

MIDYEAR OUTLOOK

2020 aerospace and defense
industry outlook

At the end of 2019, we produced our 2020 outlook for the aerospace and defense industry. Given the disruption and impact caused by COVID-19, we've evaluated the key trends, challenges, and opportunities that may affect your business and influence your strategy for the remainder of 2020. Check out our midyear trends:



A prolonged recovery for commercial aerospace, while the defense sector remains resilient

Aerospace and defense (A&D) is one of the industries most affected by the COVID-19 pandemic, particularly the commercial aerospace sector. According to our previous outlook,¹ the commercial aerospace sector was expected to recuperate in 2020 after experiencing a decline in production in 2019. However, the COVID-19 crisis has significantly reduced both domestic and international passenger traffic, which, in turn, affected deliveries and order books. As a result, the US commercial aerospace sector is preparing for a weak second half of the year. With global passenger traffic possibly taking as long as three years to recover to pre-COVID-19 levels, aircraft deliveries are likely to decline more than 50 percent in 2020² compared with 2018—the peak year for deliveries, significantly affecting the US commercial aerospace sector.

US defense, however, has not had a major impact, as military projects remain a strategic priority and the nation continues to focus on strengthening its defense industrial base (DIB). To ensure minimal business disruption amid the pandemic, the US Department of Defense (DoD) is using several measures, such as classifying the sector as a critical infrastructure sector and enhancing liquidity for defense contractors.



Commercial aerospace

The pandemic expected to significantly impact deliveries and order books in 2020

After experiencing solid growth in passenger traffic over the past decade, air travel has come to a near-standstill, with the COVID-19 pandemic substantially eroding passenger travel demand in just the first few months of 2020. It may take up to three years for passenger traffic to return to pre-COVID-19 levels.³ While commercial air travel is down 90 percent globally from a year ago, airlines have taken out over 30 percent of their capacity as a result of the pandemic.⁴ International Air Transport Association (IATA) forecasts suggest passenger traffic is expected to decline by 55 percent in 2020 from a year ago and remain about 30 percent below pre-COVID-19 levels even in 2021.⁵ In North America, the decline in passenger traffic in 2020 is projected to be slightly more than 50 percent from the previous year, in line with the impact on other regions.⁶

A prolonged decline in passenger demand is likely to result in fewer orders and deliveries for original equipment manufacturers (OEMs) in 2020, especially for long-haul aircraft, negatively affecting the US commercial aerospace sector. In 2020, global commercial aircraft deliveries are estimated to be in the range of 650–690 aircraft, a decline of more than 50 percent from 2018, the peak year for deliveries.⁷ Aircraft production rates in the United States are being reduced, as



several airlines have already announced order cancellations and deferrals. In the United States, aircraft order cancellations began as early as the first week of April—for instance, aircraft lessor Avolon announced the cancellation of 75 737 MAX aircraft to adjust its order book to the COVID-19 pandemic.⁸ The impact could also be seen on the extended US commercial aerospace manufacturing supply chain, especially on mid-to-lower-tier suppliers, which may struggle due to the OEM rate reductions.

Moreover, the pandemic is expected to result in certain behavioral changes among passengers, with increased demand for short-haul and domestic travel initially. In 2020, average air travel trip length is expected to drop by about 8.5 percent globally—IATA does not expect a return to pre-COVID-19 trip length levels before 2025.⁹ According to Deloitte research conducted in June 2020, 73 percent of consumers said they did not feel safe flying right now.¹⁰ Of the US consumers surveyed, 77 percent were unlikely to take a domestic flight for leisure in the next three months, and 86 percent responded they are unlikely to fly internationally in that period.¹¹ These changes in consumer behavior could result in higher demand for narrow-body aircraft, which are likely to lead the path to recovery in the medium-to-long term, both for US and global OEMs. Also, in the medium term, airlines may consider swapping orders of twin-aisle aircraft with single-aisle to adapt to a shift in demand.

Global commercial aircraft backlog stands at about 14,100 aircraft as of May 31, 2020,¹² only marginally below the 2019 levels of 14,300 aircraft and not far off from the peak backlog.¹³ However, with further cancellations expected and a bleak outlook for new orders in the second half of 2020, the backlog levels are expected to decline.

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Defense

Military projects remain critical to national defense, making the sector relatively stable

The US defense sector is not expected to be significantly affected by the COVID-19 pandemic, as military projects remain a strategic priority for the United States. Moreover, the United States continues to focus on strengthening its defense industrial base (DIB), with defense budgets reaching presequestration levels.¹⁴ Although the rate of growth may decrease or flatten in 2020, the United States' emphasis on firming up its military capabilities is expected to result in relative stability in the defense sector.

The US Department of Defense (DoD) is also ensuring that the DIB remains resilient amid the pandemic, with minimal disruption, especially for critical defense programs. The DoD is using several measures to ensure defense companies remain viable. For instance, a memorandum was issued in March, which identified the DIB as a critical infrastructure sector, allowing defense companies to stay operational.¹⁵ Also, the DoD is making changes to the progress payment rates—the rate at which partial payments are made to contractors based on work completed to enhance liquidity for defense contractors.¹⁶

However, the pandemic may lead to a temporary disruption in the defense sector supply chains, which are global and diversified in nature. As a consequence, minor near-term cost overruns and schedule delays could be expected. From 2020–21, US defense

spending is likely to flatten out after experiencing five straight years of growth, and the result of US presidential elections in November 2020 are unlikely to have a major impact on defense budgets prior to 2022.¹⁷





Merger and acquisitions (M&A)

Deal activity expected to slow as companies focus on preserving cash

2019 was a solid year for M&A activity, and the trend followed in the first quarter of 2020 with some large value¹⁸ deals announced—for instance, the merger of Woodward and Hexcel.¹⁹ However, deal activity is anticipated to be sluggish in the second half of 2020 as the pandemic creates uncertainty and affects demand, especially for the commercial aerospace sector. As liquidity becomes a key priority, most A&D companies are likely to become cautious about any M&A activity, at least in the second half of 2020. The pandemic has even led to a fallout of some M&A deals that had been announced pre-COVID-19. For example, Boeing recently terminated its agreement to acquire a controlling stake in Embraer's commercial aircraft business,²⁰ and Woodward and Hexcel mutually terminated their merger announced at the beginning of the year.²¹

The United States is also considering more stringent foreign investment rules designed to protect critical elements of the DIB, which could prevent some cross-border M&A deals in the near term. Recently, a bill was introduced in the US Congress to restrict opportunistic acquisitions by foreign entities during the COVID-19 pandemic, especially by China. The bill would also expand the scope of the Committee on Foreign Investment in the United States (CFIUS) to review any acquisitions by companies with ties to the Chinese government.²²

Aerospace and defense companies that have followed a focused capital discipline strategy in the past are likely to be prepared to consider acquisitions for cost and scale effectiveness in the medium-to-long term. After the effect of the pandemic subsides, the industry may see smaller deals in the extended supply chain, especially the acquisition of distressed and mid-to-lower-tier suppliers by financially sound companies.



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Digital technologies

Business disruptions reduced with increased adoption of advanced technology

The industry has been at the forefront of adopting new and advanced manufacturing technologies; however, now might be the time for A&D companies to leverage digital technologies more than ever to enhance productivity and efficiency and help the industry recover from the crisis.

During 2020, as companies focus on regaining their footholds, they can better position themselves by accelerating the adoption of advanced digital technologies, such as advanced robotics and automation, to make the manufacturing process more efficient as companies operate with reduced manpower. In a remote working environment, companies should increasingly use technologies such as augmented and virtual reality (AR/VR) during planning and design. They should also focus on leveraging digital tools to transform traditional supply chains, which are rather complex for the A&D industry, into more visible, dynamic, and interconnected networks.

Additionally, to emerge more responsive and agile, A&D companies could leverage digital technologies to effectively manage a remote workforce, as well as to ensure employee health and safety on the factory floor. For instance, they can use digital tools to virtually and remotely monitor on-site workers to ensure they are complying with safety standards and conduct

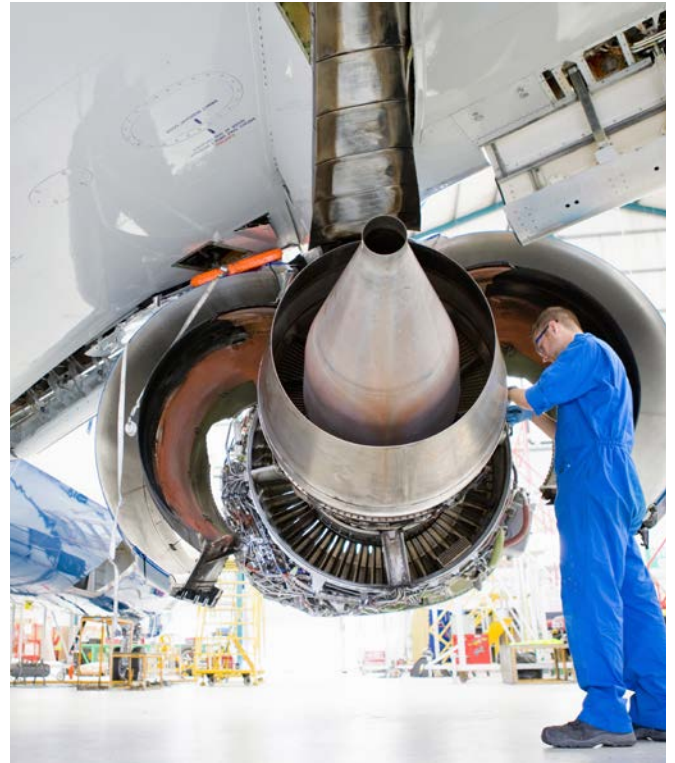
risk assessments of manufacturing facilities to ensure health and safety guidelines are being met.

The A&D industry can use the pandemic as an opportunity to accelerate digital transformation and help the industry manage business disruptions—not just to survive, but to also recover and thrive amid the pandemic.



Digital transformation and capital discipline could remain key to recovery

The A&D industry needs to prepare for a hard landing. However, companies that remained ahead of the digital transformation curve before the pandemic are more likely to be able to navigate through the crisis. Moreover, A&D companies that have followed a focused capital discipline strategy in the past could also be more successful in overcoming the downturn and emerge stronger. In addition, focusing on M&A as the fog clears can help industry players position themselves for future growth and stability.



Let's talk



Robin Lineberger

US and Global Aerospace & Defense Leader

Deloitte Consulting LLP

rlineberger@deloitte.com

+1 571 882 7100

Robin Lineberger is Deloitte's US and Global Aerospace & Defense leader and a principal with Deloitte US (Deloitte Services LP). His career includes 35 years as a consultant to the aerospace and defense industry, having advised and served companies globally. He also serves on several US and international industry advisory boards.

Endnotes

1. Deloitte, [2020 Global Aerospace and Defense Outlook](#), November 2019.
2. Deloitte analysis based on The Boeing Company, "[Order and deliveries](#)," accessed July 7, 2020; Airbus Group, "[Orders and deliveries](#)," accessed July 7, 2020; International Air Transport Association (IATA), "[Industry Statistics: Fact Sheet](#)," July 7, 2020; Barclays, "US Aerospace & Defense – The Weekly Scope," June 5, 2020.
3. Suzanne Rowan Kelleher, "[At Least 3 Years For Air Travel To Recover: IATA Chief Shares Boeing CEO's Pessimism](#)," *Forbes*, May 14, 2020; Andrew Tangel and Doug Cameron, [Boeing CEO Sees Slow Recovery for Global Aviation](#), *Wall Street Journal*, April 27, 2020.
4. Kelleher, "[At Least 3 Years For Air Travel To Recover: IATA Chief Shares Boeing CEO's Pessimism](#)."
5. IATA, "[Industry Statistics: Fact Sheet](#)," June 9, 2020.
6. Ibid.
7. Deloitte analysis based on The Boeing Company, "[Order and deliveries](#)"; Airbus Group, "[Orders and deliveries](#)"; International Air Transport Association (IATA), "[Industry Statistics: Fact Sheet](#)"; Barclays, "US Aerospace & Defense – The Weekly Scope."
8. Jeremy Bogaisky, "[This big Boeing 737 MAX order cancellation could be start of a wave](#)," *Forbes*, April 3, 2020.
9. International Air Transport Association (IATA), "[COVID-19: Outlook for air travel in the next 5 years](#)," May 13, 2020.
10. Deloitte Insights, [Deloitte State of the Consumer Tracker](#), accessed July 7, 2020.
11. Ibid.
12. Deloitte analysis based on The Boeing Company, "[Order and deliveries](#)"; Airbus Group, "[Orders and deliveries](#)"; Russian Aviation Insider, "[MC-21: Newest Russian narrow-body aircraft](#)," accessed July 7, 2020; Ari Magnusson, "[COMAC Rising: China's state-owned aerospace manufacturer aims high](#)," Airline Passenger Experience Association (APEX), January 23, 2019.
13. Ibid.
14. Department of Defense, [DoD Budget Request](#), accessed May 28, 2020.
15. C. Todd Lopez, "[DOD focuses on sustaining industrial base through pandemic](#)," US Department of Defense, May 5, 2020.
16. Ibid.
17. Deloitte analysis.
18. Deals with a value greater than \$1 billion.
19. Woodward, "[Woodward And Hexcel Announce Merger Of Equals To Create A Premier Integrated Systems Provider Propelling The Future Of Flight And Energy Efficiency](#)," press release, January 12, 2020.
20. Vindu Goel, "[Boeing terminates \\$4.2 billion deal to buy stake in Embraer unit](#)," *New York Times*, April 25, 2020.
21. Tony Robinson and Elizabeth Fournier, "[Woodward, Hexcel end aerospace merger pact, citing pandemic](#)," *Bloomberg*, April 6, 2020.
22. US House of Representatives, "[Rep. Banks introduces bill to stop predatory acquisitions by China during COVID-19](#)," May 5, 2020



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