do not have the range of the B777 to serve JNB, Delta proposed adding a stopover in Cape Town on the return to the U.S. to refuel at sea level. More recently, Delta added all 10 B737-700s and an unknown number of A320s and B767s to the list of impending retirements.



670

Southwest Airlines and **United Airlines** have not made any public announcements yet regarding fleet retirements, though both have aircraft in long-term storage. It is anticipated that Southwest will retire older Boeing 737-700s once the MAX returns to service. United may simplify their Boeing 757 and 767 fleets to reduce incompatibilities, as evidenced by their recent closure and realignment of pilot crew bases.

