+357 96 030922
info@marketpublishers.com

Aircraft Synthetic Vision System Market Forecasts to 2032 – Global Analysis By Component (Hardware, Software and Services), Platform, Display System Type, End User and By Geography

https://marketpublishers.com/r/A4843B3668EEEN.html
Date: September 2025
Pages: 200
Price: US$ 4,150.00 (Single User License)
ID: A4843B3668EEEN

Abstracts

According to Stratistics MRC, the Global Aircraft Synthetic Vision System Market is accounted for $524.09 million in 2025 and is expected to reach $767.45 million by 2032 growing at a CAGR of 5.6% during the forecast period. An Aircraft Synthetic Vision System (SVS) is a sophisticated cockpit technology that combines 3D terrain mapping, GPS data, and onboard sensors to generate a real-time virtual representation of the environment. Presented on cockpit displays, it provides pilots with a clear, daylight-like view regardless of weather or visibility. This system boosts navigation precision, minimizes spatial disorientation, and enhances safety throughout all flight stages, including departure, cruising, and landing.

According to the International Air Transport Association (IATA), 7 fatal accidents were reported in 2024 with 244 onboard fatalities. Synthetic vision systems in aircraft are developed to enhance situation awareness for the onboard flight crew.

Market Dynamics:

Driver:

Increasing adoption of advanced avionics

With safety and visibility taking center stage in aviation, there's a growing shift toward equipping aircraft with advanced cockpit technologies. Synthetic Vision Systems (SVS) provide pilots with a digitally rendered, three-dimensional view of terrain and runways,

+357 96 030922
info@marketpublishers.com

even in poor weather or darkness, boosting situational awareness. The aviation industry's move toward automation and intelligent flight systems is accelerating SVS deployment across both civil and military fleets. Regulatory support from agencies like the FAA and EASA is also encouraging broader adoption through updated compliance frameworks.

Restraint:

Complexity in system integration with existing avionics

Many aircraft still operate on legacy platforms that lack the technical capacity to support SVS features. Upgrading these systems often involves significant investment in hardware, software, and certification processes. Compatibility issues with other cockpit technologies—such as EVS or HUDs—can further complicate retrofitting efforts. Airlines may be reluctant to pursue SVS upgrades unless the process is streamlined and cost-effective. These integration complexities continue to limit SVS penetration across aging fleets.

Opportunity:

Development of lightweight, cost-effective SVS solutions

Breakthroughs in sensor miniaturization and display innovation are enabling the creation of smaller, more efficient SVS units. These lightweight systems are ideal for general aviation, drones, and regional aircraft where space and power constraints are critical. Lower-cost SVS solutions offer a compelling value proposition for operators seeking enhanced safety without major capital outlays. Modular designs also allow for flexible deployment across diverse aircraft models. As manufacturing becomes more cost-efficient, SVS is becoming viable for emerging markets and budget-sensitive operators. This trend presents a strong growth avenue for suppliers targeting underserved aviation segments.

Threat:

Cybersecurity risks in avionics systems

As SVS and other avionics systems become increasingly digital and interconnected, they face heightened exposure to cyber threats. Attacks on flight software or data inputs could jeopardize aircraft safety and disrupt operations. SVS depends on real-time data

+357 96 030922
info@marketpublishers.com

from GPS, terrain mapping, and onboard sensors—making it susceptible to spoofing or interference. Growing connectivity between aircraft and ground networks adds further risk of unauthorized access. While regulators are pushing for stronger cybersecurity standards, implementation remains inconsistent across the industry. These vulnerabilities pose a serious challenge to SVS reliability and market trust.

Covid-19 Impact:

The pandemic caused delays in aircraft upgrades and avionics installations, as airlines focused on financial survival and operational continuity. SVS projects were put on hold due to supply chain issues and reduced capital spending. Yet, the crisis underscored the importance of advanced safety systems in maintaining flight resilience. As global aviation recovers, there's renewed momentum to modernize cockpits and reduce pilot workload through technologies like SVS. Although growth was temporarily stalled, long-term demand for SVS has been revitalized by a stronger focus on reliability and preparedness.

The display systems segment is expected to be the largest during the forecast period

The display systems segment is expected to account for the largest market share during the forecast period, propelled by innovations in cockpit visualization, including ultra-clear LCDs, OLED panels, and advanced head-up displays. Trends such as interactive touchscreens and augmented reality enhancements are improving pilot usability and flight awareness. Recent advancements integrate terrain data, obstacle alerts, and real-time sensor inputs into sleek, power-efficient formats. As automation and safety requirements rise, these technologies are gaining traction across commercial aviation, defense applications, and private aircraft fleets.

The aftermarket segment is expected to have the highest CAGR during the forecast period

Over the forecast period, the aftermarket segment is predicted to witness the highest growth rate, driven by rising demand for retrofitting older aircraft with advanced situational awareness technologies. Key developments include modular SVS units compatible with legacy avionics and upgrades featuring enhanced terrain rendering, obstacle detection, and real-time data integration. Emerging trends such as plug-and-play installations and software-based enhancements are simplifying deployment. As operators seek cost-effective safety improvements and regulatory compliance, the aftermarket segment is expanding across commercial, regional, and general aviation

+357 96 030922
info@marketpublishers.com

fleets worldwide.

Region with largest share:

During the forecast period, the Asia Pacific region is expected to hold the largest market share, due to rapid aviation expansion, growing passenger volumes, and heightened emphasis on operational safety. Innovations like miniaturized SVS components, ultra-clear cockpit displays, and advanced sensor integration are becoming increasingly popular. Regional trends show rising use of SVS in business jets, smaller aircraft, and unmanned aerial vehicles. Notable developments include government-led aviation upgrades and increased spending on SVS-enabled pilot training.

Region with highest CAGR:

Over the forecast period, the North America region is anticipated to exhibit the highest CAGR, owing to robust regulatory frameworks, mature aviation infrastructure, and a strong base of avionics innovators. Breakthroughs in real-time sensor fusion, 3D terrain visualization, and ultra-high-definition cockpit displays are improving pilot decision-making and flight safety. Trends like augmented reality integration and support for autonomous navigation are gaining traction. Key developments, including FAA-endorsed upgrades and growing SVS adoption in corporate and commercial aircraft, are fueling widespread implementation across the region.

Key players in the market

Some of the key players in Aircraft Synthetic Vision System Market include Honeywell International Inc., Rockwell Collins, Garmin Ltd., General Dynamics Mission Systems, Collins Aerospace, Lockheed Martin Corporation, Thales Group, Textron Aviation, Universal Avionics Systems Corp., Northrop Grumman Corporation, ForeFlight, L3Harris Technologies, Elbit Systems Ltd., Avidyne Corporation, BAE Systems, Aspen Avionics Inc., Dynon Avionics, and Saab AB.

Key Developments:

In August 2025, Lockheed Martin is expanding its industrial collaboration package for the Philippines as part of its F-16 Block 70 solution for the country's Multi Role Fighter program. The enhanced offer includes a strategic partnership with Southern Methodist University (SMU) to drive digital innovation, intellectual property creation, and workforce development with Philippine universities and industry.

+357 96 030922
info@marketpublishers.com

In July 2025, Honeywell announced that it has acquired from Nexceris its Li-ion Tamer business, a leading off-gas detection solution for lithium-ion (li-ion) batteries that detects thermal runaway events. The acquisition enhances Honeywell's portfolio of best-in-class fire life safety technologies within its Building Automation segment and emerged from a partnership with Nexceris over the past 5 years to strategically address lithium-ion battery system safety.

In July 2025, TAU Systems, the developer of next-generation ultrafast laser-plasma accelerators, announced the collaboration with solid-state laser producer Thales. The collaboration leverages Thales' expertise in high peak power laser systems and TAU Systems' innovation in laser-driven particle acceleration.

Components Covered:

- Hardware
- Software
- Services

Platforms Covered:

- Fixed-Wing Aircraft
- Rotary-Wing Aircraft
- Unmanned Aerial Vehicles (UAVs)

Display System Types Covered:

- Primary Flight Display (PFD)
- Head-Up Display (HUD)
- Multi-Function Display (MFD)

+357 96 030922
info@marketpublishers.com

End Users Covered:

- Original Equipment Manufacturer (OEM)
- Aftermarket

Regions Covered:

- North America
  - US
  - Canada
  - Mexico
- Europe
  - Germany
  - UK
  - Italy
  - France
  - Spain
  - Rest of Europe
- Asia Pacific
  - Japan
  - China
  - India

+357 96 030922
info@marketpublishers.com

- Australia
- New Zealand
- South Korea
- Rest of Asia Pacific

South America

- Argentina
- Brazil
- Chile
- Rest of South America

Middle East & Africa

- Saudi Arabia
- UAE
- Qatar
- South Africa
- Rest of Middle East & Africa

What our report offers:
- Market share assessments for the regional and country-level segments
- Strategic recommendations for the new entrants
- Covers Market data for the years 2024, 2025, 2026, 2028, and 2032
- Market Trends (Drivers, Constraints, Opportunities, Threats, Challenges, Investment Opportunities, and recommendations)
- Strategic recommendations in key business segments based on the market estimations

+357 96 030922
info@marketpublishers.com

- Competitive landscaping mapping the key common trends
- Company profiling with detailed strategies, financials, and recent developments
- Supply chain trends mapping the latest technological advancements

Free Customization Offerings:

All the customers of this report will be entitled to receive one of the following free customization options:

Company Profiling

Comprehensive profiling of additional market players (up to 3)

SWOT Analysis of key players (up to 3)

Regional Segmentation

Market estimations, Forecasts and CAGR of any prominent country as per the client's interest (Note: Depends on feasibility check)

Competitive Benchmarking

Benchmarking of key players based on product portfolio, geographical presence, and strategic alliances

+357 96 030922
info@marketpublishers.com

Contents

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

9 GLOBAL AIRCRAFT SYNTHETIC VISION SYSTEM MARKET, BY GEOGRAPHY

10 KEY DEVELOPMENTS

+357 96 030922
info@marketpublishers.com

11 COMPANY PROFILING

+357 96 030922
info@marketpublishers.com

List Of Tables

LIST OF TABLES

+357 96 030922
info@marketpublishers.com

Note: Tables for North America, Europe, APAC, South America, and Middle East & Africa Regions are also represented in the same manner as above.

+357 96 030922
info@marketpublishers.com

I would like to order

Product name: Aircraft Synthetic Vision System Market Forecasts to 2032 – Global Analysis By Component (Hardware, Software and Services), Platform, Display System Type, End User and By Geography

Product link: https://marketpublishers.com/r/A4843B3668EEEN.html

Price: US$ 4,150.00 (Single User License / Electronic Delivery)

If you want to order Corporate License or Hard Copy, please, contact our Customer Service:
info@marketpublishers.com

Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page https://marketpublishers.com/r/A4843B3668EEEN.html