NATIONAL TRANSPORTATION SAFETY BOARD WASHINGTON, D.C.

ISSUED: May 21, 1974

Forwarded to:

Honorable Alexander P. Butterfield Administrator Federal Aviation Administration Washington, D. C. 20591

SAFETY RECOMMENDATION(S)

A-74-43

The Federal Aviation Administration collects data on the number of hours flown in general aviation, by make and model of aircraft and by kind of flying. These data are used routinely in the National Transportation Safety Board's annual review of aircraft accident data and in its special safety studies.

In addition to hours flown, however, data on departures are also important to the Safety Board's compilations of accident statistics. Although a significant relationship exists between phase of flight and certain types of accidents, comprehensive statistical data required to measure exposure in the various phases of flight are not available. The need for such data on takeoffs and landings is particularly important since about 67 percent of the general aviation accidents occur during these phases.

An accurate tabulation of departures by make and model of airplane would serve as a useful criterion of exposure of these two phases of flight. Such information might be obtained by a comprehensive sampling of departures which, for example, could be taken 2 days a week at a number of the Nation's busiest general aviation airports. The sampling could take place for up to 1 year. Probably, once a complete correlation of departures is obtained, it will remain relatively fixed and would require only infrequent checks for variance. These data, together with data on kind of flying by make and model, would provide a sound basis for statistical modeling and a yardstick for assessing accident significance.

Because exposure to departures is fundamental to the study of general aviation safety, the National Transportation Safety Board recommends that the Federal Aviation Administration:

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Conduct a comprehensive sampling survey to correlate general aviation departures by make and model and for the kinds of flying depicted on FAA's aircraft registration eligibility, identification, and activity report (ac form 8050-73). (Safety Recommendation A-74-43).

Personnel from our Bureau of Aviation Safety will be made available in the event that any further information or assistance is required.

REED, Chairman, McADAMS, THAYER, BURGESS, and HALEY, Members, concurred in the above recommendations.

By: John H. Reed

THIS RECOMMENDATION WILL BE RELEASED TO THE PUBLIC ON THE ISSUE DATE SHOWN ABOVE. NO PUBLIC DISSEMINATION OF THE CONTENTS OF THIS DOCUMENT SHOULD BE MADE PRIOR TO THAT DATE.