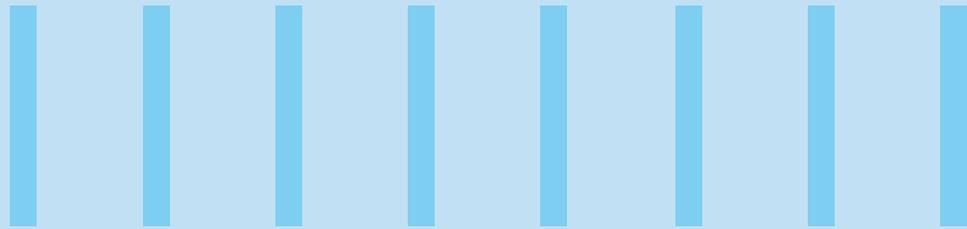




**TURNING A CRISIS INTO AN
OPPORTUNITY HOW AEROSPACE
FIRMS MUST EXPLOIT THE UNIQUE
SITUATION TO ITS ADVANTAGE**



A ripple effect on the industry

At the start of the year 2020, buoyed by globalization, healthy economic activity, and a growing number of leisure travelers, the aerospace industry expected to fulfill record-high demand. The onset of the COVID-19 pandemic has overturned the industry's well-laid out plans and instead has it grappling with numerous significantly grave challenges.

Countries shut down their borders, halted commercial flights and triggered a domino effect. With the pandemic remaining active, passengers today are apprehensive about their health and hence reluctant to board a plane. In fact, airlines carried 80% lesser passengers in June 2020 compared to a year ago¹. The dwindling passenger traffic has forced airlines to ground several aircraft. Pre-COVID, there were over 27,000 aircraft in use globally, and today it has shrunk to a low 9816². Many airlines, including Air Italy, Flybe, Virgin Atlantic, have declared bankruptcy and halted operations. Of the surviving airlines, most have canceled delivery of new planes and only take on essential repair work³.

AIRCRAFT DELIVERIES WILL DROP DRAMATICALLY IN 2020

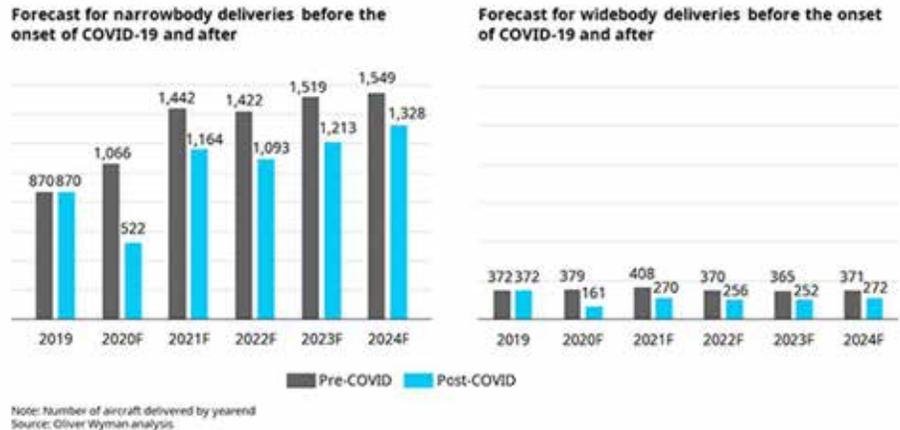


Figure 1 Impact on aircraft delivery

Consequently, the drop in orders has reduced manufacturing in OEMs such as Airbus and Boeing. In an industry that relies heavily on its supply chain, the impact percolates down to the lowest level of suppliers. Many small suppliers characterize the aerospace industry, and often they are exclusive suppliers to an OEM. When suppliers are not in the same geography as the OEM, the situation is

further exacerbated by transportation restrictions.

At stake is the survival of suppliers, and many have already succumbed to the drastic drop in business. A case in point, Precision Castparts Corp., part of Berkshire Hathaway Inc., is a large American supplier to the aerospace industry. It recently had a \$9.8 billion write-down and cut 10,000 jobs owing to the pandemic⁴.



An industry in upheaval

Between business related to health and psychological aspects, aerospace firms must deal with plenty of problems. Some of the key ones are -

Conserve cash – Revenues from commercial airlines are the mainstay of this industry. Airlines clamping down on new orders to conserve cash and survive the crisis have placed aerospace firms in a precarious position. Boeing's commercial airline revenues dropped by 65% compared to last year⁵, while Airbus' dropped by 40%. OEMs will now need to reduce their manufacturing capacity and workforce significantly to address the current demands. In a cash-strapped situation, aerospace firms must track cash position and take remedial measures daily. As these firms look to protect cash reserves to tide over the crisis, they will minimize

discretionary spending until the situation improves.

Reassure travelers on the safety of air travel – Passengers today are apprehensive about taking a flight to travel. The restrictions imposed by the pandemic to maintain social distances and reduce touching of surfaces have effectively dissuaded travelers from risking a flight. With social distancing and cleaning protocols under heightened scrutiny, the usual space-conserving cabin layouts will no longer pass muster. A passenger is unlikely to wear face masks and sit in the middle seat of a plane, which worsens for long-distance flights. Both the aerospace and airline industries must invest efforts to make air travel safer, regain the trust of passengers and ensure their peace of mind.

Postpone heavy purchases – The severe drop in passenger traffic has resulted in commercial airlines postponing their acquisition of new aircraft. Airlines are concentrating efforts on how to outlive the crisis and will steer away from any significant investment.

Experts opine that it will take at least three years for the aerospace industry to gain some semblance of stability and normalcy. However, it is not a hopeless situation, and there are several steps that aerospace firms can take to reverse the course. Aerospace industry can evaluate the below four-point change agenda to handle the current situation and equip themselves to emerge stronger from the crisis.



A four-point change agenda

1. Consolidation across the industry

– There is a good likelihood that the pandemic will obliterate smaller suppliers. To prevent disruption of the supply chain, OEMs or Tier 1 suppliers can provide bailout packages to these companies or acquire them. Spirit has indicated its interest in acquiring European supplier Asco⁶. Similarly, Aspen Avionics will soon be part of the AIRO Group⁷. Intervention from the government is another option; however, the trade-offs involved in such deals may not make it worthwhile.

2. Redesign the cabin

– Aerospace firms must reimagine cabin layouts to provide for the traveler's safety. New design ideas on the space front include double-decker rows, seat dividers, flipped middle seats⁸, while touchless solutions for boarding and in-flight usage are also being explored. Airbus is relying on IoT technology to enable touchless systems and maintain a less-infected environment⁹. Safran now offers touchless toilet solutions to promote hygiene¹⁰. Other ideas include ultraviolet powered cleaning to disinfect the cabin quickly and new

ways to purify the air to be recirculated within the cabin. Companies will have to convince travelers that it is safer to travel and use technology as a lever to make the necessary changes. Boeing plans to launch the "Confident Traveler Initiative," through which they intend to educate passengers on the new steps designed to purify and eliminate viruses in the air circulated inside the aircraft cabin¹¹.

3. Focus on the service budget - With the purchase of new aircraft postponed, aerospace firms can expect airlines to increase their servicing budgets to

extract the maximum from existing aircraft assets. Aircraft will be retrofitted to make air travel safe and refurbished to increase longevity. Aerospace major Bombardier launched Line Stations inside airports to provide enhanced service capabilities and has continued to expand this presence in other locations this year¹². The industry must experiment with such innovative approaches to overcome these troubled times.

4. Technology to the rescue – As firms look to convert capital investments to operational expenses, technology can play a significant role in making the

transition successful. It automatically implies making cloud and digital transformation programs top priorities. During these troubled times, aerospace firms must exploit the underlying philosophy of these technologies, which eliminates pressure on capital investments.

In the current pandemic, aerospace industry has been at the tip of the spear, and there is no sign of a quick recovery. The industry expects governmental intervention in the form of bailouts. There is also talk of influencing governments to retire older aircraft faster and provide a much needed stimulus to the OEMs by

selling new aircraft. While it is an uncertain environment, it can also be a catalyst for change and spur companies to explore innovative ways to solve problems. For instance, Pratt & Whitney plans to capitalize on this period to fix some known issues in its engines.

We can expect an overhaul of the industry with a restructuring of the supply chain, launching digitization programs and outsourcing non-core functions to lower operating costs. Those businesses that seize the opportunity to reinvent themselves, adopt a long-term view and use technology levers to address challenges will surge ahead.

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