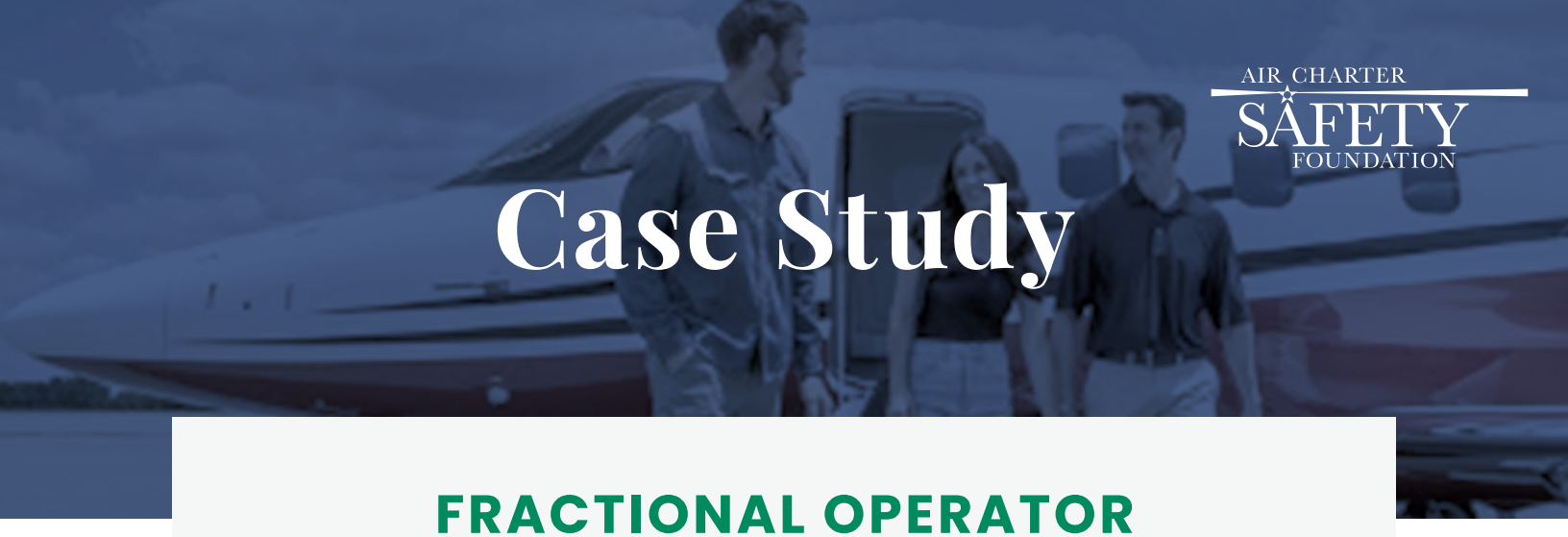


AIR CHARTER SAFETY FOUNDATION

Case Study

FRACTIONAL OPERATOR ELEVATES SAFETY REPORTING WITH FDM

THE SITUATION

A fractional jet operator got a head start in implementing its Flight Data Monitoring (FDM) program, thanks to a beta test managed by the Air Charter Safety Foundation (ACSF).

In an effort to provide a turnkey FDM solution, the ACSF engaged two leading aviation technology innovators. They included: AirSync, for flight data collection hardware and connectivity; and CloudAhoy, for flight data analysis software.

WHAT IS FDM?

According to the NTSB's "Most Wanted List," aircraft operators should capture and analyze flight data using a **Flight Data Monitoring (FDM)** program.

As part of a non-punitive aviation safety solution, a FDM program will:

- Analyze routine flight data captured from aircraft systems, to improve safety performance.
- Measure compliance with company standards and federal regulations.
- Provide input to an aviation operator's Safety Management System (SMS).
- Tell you what the aircraft did during flight, while a post-flight Aviation Safety Action Program (ASAP) report will explain why it happened.

CHALLENGE

Flight Data Monitoring is often costly to implement. And, for years, FDM programs have mostly benefited medium-to-large cabin aircraft operators. That is, those operators with bigger budgets, and/or whose equipment comes built-in with an FDM device. This limited range leaves operators of piston, turbo-prop and light jets without a cost-effective solution.

SOLUTION

The ACSF's FDM offering provides a cost-effective, entry-level option for smaller operators with all the benefits of a large-scale operation.

To test the program, the ACSF invited two other operators to implement a FDM program of their own.

> **Working with ACSF has helped us—a growing operator—implement a Flight Data Monitoring program and navigate through uncharted territory.**

DIRECTOR OF SAFETY
Fractional Operator

In turn, each ACSF member would get assistance with:

- Determining their operation's FDM program scope.
- Sourcing AirSync's FDM hardware (AirBridge) and CloudAhoy's FDM software (P-FOQA).
- Analyzing flight data to improve safety performance, and, as well, analyzing all de-identified member data.
- Providing a FDM Program Manual and FDM section for their Flight/General Operations Manual.
- Educating staff regarding the non-punitive nature of a FDM program.
- Sharing trends to help improve safety events and incidents.
- Helping address systemic issues identified through FDM.

IMPLEMENTATION

The fractional provider's Director of Safety originally wanted to equip their entire fleet with AirSync's data recording devices. But cost and scalability were a factor.

So they initiated their program using a single device. Starting out small gave them the necessary time to understand the incoming data and not to pay for capabilities beyond his needs. Since then, the operator has installed three AirBridge devices, with plans to upgrade by year's end.

The good news, Greenleaf says, is that you don't have to jump into the deep end to reap the benefits of FDM. "Wading in slowly can actually prove more beneficial," he explained. "Not only is it more palatable on the budget, it gives you time to understand and process the collected data and turn it into actionable, insightful information."

RESULTS

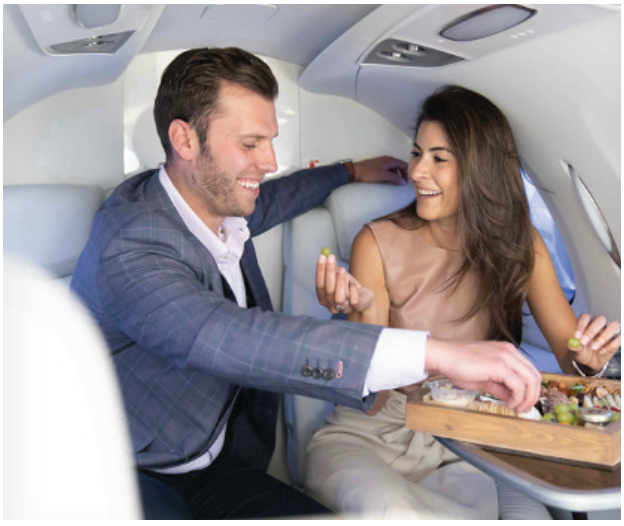
- 3 FDM devices installed.
- 80+ flight crew members trained.
- 1,700 flight data segments collected and analyzed, resulting in changes to training and SOPs.

BENEFITS

- **Gain better insight** into how its crews operate and use real-world data in training scenarios. Ensure that crewmembers' training is even safer and more efficient.
- **Provide immediate feedback** to crewmembers after every flight, highlighting safety and proficiency topics and bolstering confidence in the Just Safety culture.
- **Enable safety managers to aggregate** anonymized data across multiple operators, to identify trends and improve flight safety across the board.
- **Significantly enhance safety** by increasing efficiency and automating flight ops, maintenance and training.

INSIGHTS/ RECOMMENDATIONS

The beta test proved helpful for the participating operators to collaborate. "While we all operate different aircraft with varying sizes of flight departments, we found several commonalities.



For one, we all took a similar approach to educating our crews to the program—especially those who were apprehensive about having monitoring devices on the aircraft they're operating,"

Understanding the importance of reinforcing a Just Safety culture early and often has been key to gaining acceptance by flight crews. It's also recommended that each operator introduce the concepts and principles of FDM well before installing the first device on a plane. Having an incremental approach is important from a cost and programmatic standpoint, but also to ensure that everyone's on the same page.

NEXT STEPS

LEARN MORE

To learn more about the Flight Data Monitoring for ACSF members, visit:

acsf.aero/FDM

JOIN

To join the ACSF, visit:

acsf.aero/join

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