

REPORT OF THE CIVIL AERONAUTICS BOARD

on the

Investigation of an Accident Involving Aircraft
In Scheduled Air Carrier Operation

An accident which occurred on a mountainside about 17 miles southeast of Chambersburg, Pennsylvania, at approximately 5:04 p.m., on October 25, 1943, resulted in serious injuries to Pilot Thomas Edward Bryan and Mechanic Victor James Gasbarro. The aircraft, a Stinson SR-10C, NC 2285, powered by a Lycoming 245 h.p. engine, was owned and operated by All American Aviation, Inc. (hereinafter referred to as All American.) It was almost completely demolished. Bryan, age 28, held an airline transport certificate with single-engine land, 120-370 h.p., and flight instructor ratings. He had flown approximately 2833 hours, about 1220 of which were as first pilot for All American's pick-up service in the type aircraft involved. Gasbarro, age 21, held an aircraft and engine mechanic certificate, and, as flight mechanic, operated the pick-up device.

The flight, designated by All American as Trip 12, was scheduled to depart Harrisburg, Pennsylvania at 4:30 p.m., pick up mail and express from the stations en route, and arrive at Philadelphia, Pennsylvania, its final destination, about 6:15 p.m. Prior to departure the company's Pittsburgh dispatcher telephoned Pilot Bryan and advised him that the weather at Philadelphia would probably hold above company minimums (500 feet ceiling, 1 mile visibility) but that strong easterly winds would be encountered and the weather would probably be instrument on the ridge between Chambersburg and Gettysburg. The dispatcher suggested an early start to compensate for the headwinds and a possible detour to the south of the course, if necessary, to remain contact. The pilot agreed with the dispatcher, saying that after the Chambersburg pick-up he would fly toward the ridge and if it was closed in, he would detour around to the south. The pilot then secured proper clearance for contact flight and, accompanied by the flight mechanic, took off from the Harrisburg Airport at 4:25 p.m. In addition to the two occupants, who were not equipped with parachutes, the aircraft carried a 4-hour fuel supply (76 gallons) and two pounds of mail. Two of the plane's instruments, the airspeed indicator and the turn and bank indicator, were known to be malfunctioning. The flight proceeded normally with scheduled pick-ups at Carlisle, Shippensburg and Chambersburg, followed by the final radio contact with the flight as follows: "Cleared Chambersburg, 4:53. Estimate York 5:25." After clearing Chambersburg, Pilot Bryan started climbing at a rate of 500 feet per minute and flew a corrected compass course of 110° to allow for a quartering northeast headwind. This placed him on a direct course to Gettysburg with a 1980-foot point in the ridge directly ahead. Two or three minutes after clearing Chambersburg, Bryan, finding it difficult to remain contact, changed his course to 150° to avoid the high point of the ridge ahead. Shortly thereafter the aircraft entered the base of the overcast and, according to the pilot, turbulence was encountered which carried him to an indicated altitude of 3500 feet. He then let down at the rate of 400 feet per minute to an indicated altitude of 2500 feet and, after approximately 11 minutes of elapsed time out of Chambersburg, attempted a let-down with intended recovery at 2000 feet indicated altitude, believing he had passed the ridge. This opinion, he said, was based on the 12 minutes average flying time between Chambersburg and Gettysburg. Gasbarro, the mechanic, was first to see the ground and notified the pilot. The pilot stated that he did not look out but

continued his let-down intending to level off at 4000 feet. The mechanic then yelled, "There is the ground real close." The pilot looked out just in time to pull up into a right turn in an attempt to avoid the sloping terrain ahead. The right wing struck a tree, collapsing the wing from the tip inboard to the fuel tanks. The aircraft, with the engine still developing power, contacted the ground 40 feet from the tree, and reversed its heading 180°. It slid forward about 70 feet and stopped in an upright position on the bottom of the fuselage. The injured pilot and mechanic extricated themselves from the wreckage and were found, while seeking aid, on a mountain road by searchers about 2:15 p.m. the following day. The wreckage was located on the mountainside 1750 feet above sea level, about 100 feet below the crest of the ridge.

All American is certificated to fly contact with minimums set at: Ceiling - 500 feet, visibility - 1 mile. However, as weather reporting stations do not cover all local conditions between points, unreported instrument weather may prevail and occasionally the pilots may encounter conditions requiring them to go on instruments. The established Company procedure in such an instance requires that the pilot return along the route previously flown and establish contact flight, if possible. If this is not accomplished within a reasonable length of time, or the terrain is such that low flying would be inadvisable, the pilot is to attain a safe altitude, proceed to the nearest radio range station, and make a procedure let-down and landing.

After the pilot became involved in instrument weather, the turbulent air made it difficult for him to control the aircraft and maintain an accurate rate of climb or descent on instruments. He stated that he was aware of the fact that the turn indicator of his turn and bank indicator was too sensitive and that his air speed indicator was reading high. Therefore, he did not feel that the improper functioning of these instruments was a contributing factor to the accident.

Although the evidence indicates that faulty instruments did not contribute to this accident, nevertheless the Company displays laxity in dispatching the aircraft, knowing that two of the instruments were not functioning properly. Likewise, the pilot used poor judgment when, after encountering instrument weather, he continued on course over the ridge, contrary to Company procedure. The pilot offered no explanation nor is there any evidence to indicate any reason for his not turning back when he found that he could not continue on course without entering the overcast.

The probable cause of this accident was the pilot's action in descending through the overcast without definite assurance as to his exact location.

BY THE BOARD

/s/ Fred A. Toombs
Secretary