

NATIONAL TRANSPORTATION SAFETY BOARD WASHINGTON, D.C.

ISSUED: September 7, 1979

Forwarded to:

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

SAFETY RECOMMENDATION(S)

A-79-72

A Beechcraft B19, N1922W, crashed at Gurney, Illinois, on November 9, 1978. The pilot stated that the engine had quit after he switched from right to left fuel tanks; he switched tanks again and applied carburetor heat and the electric boost pump. He then negotiated an emergency landing after the engine failed to restart.

Investigation disclosed fuel in both tanks but the fuel selector valve was in an "off" position. (The valve was designed to rotate 360°, with four positions: Left, right, off, and off).

A survey of accident briefs of 152 general aviation fuel starvation accidents for the latest complete 3-year period, 1975 through 1977, revealed 10 accidents involving various makes and models of aircraft in which the pilot unintentionally placed the fuel selector valve in the "off" position.

To prevent accidents of this kind, the Safety Board believes that 14 CFR 23 should specifically require a device that prevents fuel selectors from being moved to the "off" positions until release action is taken by the pilot.

Piper Aircraft Corporation has incorporated such a "lock-out" feature in all Piper single-engine airplanes starting with 1971 models. Further, a lock-out device was offered for pre-1971 models by Piper Service Letter 590 of May 1972; Piper recommended installation of the device at the next 100-hour or annual inspection.

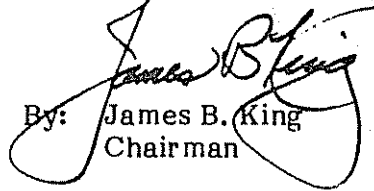
The Board is aware of your research and development project relating to powerplant controls and fuel selector standardization, which was in response to our Safety Recommendations A-74-38 and A-74-39. However, we have been advised that, apparently, the "lock-out" device has not been under active consideration in this project. The Safety Board believes that fuel selector

standardization would only be a partial deterrent to accidents such as this one unless the "lock-out" device also is required.

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

Amend 14 CFR 23 to require that fuel selector valves incorporate devices that prevent movement to "off" positions without separate lever-release action by the pilot. (Class III—Longer-Term Action)
(A-79-72)

KING, Chairman, DRIVER, Vice Chairman, McADAMS, GOLDMAN, and BURSLEY, Members, concurred in this recommendation.


By: James B. King
Chairman