

DEPARTMENT OF COMMERCE
Washington

August 31, 1937

REPORT OF AIRCRAFT ACCIDENT INVESTIGATION

Statement of Probable Cause of Accident Involving
an Aircraft of the Eastern Air Lines, Inc., at
Daytona Beach, Florida, on August 10, 1937.

In an order dated August 10, 1937, issued by the Secretary of Commerce, pursuant to the Air Commerce Act of 1926, as amended relating to the investigation of accidents in civil air navigation in the United States, Denis Lulligan, Chief, Regulation and Enforcement Division, Robert I. Hazen, Air Line Inspector, and George V. Lossov, Air Line Maintenance Inspector, all of the Bureau of Air Commerce, Department of Commerce, were designated to investigate the facts, conditions and circumstances of an aircraft accident which occurred on August 10, 1937, in the vicinity of Daytona Beach, Florida, and to make a report thereon. Lowell S. Harding, Air Line Inspector of the Bureau of Air Commerce, Department of Commerce, and H. C. Whitney, Director, State Aviation Division, State Road Department of the State of Florida, were designated as technical advisers. Messrs. Hazen, Lossov and Harding proceeded at once to the scene of the accident, arriving there on the afternoon of August 10. After a field examination had been made, public hearings were held from August 12 to 14, inclusive, in the Burgoyne Casino in Daytona Beach.

The following facts, conditions and circumstances appear to us to have attended the accident:

On August 10, 1937, at approximately 4:40 a.m., at a place on the Daytona Beach-DeLand Road south of the southern boundary of Sholz Field, municipal airport of Daytona Beach, Volusia County, Florida, an aircraft of United States registry, while being operated in scheduled interstate air commerce, carrying passengers, mail and express, met with an accident which resulted in the death of four and the injury to five persons on board, and the destruction of the aircraft.

The dead were.

Col. J. Forien y Triana,
Mexico City, D. F.

Stuart G. Dietz (Pilot),
Baltimore, Maryland

J. F. Phillipots,
Kingston, Jamaica.

Robert Rex Reed (Co-pilot),
Oklahoma City, Oklahoma

The injured were.

C. W. Dunlap,
Chicago, Illinois.

E. W. Phillipots,
Kingston, Jamaica.

M. N. Hamilton,
Detroit, Michigan.

F. H. Thompson,
Greenville, S. C.

Bryan W. Merrill (Steward),
Miami, Florida.

The pilot, Stuart G. Dietz, held a currently effective Federal transport pilot license and a scheduled air transport rating. The co-pilot, Robert Rex Reed, held a currently effective Federal Transport pilot license. The third member of the crew was Flight Steward Bryan W. Merrill.

The aircraft, a Douglas, twin-engine cabin land monoplane, model DC-2, was inspected and approved for re-licensing by the Department of Commerce on October 1, 1936. It bore Federal aircraft license number NC-13739 and company number 329. It was owned by North American Aviation, Inc., of 1775 Broadway, New York City, and was operated by the Eastern Air Lines, Inc., of the same address, on Trip No. 7, scheduled from Chicago, Ill., to Miami, Florida, with intermediate stops at Indianapolis, Ind., Louisville, Ky., Nashville, Tenn., Chattanooga, Tenn., Atlanta, Ga., Jacksonville, Fla., and Daytona Beach, Fla. This operation was conducted under a currently effective letter of authority issued by the Department of Commerce. The use of the Daytona Beach Airport for daylight and darkness operation, with Douglas equipment, had been inaugurated by the Eastern Air Lines, Inc., on May 31, 1937.

The flight was scheduled to arrive at Daytona Beach at 3:55 a.m. It arrived about thirty-five minutes late, having been delayed, according to the testimony, at Chicago, Ill., Atlanta, Ga., and Jacksonville, Fla., for passengers, mail and express connections. It departed from the ramp at Daytona Beach about 4:35 a.m., while the airport and the countryside were still in darkness.

The weather between Daytona Beach and Miami was satisfactory for clearance from Daytona Beach. At, and in the vicinity of the field, the weather was good, with a visibility of six miles, an unlimited ceiling, calm wind, and a light ground fog reported.

Before taking off from the field, the aircraft was taxied to the north end of the North-South runway, where the engines were run-up. As the take-off was made, the landing lights of the aircraft were observed to be burning, and the testimony indicated that the engines were functioning properly. The aircraft took off in a southerly direction on the North-South runway, and when about 138 feet beyond the southern edge of the North-South runway its right wing collided with a wooden pole. As a consequence of the impact of the aircraft with the pole, about 15 feet of the right wing, measured from the wing tip along the leading edge, was sheared off the aircraft. This portion of the wing was found slightly to the east of the projection of the center line of the North-South runway and about 210 feet from the post hole. It appears that the remainder of the plane continued in flight in a bank to the right for a distance of about 600 feet when it struck the ground. It continued along the ground and came to rest about 850 feet from the south edge of the road and about 300 feet to the west of the projection of the center line of the North-South runway.

The pole collided with was one of four carrying an electric transmission or distribution line which had been newly erected on the Daytona Beach-Deland Road, which runs along the southern boundary of the airport. It was placed on the south side of the right-of-way of the road, approximately on the projection of the center line of the North-South runway of the airport. This pole, which was 30 feet long, was dark in color and extended about 26 feet into the air above the ground at its base and about 24 feet above the crown of the road. Marks on the pole showed that the wing had struck the pole within 4 feet from its top.

This pole and the other newly erected poles, with No. 6 bright copper wire strung upon them, had been installed between the hours of 9:30 p.m., Monday, August 9, and 2:00 a.m., Tuesday, August 10. The Florida Power and Light Company, which owned and erected the poles, had placed them in position in order to provide service through an overhead line because of an emergency which had arisen about 7:30 p.m., August 9, when a storm had caused a break in the underground circuit which traversed the area along the road on the southern boundary of the airport.

While the significance is not clear, it appears that by a Resolution dated August 5, 1937, of the Board of County Commissioners of Volusia County, Florida, subject to approval of the State Highway Department, the Florida Power and Light Company had been granted the right, privilege and permit, under certain conditions, to construct, maintain and operate electric light and power transmission and distribution lines upon, along or over the County road on highway described as follows: "Extending from the East of the present line near the Airport, Daytona Beach, west .44 miles, to be located on the South side of the Daytona Beach-Deland Road."

With respect to the erection of the poles in question, it does not appear that the Power and Light Company gave formal or informal notification of the fact of their erection prior to, during the course of, or at the completion of their erection, to the operators of the aircraft, the airport authorities, or to any other governmental authority concerned with the safety of operation of aircraft at the airport. Furthermore, it was established that these poles were not lighted or marked in any manner which would serve to warn the crew of aircraft NC-13739 of their presence.

To establish the element of notice, the Company claimed that one of its employees, who had investigated the failure in the underground circuit, used the public telephone in the Administration Building of the airport to call his office and report the trouble to his superior and to advise the erection of an overhead line. This call was reported to have been made between 7:30 and 9:30 p.m., August 9, that later, during the installation of the poles and wires, another of its employees used the same telephone, that the men on duty in the airport office should have observed the men at work along the road with their equipment and lights, setting up the poles and strung the wire, and also that the air lines using the airport knew from previous occasions that, as a temporary measure, such poles had been set up to give service to customers.

It appears from our investigation that the condition and functioning of the aircraft and its power plant were normal, and that the take-off likewise was normal.

In our opinion, the probable cause of this accident was the absence of reasonable notice to those operating and navigating the aircraft that an object had been erected which constituted a hazard to the aircraft taking off.

Respectfully submitted,

Dennis Mulligan
Chief, Regulation and Enforcement Division

Robert I. Hazen
Air Line Inspector

George W. Lessor
Air Line Maintenance Inspector

Approved and forwarded:

Director, Bureau of Air Commerce

Approved and forwarded:

Assistant Secretary of Commerce

Approved,

Secretary of Commerce