

FDM Questions and Answers

What IS FDM?

- **Flight Data Monitoring.** A term used to describe [FOQA](#) or FOQA-like programs.
- **Flight Operational Quality Assurance.** A voluntary program that entails the routine acquisition and analysis of digital flight data from air carrier operations, and corrective action for adverse trends revealed by that data. FOQA collects and analyzes digital flight data generated during normal line operations. FOQA programs provide greater insight into the total flight operations environment. FOQA data is unique because it can provide objective information that is not available through other methods. The information and insights provided by FOQA can improve safety by significantly enhancing training effectiveness, operational procedures, maintenance and engineering procedures, and air traffic control procedures. FOQA may be known by different names around the world, such as Flight Data Monitoring (FDM), but the programs are essentially the same. ([FOQA AC No: 120-82](#), [Published 12 April 2004](#))
- Collection and **proper** analysis of recorded data from (any) aircraft.
- Any **valid** data that is collected on a flight recorder can be used in a FDM program
- Properly analyzed data is used to present meaningful findings and recommendations to augment safety, cut cost and improve training
- After review of data, report meaningful findings and recommendations, group review to determine operational and training impact.

What is the purpose of the FDM Workshop?

Convergence of industry, academia and government for the common goal of the development of “Plug and Play” (“PnP”) Flight Data Monitoring programs suitable for use in the general aviation (GA) community by collegiate, commercial training, air taxi, fractional and owner-flown flight operations.

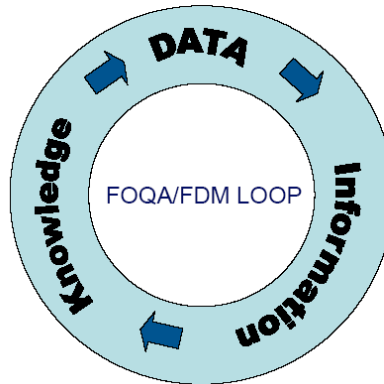
What is a PnP FDM program?

A GA FDM program that has been systematically developed utilizing features selected, developed and desirable by FDM workshop participants. PnP FDM Programs can be tailored for use by collegiate, commercial training, air taxi, fractional, and owner-flown flight operations.

What is the purpose of the PnP FDM deliverable?

The resultant deliverable will enable the FDM user a means to affordably collect reliable flight data, convert the data into usable information and gain knowledge from this information to improve operational safety, training and the economics of flight operations.

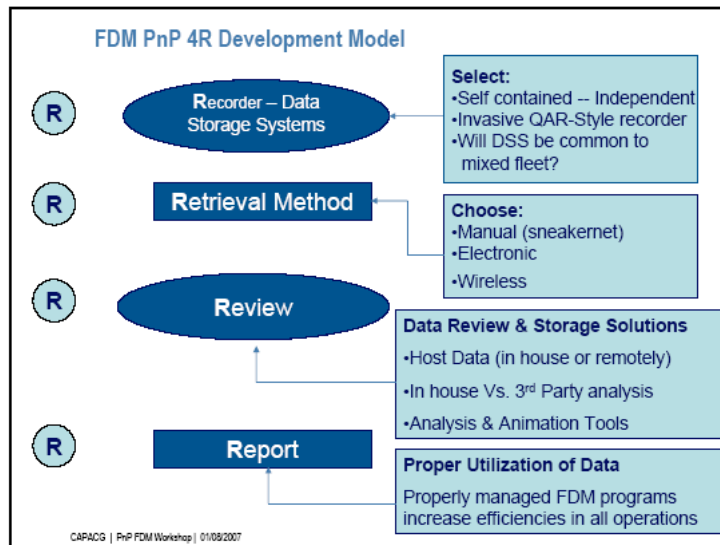
Resultant PnP product converts data into useful information and the end user gains knowledge



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What are the functional core components of a PnP program? The Four R's

- Record (select hardware)
 - Data Storage System (DSS)
- Retrieve (select methods-TAA/Legacy fleets)
 - Manual, electronic or wireless
- Review (choose process)
 - How best to validate, classify and analyze the retrieved data (select tools)
- Report (How to use the data?)



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Isn't FDM just for the airlines? Why can we now utilize FDM in general aviation?

Confluence of events support the introduction of Flight Data Monitoring programs in general aviation.

Technology

- Avionics
- GPS
- Cellular/Satellite
- Affordable computing
- High-speed internet connectivity

Industry (change in the status quo)

- Airframe manufacturers
- Avionics manufacturers
- Training
- Legal and liability

Regulatory

- Voluntary Safety Programs
- SMS
- FITS
- Introduction of a "Just and Learning Culture"

What is SMS? Safety Management System

An SMS is a quality management approach to controlling risk. It also provides the organizational framework to support a sound safety culture. For general aviation operators, an SMS can form the core of the company's safety efforts. For certificated operators such as airlines, air taxi operators, and aviation training organizations, the SMS can also serve as an efficient means of interfacing with FAA certificate oversight offices. The SMS provides the company's management with a detailed roadmap for monitoring safety-related processes.

What is ASAP? [Aviation Safety Action Program](#)

A voluntary program under which employees of 14 CFR Part 121 or Part 145 certificate holders may report safety related events, including possible violations by the reporting employees themselves, of U.S. Federal Aviation Administration (FAA) regulations. The objective of ASAP is to encourage air carrier and repair station employees to voluntarily report safety information that may be critical to identifying potential precursors to accidents. Under ASAP, safety issues are resolved through corrective action rather than through punishment or discipline. ASAP is based on a safety partnership that includes the FAA and the certificate holder, and usually includes a third party, such as the employee's labor organization. For reports accepted under the program, the FAA stipulates that it

will take no more than administrative action against the employee. When the employee is the sole source of information on the event, the FAA takes no action. Possible lack of qualification issues for accepted reports are addressed under ASAP with corrective action but not by certificate action. ([AC 120-66B published 15 November 2002](#)).

What is the IS-BAO? International Standard for Business Aircraft Operations

IS-BAO is an industry code of practice that challenges flight departments to review their current systems, programs and procedures, recognize strengths and weaknesses in those procedures, and upgrade to a higher standard. IS-BAO is similar to an ISO-9000 standard of practice, but specifically formulated for the business aviation community.

What is an IS-BAO auditor?

An auditor certified by the International Business Aviation Council (IBAC) to conduct IS-BAO audits.

Who is CAPACG, LLC?

[CAPACG, LLC](#) was incorporated in June 2004 by professional aviators, evaluators, instructors and safety specialists who have airline experience with flight data monitoring and also general aviation expertise. CAPACG was founded on the basis of adapting airline best practices used in the airline transport world to the general/business aviation community. These best practices include training, auditing and safety programs. CAPACG is successful due to its ability to leverage from a large pool of expertise to implement and deliver a comprehensive data monitoring program solution.