The True Cost of Downtime: How Reliable Inflight Connectivity Reduces Maintenance Burden

EXECUTIVE SUMMARY

Every hour an aircraft sits idle costs time, money, and productivity. For directors of maintenance (DOMs), keeping aircraft mission-ready is about more than just mechanical reliability, it's about maintaining every system on board, including inflight connectivity.

At Gogo, we understand that connectivity systems can either simplify maintenance operations or become a recurring source of frustration. The difference comes down to system design, reliability, and support.

Gogo connectivity solutions are built with maintainability in mind, offering remote diagnostics, over-the-air (OTA) software updates, and proactive monitoring that help minimize downtime and reduce the maintenance burden on flight departments.

This paper explores the hidden costs of downtime and how Gogo's connectivity technology and support ecosystem help maintenance teams improve aircraft availability, streamline troubleshooting, and ensure reliable performance across the fleet.

THE HIDDEN COST OF DOWNTIME

For maintenance directors, downtime isn't just about the hours an aircraft sits idle. It's about the cascading effects: delayed departures, rescheduled flights, passenger dissatisfaction, and increased pressure on maintenance staff.

The Financial Impact

- **Direct Costs:** Labor hours, troubleshooting time, replacement components, and maintenance travel.
- **Indirect Costs:** Lost charter revenue or business productivity, schedule disruption, and brand perception.
- **Opportunity Costs:** When one aircraft is down, another asset must pick up the slack, if available.

> **Example:** A midsize jet earning $6,000/hour in charter revenue loses $48,000 during a single eight-hour AOG event. Multiply that by recurring connectivity issues or software failures, and the annual cost of unreliable systems quickly reaches six figures.

Connectivity as a Maintenance Tool

Modern inflight connectivity systems are not just communication links – they are maintenance assets.

Proactive Diagnostics

Gogo's systems continuously send health data to our Network Operations Center (NOC), allowing Gogo support to identify and often resolve issues before they impact service. DOMs gain confidence knowing potential disruptions are being monitored 24/7.

Built for Aviation

Connectivity systems that are designed specifically for business aviation are more reliable and can be tailored for diverse aircraft fleets. In addition they can integrate with other aircraft systems providing valuable data and flight logs to maintenance teams.

Over-the-Air Updates

All Gogo AVANCE systems support OTA updates, meaning software and configuration improvements can be deployed remotely, no hangar visit required. That translates to less downtime, less labor, and aircraft that stay flight-ready.

Future Ready and Easy to Maintain

The modular design and software platform of Gogo systems makes troubleshooting, replacement, and technology upgrades faster, with minimal aircraft disruption. So you are always ready to fly with the latest technology and connect to the highest performing networks.

THE DOWNTIME DIFFERENTIAL: RELIABLE VS. UNRELIABLE CONNECTIVITY

MAINTENANCE FACTOR	WITH GOGO CONNECTIVITY	WITHOUT GOGO CONNECTIVITY
Diagnostics	Remote health monitoring and automatic alerts	Manual system checks and component swapping
Software Updates	Performed OTA with no hangar downtime	Requires physical access and labor hours
Support Escalation	Proactive 24/7 support and real-time visibility	Reactive support tickets and longer resolution times
System Reliability	Dependable connectivity with a proven software platform and network redundancy	Unplanned interruptions and recurring troubleshooting
Fleet Efficiency	Consistent performance across aircraft	Variable results and unpredictable maintenance effort

Gogo's inflight connectivity solutions are engineered to simplify maintenance and improve system reliability, so DOMs can focus on the rest of the aircraft.

MAINTENANCE DIRECTOR'S CHECKLIST FOR RELIABLE CONNECTIVITY

When evaluating inflight connectivity systems, DOMs should look for:

- Proven uptime and reliability data
- Remote diagnostics and alerting capabilities
- Over-the-air software and configuration updates
- Simplified, modular hardware architecture
- Continuous OEM support and real-time monitoring
- Comprehensive STC coverage for your airframes

Every item on this list is built into Gogo's connectivity solutions, and backed by the expertise of Gogo's field service and NOC teams.

CONCLUSION

For directors of maintenance, reliability isn't just about uptime, it's about efficiency. Gogo's connectivity systems are designed to reduce troubleshooting, minimize downtime, and give maintenance teams greater control over the systems they support.

By combining robust hardware, intelligent software, and proactive support, Gogo helps flight departments keep aircraft ready to fly, and connected, without adding to the maintenance workload.

Because when your aircraft are in the air, your operation runs smoother.

Contact Gogo to learn how our systems can simplify your maintenance operations.