

CIVIL AERONAUTICS BOARD

ACCIDENT INVESTIGATION REPORT

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CESSNA 140 AND PIPER PA-11, NEAR MIAMI, FLA., JANUARY 22, 1950**The Accident**

A Cessna 140 aircraft, N-2923N, and a Piper PA-11 aircraft, N-4545M, collided on final approach to Sunny South Airport, near Miami, Fla., at 1545¹ January 22, 1950. The pilot and pilot-instructor in the Cessna were killed and the aircraft was destroyed by impact and fire. The student pilot in the Piper was killed, and the pilot-instructor received serious injuries. The Piper was also destroyed by impact and fire.

History of the Flight

Charles Lewis Faries, a private pilot, and Lewis Walker Hodges, a commercial pilot, departed Woodrum Field, Roanoke, Va., in the Cessna, at 0730, January 21, 1950, on a cross-country flight to Miami, Fla. Although the flight was planned to arrive in Miami the same day, the pilots, upon arrival at Jacksonville, Fla., decided to remain overnight. The next day, January 22, 1950, the flight continued to Miami, making an intermediate stop for fuel at Melbourne, Fla., and arrived in the vicinity of Sunny South Airport at approximately 1540. While at Melbourne, another pilot advised the Cessna pilots that the Sunny South Airport at Miami had a right-hand traffic pattern when the surface wind was from an easterly direction. George A. Lohr, instructor pilot accompanied by Fred W. Reese, student pilot, took off in an easterly direction from Sunny South Airport at 1530. The purpose of the flight was the final check ride for Student Pilot Reese before taking his private pilot's flight examination. Immediately prior to the accident, Pilot Reese was practicing spot landings, and in doing this was flying a right-hand traffic pattern around the airport.

Between 1540 and 1545, both aircraft were observed in the airport traffic pattern and

on converging courses. At that time the Piper aircraft was seen to start a right turn from the base leg of the traffic pattern to the final approach leg, and the Cessna was making a straight-in descending approach from a westerly direction. The collision occurred about the time the Piper aircraft completed the turn and at an altitude estimated to be approximately 200 feet above the ground. After collision both aircraft fell and struck the ground at a point near the west boundary of the airport. Fire, which occurred immediately after ground impact, destroyed both aircraft. Instructor Lohr, although severely burned, escaped from the wreckage.

At the time of the accident, the visibility was reported 15 miles, ceiling was unlimited, there were scattered clouds at 3,500 feet, and the wind from the east-northeast at 9 miles per hour.

Investigation

The wreckage of both aircraft was found in one mass, with the general configuration of the Cessna wreckage being on a northwesterly heading and that of the Piper on a southeasterly heading. The cabins of both aircraft were adjacent, with the Cessna wreckage resting on the Piper left wing structure. Impact with the ground and the ensuing fire seriously damaged both aircraft. There was no evidence of structural failure or malfunctioning of either aircraft or engine, or of fire, prior to the collision.

The condition of the wreckage, and paint markings on the Cessna, indicated that the Piper aircraft was struck on its left side and from the rear by the Cessna. The pilots of the Piper were wearing parachutes, but apparently no attempt was made to use them.

The Cessna, a high-wing side-by-side type aircraft, silver in color, was first seen by ground observers approaching from the northwest at an altitude of approximately 1,000 feet and about one mile from the airport.

¹All times referred to herein are Eastern Standard and are based on the 24-hour clock

Immediately prior to the collision, it was observed making a descending straight-in approach

When the Cessna was on the ground at Melbourne, its two pilots were observed by a third pilot and a service attendant, who stated that the younger of them—the one with the darker complexion (Pilot Hodges)—was seated on the right side of the aircraft when it departed. However, as the Cessna was equipped with dual side-by-side controls, it cannot be determined who was actually at the controls when the accident occurred.

Investigation disclosed that the Piper, a tandem trainer type aircraft painted yellow and red, was conforming to the right-hand traffic pattern of the airport at all times. It was also found that the student in the aircraft was practicing spot landings, and that throughout the pattern around the airport the maximum altitude gained was 600 feet. The descent from this altitude was started after turning to the base leg. Instructor Lohr, the only survivor, who was seated in the front seat of this aircraft stated that both he and Student Reese were constantly on the alert for other traffic in the air. He further stated that he did not see the Cessna at any time during the flight. At the time the accident occurred there were several other aircraft in the air in the vicinity of the airport and in its traffic pattern.

The available records of both aircraft indicated that they were currently certificated and in an airworthy condition at the time of the collision.

Sunny South Airport is located six miles north of the center of Miami. Due to its close proximity to a large U S Navy airport, a right-hand traffic pattern was established under an easterly wind condition. There was no control tower on the airport to direct traffic, however, the airport was adequately marked with an approved type traffic indicator.² The movable wind "tee" was

²CAR Section 60.18 Operation on and in the vicinity of an Airport. Aircraft shall be operated on and in the vicinity of an airport in accordance with the following rules:

(a) When approaching for landing, all turns shall be made to the left unless the airport displays standard visual markings approved by the Administrator and which indicate that all turns are to be made to the right, or unless otherwise authorized by air traffic control; *Continued*

found set for landings in an east-southeast direction at the time of the accident. Information concerning the right-hand pattern had been published in the current issue of the Civil Aeronautics Airman's Guide, Volume 4, No. 22, dated January 17, 1950. The same information was contained in several previous copies of the Airman's Guide. (This document is published every two weeks and is available to pilots at all CAA Airport Communications Stations and U S Airport Weather Bureau Stations.) The Sunny South Airport traffic patterns had been approved by the Civil Aeronautics Administration and the published patterns were in effect on January 22, 1950. An 1,100 by 50 foot concrete sign, "Sunny South Airport," at the south boundary of the airport made the field readily identifiable.

Analysis

It is the common and universally accepted practice when approaching an unfamiliar airport, or one where there is considerable air traffic, to fly over the field at a safe altitude so as to observe the flow of traffic and the aircraft which are landing and taking off. Established traffic patterns generally define left-hand rectangular flight around an airport with entry into the pattern made at a 45 degree angle to the down wind leg. This was true at the Sunny South Airport with the exception that aircraft were to circle to the right rather than to the left. In this case the pilot of the Cessna did not comply with the established pattern, nor did he fly over the airport to observe traffic as good practice would dictate. Instead, he executed a straight-in approach. Accordingly, the Cessna pilot did not discharge his duties as defined in the Civil Air Regulations since he neither complied with the accepted practices of observing or entering traffic, nor did he remain vigilant for the

²*Continued*—Note: Where right-hand turns and clockwise flow of traffic are desirable in the interest of safety, airport markings visible from the air will inform the transient pilot of the necessity for making turns to the right.

Civil Aeronautics Administration Technical Standard Order TSO-N5, dated July 30, 1947, prescribed the markings for right-hand traffic patterns on airports where an airport traffic control tower is not in operation.

presence of other aircraft ³ As a result he collided with the Piper.

Prior to the collision the student and the instructor pilot in the Piper were correctly conforming to the airport's traffic pattern while practicing spot landings. However, since the collision occurred immediately after the Piper had completed its turn to final approach, and since the radius of the turn was short, requiring but a few seconds, there could have been relatively little separation between the two aircraft in distance and altitude immediately before the turn. The pilots in the Piper, in particular the instructor pilot who was in the front seat, could have reasonably been expected to see the Cessna at that time. Therefore, it is concluded that the instructor pilot, who was in charge of the flight, did not completely discharge his duties to remain vigilant for other aircraft.

Findings

On the basis of all available evidence the Board finds that

1 Both aircraft were properly certificated, and were operating without mechanical difficulty prior to the collision

2 Lewis Walker Hodges, Fred W. Reese, and George A. Lohr were properly certificated. Charles Lewis Faries was not properly certificated since his medical certificate expired prior to the accident

³Section 60.12 Civil Air Regulations "Careless or reckless operation. No person shall operate an aircraft in a careless or reckless manner so as to endanger the life or property of others

NOTE c Lack of vigilance by pilot to observe and avoid other aircraft. In this respect the pilot must clear his position prior to starting any maneuver either on the ground or in flight "

3 At the time of the accident the ceiling was unlimited, there were scattered clouds at 3,500 feet, and the visibility was 15 miles

4 The Sunny South Airport did not have a control tower, however, the traffic pattern was indicated by an approved visual type indicator which showed it to be a right-hand rectangular flight path around the field

5 At the time of the accident the pilots in the Piper were conforming to the airport's traffic pattern, and were executing a descending right turn from the base leg to final approach.

6 The pilots in the Cessna did not fly over the field to observe traffic, nor did they conform to the airport's traffic pattern. Instead, they executed a straight-in approach, during which they collided with the Piper from above and to the rear.

7. The collision occurred at an approximate altitude of 200 feet, near the west boundary of the Sunny South Airport.

Probable Cause

The Board determines that the probable cause of this accident was, primarily, the failure of the Cessna pilots to observe and avoid another aircraft while making a landing approach, and, to a lesser degree, the failure of the instructor pilot in the Piper to remain vigilant at all times for other aircraft in the air even though he had the right of way

BY THE CIVIL AERONAUTICS BOARD

- /s/ D W RENTZEL
- /s/ OSWALD RYAN
- /s/ JOSH LEE
- /s/ HAROLD A JONES
- /s/ RUSSELL B ADAMS

Supplemental Data

Investigation and Hearing

The Civil Aeronautics Board received notification of the accident on January 22, 1950, at 1615E, by telephone from CAA Communications, Miami, Fla , and immediately initiated an investigation in accordance with the provisions of Section 702 (a) (2) of the Civil Aeronautics Act of 1938, as amended. As part of the investigation a hearing was held February 8, 1950, in Coral Gables, Fla

Personnel

Charles Lewis Farries, age 29, held an airman certificate with private pilot and single engine land ratings. He had accumulated approximately 163 flying hours in light type aircraft. His last CAA physical examination was accomplished January 28, 1947.

Lewis Walker Hodges, age 22, held a valid airman certificate with commercial pilot, flight instructor, and single engine land ratings. He had accumulated approximately 550 flying hours in light type aircraft. His last CAA physical examination was accomplished July 21, 1949.

Fred W. Reese, age 41, held a valid student pilot certificate. He had accumu-

lated approximately 44 hours of flying time.

George A Lohr, age 25, held a valid airman certificate with commercial pilot, single and multi-engine land, multi-engine sea, and flight instructor ratings. He had accumulated 4,800 flying hours of which approximately 4,000 hours were in light type aircraft. His last CAA physical examination was accomplished January 26, 1949.

The Aircraft

NC-2923N, owned and operated by Hicks-Kesler Flying Service, Inc , Roanoke, Va., was currently certificated by the Civil Aeronautics Administration. It had been flown a total of 898 hours since the time of its purchase. It was equipped with a Continental engine, Model C-85-12.

NC-4545M, a Piper Aircraft, Model PA-11, owned and operated by Sunny South Aircraft Service, Inc , Miami, Fla , was currently certificated by the Civil Aeronautics Administration. It had been flown a total of 1,357 hours since its date of purchase. It was equipped with a Continental engine, Model A-65-8TC.