

Adopted: February 17, 1943

File No. 2017-42

REPORT OF THE CIVIL AERONAUTICS BOARD
on the
Investigation of an Accident Involving Aircraft in a
Scheduled Air Carrier Flight

A Douglas DC3 aircraft, NC 1942, owned and operated by Transcontinental and Western Air, Inc., received minor damage in an accident which occurred at the Municipal Airport, Indianapolis, Indiana, at approximately 3:03 p.m. on September 17, 1942. The crew consisted of Captain Ray L. Thrush and First Officer Glenn B. Fitzgerald, both of whom were properly certificated and appropriately rated for the flight involved, and a stewardess, Miss M. E. White. There were 19 revenue passengers and one TWA student first officer aboard. No injuries were sustained by any of the passengers or crew.

The flight, designated by the air carrier as Flight 20, originated at Burbank, California, with La Guardia Field, New York, as its destination. Several intermediate stops en route were scheduled, including ones at St. Louis, Missouri, and Indianapolis. Departure was made from St. Louis at 1:38 p.m. for Indianapolis, with St. Louis as an alternate. The flight proceeded "on" and "off" instruments and established contact at 1300 feet directly over the Indianapolis Municipal Airport at approximately 3:00 p.m. A heavy rainstorm had just passed over Indianapolis. Captain Thrush was cleared by the control tower to land toward the southeast on Runway 13 (northwest-southeast) and made a normal approach through moderate rain. The aircraft crossed the northwest boundary of the airport at about 100 m.p.h., with flaps fully extended, and the wheels made contact at a point near the center of the runway's length. The tail wheel made contact about 600 feet beyond and full brakes were applied. There was considerable water on the runway at the time and the plane continued to roll and skid over the end of the runway and onto the sodded area beyond. It crashed through the airport boundary fence, and stopped in a normal position on flat, uncultivated ground about 942 feet past the end of the runway.

Statements of the crew and qualified ground witnesses agreed in almost every detail, except as to the point where the wheels first made contact with the runway. The captain and first officer stated that this contact was made about one-third of the way from the approach end of the northwest-southeast runway, while the airport traffic controller placed it at the intersection of this runway with the northeast-southwest runway. Other witnesses placed the first point of contact at from 250 to 400 feet northwest of the intersection of the two runways. All stated that the approach was normal, except one witness, a pilot on the ground, who said it was "slightly high." According to the crew, the approach and landing were not affected by lack of visibility. The captain stated that "the runway was completely covered with water and the wheels skidded from the point of contact to where the plane stopped." This statement was substantiated by the statement of the airport traffic controller. Just before crossing the end of the paved runway the captain unlocked the tail wheel, applied full left

throttle, and attempted to groundloop the plane to the right in order to avoid the field boundary fence. The plane turned only about 30° and when it started to skid sideways on the wet grass beyond the end of the runway proper, the captain applied right throttle and rudder in order to straighten out the course of the aircraft so as to hit the boundary fence head-on.

There was no indication that malfunctioning of the engines or the controls contributed in any way to the cause of the accident. Although Captain Thrush questioned the brake action, tests of the braking system after the accident showed that it was operating normally. The aircraft was loaded within prescribed limitations and was dispatched in a routine manner. Weather observations by the U. S. Weather Bureau and their communication to the crew were properly handled. Ceiling and visibility at the time of the flight's arrival at Indianapolis were above the limits specified for approach and landing. The wind varied from SSW 13 at 3.00 p.m. to S 5 at 3 09 p.m.

PROBABLE CAUSE: Failure of the captain to take account of the runway conditions and land as close as possible to the approach end of the runway

CONTRIBUTING FACTOR Slippery condition of concrete runway and the grass beyond it, due to rain

BY THE BOARD

/s/ F. A. Toombs
Acting Secretary