

NOTICE

U.S. DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION

N 8020.187

National Policy

Effective Date:
04/27/10

Cancellation Date:
04/27/11

SUBJ: AVP Flight Data Laboratory

1. Purpose of This Notice. This notice provides guidance to FAA personnel of the services provided by the Office of Accident Investigation and Prevention (AVP) Flight Data Laboratory (FDL) for safety-related functions including, but not limited to, accident, incident and occurrence investigation, enforcement investigation, engineering analysis and training. The information incorporates requirements of certain AVP Quality Management System (QMS) Work Instruction(s) (WIs).

2. Audience. The primary audience for this notice is Flight Standards District Office (FSDO) aviation safety inspectors. The secondary audience includes Flight Standards Service branches and divisions in the regions and in headquarters.

3. Where You Can Find This Notice. You can find this Notice on the MyFAA Web site https://employees.faa.gov/tools_resources/orders_notices/. Inspectors can access this notice through the Flight Standards Information Management System (FSIMS) at <http://fsims.avs.faa.gov>. Operators may find this information on the Federal Aviation Administrations' (FAA) Web site at <http://fsims.faa.gov>.

4. Background.

a. The increase in the use of digital avionics and aircraft systems has made onboard recorded data available on an ever-expanding range of aircraft. These data sources go beyond the conventional Digital Flight Data Recorder (DFDR) and Cockpit Voice Recorder (CVR), and include data loggers, health and utilization monitors (HUMS), flight data monitoring systems (FDM), quick access recorders (QARs), system and display non-volatile memory (NVM), navigation system memory (such as GPS), and other systems and components.

b. Changes in the sophistication of aircraft and operations have made general aviation accident investigation more complex. These changes have resulted in greater challenges to the Office of Aviation Safety (AVS) and the associated services and offices, and other FAA lines of business, such as Airports (ARP), and Air Traffic (AJO). This increased complexity demands advanced data analysis methods to ensure effective safety management.

The FAA initiated the development of the AAI (now AVP) FDL in late 2007. Initial capabilities were dedicated to the support of major accident investigations. With the implementation of new processes, staffing, and equipment resources, the FDL functions and services are now available to a wider range of FAA safety activities.

5. Guidance.

a. When accidents, incidents, or other events occur, FAA personnel should be cognizant of any available digital data that might be retained onboard the aircraft in question. Investigators should be vigilant for the presence of electronic components which may contain non-volatile memory, such as SD cards, memory chips, digital cockpit avionics and displays, flight recorders, and other recording devices. Peripheral devices, such as hand held GPS units, cell phones, laptop computers, and digital cameras may also contain data which can support a safety or enforcement investigation.

b. There are specific limits to the use of data collected in the process of a National Transportation Safety Board (NTSB) investigation. Data collected in an NTSB investigation may not be used in an FAA enforcement investigation. However, FAA may access that data through inspections, surveillance and investigation activity independent of the NTSB investigation. When data is collected independently, even if available to the NTSB, it may be used for FAA enforcement purposes. A specific exception is the use of CVR data, which is prohibited for use in FAA enforcement by 14 CFR 91.609. To ensure independent access to data by FAA for enforcement purposes, personnel assigned to the enforcement investigation may not be assigned to the FAA or NTSB accident investigation.

c. Data collected during an NTSB investigation may only be used in that investigation, according to NTSB policy and regulation. FAA participation in NTSB investigations allows for use of investigation data for Continued Operational Safety (COS) considerations. When safety of flight issues are discovered, investigative data may be disseminated to the appropriate services or offices. Data must be controlled by the FAA investigator in charge (IIC) to ensure that only the FAA components with direct COS responsibility for the issue, or that are directly participating in the investigation have access to the data. At the end of the NTSB investigation the data may be shared within the FAA for statistical and trending analysis.

d. AVP products and services include interpretation of data, identification of data limitations, integration of multiple data sets, development of plots, tabular data and animation recreations.

6. Action.

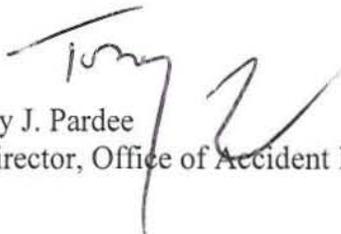
a. If a FSDO IIC believes that onboard data may be available and useful in the accident or incident investigation, the IIC should contact the AVP-100 Air Safety Investigator assigned to their region and request AVP FDL support. The FDL specialist will assist in determining the potential viability of data, methods or retrieval and transfer, appropriate services and products, and coordination with the NTSB Recorder Laboratory.

b. Other services/offices may request AVP FDL services through the manager of the Accident Investigation Division, AVP-100.

c. Data transferred and accepted by the FDL will be processed and analyzed on a priority basis, determined by the manager of the Accident Investigation Division, AVP-100.

7. Disposition. We will permanently incorporate the information in this notice in the most current FAA Order 8020.11 before this notice expires. Any questions or comments regarding the information provided should be directed to the Accident Investigation Division, AVP-100, at (202) 267-8190.

8. Distribution. We will distribute this notice to the division level in the Flight Standards Service in Washington headquarters, including the Regulatory Standards Division at the Mike Monroney Aeronautical Center; to the branch level in the regional Flight Standards divisions to all Flight Standards District Offices, to all Aviation Safety services and offices, to the Air Traffic Organization, Airports and to the Transportation Safety Institute. Flight Standards Inspectors can access this notice through the Flight Standards Information Management System (FSIMS) at <http://fsims.avr.faa.gov>. Operators may find this information on the Federal Aviation Administration's (FAA) Web site at: http://www.faa.gov/library/manuals/examiners_inspectors/8000/.


for Jay J. Pardee
Director, Office of Accident Investigation and Prevention