

CIVIL AERONAUTICS BOARD

ACCIDENT INVESTIGATION REPORT

Adopted: April 27, 1949

Released: April 28, 1949

CAPITAL AIRLINES - NEAR FRANKFORT SPRINGS, PENNSYLVANIA,  
MARCH 3, 1949

A Capital Airlines DC-3, NC 25689, operating as Trip 40 to Pittsburgh, Pennsylvania, was damaged about 0910 EST\*, March 3, 1949, during an emergency landing following stoppage of both engines. The landing was made in a farm field near Frankfort Springs, Pennsylvania. The four crew members and twelve passengers were not injured and only minor damage was incurred by the aircraft.

Trip 40 departed Youngstown, Ohio, at 0835 in continuation of a flight from Chicago, Illinois. Captain Ralph Allen Fretwell was at the controls and W. B. Stookey served as copilot; Elizabeth Joan Witt was hostess and Captain C. O. MacNeal, listed as an extra crew member, was riding in the cabin with the twelve passengers. The flight's clearance was IFR to proceed to Pittsburgh at 5000 feet. At 0850 a routine check was made over East Liverpool, Ohio, and shortly thereafter an ATC clearance was obtained to descend to 4000 feet. Upon reaching 4000 feet, the right fuel warning light came on and the right engine stopped. The Captain, who stated he believed there was a fuel pump failure, turned on the cross-feed valve and the copilot worked the wobble pump. When there was no response from the right engine, the Captain turned the cross-feed valve off. Meanwhile, the

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\*All times noted in this report are Eastern Standard and based on the 24-hour clock.

left fuel warning light came on and the left engine stopped. The airplane was losing altitude rapidly and the Captain notified Company radio that he was in trouble and was making an emergency landing. He then cut the ignition switches and executed a gear-up landing on the Myers farm near Frankfort Springs at approximately 0910. During the landing the airplane's ILS antenna cut a power line.

Investigation disclosed no evidence of mechanical failure or malfunctioning of the airplane or powerplants, and the airplane was flown from the farm field after making minor repairs to the aircraft and replacing the damaged propellers. It was determined that both engines had been operated on the right main fuel tank from the time of departure from Detroit until engine stoppage which preceded the emergency landing; thus, fuel was exhausted from this tank. Although more than an adequate fuel supply for completion of the flight to Pittsburgh was available in the left main and left auxiliary tanks, no attempt was made to restore the fuel supply to the engines by switching to these tanks.

Copilot Stookey stated that when the left engine stopped, he put the fuel mixture control into what he thought was "emergency rich" but after landing changed this position before he left the cockpit. Examination of the mixture controls after the landing disclosed them to be in the "emergency rich" position. The evidence indicates that he may have placed the mixture controls in "idle cut-off" position during the emergency and changed the position to "emergency rich" after the airplane was on the ground.

The airplane, carrier and crew were properly certificated for the flight involved. This flight was not conducted in accordance with Capital Airlines' procedures governing fuel management and the Company has taken disciplinary action against Captain Fretwell.

The Board determines that the probable cause of this accident was failure of the Captain to properly manage the fuel supply available.

BY THE CIVIL AERONAUTICS BOARD:

/s/ JOSEPH J. O'CONNELL, JR.

/s/ OSWALD RYAN

/s/ JOSH LEE

/s/ HAROLD A. JONES

/s/ RUSSELL B. ADAMS