NATIONAL TRANSPORTATION SAFETY BOARD WASHINGTON, D.C.

FOR RELEASE: 6:30 A.M., E.S.T., AUGUST LO, 1976

ISSUED: August 10, 1976

Forwarded to:

Honorable John L. McLucas Administrator Federal Aviation Administration Washington, D. C. 20591

SAFETY RECOMMENDATION(S)

<u>A-76-116 through 119</u>

On March 28, 1976, near Pullman, Washington, a Piper PA23-250 C (N6199Y) struck the ground in a high speed spiral. During its investigation of the crash, the National Transportation Safety Board discovered that a major structural alteration had been approved and accomplished without proper engineering evaluation. The major alteration was an extension of the fuselage nose by installing P/N 32958-00--section assembly - fuselage nose.

Approval for the installation was given by the General Aviation District Office (GADO)on a "Major Repair and Alteration" FAA Form 337, dated March 14, 1975. The basis for approval was the Piper Service Manual. Changes in weight were listed and a statement that the weight and balance data had been revised was included.

Further investigation disclosed that the extended nose was listed in both the Parts Catalog and Service Manuals as applicable to the PA-23-250 E Model only and that a modification in the control system is required with the extended nose configuration. An Airworthiness Directive (AD) 72-21-07 was issued on October 19, 1972, against the E Models with no mention of the extended nose installation. A revision of this AD on April 29, 1976, expanded coverage to all PA-23-250 airplanes with nose modifications. The controls modification had not been installed in the accident aircraft. There was no entry in the airframe log nor in the flight manual to show weight and balance changes.

The National Transportation Safety Board believes that FAA inspectors should thoroughly investigate the extent of an alteration so that approval is based on approved technical data. The Safety Board believes that the circumstances may exist in other fuselage nose extension modification approvals for PA-23 aircraft. Honorable John L. McLucas

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In view of the above, the National Transportation Safety Board recommends that the Federal Aviation Administration:

Review fuselage nose alteration approvals on all PA 23 aircraft and determine that the modifications are based on approved technical data. (Class I--Urgent Followup.) (A-76-116).

Review applicability of AD 72-21-07 for PA 23 models other than the -250 and extend the applicability as necessary. (Class I--Urgent Followup.) (A-76-117).

Alert GADO inspectors and holders of Inspection Authorizations to the interrelationship between configuration modifications, possible associated stability problems, and weight and balance changes which can require control system changes. Ref. FAA Handbook 8310.4A, Paragraph 68, e. (Class II--Priority Followup.) (A-76-118).

Remind the holders of Inspection Authorizations of FAR Part 43.5 (a)(4) which requires recording of weight and balance changes resulting from aircraft alterations. (Class II--Priority Followup.) (A-76-119).

TODD, Chairman, BAILEY, Vice Chairman, McADAMS, HOGUE, and HALEY, Members, concurred in the above recommendations.

Lay Bailey, acting for

By: Webster B. Todd, Jr. Chairman

THESE RECOMMENDATIONS 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.