Log 2344



National Transportation Safety Board

Washington, D.C. 20594 Safety Recommendation

Date: June 8, 1993

In reply refer to: A-93-76

Mr. Joseph M. Del Balzo Acting Administrator Federal Aviation Administration Washington, D.C. 20591

On December 28, 1991, about 2147 eastern standard time, a Beech 1900C, N811BE, operated by Business Express, Inc., crashed in the Atlantic Ocean, about 10 miles east northeast of Block Island, Rhode Island, while on a training flight. Business Express is certificated under 14 Code of Federal Regulations (CFR) Part 135, but the accident flight was operated under 14 CFR Part 91. The airplane was destroyed, and the three crewmembers are presumed to have been fatally injured. An attempt to recover the wreckage from the Atlantic Ocean has been only partially successful. Much of the airplane could not be located, and the bodies of the crewmembers were not found.

During the investigation, it was discovered that the airplane had been substantially damaged on April 7, 1987, during a ground collision with a ramp vehicle. As a result of that collision, the right side of the fuselage and the right wing required major repairs, costing about \$1 million. The airplane was returned to service after about 9 months. The repair was performed by a repair station operating under the provisions of 14 CFR Part 145.

As part of the accident investigation, Safety Board investigators requested all of the available maintenance records for N811BE. The records provided by the operator for the major repair in 1987 consisted of a list of parts and accounting information listed on an invoice. The records did not provide a detailed description of the repair nor did they detail the extent of damage or the adequacy of the repair. The airplane's logbook showed only that the airplane had been repaired and then had been returned to service, and that further details were on the associated work order. The operator was unable to provide a copy of the work order.

Safety Board investigators requested the pertinent records of the 1987 major repair from the repair station that accomplished the work. The repair station operator informed the investigators that the records were no longer available, as they had been destroyed after 2 years, as authorized by 14 CFR Part 43. Federal regulations, specifically, 14 CFR Part 43, Appendix B, require each person performing a major repair or alteration of an aircraft to record that repair on a repair or alteration form authorized or furnished by the Federal Aviation Administration (FAA) (currently Form 337) and to provide that form to the operator and to the FAA. However, Appendix B excepts certified repair stations from these recording requirements and permits the repair station to record the repair on the customer's work order. Additionally, Appendix B permits the repair station to purge its files of such records after 2 years.

The investigation found that the method of recording the major repair on the customer work order is inadequate for major repairs and/or alterations. Because of the lack of detailed repair reports, the operator may not have an adequate history of the aircraft, especially when the aircraft ownership changes. This could also result in inappropriate continuing airworthiness action by an operator and an inability of the FAA to maintain accurate surveillance of an operator's maintenance program.

The Safety Board believes that a complete maintenance history is important to the safe continued operation of an aircraft. Therefore, considering the number of aircraft repaired by certified repair stations, it is necessary that maintenance reporting requirements be expanded to assure ongoing availability of complete details of major repairs.

Therefore, the National Transportation Safety Board recommends that the Federal Aviation Administration:

Amend 14 CFR Part 43, Appendix B to require that repair stations complete Federal Aviation Administration (FAA) Form 337 or equivalent records for all major repairs and/or alterations and provide copies of the records to the FAA and to the owner, to be retained with the aircraft historical records. (Class II, Priority Action) (A-93-76)

Chairman VOGT, Vice Chairman COUGHLIN, and Members LAUBER, HART, and HAMMERSCHMIDT concurred in this recommendation.

Carl W. Vogt

Chairman