

UNITED STATES OF AMERICA  
NATIONAL TRANSPORTATION SAFETY BOARD  
WASHINGTON, D.C.

ISSUED: February 23, 1972

Adopted by the NATIONAL TRANSPORTATION SAFETY BOARD  
at its office in Washington, D. C.  
on the 11th day of February 1972

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FORWARDED TO: )  
Honorable John H. Shaffer )  
Administrator )  
Federal Aviation Administration )  
Washington, D. C. 20591 )  
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SAFETY RECOMMENDATIONS A-72-15 & 16

On December 18, 1971, a Piper Model PA-30 Twin Comanche, N8083Y, crashed at Bowling Green, Ohio, during a training flight and fatally injured the instructor pilot and trainee. The aircraft was observed to enter a nosedown spin from a steep left climbing turn. The spin became flat after approximately the first one and one-half turns. Piper's air flow modification kit, designed to improve the PA-30's handling characteristics, had not been installed on this airplane. The mandatory installation of the kit was recommended by the National Transportation Safety Board on July 29, 1971.

We are concerned by the above accident, since the installation of the air flow kit might have served to prevent this accident. You indicated in your response of August 17, 1971, that our recommendation would effectively be complied with by virtue of the Piper Corporation's program to provide for the voluntary installation of these kits on all PA-30 aircraft. However, despite the efforts of the manufacturer, the kits have not been installed as promptly as they should be in fixed-base training operations where they are needed most, i.e., where stalls, single-engine maneuvers, etc., are practiced routinely. The owner/operator of N8083Y, for example, had been operating the airplane for about 8 months and although an air flow kit was available, it had not been installed.

In your August 17th reply, you categorized the air flow kit as a "product improvement." However, the Safety Board continues to believe that the incorporation of this modification will significantly enhance this aircraft's controllability characteristics and margins of safety, especially during flight training operations.

The Piper Corporation, through its own safety program, has been progressively achieving the intent of the Safety Board's recommendation made to you July 29, 1971. The manufacturer's goal is to have the air flow kit installed on all eligible PA-30 airplanes. We believe that the Federal Aviation Administration should assist in the attainment of this goal by informing PA-30 owners/operators of the safety qualities that the kit installation will provide and should encourage them to have the air flow kit installed on their airplanes. With this cooperative effort, we believe that the purpose of our recommendation of last July can be fulfilled and that it could result in a reduction in the relatively high fatal stall/spin accident rate.

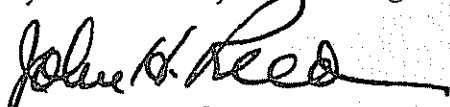
As of February 1, 1972, in excess of 1,800 of the air flow kits had been shipped by Piper -- more than enough to retrofit the complete PA-30 fleet. Of a total of 1,788 airplanes eligible for retrofit, 1,401 had been modified. A verbal agreement to comply has been received in connection with 204 aircraft, and a reply is being awaited in the case of the remaining 183 airplanes. Changes in ownership, difficulties in scheduling, relative inaccessibility of maintenance facilities, and other constraining influences are factors which affect a timely modification of the remainder of the PA-30 fleet when there is no mandatory requirement. Since Piper's offer to install the air flow kits free of charge to the customer is to expire on March 1, 1972, the increased risk of additional stall/spin accidents in those airplanes which may remain unmodified warrants your immediate attention and consideration.

In view of this and the fact that sufficient air flow kits are already available, we recommend that:

1. The Federal Aviation Administration advise all remaining PA-30 owners/operators who have not had their aircraft retrofitted with the air flow kits (including foreign owners/operators) of the importance of the kit and urge them to have it installed.
2. Alternatively, the FAA reconsider our previous recommendation for an Airworthiness Directive.

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.

Reed, Chairman; Laurel, McAdams, and Burgess, Members, concurred in the above recommendations. Thayer, Member, was absent, not voting.

  
By: John H. Reed  
Chairman