

Log 1557

NATIONAL TRANSPORTATION SAFETY BOARD
WASHINGTON, D.C.

ISSUED: August 9, 1983

Forwarded to:

Honorable J. Lynn Helms
Administrator
Federal Aviation Administration
Washington, D.C. 20591

} SAFETY RECOMMENDATION(S)

A-83-50 and -51

On October 20, 1982, at North Myrtle Beach Airport, South Carolina, the pilot of a Piper PA-23, Aztec, set the airplane parking brake and routinely started the engines. After starting the engines, he discovered that the airplane was rolling toward an unattended MU-2 airplane. The pilot later stated that he "stood" on his toe (wheel) brakes while he attempted to reset the parking brake, but no effective braking was realized. He then immediately shut down both engines, but such action was too late and the Piper PA-23 collided with the MU-2 airplane. Both airplanes were substantially damaged as a result of the collision.

Tests conducted after the accident by Piper personnel in a PA-23 airplane indicated that it is possible to nullify wheel brake pressure when a pull of 23 pounds or more is being applied and held on the parking brake handle at the same time the toe brakes are being applied. The Aztec Flight Manual does not describe the relationship between the parking brake and toe brakes and specifically does not address the fact that toe brakes may become ineffective when the parking brake is pulled and held engaged.

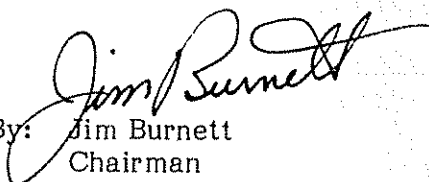
The Safety Board believes that owners/operators of Piper PA-23 airplanes should be aware of such information and that such information should be contained in the Aztec Flight Manual. Had the pilot in this accident better understood the braking system, he could have disengaged the parking brake handle, and possibly avoided the accident.

Therefore, the National Transportation Safety Board recommends that the Federal Aviation Administration:

Require the Piper Aircraft Corporation to revise the Piper PA-23 Aztec Flight Manual to indicate that if the parking brake is pulled and held extended during application of the toe brakes, hydraulic pressure to the wheel brakes can be blocked or restricted. (Class II, Priority Action) (A-83-50)

Review the braking systems of other models of Piper Aircraft Corporation airplanes to determine whether the simultaneous application of the toe brakes and the parking brake handle limits the wheel braking pressure which can be applied and where necessary, require that the Airplane Flight Manuals be revised to include appropriate cautionary information. (Class II, Priority Action) (A-83-51)

BURNETT, Chairman, GOLDMAN, Vice Chairman, and McADAMS, BURSLEY, and ENGEN, Members, concurred in these recommendations.


By: Jim Burnett
Chairman