

MAR 16 1972 .

Honorable John A. Volpe
Secretary of Transportation
Washington, D. C. 20590

Dear Mr. Secretary:

The National Transportation Safety Board is pleased to forward draft copies of its recently approved Manual of Automatic Data Processing (ADP) Program User Instructions for the Automated Aircraft Accident/ Incident Information System. The Board also desires to make two specific recommendations in regard to use of the automated system described in the manual. These recommendations are:

- A-75-25 First, that the Secretary designate the NTSB Automated Aircraft Accident/Incident Information System as the official Department of Transportation system and source for that information; and
- A-75-26 Second, that the Secretary evaluate the feasibility, practicability, and cost effectiveness of applying this system, or a similar system, to the surface transportation modes.

This manual updates existing documentation and brings together, under one cover, background and current information related to the automated aircraft accident/incident information system. It addresses each of the ADP programs from the standpoint of a general discussion and technical user instructions, and provides examples of the products produced.

The manual will be made available to the Department and to agencies outside the U. S. Government which have obtained, or anticipate obtaining, the aircraft accident/incident data files and the ADP programs on magnetic tapes under provisions of the Code of Federal Regulations, Title 14, Chapter III, Part 401. Examples of these are U. S. aviation industry, private research organizations, the governments of Australia and West Germany, and the International Civil Aviation Organization.

The Safety Board believes that the system covered in the Manual of Code Classifications and the Manual of User Instructions for the

ADP Programs is the most complete total automated aircraft accident/incident information system available.

The Board also believes that the interest shown by these organizations and governments implies a confidence in the Board's system of collecting, identifying, storing, manipulating, and retrieving the aircraft accident/incident data. Further, we believe that this is a major step forward in a standardization of such systems, and that this will ultimately lead to a significant contribution to improvement in aviation transportation safety. The Board's installation of a data transmission terminal, capable of producing hard copy, has helped demonstrate the present technology in the field of communications in the exchange of accident/incident information. The potential in the exchange and examination of aircraft accident/incident data within the Department and the aviation community through the telecommunications network is virtually unlimited.

The following specific points justify the first recommendation:

1. The information in the data bank is a most comprehensive collection of aircraft accident/incident data based on a detailed coding system that assures a high degree of standardization of the data collected.
2. The ADP programs are unique in the field of aviation transportation safety in that there are no other ADP applications known with such great flexibility for data manipulation, retrieval, and reporting.
3. The system is designed for expansion; therefore, additional data deemed to be essential to the promotion of air transportation safety may be added within the present procedural framework with a minimal disruption of the ongoing production within the system.
4. As previously indicated, the NTSB data files and ADP programs are being copied by U. S. industry, private research organizations, and foreign governments. Adoption as the official Department of Transportation system would enhance standardization and provide a base for future growth in exchange of compatible aircraft accident/incident information.

The Board makes the second recommendation in an effort to exploit for the surface transportation modes a system that records transportation accidents from the standpoint of personal injury, what happened (type of occurrence), where it happened (operational segment), and why it

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happened (cause/factor). The system provides for storing the cause or probable cause determined by the Board under the statutory duty defined in the Department of Transportation Act, and the additional facts, conditions, and circumstances of each occurrence that support the probable cause.

This data bank information then becomes a valuable source for statistical input to aviation safety special studies. This cycle--accrual of valid factual information to develop an adequate base, followed by use and reuse of data through manipulation, study, retrieval, and reporting--is essential to the effectiveness of any safety promotion or accident prevention activity.

The Board is aware that the surface modes have a vast difference in the volume of accident information that can be considered appropriate for a data bank; however, it believes that expertise is available to make an intelligent selection of data to be accumulated, and that the volume of accidents to be represented in the data bank can be restricted to a reasonable size by selectivity of the occurrences to be reported. There would be a need to develop a Manual of Code Classifications in each of the surface modes. Once each mode has an established procedure for reporting, coding, and storing its data bank information, the same ADP system approach to data manipulation could be utilized.

The Board recognizes that you or your staff may desire an indepth review of the total NTSB automated aircraft accident/incident information system. We would welcome the opportunity to provide any required assistance in this regard.

Sincerely yours,

Original signed by
John H. Reed

John H. Reed
Chairman

Enclosures (2)

Notation 758 approved by Board as revised
FHHollowell/dph MA-87 3.13.72
cc: NG-1(2), NG-1, MA-80(2),
-81, -87(3), NE-51