# 2025 Aerospace and Defense Industry Outlook: Midyear update

## How the five trends we identified have evolved as of July 2025

The first half of 2025 has marked an inflection point for the aerospace and defense (A&D) industry. Persistent supply chain disruptions, acute workforce shortages, and operational complexity have intensified amid shifting trade policies, evolving tariff structures, and heightened geopolitical uncertainty. In parallel, a surge in defense investment—driven by depleted stockpiles and expanded NATO commitments—is reshaping priorities across the sector. Commercial aviation is also gaining momentum, with aircraft deliveries from the two leading original equipment manufacturers (OEMs) rising 18% in the first six months of 2025 compared to the same period last year.[1] This acceleration is amplifying pressure on production capacity, intensifying talent challenges, and exposing gaps in supply chain visibility—catalyzing a strategic realignment across the A&D ecosystem toward greater agility, efficiency, and resilience.

| The trends | What's changed |
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| **Aftermarket services:** Artificial intelligence and digital technologies appear poised to lead a revolution in delivering value through maintenance, repair, and overhaul | • AI use cases across maintenance, repair, and operations (MRO) are rapidly evolving beyond predictive maintenance in 2025. AI-powered tools are increasingly performing technical tasks with greater speed, precision, and consistency, unlocking measurable gains in repair and inspection. For example, AI-enabled engine inspection systems are significantly reducing turnaround times, with early results indicating the potential to cut inspection duration by up to 50%.[2]<br>• The widespread adoption of AI-powered predictive maintenance and digital twins is reducing downtime, improving asset utilization, and optimizing inventory management. However, as digital twin technologies scale across MRO, a widening skills gap is emerging as a key constraint in 2025—with many organizations lacking the technical workforce needed to unlock the full value of these technologies.[3]<br>• Some external analyses suggest that tariff impacts and global sourcing challenges are contributing to increased costs and operational delays, prompting a shift toward component repair and overhaul, and accelerating the use of advanced repair techniques—particularly for legacy fleets. As trade deals continue to shift, operators respond to 12% to 18% cost increases, 30% to 40% higher working capital requirements, 3% to 5% declines in production efficiency, and emergency repair cost spikes of 40% to 60%.[4]<br>• A leading aircraft engine OEM has raised its 2025 profit forecast, driven by strong demand for aftermarket maintenance services and supply chain improvements, which can help accelerate new aircraft production.[5] |
| **Workforce:** The industry is leveraging digital technologies to attract talent and buttress traditional talent strategies | • Although the A&D industry is outpacing the national industry average in job creation, rapidly increasing demand has exacerbated the existing workforce shortages, which have reached critical levels and impacted production capabilities. Even with salaries averaging 56% higher than the national average, attrition in A&D remains nearly double the US average, with engineering and skilled manufacturing positions proving the hardest to fill.[6]<br>• The US Department of Defense (DoD) is actively reshaping its civilian workforce through voluntary separations and a hiring freeze. The DoD's Workforce Acceleration and Recapitalization Initiative effort is expected to reduce almost 45,000 civilian full-time equivalents and US$6.5 billion. [7] |
| **Strategic spending:** Defense priorities are helping to shape spending in the industry | • The US House of Representatives passed the FY26 Defense Appropriations Act that holds defense spending flat, while the US Senate has advanced a proposal with a US$21.72 billion (2.5%) increase.[8]<br>• Although details must still be negotiated by Congress, proposed strategic investments may lead to additional funding for some key programs like 5th and 6th generation aircraft, unmanned aerial systems (UAS), uncrewed maritime platforms, land-based counter-UAS, national security space, missile defense and space programs, and hypersonic programs.[9]<br>• This annual funding comes in addition to over US$150 billion in one-time spending through the One Big Beautiful Bill Act. This includes a key new investment area in the US Golden Dome missile defense initiative, backed by US$25 billion in one-time funding.[10] The program has formally entered the development phase with a focus on sensor or satellite deployment and integration of legacy systems and space-based interceptors. Limited demonstrations are aimed for completion by 2028.[11] |

| The trends | What's changed |
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| **Advanced air mobility:** The industry is marching toward flight operations through scaling, certification, and acceptance | • To accelerate and create a robust regulatory environment for the advanced air mobility (AAM) industry, Federal Aviation Administration and other aviation authorities from Australia, Canada, New Zealand, and the United Kingdom have developed a Roadmap for Advanced Air Mobility Aircraft Type Certification, aiming to align the countries' AAM airworthiness and certification standards by sharing data, research, and safety information.[12]<br>• With the Middle East emerging as a strategic proving ground for early deployment, AAM companies are accelerating certification and commercial launch plans. The United Arab Emirates' General Civil Aviation Authority has issued the world's first regulatory framework for hybrid eVTOL-helicopter operations[13] and initiated national air corridor mapping, with initial operations expected to begin by 2026.[14] A leading US eVTOL OEM is doubling production capacity to align with the regions' maturing certification pathways and near-term launch strategies.[15]<br>• NASA has increased its trials and studies to understand and evaluate passengers' air travel comfort and what passengers will and won't tolerate, in addition to research efforts for air traffic surveillance,[16] wind effects and aircraft tracking,[17] and remotely piloted cargo flights tests.[18] This data can guide the industry in design and operational practices for future air taxis.[19]<br>• Integration efforts have intensified as AAM operations move closer to commercial reality. The Federal Aviation Administration's modernization of the US air traffic control system—including upgrades to surveillance, communications, automation, and new tower infrastructure—is a key enabler for safely integrating eVTOL aircraft into the evolving national airspace system by 2028.[20] |
| **Supply chain:** Elevating visibility remains a priority for the industry | • The new administration in the United States has fostered a more flexible procurement and defense acquisition ecosystem through the Federal Acquisition Regulation (FAR) Overhaul initiative that aims to prioritize agility, innovation, and accountability. The administration has stated that the proposed changes will lower entry barriers for nontraditional suppliers and increase competitive risk for legacy organizations to compete on speed to market.[21]<br>• As FAR and Defense Federal Acquisition Regulation Supplement undergo reform, A&D companies will likely face an increase in competition and a pivotal shift in how they manage supply chain compliance, cost structures, and vendor participation.[22]<br>• The Aerospace Industries Association is advocating for FAR reform to trim over 50 legacy regulatory requirements—from cybersecurity to intellectual property—to further foster innovation, reduce costs, and expand the supplier base.[23]<br>• While broad aerospace supply chain constraints remain, engine deliveries have shown notable improvement. A major engine OEM reported a 45% year-over-year increase in total deliveries and a 38% rise for narrow-body engines in the second quarter of 2025. Supplier performance has improved in tandem—10% more parts delivered, with more than 90% volume commitments met, double the rate from the previous year[24]—even while navigating an estimated US$500 million in tariff-related costs by that engine OEM.[25]<br>• Following a 22% reduction in DoD's Defense Logistics Agency vendors between 2016 and 2022, which resulted in supply delays and higher costs, the department is advancing in integrating AI to solve persisting issues.[26] For instance, in early 2025, the United States Air Force selected a couple of companies to deploy AI-powered logistics platforms to improve lead-time visibility, part availability, pricing, and quality.[27] |

## Endnotes

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