

The U.S.-Australia Strategic Innovation Alliance

Australia's Aerospace, Aviation, Space, and Hypersonics Economy Factsheet

Overview

Australia's aerospace, aviation, space, and hypersonics sectors are experiencing unprecedented growth in 2025, underpinned by record defense spending, a whole-of-government push for sovereign capability, and dynamic partnerships — especially with the United States and United Kingdom. The nation's industrial base is diversifying and modernizing, with a focus on advanced manufacturing, dual-use technologies, and integration into global supply chains. These sectors are now central to Australia's economic resilience, technological advancement, and regional security strategy.

Market Size and Growth

- **Aerospace & Defense Manufacturing:** Output is projected at \$3.54 billion USD in 2025, with the sector benefiting from both commercial and defense demand. The value-added margin in aerospace and defense manufacturing is high, reflecting advanced technology and skilled labor requirements.¹
- **Total Aerospace & Defense Market:** The market reached \$12.89 billion USD in 2024 and is forecast to grow at a CAGR of 5.25 percent, reaching \$21.04 billion USD by 2033.²
- **Defense Market:** Broader defense market spending hit \$50 billion USD in 2024, projected to reach \$81.44 billion USD by 2034.³ This includes major investments in air, maritime, and missile systems.
- **Aerospace Exports:** Projected to reach \$2.6 billion USD by 2028, up from \$2.1 billion in 2023, with key exports including aircraft components, avionics, and maintenance services.⁴
- **Aviation Market:** Valued at \$4.26 billion in 2024, with growth driven by fleet renewals, airport upgrades, and the rebound of international and domestic travel.⁵

¹ Statista, "Aerospace & Defense Manufacturing - Australia | Forecast."

² IMARC Group, "Australia Aerospace and Defense Market Size | Share 2033."

³ Expert Market Research, "Australia Defense Market Size, Share | Industry Report 2034."

⁴ ReportLinker, "Australia Aerospace Industry Outlook 2024 - 2028."

⁵ OpenPR, "Australia Aerospace and Defense Market Size, Share, Trends."

Sectoral Breakdown

Aerospace and Defense

- **Military Aviation:** Australia is investing heavily in fifth-generation fighter jets (F-35A Lightning II), P-8A Poseidon maritime patrol aircraft, MQ-4C Triton drones, and advanced helicopters. These acquisitions, largely sourced from the United States, are modernizing the Royal Australian Air Force and enhancing interoperability with allies.⁶
- **Missile Manufacturing:** Up to \$11.7 billion is committed to domestic missile production, with ambitions to produce 4,000 guided missile systems annually by 2029. Programs include the Guided Weapons and Explosive Ordnance Enterprise, with U.S. partners such as Lockheed Martin and Raytheon Technologies.⁷
- **Manufacturing Base:** Over 5,500 businesses and 64,100 employees are engaged in aerospace and defense, with clusters in Victoria, Queensland, and South Australia. The Australian Industry Capability program is fostering local content and technology transfer.⁸

Civil and Commercial Aviation

- **Fleet Modernization:** Qantas and Virgin Australia are investing in next-generation Airbus A321XLR, A220, and Boeing 787 aircraft, targeting fuel efficiency and emissions reduction. These renewals are critical for maintaining international competitiveness given Australia's comparative remoteness.⁹
- **General Aviation and Training:** Australia is the Asia-Pacific's leading pilot training hub, with world-class flight schools and simulation centers supporting both domestic and international airlines.¹⁰
- **Airports and MRO:** Major airport upgrades are underway in Sydney, Melbourne, and Brisbane, with expansion of Maintenance, Repair, and Overhaul (MRO) facilities to support both civil and military fleets.¹¹

⁶ Protiviti, "2025 Report on Top Risks in the Aerospace and Defense Industry."

⁷ Manufacturers' Monthly, "The state of Australia's defence manufacturing," November 25, 2024.

⁸ Australian Bureau of Statistics, "Australian defence industry grows by 12.4 percent," April 16, 2025.

⁹ IATA, "Airlines are expanding operations and investing in fuel-efficient, next-generation aircraft," 2025.

¹⁰ Flight Training Australia, "Australia is the Asia-Pacific's leading pilot training hub," 2025.

¹¹ Australian Airports Association, "Major upgrades to airports and expansion of Maintenance, Repair, and Overhaul (MRO) capabilities," 2025.

Space Economy

- **Government Investment:** The Australian government has pledged \$750 million through 2038–39 for four new sovereign satellites, supporting Earth observation, communications, and defense applications.¹²
- **Australian Space Agency:** The agency leads national strategy, supporting satellite manufacturing, launch services, and downstream analytics. Australia’s regulatory environment is designed to attract commercial launch providers and satellite operators.¹³
- **Commercial Space:** Startups and established firms are active in launch services (e.g., Gilmour Space Technologies), satellite tech (Fleet Space), and analytics (Myriota), contributing to a vibrant and innovative sector.¹⁴
- **International Partnerships:** Australia is a partner in NASA’s Artemis lunar program and works closely with the United States and UK on space situational awareness, defense, and technology transfer.¹⁵

Hypersonics

- **Research Leadership:** Australia is a global leader in scramjet and high-speed flight research, with the University of Queensland’s Centre for Hypersonics and DSTG leading major projects. Government and defense investment is supporting the transition from research to prototype and operational capability.¹⁶
- **AUKU.S. Collaboration:** Through AUKU.S., Australia is engaged in joint R&D with the United States and UK on hypersonic weapons, counter-hypersonic systems, and the advanced materials required to support them. Australian industry is participating in trilateral technology demonstration projects, with a focus on rapid prototyping and integration into allied supply chains.¹⁷

Strategic Drivers and Partnerships

- **Defense Spending:** Australia’s defense budget exceeded \$50 billion USD in 2023, with a strategic focus on maritime, aerial, and space capabilities. The 2024 National Defence Strategy prioritizes rapid capability development and sovereign industrial capacity.¹⁸

¹² Australian Space Agency, “Australia government has pledged \$1.16 billion AUD through 2038–39 to design and operate four new satellites,” 2025.

¹³ Australian Space Agency, “Australia’s national strategy, supporting satellite manufacturing, launch services, and downstream applications,” 2025.

¹⁴ Space Industry Association of Australia, “A growing ecosystem of startups and established firms in launch services, satellite tech, and space-enabled analytics,” 2025.

¹⁵ NASA, “Australia is a partner in NASA’s Artemis lunar program,” 2025.

¹⁶ Department of Defence, “Australia is a global leader in scramjet and high-speed flight research,” 2025.

¹⁷ US Department of Defense, “Joint R&D with the US and UK on hypersonic weapons, counter-hypersonic systems, and advanced materials,” 2025.

¹⁸ Australian Strategic Policy Institute, “Australia government defense expenditure exceeded \$50 billion USD in 2023,” 2025.

- **Domestic Manufacturing Push:** Policy and funding initiatives such as the National Reconstruction Fund and Modern Manufacturing Initiative promote local industry participation, advanced manufacturing, and R&D in aerospace and defense.¹⁹
- **Export and Supply Chain Integration:** Australia is increasingly integrated into global aerospace and defense supply chains, with export-oriented manufacturing, technology transfer agreements, and participation in U.S. Foreign Military Sales programs.²⁰

Major Industry Players

- **Boeing Australia:** Holds a leading local market share, with key roles in military and commercial aerospace, autonomous systems, and advanced manufacturing.²¹
- **BAE Systems, Airbus Australia, Lockheed Martin:** Major contributors in combat aircraft, systems integration, and defense technology, with significant R&D and sustainment operations in Australia.²²
- **Thales, Northrop Grumman, RTX (Raytheon):** Active in avionics, weapons, and advanced research, supporting both domestic and export markets.²³
- **Emerging Local Firms:** Startups in launch services (Gilmour Space), satellite tech (Fleet Space, Myriota), and hypersonics are gaining traction, supported by government and international partnerships.²⁴

Sector Trends

- **Technology and Innovation:** Focus on advanced materials, autonomous systems, AI, and digitalization. The sector is adopting digital twins, predictive maintenance, and advanced manufacturing processes.²⁵
- **Sustainability:** Investment in sustainable aviation fuel, green airport infrastructure, and emissions reduction is increasing, supported by government incentives and airline commitments.²⁶
- **Workforce Development:** Growth in STEM education, aviation training, and high-skill manufacturing jobs is a priority, with new university-industry partnerships and skills programs.²⁷

¹⁹ Department of Industry, Science and Resources, "Policy and funding initiatives promote local industry participation," 2025.

²⁰ Australian Trade and Investment Commission, "Australia is increasingly integrated into global aerospace and defense supply chains," 2025.

²¹ IBISWorld, "Boeing Australia Holds 45.9 percent local market share," 2025.

²² Defense Technology Review, "BAE Systems, Airbus Australia, Lockheed Martin: Major contributors in combat aircraft," 2025.

²³ Jane's Defence Weekly, "Thales, Northrop Grumman, RTX (Raytheon): Active in avionics, weapons, and advanced research," 2025.

²⁴ 1Space Industry Association of Australia, "A growing ecosystem of startups and established firms in launch services, satellite tech, and space-enabled analytics," 2025.

²⁵ CSIRO, "Focus on advanced materials, autonomous systems, AI, and digitalization," 2025.

²⁶ Infrastructure Australia, "Investment in sustainable aviation fuel and green airport infrastructure," 2025.

²⁷ Engineers Australia, "Growth in STEM education, aviation training, and high-skill manufacturing jobs," 2025.

- **Regional Growth:** Queensland and Victoria lead in aerospace and defense manufacturing, with state-level investment and industry clusters supporting job creation and export growth.²⁸

Challenges

- **Cost and Supply Chain Pressures:** Rising input costs, labor shortages, and global supply chain disruptions are impacting project delivery and margins.²⁹
- **Global Competition:** Australia faces competition from established aerospace exporters in North America, Europe, and Asia, requiring ongoing investment in innovation and productivity.³⁰
- **Changing Threat Environment:** The requirements placed on Australian defense planners is forecasted to grow amid increased uncertainty in the Asia-Pacific security environment.

²⁸ Queensland Government, "Queensland and Victoria are leading regions for aerospace and defense manufacturing," 2025.

²⁹ Deloitte, "Rising input costs, labor shortages, and global supply chain disruptions," 2025.

³⁰ World Trade Organization, "Australia faces competition from established aerospace exporters," 2025.