

Adopted: January 27, 1942

File No. 2311-41

REPORT OF THE CIVIL AERONAUTICS BOARD
of the

Investigation of an Accident Involving Aircraft in
Scheduled Air Carrier Operation

Minor injuries were sustained by the Captain and the First Officer of a Douglas aircraft which was involved in an accident about 12:30 p.m. on June 3, 1941 at the Joliet, Illinois, Municipal Airport. The crew consisted of Captain Ralph James who held an airline transport certificate with appropriate ratings and who had accumulated approximately 4430 hours of flying time, First Officer Joseph C. Kelly, who held a commercial certificate with appropriate ratings and had accumulated approximately 1485 hours of flying time, and the stewardess, Miss Josephine Larson. The aircraft, a DC-3, NO 28378, owned by Chicago and Southern Airlines, Inc., received major damage. The stewardess and fourteen passengers were uninjured.

The flight, designated by the carrier as Trip No. 10, departed St. Louis, Missouri at 9:41 a.m., six minutes behind schedule, on June 3, 1941, for Chicago, Illinois. It was properly dispatched by a certificated dispatcher. No intermediate stops were scheduled. At the time of takeoff the aircraft carried 720 gallons of fuel and its total weight was 24,244 pounds, approximately 356 pounds under its authorized standard weight. The flight proceeded uneventfully over the top of an overcast and at an altitude of about 7000 feet above sea level until it approached Joliet, Illinois. Nearing that point the aircraft descended into the overcast to an altitude of 3000 feet when it passed over the Joliet range station at 10:56 a.m. The flight had been previously cleared, at 10:43 a.m., from the Joliet range out the northeast leg of the Joliet Range Station to the intersection of the northeast leg of the Joliet range and the northwest leg of the Chicago range. It appears that a miscalculation in flight time, which was made and admitted by the First Officer, resulted in the flight arriving at the intersection at 11:33 a.m. rather than at the estimated time of 11:02 a.m. From this point an instrument approach to the Chicago Municipal Airport was made; however, ground contact was not effected. The flight was then cleared by Airway Traffic Control to the Joliet Range Station via the southwest leg of the Chicago range and was instructed to maintain an altitude of 2000 feet while so doing, and to report when over Dupage intersection. The pilot failed to make this report. Subsequently the flight also was instructed by the carrier's own communication system to proceed to Joliet and land. Arrival over the Joliet Range Station was at 12:03 p.m. During the subsequent approach the Captain inquired concerning the wind at Joliet and was informed that the 11:35 weather report indicated a northeast wind of 11 miles per hour. An instrument let-down procedure was effected and ground contact was established on the first approach through low scud which existed at an altitude of about 200 feet, but which was not severe enough to affect visibility seriously. This approach was from the northwest and the aircraft proceeded along the

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southwest edge of the Joliet Airport so that the wind direction might be observed. The Captain, shortly after passing the airport boundary, made a sharp 180-degree turn from a general southeasterly heading, at an altitude of about 200 feet, in order to make a landing approach toward the northwest. During the latter part of this turn the flaps were extended and the aircraft was lined up to approach the Southeast-Northwest runway. The aircraft landed at a point about 1280 feet from the southeast end of the runway which is 2960 feet in length. The aircraft rolled and skidded on the runway which was wet and also had small patches of loose shale. Brakes were applied, locking the wheels approximately 150 feet beyond the point of landing and thereafter were applied intermittently until the aircraft stopped. This braking action was evidenced by the tires which were severely worn in large flat spots, and also by tire slide marks on the concrete runway. The First Officer had assisted the Captain in applying the brakes.

The aircraft could not be stopped within the confines of the airport and after continuing straight ahead through the metal airport boundary fence it struck a parked automobile and an obstruction light pole, went through another fence and, about 485 feet beyond the end of the runway, came to rest after penetrating the side of a barn to a depth of eight feet. The speed of the aircraft upon leaving the end of the runway was estimated as 25 m.p.h.

Subsequent investigation disclosed that the existing wind was from the northeast and that the pilot knew he was landing approximately cross-wind. The runway in the direction of this wind (northeast-southwest) is slightly longer than the one which was used and is known by the personnel operating at the subject airport to afford a better braking surface in wet weather. However, the length of the southeast-northwest runway would have been ample if proper precaution had been exercised in the approach.

At the time of the approach to the Chicago Airport, the weather there included a visibility of 1-1/4 miles or more and a ceiling of 900 feet with lower broken clouds at 200 feet and light rain and light fog. The Captain subsequently stated, in connection with the approach to Chicago, that because of the fact that he had a new co-pilot (First Officer) he was obliged not only to work the approach problem but to listen to all radio contacts as well, and that this extra work contributed to his not effecting a normal landing. Other scheduled aircraft pilots experienced no unusual difficulty in landing at Chicago for appreciable periods of time both before and after Trip 10 passed up its scheduled landing there.

Although Captain Eames had a total time of approximately 4430 hours of which approximately 2125 hours had been in the employ of Chicago and Southern Air Lines, Inc., he had logged only 78 hours and 36 minutes as a Captain on DC-3's. He had flown in the Chicago-Joliet region rather extensively, over a period of three years, as a co-pilot. He had never previously landed any aircraft at Joliet. He had never worked an instrument approach procedure to the Chicago Municipal Airport, nor had he ever practiced any approach procedure, as a Captain, at that airport. He did not cut the master switch when overshooting was evident, as indicated by the fact that the right engine continued to run for some seconds after the aircraft came to rest.

PROBABLE CAUSE: Action of the pilot in continuing to a landing after overshooting a part of the field in the approach.

BY THE BOARD

/s/ Darwin Charles Brown

Secretary