

NATIONAL TRANSPORTATION SAFETY BOARD WASHINGTON, D.C.

ISSUED: March 27, 1980

 Forwarded to:

 Honorable Langhorne M. Bond
 Administrator
 Federal Aviation Administration
 Washington, D.C. 20591

SAFETY RECOMMENDATION(S)

A-80-24 and -25

On April 21, 1979, a Piper Model PA-18 Super Cub crashed at the Lebanon Regional Airport, Lebanon, New Hampshire. The sky was clear and although the wind was calm, the airplane was observed to bounce severely several times during the attempted landing. The airplane then turned right, and a go-around was initiated. Shortly thereafter, the aircraft crashed near the airport boundary and burned. The pilot was killed, and his passenger was seriously injured.

The pilot had flown this new airplane from the Piper factory at Lock Haven, Pennsylvania, and was in the process of delivering it to Lebanon when the accident occurred. Although he had accumulated several hundred flight hours in tricycle gear aircraft, his experience in tailwheel airplanes was limited to about 5 hours. Moreover, before the date of the accident, he had not flown in a tailwheel airplane for 2 years. While the pilot made a number of takeoffs and landings with a flight instructor in the PA-18 immediately before he departed for Lebanon, the Safety Board believes that the scope of this familiarization was inadequate and did not prepare him sufficiently to take charge of the aircraft.

The Safety Board believes that the severe bouncing observed during the landing attempt clearly indicates that the pilot did not perform the landing flare maneuver properly. Moreover, lack of skill in the operation of tailwheel airplanes was further evidenced by the pilot's delay in initiating a go-around. The go-around, although belated, would still have been successful if the pilot had been thoroughly familiar with this aircraft. Lacking such familiarity however, he apparently failed to retrim the airplane from an approach trim setting to a go-around setting since the adjustable stabilizer was found in the full airplane nosedown position. The resultant stick forces would have been very high during the attempted go-around and particularly disconcerting to this pilot with limited experience in tailwind airplanes.

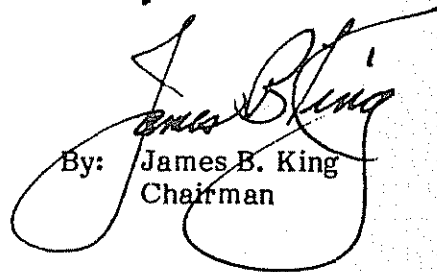
The safe operation of tailwheel airplanes requires a unique measure of operational familiarization that is not transferable from experience in tricycle gear aircraft. Tailwheel airplanes are especially prone to loss of directional control during takeoff and landing, and to severe bouncing if the landing is not performed properly. The pilot's knowledge and level of proficiency concerning crosswind takeoffs and landings, power (wheel) landings, recovery from bounced landings, and go-around procedures is particularly critical to safe operation of tailwheel aircraft. A special study ^{1/} by the Safety Board has shown that the total accident rate for tailwheel aircraft is more than twice that of aircraft with tricycle landing gear.

The Safety Board believes that an adequate checkout of pilots in tailwheel airplanes is essential and that continued safe operation of these airplanes requires a minimum level of recent experience somewhat greater than presently required. The checkout should focus on safe takeoffs and landings and should provide measurable assurance of the pilot's capability to operate the airplane in all phases of flight. Consequently, the Safety Board recommends that the Federal Aviation Administration:

Amend FAR 61.31, "General Limitations," to require that before acting as pilot-in-command of a tailwheel airplane, a private or commercial pilot receive flight instruction (including all normal and contingent aspects of takeoffs and landings) from an authorized flight instructor who has found him competent to pilot such airplanes and has so endorsed his pilot logbook. This requirement need not apply to pilots who have logged flight time as pilot-in-command in tailwheel airplanes before the effective date of this amendment. (Class II, Priority Action) (A-80-24)

Amend FAR 61.57, "Recent Flight Experience: Pilot in Command (c) General Experience," to make more stringent the currency requirements for the pilot in command of a tail wheel configured airplane carrying passengers. (Class II, Priority Action) (A-80-25)

KING, Chairman, DRIVER, Vice Chairman, McADAMS, GOLDMAN, and BURSLEY, Members, concurred in these recommendations.


By: James B. King
Chairman

^{1/} "Single-engine, Fixed-wing General Aviation Accidents, 1972-1976 (NTSB-AAS-79-1).