Flight Data Monitoring Information and Fact Sheet

YOUR Airline´s SAFETY COMMITMENT

An Airline has defined Flight Safety as the most valuable asset and therefore follows a company-wide best practice policy.

There will always be hazards, both real and potential, associated with the operation of any aircraft. Technical, operational and human failures induce the hazards. The objective of the ***Company´s Accident Prevention and Flight Safety Program*** is to address and control them.

This is achieved by the careful recording and monitoring of operational, engineering, and human safety-related occurrences for adverse trends in order to prevent the recurrence of similar incidents which could lead to an aircraft accident.

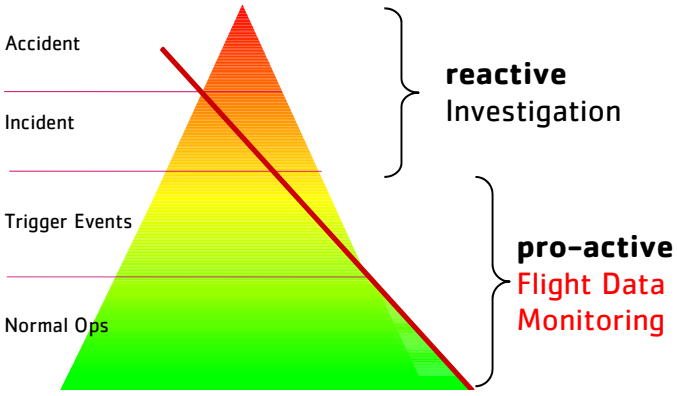
What is Flight Data Monitoring?

Flight Data Monitoring (FDM) is the systematic, pro-active and non-punitive use of digital flight data from routine operations to ***improve aviation safety***. It includes the process of downloading data recorded on the aircraft followed by analysis of each flight on a computer system. Feedback to the flight operation is given to improve and maintain the level of quality and safety during daily flight operation.

Why do we need to run a flight data Monitoring Program?

According to EU-OPS 1.037, Operators of Aircraft with a max. Takeoff Weight > 27`000kg have a ***Legal Requirement*** for an FDM Program. Aviation Safety is achieved by multiple factors such as crew training and selection, reporting systems, company culture and procedures, aircraft maintenance and engineering etc. The Flight Data Monitoring Program is a well accepted and ***mandatory part of today´s Safety Management Systems (SMS)*** thus giving feedback about the quality and standards taking place during daily flight operations.

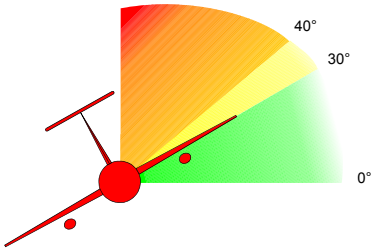
The Accident Pyramid



Accidents/Incidents trigger reactive investigations by authorities. **FDM** is a more **pro-active** approach by the quality loop that monitors each flight and analyses trigger events to continuously improve the level of safety and quality.

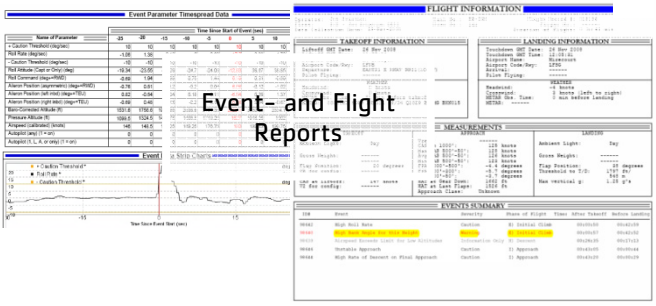
Example of a trigger Event

Standard Turns are flown with a maximum Bank Angle of 30°based Aircraft Design, Aerodynamics and other factors. In case of higher Bank Angles (>40°) there is a potential safety risk involved. The Trigger Event is programmed to report such exceedance, which then will be assessed by the flight safety team for severity.



What is the scope of FDM?

All Flight Data will be transferred to the FDM Servers where it will be scanned through customized profiles ***monitoring multiple aircraft limitations, company procedures, legal boundaries*** and more limitations. Maintenance and Airworthiness related parameters are monitored as well. Initial Reporting takes place in routine statistical manner. Flight- and Event-Reports support exceedance the analysis.



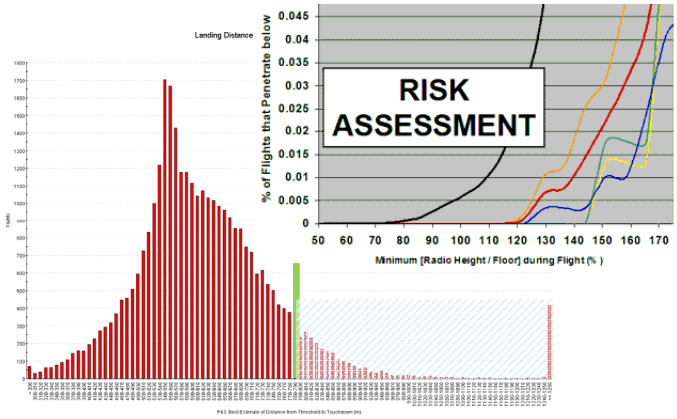
For an even more detailed feedback to Cockpit Crews additional tools such as 3D–Flight-Animations and Trajectory Analysis will be used – thus opening the door to learn and improve from daily operation.

Besides the legal requirement, the investment into highest ***Quality and Safety standards*** becomes more vital than ever before in an environment with growing complexity and demands to Operators and Pilots.

Risk Assessment

A yearly risk assessment enables the Operator to compare the exposure of the fleet against other airlines and Operators using the FDM statistics services. Today it is crucial to find a balance between the flight ops' safety risk and financial economics.

The FDM programs mission is to ***identify areas of potential risk*** in our operation by providing more information and sharper insight to flight operations environment through analysis of the flight data generated in daily Flight Operations.



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