

ANSP for Commercial Aviation

AIRCRAFT NETWORK SECURITY PROGRAM COMPLIANCE

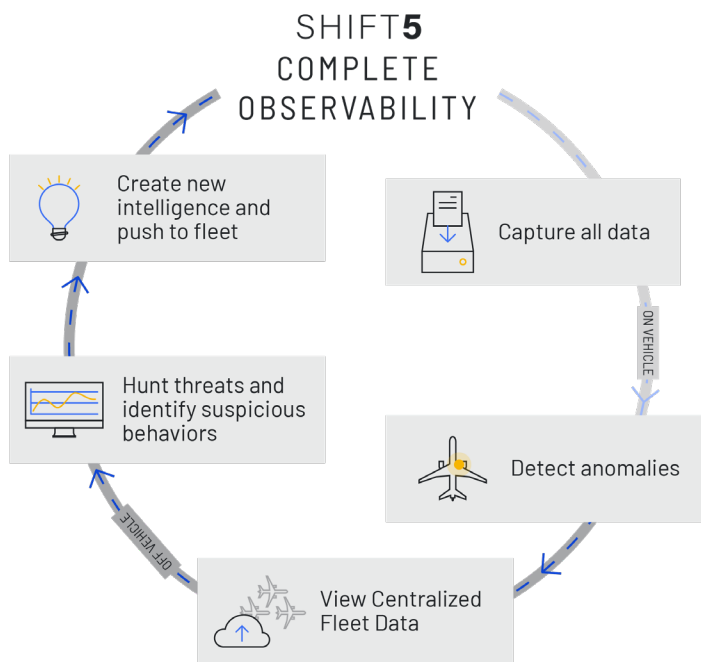


Take the burden out of regulatory compliance.

Deploying new, connected technologies on aircraft that move millions of people a year through our skies understandably requires regulatory oversight to ensure stringent safety standards. But regulatory requirements are often too rigid, making them difficult to integrate into existing processes, or too vague, creating extra work and uncertainty for resource-constrained teams.

Top of mind is FAA Advisory Circular 119-1 which requires operators to create an Aircraft Network Security Program (ANSP) that can address credible cyber threats and potential critical safety issues on connected aircraft. A key component of an ANSP is the need to aggregate, decode, monitor, and alert on potential security conditions in an aircraft's network security log files.

This task is complex and requires continuous development, research, and focus. And while AC 119-1 outlines what to do, it offers no guidance on how to do it—or why, leaving operators struggling to find a clear path to compliance.



With the Shift5 platform, operators can easily and automatically:

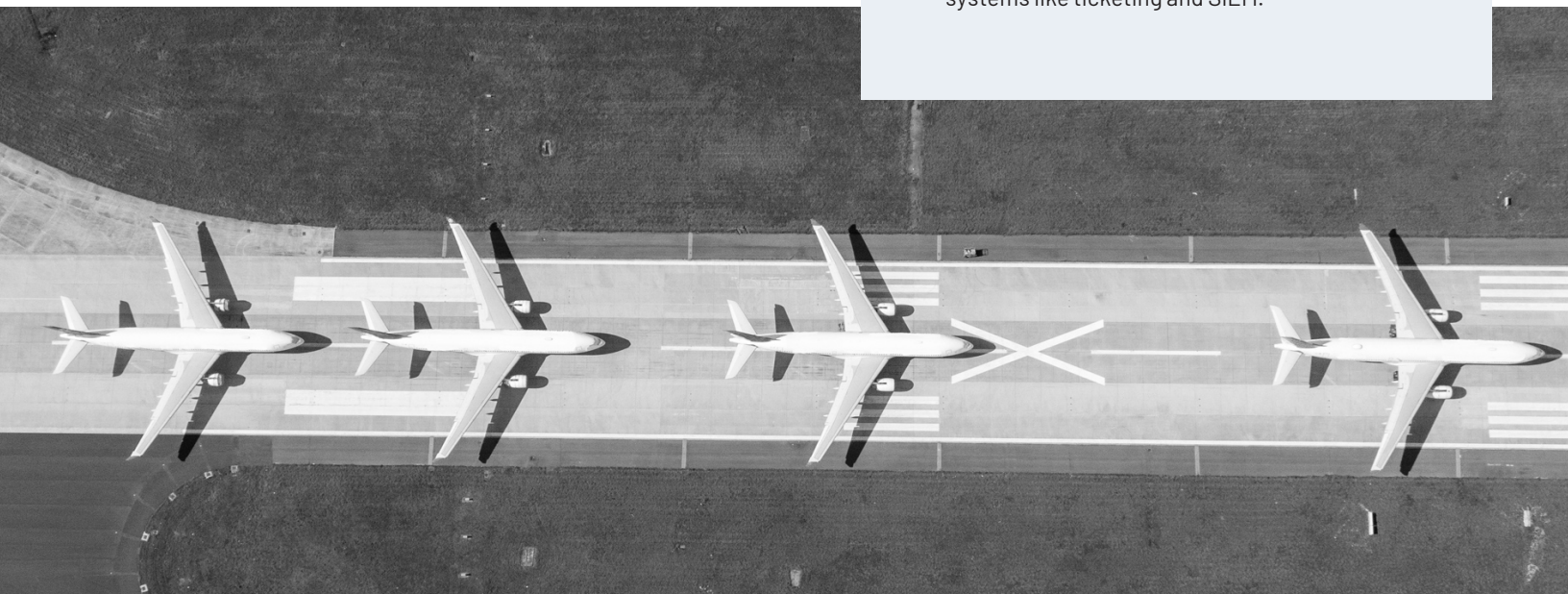
Retain security log files for recordkeeping and compliance purposes.

Conduct continuous or scheduled analysis of log files to detect anomalies.

Report any anomalies or threats in a manner consistent with industry policies.

Verify compliance with a documented ANSP, and identify threats to the system.

Export aircraft log file analysis to existing systems like ticketing and SIEM.



The Shift5 Platform

The Shift5 platform automates ANSP requirements in AC 119-1, making compliance easier and faster for aviation cybersecurity teams. The platform collects network security log files using existing aircraft data offloading processes, so it requires no additional hardware. It automatically applies manufacturer- and operator-provided rulesets to aircraft data to identify anomalies that could have resulted from system faults or failures, human error, or malicious intent. Then, the platform uses Shift5-proprietary rulesets based on MITRE ATT&CK Framework techniques to prioritize risks, helping to streamline reporting and remediation.

Reduce the workload for security teams and more.

Over 60% of cybersecurity leaders say their teams are understaffed¹, making process automation more critical than ever. The Shift5 platform automatically collects, analyzes, and correlates data from each aircraft to provide better observability across the entire fleet.

The platform centralizes aircraft data and analysis, giving teams across the organization quick and easy access to information that can help improve aircraft maintenance, airline operations, and fleet cyber resilience. The Shift5 compliance solution for ANSP also deploys as a managed service, providing greater flexibility for teams to focus on other important tasks.

Normalize log file data across different platforms.

Data in log files and its formatting can vary widely across aircraft manufacturers, platforms, and even between similar aircraft. The Shift5 platform unpacks log files and automatically normalizes the data in them into a consistent format. This automation eliminates the need for teams to stitch together inconsistent data sets. It also enables the platform to quickly identify commonalities in fleet analysis globally, which improves the robustness and accuracy of the platform for all Shift5 customers.

Focus on the security events that matter most.

A single aircraft can log countless events, making manual assessment and prioritization of risks virtually impossible. Information about critical anomalies must also be made available to regulators and industry experts without delay to ensure flight safety.

When the Shift5 platform identifies a suspicious or malicious event, it assesses its impact quantitatively based on techniques in the MITRE ATT&CK Framework. The platform also makes it easy to package and export analysis and assessments from the Shift5 console for internal review and prompt regulatory reporting.





Next Steps

Gaining observability into fleet-wide data is a journey. To learn more about the possibilities, visit shift5.io to schedule a briefing. Classified briefings are available to organizations with the proper security clearance.

We Are the Experts

Shift5 is the onboard OT data and cybersecurity company for planes, trains, and tanks. Created by founding members of the U.S. Army Cyber Command who pioneered modern weapons system cyber assessments, Shift5 defends military platforms and commercial transportation systems against malicious actors and operational failures. Customers rely on Shift5 to detect threats and maintain the readiness and availability of today's planes, trains, tanks, and weapons systems and tomorrow's next-generation vehicles.

Contact us at [Shift5.io](https://shift5.io) to learn more and schedule a call.