

CIVIL AERONAUTICS BOARD  
BUREAU OF SAFETY INVESTIGATION

PRELIMINARY STATEMENT OF FACTS THUS FAR DEVELOPED CONCERNING AIRCRAFT  
ACCIDENT NEAR THE WASHINGTON NATIONAL AIRPORT, WASHINGTON,  
D. C., TO AIRCRAFT OPERATED BY CAPITAL AIRLINES,  
WHICH OCCURRED ON DECEMBER 12, 1949

January 9, 1950

Capital Airlines' Flight 500, a DC-3 airplane, NC-25691, at 2045\*  
December 12, 1949, crashed 1,875 feet southeast from the approach end of  
Runway 36 of the Washington National Airport, Washington, D. C. Of the  
20 passengers on board, four received fatal injuries; 14, serious injuries;  
and 2, minor injuries. Of the crew of three, the pilot and copilot were  
killed, and the flight attendant sustained minor injuries. The airplane  
was destroyed.

Capital Airlines' Flight 500 originated in Memphis, Tennessee,  
December 12, 1949, and proceeded to Norfolk, Virginia, according to schedule.  
No difficulties of any kind were experienced. At Norfolk a new crew con-  
sisting of Captain William J. Davis, Copilot Lloyd L. Porter and Flight  
Attendant Joseph W. Buell were assigned to the flight for the remainder of  
the trip to Newport News, Virginia, and Washington, D. C. The flight  
arrived at Newport News at 1836. It was off the ground again at 1843 at  
which time there were on board 20 passengers, the crew of three, 792  
pounds of cargo and 500 gallons of fuel. Total aircraft weight at the time  
of takeoff was 25,472 pounds; company flight records indicated that the  
allowable takeoff weight was 25,134. All loading was proper in so far as  
the center of gravity of the aircraft was concerned.

\*All times referred to herein are Eastern Standard and based on the 24-hour  
clock.

At the time of departure from Newport News, 1843, the Weather Bureau at the Washington National Airport was reporting an overcast at 500 feet with visibility reduced to two miles by light rain and fog. The latest Weather Bureau forecast available to the company prior to the departure of the flight predicted that at the time of the flight's estimated arrival over Washington, there would be an overcast variable from 500 to 200 feet with visibility reduced to one mile by rain and fog. Ceilings for the alternate airports, Richmond and Norfolk, Virginia, were forecasted to remain well above 1,000 feet with visibility to remain three miles or better.

Following air route traffic control clearances, the flight arrived over Richmond, Virginia, at 1910, proceeding then to Washington at an assigned altitude of 8,000 feet. When in the vicinity of the Clifton Intersection, 20 miles southwest of Washington, the flight contacted air route traffic control at the Washington National Airport which advised that there was a 300-foot overcast over the field, that visibility was reduced to one mile by light rain and fog, and that approach clearances for landing could be expected at about 2010.

From 1933 until 2025 weather conditions over the Washington National Airport remained below the landing minimums of ceiling 400 feet, visibility 3/4 mile. Accordingly, Capital's Flight 500 was held south of the airport. At 2025 a 400-foot ceiling and 3/4 mile visibility was reported at the end of Runway 36; and shortly thereafter Flight 500 was cleared to descend to 1,500 and to approach number one. As the flight reported leaving 2,500 feet at 2034, approach control transmitted the 2033 weather observation taken from the end of Runway 36 which was ceiling 400 feet variable, visibility 1-1/2 miles.

Ground Control Approach (GCA) stated to the flight that its landing approach on ILS (Instrument Landing System) would be monitored, but whether the flight received any transmission from GCA cannot be determined. GCA advised the flight when it was 4-1/2 miles from touchdown that it was 200 feet right of course, and that its glide was good; when it was three miles from touchdown, that it was 50 feet right of course, glide good; when two miles from the end of the runway, course good, 25 feet above glide path; then, when 1-1/2 miles from touchdown, that its course was good and its glide was good. Immediately following the last statement GCA advised the flight that it was drifting off to the right, and that the aircraft could no longer be observed in the elevation portion of the scope. However, the operator saw the aircraft in the azimuth portion of the scope progress 1,500 feet to the right of course, turn left, proceed back to within 1,000 feet of course, and then disappear from view when 1/2 mile from the end of the runway.

The airplane was never visually observed by any of the control tower operators, or by the weather observer stationed at the end of Runway 36. When the airplane was lost from view on the radar scopes, the ceiling at Washington National Airport at the end of Runway 36 was measured to be 400 feet and the visibility to the north was observed to be two miles. There was light rain and fog, and the wind was from the south-southwest at 9 miles per hour.

Captain William John Davis, age 45, was employed by the company as a pilot February 25, 1943. He held a valid airline transport pilot certificate, and had a total of 5,476 hours. His last instrument check had been accomplished July 26, 1949, and his total instrument time was 453 hours. Lloyd Leroy Porter, age 28, was employed by the company as copilot October 11, 1945.

He had been previously trained as a pilot in the U. S. Air Forces. He held a valid commercial certificate, and had a total of 4,012 hours of flight time. His last instrument check had been accomplished September 15, 1949. He had a total of 256 hours instrument flying.

As part of the investigation, a public hearing was held in Washington, D. C., December 22 and 23, 1949. As soon as all evidence has been carefully considered, a final report will be issued by the Civil Aeronautics Board.