

## **Airborne Radar Market Opportunity, Growth Drivers, Industry Trend Analysis, and Forecast 2026 - 2035**

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### **Report description:**

The Global Airborne Radar Market was valued at USD 18.5 billion in 2025 and is estimated to grow at a CAGR of 9.5% to reach USD 44.8 billion by 2035.

Market expansion is driven by the rising global emphasis on national security, airspace monitoring, and advanced defense preparedness. Governments are increasingly prioritizing the integration of sophisticated airborne radar solutions to strengthen detection, identification, and tracking capabilities in complex operational environments. Defense modernization programs continue to stimulate investment in next-generation radar architectures, enabling enhanced situational awareness and multi-mission performance. The growing reliance on Intelligence, Surveillance, and Reconnaissance operations is further reinforcing demand, as airborne radar systems play a critical role in real-time data acquisition and threat assessment. Increased procurement of modern military aircraft, combined with retrofit and upgrade programs for existing fleets, is creating a favorable ecosystem for sustained radar development. Additionally, advancements in electronically scanned arrays and enhanced signal processing are enabling higher performance, adaptability, and operational reliability, supporting long-term market growth across military and security applications.

The X-Band segment generated USD 7.7 billion in 2025. Demand for this frequency range is supported by its ability to deliver precise imaging, accurate target discrimination, and reliable performance across diverse mission profiles. The segment benefits from growing integration of compact and lightweight radar solutions that align with modern platform requirements, enabling deployment across a broad range of airborne systems while maintaining high-resolution surveillance and tracking capabilities. The long-range segment, covering detection distances beyond 200 kilometers, is projected to grow at a CAGR of 7.3% through 2035. This growth reflects increasing emphasis on extended-area monitoring, early detection, and strategic defense readiness. Investments in platforms designed for sustained surveillance missions continue to rise as defense agencies seek enhanced reach and persistence. The need for early threat identification and comprehensive airspace coverage is encouraging wider adoption of long-range airborne radar technologies.

North America Airborne Radar Market accounted for 34.1% share in 2025, maintaining a leading regional position. Growth in this region is supported by consistent defense budget allocations and long-term modernization initiatives. Airborne radar systems are

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being prioritized to strengthen surveillance, early warning, and operational coordination across multiple domains. Continued investment in advanced aerospace technologies and integrated defense capabilities is reinforcing regional demand and supporting sustained market expansion.

Key companies active in the Global Airborne Radar Market include Lockheed Martin, Thales Group, Northrop Grumman, Leonardo S.p.A., Saab AB, RTX Corporation (Raytheon), L3Harris Technologies, Airbus SE, Boeing, Elbit Systems, Hensoldt AG, BAE Systems, Mitsubishi Electric, Israel Aerospace Industries, General Dynamics, ASELSAN, TERMA, and Telephonics Corporation. Companies operating in the airborne radar market are strengthening their market position through sustained investment in research and development, with a strong focus on advanced signal processing, electronic scanning technologies, and system miniaturization. Strategic collaborations with defense agencies and aircraft manufacturers enable early integration of radar solutions into new and upgraded platforms. Firms are also expanding modular product portfolios to support multi-mission flexibility and lifecycle upgrades. Geographic expansion, long-term defense contracts, and aftermarket support services further enhance revenue stability.

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## Comprehensive Market Analysis and Forecast

- Industry trends, key growth drivers, challenges, future opportunities, and regulatory landscape
- Competitive landscape with Porter's Five Forces and PESTEL analysis
- Market size, segmentation, and regional forecasts
- In-depth company profiles, business strategies, financial insights, and SWOT analysis

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