

Military Aircraft Avionics Market Size & Share Analysis - Growth Trends and Forecast (2026 - 2031)

> **Industry:** Military Aircraft & Defense Electronics (Aerospace & Defense)
> **Source:** https://www.mordorintelligence.com/industry-reports/military-aircraft-avionics-market
> **Scraped Date:** 2026-09-17

Executive Market Summary

Market Metric	Details
Base Market Size	USD 24.06 billion
Projected Forecast (2031)	USD 24.06 billion
Growth Rate (CAGR)	4.78 %
Largest Market Region	N/A
Fastest-Growing Region	N/A

Market Visualizations & Infographics

! [Major players in Military Aircraft Avionics industry] (images/chart_2.png)

! [Military Aircraft Avionics Market (2026 - 2031)] (images/chart_3.png)

! [Military Aircraft Avionics Market: Market Share by Subsystem] (images/chart_4.png)

! [Military Aircraft Avionics Market: Market Share by Fit] (images/chart_5.png)

! [Military Aircraft Avionics Market CAGR (%), Growth Rate by Region] (images/chart_6.png)

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Comprehensive Research Analysis

Overview Points List Flex 49 Share Feature End

Market OverviewStudy Period | 2019 - 2031 |
Market Size (2026) | USD 24.06 Billion |
Market Size (2031) | USD 30.38 Billion |
Growth Rate (2026 - 2031) | 4.78 % |
Fastest Growing Market | Asia Pacific |
Largest Market | North America |
Market Concentration | Medium |
Major Players*Disclaimer: Major Players sorted in no particular order

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Market Overview

Military Aircraft Avionics Market Analysis by Mordor Intelligence The military aircraft avionics market size is estimated at USD 24.06 billion in 2026 and is projected to reach USD 30.38 billion by 2031, growing at a 4.78% CAGR. The growing demand for AI-enabled sensor fusion that processes data at the edge, the mandatory adoption of open-systems architecture, and the rapid fielding of power-efficient avionics for unmanned platforms are shaping procurement priorities in every major air arm. Suppliers are racing to embed zero-trust cyber controls that satisfy DO-326A and EUROCAE ED-202A while still meeting weight and power budgets. At the same time, on-shoring of RF and microelectronics capacity is redrawing supply chains and moderating the impact of semiconductor disruptions. These intersecting forces reinforce a momentum that offsets the long certification cycles typical of the military aircraft avionics market.

Key Report Takeaways* By subsystem, communication systems led the military aircraft avionics market with a 26.64% market share in 2025 and are forecasted to expand at a 6.03% CAGR through 2031.

* By aircraft type, fixed-wing combat aircraft accounted for 41.21% of the military aircraft avionics market size in 2025, whereas unmanned aerial vehicles (UAVs) are projected to advance at a 9.81% CAGR through 2031.

* By fit, linefit installations captured 56.47% of the military aircraft avionics market in 2025; however, retrofit applications are growing at the fastest rate with a 6.67% CAGR.

* By geography, North America held 30.47% of the military aircraft avionics market in 2025, while Asia-Pacific is registering the highest regional CAGR at 5.65% through 2031.

Key Market Trends

Market Trends and Insights Drivers Impact Analysis of Military Aircraft Avionics Market * Driver | (~) % Impact on CAGR Forecast | Geographic Relevance | Impact Timeline |

Rising global defense spending and modernization of military aircraft fleets | +1.20% | North America, Europe, Asia-Pacific | Medium term (2-4 years) |

Accelerated integration of AI-enabled sensor fusion and edge analytics | +0.90% | North America, Europe, Asia-Pacific | Medium term (2-4 years) |

Proliferation of UAV platforms driving demand for lightweight avionics | +1.10% | Middle East, Asia-Pacific | Short term (≤ 2 years) |

Mandates for open-systems architecture by DoD and NATO | +0.70% | North America, Europe, allied APAC | Long term (≥ 4 years) |

Strategic on-shoring and localization of RF and microelectronics | +0.50% | North America, Europe, India, Japan | Long term (≥ 4 years) |

Emergence of zero-trust cybersecurity standards for avionics certification | +0.40% | Global, early adoption in North America, Europe | Medium term (2-4 years) |

Source: Mordor Intelligence |

Competitive Landscape

Competitive Landscape

The top five suppliers, RTX Corporation, Lockheed Martin Corporation, Northrop Grumman Corporation, L3Harris Technologies Inc., and Thales Group, control roughly 62% of the military aircraft avionics market through vertical integration of sensors, processors, and software. Open-systems mandates are lowering entry barriers, enabling Mercury Systems, Elbit Systems, and Leonardo to win subsystem awards.

ds with MOSA-compliant hardware that slots into prime architectures without proprietary interfaces. Strategic moves focus on AI and software, such as RTX Corporation's 2024 purchase of a machine-learning firm to accelerate sensor-fusion algorithms and BAE Systems' alliance with Palantir to embed data analytics in mission planners.

White-space opportunities are emerging in attritable UAV avionics, where subsystems must balance 9-G survivability with price points fit for expendable platforms. Technology remains the decisive lever: suppliers invest in GaN RF, neuromorphic processors, and quantum-secure encryption, which future-proofs designs against evolving threats. Patent activity underscores this shift; L3Harris filed 142 avionics-related patents in 2024, with a focus on adaptive waveform generation and cognitive electronic warfare. As open standards proliferate, differentiation moves from hardware enclosures to the software stack, reshaping competitive dynamics across the military aircraft avionics market.

Military Aircraft Avionics Industry Leaders* Lockheed Martin Corporation

* Northrop Grumman Corporation

* RTX Corporation

* Thales Group

* L3Harris Technologies, Inc.

* *Disclaimer: Major Players sorted in no particular order

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Scope Methodology P Space

For this study, the market covers avionics equipment and embedded software that are installed on military aircraft to support safe flight and mission tasks, including communication, navigation, flight control, and onboard monitoring functions.

Scope exclusions: It does not count ground-based command centers, satellite manufacturing, or stand-alone weapons that are not part of the aircraft avionics suite.

Segmentation Container

* By Subsystem* Flight Control Systems

* Communication Systems

* Navigation Systems

* Monitoring and Health-Management Systems

* Other Subsystems

* By Aircraft Type* Fixed-wing Combat Aircraft

* Fixed-Wing Non-Combat Aircraft

* Helicopters

* Unmanned Aerial Vehicles (UAVs)

* By Fit* Linefit

* Retrofit

* By Geography* North America* United States

* Canada

* Mexico

* Europe* United Kingdom

* France

- * Germany
- * Russia
- * Rest of Europe
- * Asia-Pacific* China
- * India
- * Japan
- * Australia
- * Rest of Asia-Pacific
- * South America* Brazil
- * Rest of South America
- * Middle East and Africa* Middle East* Saudi Arabia
- * United Arab Emirates
- * Rest of Middle East
- * Africa* South Africa
- * Rest of Africa

Frequently Asked Questions

What is the current value of the military aircraft avionics market?

The military aircraft avionics market size is USD 24.06 billion in 2026 and is projected to reach USD 30.38 billion by 2031.

Which subsystem segment is growing fastest?

Communication systems are expanding at a 6.03% CAGR due to widespread installation of wideband SATCOM, Link 16, and software-defined radios (SDRs).

Why are unmanned aerial vehicles (UAVs) important for avionics suppliers?

UAVs require lightweight, power-efficient avionics and are posting a 9.81% CAGR, making them the most dynamic aircraft-type opportunity.

How significant is retrofitting compared with new-build installations?

Retrofit demand is rising at 6.67% annually as air forces extend aircraft service lives and refresh mission systems every decade.

Which region shows the highest growth through 2031?

Asia-Pacific leads regional growth with a 5.65% CAGR, underscored by large indigenous fighter programs in India, Japan, and South Korea.

What impact do zero-trust cybersecurity standards have on avionics development timelines?

Adoption of DO-326A and EUROCAE ED-202A adds 12–18 months to certification because suppliers must implement continuous authentication, network micro-segmentation, and hardware roots of trust, yet the extra effort sharply reduces cyber-attack surface and is becoming mandatory on new programs.