Flight Data Analytics

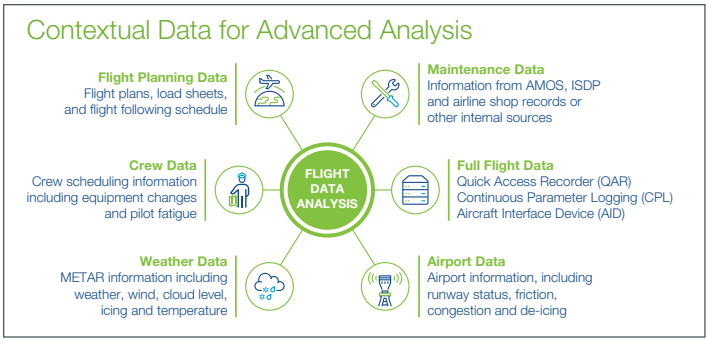
Advanced Safety Analytics

In a rapidly changing aviation market, Boeing is dedicated to safety, technology and quality initiatives that modern operators need to stay competitive. The availability of aviation data is growing exponentially and the opportunity to integrate and enable users to manage this complex data and gain insights is critical for safety and operational efficiencies.

The Boeing Flight Data Analytics portfolio offers Advanced Safety Analytics – an in-depth analytics solution that goes beyond single-event exploration to highlight trends and leading indicators of safety-related events (for example, hard landings, extreme turbulence and tail strikes) across all flights and fleet types. This supports proactive data-driven decision-making and improvements across safety and flight operations.

Advanced Safety Analytics Capabilities

- **Focus-based analytics** – a series of default and customizable dashboards to identify underlying trends and focus areas within an operation
- **Dashboard editor** – allows users to create and customize dashboards to further investigate areas of interest across data sources using parameters and data points
- **My Dashboard** – an environment for personalized and individual dashboards
- **Operational monitoring** – integration with the Safety Management System (SMS), as well as other relevant flight ops and tech ops data
- **Data set joint** – allows users to integrate unlimited contextual data sources for additional correlation and context allows users to integrate unlimited contextual data sources for additional correlation and context with examples seen in the following image:



Alignment with Industry Standards and Best Practices

- Helps operators achieve compliance with regulatory requirements and safety programs
- Incorporates industry best practices such as those published in the UK CAA's CAP 739, EASA's AMC/GM to Annex III (Part-ORO), the FAA's AC 120-82, and ICAO's Manual on Flight Data Analysis Programs

- Developed by safety experts, pilots and data scientists with thousands of precise pre-defined data points or pre-cursors per flight that users can leverage to deepen their analysis across an operation
- Delivers user-friendly solutions for all fleet types and sizes
- Enables collaboration with aviation industry partners to continuously evolve the solution via customer advisory boards and user groups

Data Security and Platform

- Automates processing of large volumes of Quick Access Recorder/Continuous Parameter Logging (QAR/CPL)full flight data for efficient analysis
- Complies with the latest multi-layered security standards focused on encryption and multi-factor authentication to ensure the highest level of security and privacy protection for sensitive flight data
- Distributes data through highly secure role and permission-based access
- Resides within cutting-edge cloud-based architecture with isolated single-tenant environments
- Integrates with unlimited flight ops and tech ops data sources for contextual and correlation analysis
- Provides a single platform for a comprehensive solution for both basic and advanced safety analytics capabilities
- Implemented on a single, secure and scalable platform geared for the growth and performance of an operation
- Additional capabilities allow for downloading raw and translated data, as well as querying all flights to determine the capture rate

The Advanced Safety Analytics solution is part of the Boeing Flight Data Analytics suite, which is composed of advanced analytics solutions developed by aviation experts around a common flight data processing core. Built to handle recorded flight data from tens of thousands of flights along with other contextual data sources – the core technology provides secure, tailored access to a shared data set across an operation. Each solution in the Boeing Flight Data Analytics suite supports integrated data analytics capabilities, enabling better decision making based on factors that have the biggest impact on safety, efficiency, and the bottom line.