

Safety Reports

Aviation Safety Data Accessibility Study Index: Availability and Accessibility of Safety Information

Data useful for analyzing commercial aviation safety fall into four main categories: (1) accident and incident data; (2) normalizing data about airline activity levels; (3) descriptive data concerning air carrier operations; and (4) data on FAA surveillance activity. This section identifies and describes data sources falling into each category. The section also analyzes the availability and accessibility of the data sources.

Availability and accessibility are measures of whether and how easily the public can obtain information. Some information is not available to the public, because its dissemination is restricted, such as information that is protected by the Privacy Act. Generally speaking, the public *availability* of information is a "yes or no" question-either the public can get the information or it cannot. On the other hand, the *accessibility* of information to the public is not a "yes or no" question, because it refers to the degree of difficulty involved in getting and using the information. The accessibility of information depends on several factors, including the complexity of the information, how the data is stored, how it can be obtained, and the expertise required of a user.

Accident, Incident, Exposure, and Individual Carrier Data

The NTSB maintains a database on aircraft accidents and serious incidents, and also publishes hardcopy reports on the most serious accidents. FAA maintains the Accident and Incident Data System (AIDS), which contains information on incidents, and also maintains specialized databases on specific types of incidents. Specialized FAA incident databases include Pilot Deviations, Near Midair Collisions, and Operational Errors. In addition, the Aviation Safety Reporting System (ASRS) database contains voluntary reports of safety incidents.

The FAA collects and reports (e.g., FAA (1996b)) a variety of data that can be used to measure or evaluate air carrier safety and the safety of the aviation system. Most data reported today looks at safety levels in a highly aggregated format. FAA does not routinely report safety data for individual air carriers. Databases containing information on NTSB aviation accident reports and safety recommendations are available online at the FAA's Office of System Safety homepage. Monthly flight hours and accident/incident rates for large air carriers, commuters, air taxis, general aviation, and rotorcraft are also available in the Aviation System Indicators at this web site. Descriptive information is available for individual airlines from the carriers themselves and in the Vital Information Subsystem. There is a wide variety of aviation events that are categorized as aviation incidents; information on these is available on FAA's NASDAC system.

Portions of these incident databases could also be made available to the public on the internet. There is thus a wide variety of aviation safety relevant information available online, but it is relatively dispersed and requires some expertise on the part of the user to access, retrieve, and analyze these data.

All of these accident and incident data are available to the public, but obstacles that increase the difficulty of obtaining and using information from these data sources make it less accessible than it could be. The NTSB accident database is available through the Office of System Safety internet site, while some of the other databases are available from commercial vendors or nongovernmental internet sites. All of the data can be obtained in electronic form from the database managers, but considerable expertise and some computer equipment is required to use it. FAA makes a large amount of information available today, but the databases that are available are complex, are not always presented in a user-friendly form, and are not set up for *ad hoc* retrieval.

Inspection and Surveillance Data

Most information on surveillance results and completed enforcement actions is publicly available to the public through the Freedom of Information Act. Some information may be restricted because of Privacy Act requirements, or because decision-making has not been completed. The data sources concerning surveillance results and completed enforcement actions vary in size and form. National and regional special inspection reports, for example, are made available in hardcopy after passing through a review and redaction process. Other inspection results are recorded in the Program Tracking and Reporting System (PTRS), which is a large and complex database containing many different types of information, some of which is restricted. Enforcement data is contained in an independent database. In some cases, FAA publicly announces the results of major enforcement actions or decisions to increase surveillance levels. Decisions concerning public announcement of enforcement actions are made on a case-by-case basis.

Some analysts (GAO 1992, 1995) have questioned whether the quality, reliability, and management of safety data within FAA is sufficient for the internal needs of the agency. While FAA efforts to remedy these problems are intensive and ongoing (FAA 1996a), it is natural to ask if data management systems that are not yet sufficient to FAA's internal needs should be used to provide information to the public. This is especially relevant for data that may be difficult to interpret and compare, such as inspection data.