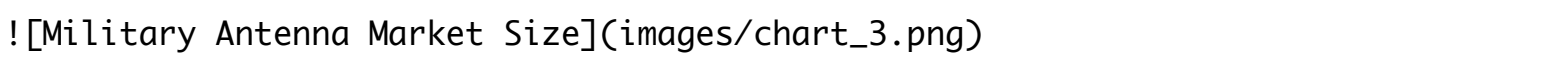
Military Antenna Market Size & Share Analysis - Growth Trends and Forecast (2026 - 2031)

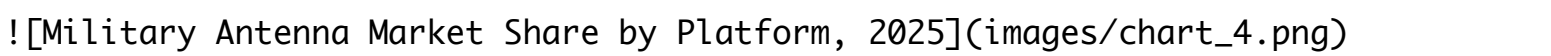
> **Industry:** Military Aircraft & Defense Electronics (Aerospace & Defense)
> **Source:** https://www.mordorintelligence.com/industry-reports/military-antenna-market
> **Scraped Date:** 2026-09-17

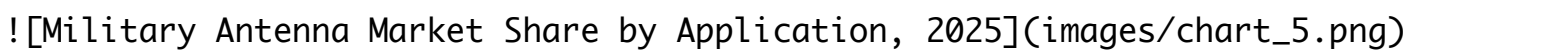
Executive Market Summary

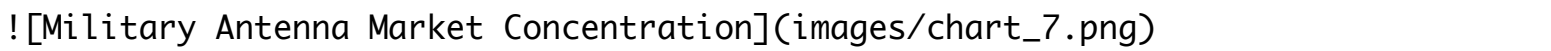
Market Metric	Details
Base Market Size	USD 6.65 billion
Projected Forecast (2031)	USD 6.65 billion
Growth Rate (CAGR)	5.42 %
Largest Market Region	N/A
Fastest-Growing Region	N/A

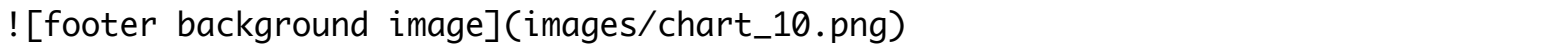
Market Visualizations & Infographics

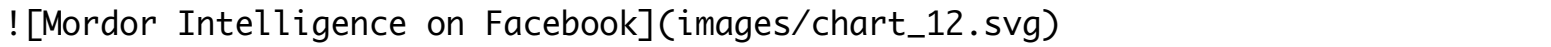


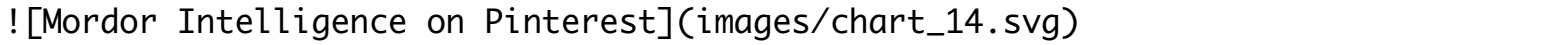


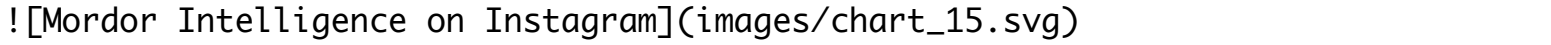












Comprehensive Research Analysis

Overview Points List Flex 49 Share Feature End

Market Overview

Study Period
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2019 - 2031
|

Market Size (2026)
|

USD 5.11 Billion
|

Market Size (2031)
|

USD 6.65 Billion
|

Growth Rate (2026 - 2031)
|

5.42 %
|

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 Antenna Market Analysis by Mordor Intelligence

The military antenna market size is projected to expand from USD 4.78 billion i

n 2025 and USD 5.11 billion in 2026 to USD 6.65 billion by 2031, registering a CAGR of 5.41% between 2026 and 2031. Advanced communication-on-the-move programs continue to be a significant demand driver as armed forces transition from static communication nodes to continuously connected mobile platforms. The military antenna market benefits from modernization in the command-and-control (C2) systems. The US Government Accountability Office (GAO) noted that the Department of Defense (DoD) requested over USD 1.4 billion for Combined Joint All-Domain Command and Control (CJADC2) activities in the FY2025 budget. Although GAO does not directly link CJADC2 funding to antenna upgrades, the program's focus on connecting assets across domains sustains demand for resilient communication systems and connectivity enhancements. The military antenna market is gaining another layer of support from rising demand for multi-orbit SATCOM, submarine communications, unmanned systems, and space payloads, all of which require smaller, lighter, and more software-driven apertures than earlier generations. Even so, the military antenna market still faces timing friction from export controls and the concentration of trusted-source components, which can slow allied integration schedules and limit production scalability for some suppliers.

Key Report Takeaways

* By platform, ground platforms held 37.55% of the military antenna market size in 2025, while space platforms are projected to record the fastest growth at an 8.90% CAGR through 2031.

* By frequency band, UHF accounted for 34.10% in 2025, while SHF is forecast to expand at a 9.01% CAGR through 2031.

* By technology, array antennas led with 35.68% in 2025, while microstrip antennas are projected to grow at an 8.77% CAGR through 2031.

* By application, communications accounted for 45.30% of the military antenna market in 2025, while telemetry is projected to grow at a 7.99% CAGR through 2031.

* By component, radiating elements captured 40.25% in 2025, while radomes are forecast to grow at a 7.15% CAGR through 2031.

* By geography, North America held 47.35% of the military antenna market share in 2025, while Asia-Pacific is projected to register the highest CAGR of 6.90% through 2031.

Key Market Trends

Market Trends and Insights

Drivers Impact Analysis of Military Antenna Market*

Driver |

(~) % Impact on CAGR Forecast |

Geographic Relevance |

Impact Timeline |

Phased-array and electronically steered antenna upgrades

|

+1.20%
|

Global, with near-term gains in North America and Europe
|

Short term (≤ 2 years)
|

Tactical SATCOM expansion across LEO, MEO, and GEO networks

|

+1.00%
|

Global, with highest intensity in North America and Asia-Pacific
|

Medium term (2-4 years)
|

C4ISR and multi-domain secure communications modernization

|

+0.90%
|

NATO members and Indo-Pacific partners
|

Medium term (2-4 years)
|

Unmanned and attritable platform proliferation

|

+0.70%
|

Global, with concentration in Asia-Pacific and North America
|

Short term (≤ 2 years) to Medium term (2-4 years)
|

Shared-aperture multifunction antenna adoption

|

+0.50%
|

North America and Europe, with spillover to Asia-Pacific and Middle East and Africa
|

Medium term (2-4 years)
|

Protected multi-orbit connectivity for polar and contested theater

|

+0.40%
|

North America, Northern Europe, and Arctic littoral states
|

Long term (≥ 4 years)
|

Source: Mordor Intelligence
|

Competitive Landscape

Competitive Landscape

The military antenna market is moderately consolidated, with L3Harris Technologies, RTX Corporation, Lockheed Martin, BAE Systems plc, and Rohde & Schwarz GmbH & Co. KG holding strong positions in Western defense programs. Even so, the military antenna market is not closed to smaller specialists, because platform-specific outsourcing remains active across communications, SATCOM, and antenna subsystem manufacturing. MTI Wireless Edge said in January 2025 that Israeli system houses were increasing outsourcing of military antenna manufacturing, which supports the view that mid-tier suppliers still have room to win focused work even when large primes dominate end programs, leaving the military antenna market with a mixed structure where prime contractors lead on large platforms, while specialists compete on subsystems, integration, and niche performance requirements.

Strategic positioning is increasingly tied to program depth and installed relationships rather than only to one-time product launches. L3Harris strengthened its position in the military antenna market through nearly USD 300 million in US Army resilient communications production orders in January 2025 and its February 2026 full-rate submarine communications contract with General Dynamics Electric Boat. AeroVironment advanced in the value chain in May 2026 by securing the SkyRange PANTHER phased-array integration contract, demonstrating antenna specialists' ability to diversify into mission-critical test and telemetry functions. Kymeta's 2026 KuKa 8-Series launch is another example, as it targeted the open space in multi-band, multi-orbit mobile terminals where no single supplier has yet secured clear dominance across all defense users.

Competition is also shifting toward software-defined apertures, integrated survivability, and easier certification across several mission sets. The military antenna market rewards suppliers that can shorten installation time, reduce aperture count, and support multi-band operation on constrained platforms. Rohde & Schwarz's launch of transportable spectrum monitoring systems shows that electromagnetic awareness and communications support are becoming increasingly closely linked in the military antenna market. The military antenna market is also being shaped by trusted manufacturing and industrial-based policy, because buyers increasingly want secure supply, domestic support, and proven long-term sustainment. As a result, competitive advantage now comes from a mix of technology performance, production resilience, and the ability to stay embedded in multi-year defense programs rather than from product specifications alone.

Military Antenna Industry Leaders

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RTX Corporation

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Lockheed Martin Corporation

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BAE Systems plc

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Rohde & Schwarz GmbH & Co. KG

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L3Harris Technologies, Inc.

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*Disclaimer: Major Players sorted in no particular order

Component Component 3 Scope Of The Report Bottom

Global Military Antenna Market Report Scope

Military antennas are specialized systems and related RF components used across defense platforms to provide secure, reliable radio-frequency connectivity in tactical and strategic operating environments. The military antenna market report excludes commercial antennas, consumer communication antennas, civilian telecom antennas, and non-defense RF products unless specifically designed, qualified, procured, or integrated for military applications.

The military antenna market is segmented by platform, frequency band, technology, application, component, and geography. By platform, the market is segmented into airborne, ground, naval, and space. By frequency band, the market is segmented into high frequency (HF), very high frequency (VHF), ultra-high frequency (UHF), super-high frequency (SHF), and extremely high frequency (EHF). By technology, the market is segmented into wire antennas, aperture antennas, array antennas, reflector antennas, lens antennas, and microstrip antennas. By application, the market is segmented into communications, navigation, surveillance, electronic warfare (EW), and telemetry. By component, the market is segmented into radiating elements, feed networks and coax assemblies, RF/microwave switches and phase shifters, radomes, and other components. The report also covers the market sizes and forecasts for the military antenna market in major countries across different regions. For each segment, the market size is provided in terms of value (USD).

By Platform

Airborne
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Ground
|

Naval
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Space
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Segmentation Accordion Item

By Geography

North America
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United States
|

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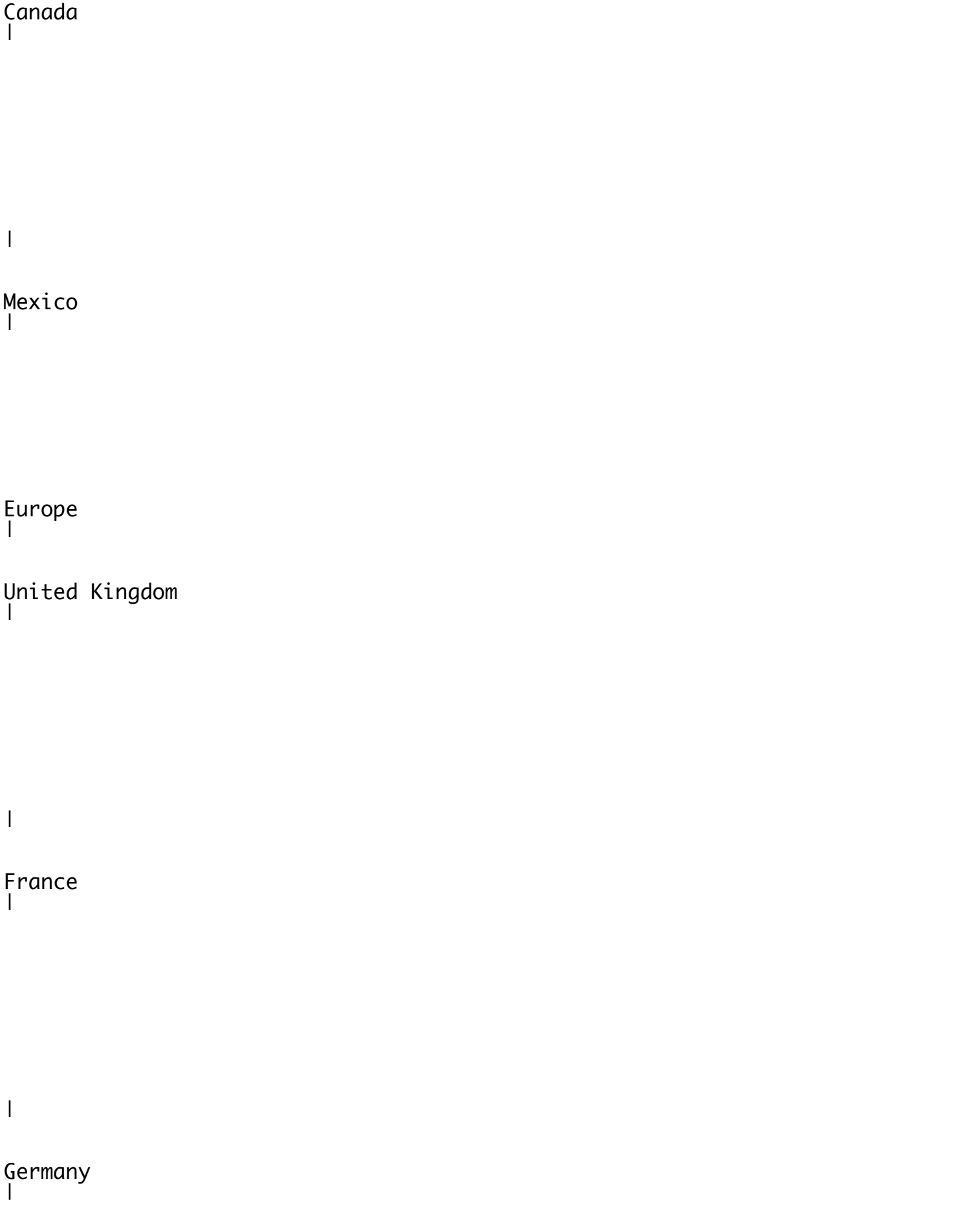
Canada
Mexico
Europe
United Kingdom
France
Germany

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Italy
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Russia
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Rest of Europe
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Asia-Pacific
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China
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India
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Japan
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South Korea
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Australia
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Rest of Asia-Pacific
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South America
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Brazil
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Rest of South America
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|

Middle East and Africa
|

Middle East
|

Saudi Arabia
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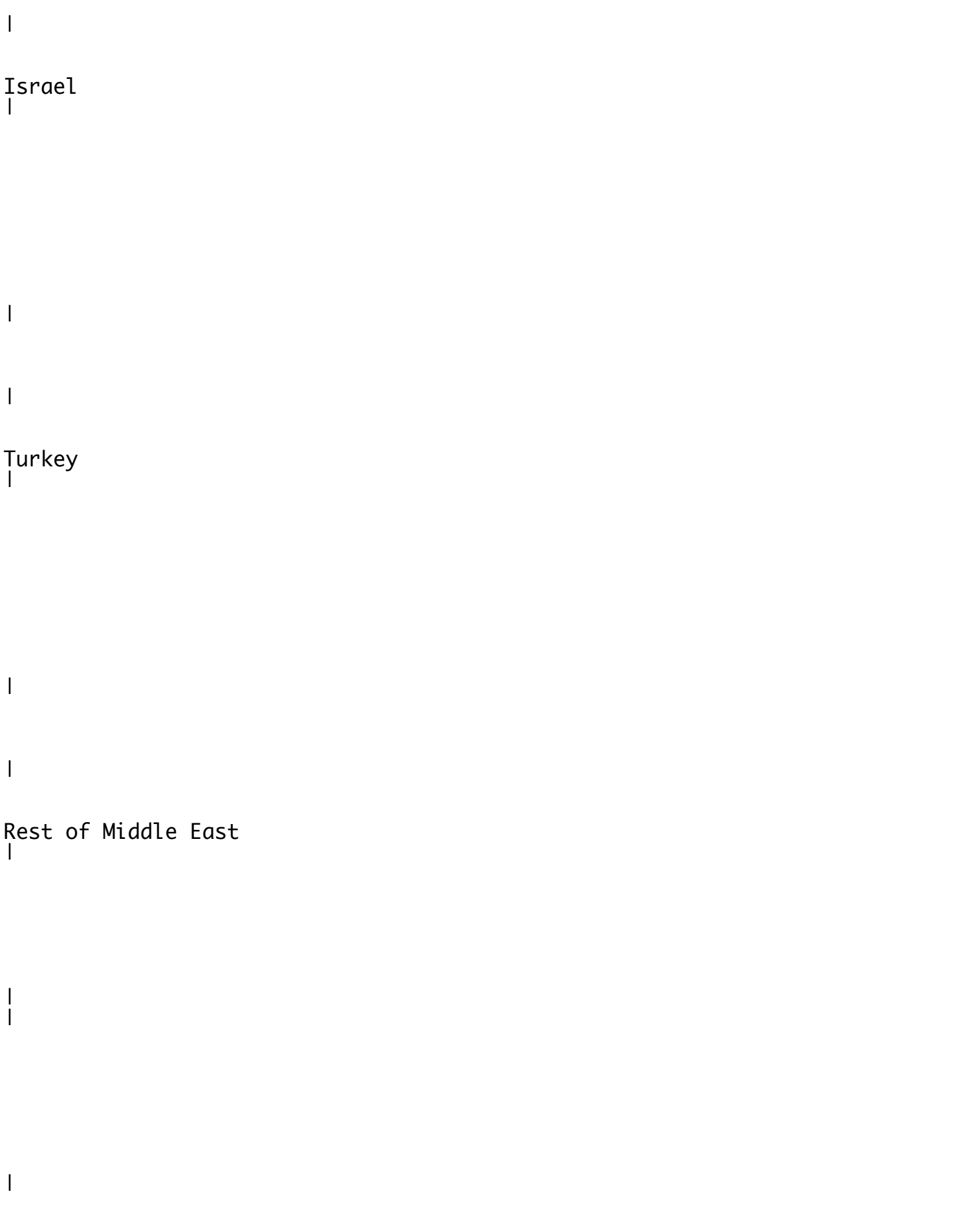
Israel
Turkey
Rest of Middle East

Africa
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Egypt
|

|

|

South Africa
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|

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Rest of Africa
|

Frequently Asked Questions

What is the current value of the military antenna market?

The military antenna market size is projected to expand from USD 4.78 billion in 2025 and USD 5.11 billion in 2026 to USD 6.65 billion by 2031, registering a 5.41% CAGR during 2026-2031.

Which technology is leading adoption across defense programs?

Array antennas led with 35.68% in 2025 because they support beam agility, multi-mission use, and better fit with radar, SATCOM, and EW requirements.

Which platform is growing the fastest through 2031?

Space is the fastest-growing platform with an 8.90% CAGR, supported by defense communications satellites, relay architectures, and more electronically steerable payloads.

Why is SHF growing faster than other frequency bands?

SHF is forecast to grow at 9.01% through 2031 because Ka-band and Ku-band SATCOM demand is rising for multi-orbit communications and mobile broadband military links.

What is the biggest application area for these systems?

Communications held 45.30% in 2025, reflecting broad demand from tactical radios, shipborne terminals, aircraft links, and networked ground systems.

Which region offers the strongest growth outlook?

Asia-Pacific is expected to grow the fastest at a 6.90% CAGR through 2031, supported by budget expansion, indigenous production, and higher demand for surveillance and secure communications.