

NBAA SAFETY DATA COLLECTION, ANALYSIS AND SHARING QUICK FACTS

WHAT IS SAFETY DATA?

- Safety data is automatically generated by an aircraft's systems or manually generated within an organization's internal safety programs and safety management system (SMS).
- Flight Data Monitoring (FDM), also known as Flight Operations Quality Assurance (FOQA), is a proactive analysis of routine flight data from onboard data recorders to identify hazards and trends.
- Narrative safety reporting data comes from in-house safety reports. Some organizations have an FAA-recognized, formal safety reporting program known as Aviation Safety Action Program (ASAP).
- The data is **collected**, stored and **analyzed** to understand risks and trends.
- Online tools assist in analysis, providing aggregated, de-identified, safety performance metrics and benchmarking.

BENEFITS OF FDM/FOQA

- Proactive Safety
 - Monitor for hidden or latent risks, identify hazards to the operation and proactively act on them.
 - Continuously monitor risk and improve operational procedures and training.
 - Collect feedback and lessons learned for continuous improvement and focused training.
 - Ensure regulatory compliance
- Cost Savings
 - Potential to reduce insurance premiums.
 - Help achieve more efficient, focused training.
 - Help achieve more efficient and safer operations.
- Maintenance
 - Confirm aircraft exceedances based on defined maintenance parameters.
 - Reduce maintenance troubleshooting time.
 - Collect data to obtain a complete picture of the operation, trends and condition of engines and systems.
- Reduced Potential Liability
 - Not having an FDM program may result in increased liability after an accident or incident, because failing to participate in these programs can be used as evidence that the operator is not participating in efforts to enhance safety.
 - FDM is a cost of operations. It acts like an insurance policy and is much less expensive than the residual costs of an accident or incident.

WHAT IS SAFETY DATA SHARING?

- Safety data sharing is the aggregation of **collected** safety data voluntarily **shared** by multiple operators.
- The primary objective is to provide an **analytical** resource to discover common, specific, and systemic safety risks and trends that span multiple operators, fleets and regions of the airspace.

SUMMARY OF BENEFITS

- Enables your operation to proactively identify risks and measure safety.
- Allows for continuous safety improvements.
- Reduces costs and liability as part of your internal safety or SMS.
- These practices have led Part 121 airline operations to have the industry's best safety record.

MORE ON FDM/FOQA

- Traditional FDM and FOQA are designed for operators of large fleets with significant resources to process and analyze data.
- Corporate-FOQA (C-FOQA) are designed for corporate and business aviation.

MORE ON NARRATIVE SAFETY DATA

- Uses employee input to identify and address:
 - Significant safety concerns and issues
 - Operational deficiencies
 - Noncompliance with regulations
 - Deviations from company policies and procedures
 - Unusual events
- Safety reporting fosters a voluntary, cooperative, non-punitive environment.
- With ASAP, accepted reports will result in lesser enforcement action, or no enforcement action, to address events involving a possible noncompliance with aviation regulations.

MORE ON SAFETY DATA SHARING

- Data sharing aggregates safety data from multiple operators for analysis.
- Data shared can be narrative safety reports and FDM data.
- The objective is to provide a resource for discovering common, specific and systemic safety risks that span multiple operators, fleets and regions.
- Aggregated information is used across the industry to drive improvements and support SMS.
- Data sharing adds value to your own operation by gaining a window into another data source, providing information for benchmarking and day-to-day operations planning.
- Data sharing benefits the broader business aviation community.

AVIATION SAFETY INFORMATION ANALYSIS AND SHARING (ASIAS)

- In 2007, the FAA and industry launched the ASIAS program, a joint government-industry, collaborative information sharing program to proactively analyze broad data sources with the goal of improving safety in the National Airspace System.
- Today, ASIAS is a mature, secure and highly effective program containing millions of safety data records shared by hundreds of U.S. operators.

- Data shared through the FAA ASIAS program supports industrywide safety enhancements through the Commercial Aviation Safety Team (CAST) and General Aviation Joint Safety Committee (GAJSC).
- ASIAS is a national resource for use in proactively discovering common, systemic safety risks that span multiple operators, fleets and regions.
- NBAA encourages operators to share their data with the ASIAS program.

MYTHS ABOUT SAFETY DATA COLLECTION, ANALYSIS AND SHARING

- Some believe that having such programs poses a risk to their operation. The NBAA Safety Committee strongly opposes this view.
- The greater risk is NOT having a safety data collection program.
- The absence of such programs may result in increased financial, reputational and business liability in the case of an accident or incident.
- Although safety data collection programs may seem expensive, these programs should be considered necessary operational expenses.
- These programs act like an insurance policy and are much less expensive than the costs of an accident or incident.

HOW TO GET STARTED WITH SAFETY DATA COLLECTION

- Secure management and employee buy-in regarding the costs and benefits
- Engage with FDM and narrative support organizations
- Review the regulatory resources
- Implement safety data into your daily operations and SMS
- Engage in data sharing programs
- Review “lessons learned” experiences from other operators
- Attend safety-related aviation forums and conferences

The NBAA Safety Committee has developed this resource to provide an overview of safety data collection, analysis and sharing for business aviation operations. Detailed information about flight data monitoring (FDM), narrative safety reporting, getting started with safety data collection and sharing, case studies demonstrating the value of safety data use, and information on myths and facts about safety data collection, analysis and sharing is available on NBAA’s website at nbaa.org/data-sharing.

