

Stephen Stein Air Safety Investigator National Transportation Safety Board Office of Aviation Safety - Eastern Region

NTSB Accident Number: ERA14FA289 Aircraft Registration & Make/Model: N51BM; 2/3 P-51 B/C Accident Location: Marion, South Carolina Accident Date: June 13, 2014

Note: The following interview was documented by the Investigator –In-Charge (IIC), Stephen Stein.

Interview Summary

Allen Rogers Eyewitness to Accident Flight

Interview date/time: June 18, 2014; 1056 EDT

Inteviewer was Stein.

Mr. Rogers stated that he was a flight instructor and advanced ground instructor during his active years as a pilot with about 3,000 hours of combined experience in Cessna 150s, Stinsons, Cessna Skymasters, Cessna 206s, and the Cessna 310.

On the day of the accident he had lunch with his family and then drove to the airport to watch the cropdusters. After he arrived at the airport he walked to the tarmac near the main terminal building and watched the P-51 taxi by. The airplane turned left and taxied north to the runway where he heard the pilot run the engine up and then reduce power to idle. The airplane rolled down runway 22 and rotated after the terminal taxiway about midfield. Mr. Rogers reported that the airplane's climbout resembled a "cruise climb" as it was very shallow. A "buzzard" obscured the witness' view for a moment, but when he refocused his attention on the airplane it was in a

nose down dive. The witness stated that the engine sounded continuous and no interruptions of power were observed.



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Interview Summary

Billy Price Friend of Accident Pilot

Interview date/time: June 16, 2014; 0945 EDT

Interviewer was Stein.

According to Mr. Price, the accident pilot told him that he brought the airplane to Marion Airport because it had a paved runway that was much longer than the runway at Timmonsville Airport. He planned to store the airplane at Marion Airport until he found a buyer.

Mr. Price stated that the airplane was grossly underpowered and the propeller was set to a pitch that would allow the pilot to achieve a higher cruise speed; however, the airplane "would barely turn any rpm." Several people told him the airplane was also nose heavy. During service intervals, maintenance staff would have to add weight to the tail before jacking the airplane up to prevent the airplane from nosing over. After the first few flights the pilot learned that he had to apply greater pressure to the flight stick to keep the airplane to get speed before departing from Timmonsville. When the pilot would takeoff from the airport in Timmonsville, onlookers and

friends would "cringe" because the airplane would be nearly out of sight before it departed the runway.

The pilot's first incident in the airplane occurred in 2002. During the takeoff attempt, the airplane departed the runway in a nose high attitude at a slow airspeed. The pilot realized that the airplane was not going to clear a group of trees at the end of the runway. Observers on the ground thought the airplane was stalling when the right wing started to drop. The airplane then rolled wings level and dropped to the ground from approximately 6 feet above the ground. According to Mr. Price, the pilot told him that the rpm gauge read between 1,600 and 1,800 rpm during the attempted takeoff. The pilot made several more takeoff attempts and eventually flew it out of the airport.

The pilot's second incident occurred several months later at the same airport. Mr. Price reported that he attempted to takeoff with a northwestern wind behind him. After the airplane departed the runway the pilot realized the airplane would not clear a group of trees and landed belly up to stop the airplane from impacting cars on the adjacent highway.

After the second incident, Mr. Price told the pilot that if he didn't "get the engine turning faster" then he'd be right back in the same place one day. The pilot told his friend that he set the propeller to achieve a higher cruise speed. Mr. Price stated that he had seen the airplane build data, which contained propeller tests that showed how adjusting the propeller can increase static rpm to 2,300. He communicated this finding to the accident pilot and added that the engine required 2,450 rpm for rotation.

Mr. Price remarked that during takeoff the airplane sounded like it was at runup power. Friends and locals at the airport were concerned for the pilot's well-being and feared this airplane would kill him.

In 2012, the pilot flew the airplane to Marion Airport to sell it to a potential buyer. Another friend of the accident pilot told Mr. Price that he was following the pilot in another airplane at the time. The accident airplane lost power during the ferry flight, the pilot forgot to deploy the landing gear and the airplane landed gear up. The pilot told the seller that he decided not to sell the airplane and sent the engine to a Ranger engine specialist in Tennessee who completed the overhaul. The engine installation and inspection was completed by the accident pilot and a mechanic a few months later. The pilot and the mechanic installed the propeller "the same way."

According to Mr. Price, the accident pilot had never flown a tailwheel equipped aircraft before he purchased the accident airplane. The pilot suddenly started flying a Loehle experimental P-51 airplane before he purchased the accident airplane from a private seller in Louisiana. Mr. Price remarked that the pilot was a "P-51 fanatic" and the 2/3 scale replica was the next best thing and affordable. The pilot wouldn't listen to any modifications as he believed the builder had worked all the bugs out. Mr. Price asked the pilot what rpm he observed when he held the brakes down and advanced the throttle to the full OPEN position and the pilot stated 1,600 rpm.



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Interview Summary

Mark Rutan 20 Year Friend of Accident Pilot

Interview date/time: June 16, 2014; 0804 EDT

Inteviewer was Stein.

According to Mr. Rutan, the pilot was very meticulous. In one example, before taking a trip he learned that his approach plate was 3 days expired, so he called Mr. Rutan for an updated copy. The pilot did not trust one of his mechanics, so he placed pieces of tape at inspection areas to make sure the mechanic was looking at every part of the airplane.

When the airplane was "airworthy" he would fly it every 10 days or so. The airplane had some cylinder problems over the years. He blew a "jug" on takeoff once at Timmonsville Airport about 5 years ago. He knew the airplane would not make it off the field so he "sucked the gear up and forced it down and got it stopped." The airplane was in maintenance for the 10 months that followed the incident. Another incident occurred over a year ago. He was flying near Marion and put it down at the airport after experiencing some difficulty. The pilot also complained about how much the tailwheel shimmied.

Mr. Rutan added that the pilot performed some acrobatics, but he can't imagine the airplane "looped well" as it didn't "turn up enough rpm."

He had a Piper Warrior that he would fly to meet clients along the Eastern Seaboard.

The airplane was equipped with a four bladed wooden propeller. Mr. Rutan didn't know who made the propeller, but "most everybody agreed there was a little too much pitch for it." The pilot told him that he had adequate performance to get in and out of the grass strip and to avoid trees at Timmonsville Airport. He also reported to Mr. Rutan that he didn't want to give up additional cruise speed that he believed he got from having a fairly high pitch propeller. According to Mr. Rutan, the dilemma is having a cruise prop or incline prop. The incline propeller will allow you to "get out good," but you cruise at 98 miles per hour. He added that if you have a cruise adjusted propeller, you'll probably depart while hitting trees, but you'll be able to reach 110 miles per hour. The airplane acted like it made cruise power during takeoff. Mr. Rutan stated that he spoke with the pilot multiple times about the propeller. During each conversation he told the pilot that he could adjust the pitch down a little for takeoff. The pilot told him that "it's a lot of trouble" and added that he liked the airplane's performance at cruise. According to Mr. Rutan the pilot achieved cruise speeds of around 125 – 130 knots, which was surprisingly slow to him.

The pilot was also talking about buying a light sport airplane. He had plans to sell the P-51 for about \$75,000 and even had a buyer for it last year before his most recent incident at Marion. The deal with the buyer was off until he overhauled the engine and repaired the airplane. When Mr. Rutan last spoke with the pilot he said that the engine had returned from overhaul.

Mr. Rutan stated that aside from bypass surgery a few years prior, the pilot appeared to be healthy.



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Interview Summary

Randy Hatchell

Pilot's Airframe and Powerplant Mechanic

Interview date/time: EDT

Inteviewer was Stein.

Mr. Hatchell knew the accident pilot for about 10-15 years and completed owner assisted annual inspection on the accident airplane. The pilot would talk with Mr. Hatchell about the work he planned to do, and Mr. Hatchell would inspect the work after it was completed.

Mr. Hatchell stated that the pilot used another mechanic to repair the accident airplane following the pilot's first incident in 2002. He was not aware of the pilot's gear up landing incident with the airplane 2 years ago, but he did install and inspect the engine after it was rebuilt by a "Ranger engine guru."

According to Mr. Hatchell, the pilot would fly the airplane a couple times a month and sometimes once or twice a week when it was stored at Timmonsville Airport.



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Interview Summary

Roger Blackmon Close Friend to Accident Pilot

Interview date/time: April 20, 2016; 1328 PT

Inteviewer was Stein.

Mr. Blackmon reported that he was a close friend to the accident pilot and had flown with him many times. He stated that there was something wrong with the airplane. The accident pilot's first incident was a "right wing stall" on takeoff from Timmonsville Airport and his second incident occurred about 6 months later that resulted in a belly up landing on the runway to avoid impacting a highway. The pilot experienced one more incident about 1 year before the pilot's fatal accident. The pilot and Mr. Blackmon departed Timmonsville Airport in separate airplanes bound for Marion Airport to reposition the accident airplane. The pilot's had intended to move the airplane to Marion Airport because it was "underpowered" for Timmonsville Airport. When they reached Marion Airport the pilot forgot to deploy the landing gear and landed gear up. Mr. Blackmon stated that the pilot did not report any power issues with the airplane on the day of the accident. In the weeks leading up to the accident, the accident pilot reported to Mr. Blackmon that the engine would "die out" and then "come back" on several occasions.

Mr. Blackmon stated that he never flew the accident airplane. The pilot's friend added that he believed the airplane was built from scratch. The pilot performed his own maintenance work on the airplane and used a licensed mechanic to sign off his inspections.

According to Mr. Blackmon, "half a dozen" people told him to sell the airplane including Mr. Blackmon, but the pilot still enjoyed flying it.

The pilot had a buyer lined up to sell the airplane, but after the gear up landing, he told the buyer that he decided not to sell it.



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Interview Summary

Sonny Huggins Airport Manager, Huggins Memorial Airport, Timmonsville, South Carolina

Interview date/time: June 16, 2014; 0839 EDT

Inteviewer was Stein.

The accident pilot was checked out in a friend's Aeronca Champ, which accounted for his total tailwheel experience before he started flying the P-51. On a hot day, the pilot could "just get it off the runway." During his first takeoff attempt from the airport, it "paid off" at the end of the runway on the right wing; Mr. Huggins thought the pilot was dead. In a separate incident the pilot landed at the south end of the airport and was planning to depart from the north end. Mr. Huggins was mowing grass at his airport home when he observed the airplane, which did not appear to be climbing sufficiently to depart the airport. Moments later the landing gear retracted and the airplane impacted the ground on its belly, which "tore the prop off." According to Mr. Huggins, the pilot had another incident that involved a gear up landing a little over a year ago at Marion Airport.

Mr. Huggins remarked that the airplane had a forward center of gravity and no dihedral in the wings. At one point they placed the airplane in his hangar, but when they attempted to jack the airplane up, the airplane fell forward and the tail flew up in the air.

Mr. Huggins reported that no one at the airport liked the airplane including the airport manager, but they all tried to help him with it. The airport manager contacted a friend of his who flew PT-19s, which are equipped with a similar Ranger engine. According to Mr. Huggins, the accident pilot's engine "never turned more than 1,600 rpm," and his friend told him that his PT-19 Ranger engine usually turned around 2,200 rpm on takeoff. Mr. Huggins told the pilot to adjust the propeller, but the pilot refused as it would interfere with his airspeed. Several people declined opportunities to watch him takeoff because they were afraid he would crash. As a result, many of his friends and acquaintances told him to sell it. Two potential buyers came to the airport to look at the airplane, but backed out.

The pilot's wife told the airport manager that she noticed the airplane was not climbing properly during the accident flight. According to the airport manager, she told him that the airplane reached approximately 800 feet and it just wasn't climbing.

The accident pilot flew the airplane a couple times a month and never flew more than 40 nautical miles. Mr. Huggins reported that the airplane could "hardly get out of Huggins on a hot day." At times the pilot would have to abruptly turn to the right to avoid trees at the end of the runway as a result of the lack of power.



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Interview Summary

Sue Sherbert Wife of the Accident Pilot

Interview date/time: June 20, 2014; 1344 EDT

Inteviewer was Stein.

According to Mrs. Sherbert, she witnessed the pilot perform a preflight inspection and accident flight from Marion Airport. During the pilot's preflight inspection, he sumped and inspected the fuel tanks, checked the oil dipstick and then completed a walk around of the airplane. He also checked the air intake, vents, and pitot tube for leaks and inspected the airplane for loose wires. After the pilot pulled the airplane out of the hangar, Mrs. Sherbert could hear the fuel pump engage, a sound she was familiar with.

Mrs. Sherbert stated that the pilot did not initially plan to fly on the day of the accident because the cropdusters were using the runway. The pilot told his wife that he had intended to taxi the airplane to circulate the oil. Mrs. Sherbert witnessed the pilot check the operation of the flaps, rudder, elevator and ailerons before taxiing out. The pilot would have been forced to wait near the airport terminal building for a cropduster to finish loading, so he elected to proceed direct to the runway. He taxied to the end of runway 22 and let the airplane "run" for about 5-6 minutes on idle. The cropduster eventually finished loading, taxied to the runway intersection and departed ahead of the accident pilot.

The takeoff roll was normal and the airplane departed the runway about midway. The pilot retracted the landing gear and entered a normal climb. Approximately 1 mile from the departure end of the runway, the airplane started to sink after it entered a sharp left turn, which was immediately followed by a nose down dive. A group of trees obstructed Mrs. Sherbert's view of the airplane momentarily and then she heard a loud noise. The pilot's wife reported that she could hear the engine running and did not hear any interruptions in power; however, she could not remember the engine sounds after the airplane entered the dive because she was deeply concerned about the flight at that point.

Mrs. Sherbert has witnessed her husband takeoff in the P-51 many times and had never seen him make such a sharp turn as she observed on the day of the accident flight. She recalled that her husband usually made gradual turns in this airplane. This turn was rapid like he was attempting to return to the runway.

72 Hour History

According to Mrs. Sherbert, the pilot was on diabetic medication that was approved by the FAA; Glucovance and Lipitor.

The pilot's wife stated that he received a full restful sleep every night on the week prior to the accident and did not exhibit any abnormal behaviors. The doctor prescribed him Ambien several years prior to help with his sleep, but the medication never affected him during the day. The medication improved his sleep patterns and his blood sugar. Prior to taking the medication the pilot would typically receive 4-5 hours of sleep each night, which was coupled with "wacky" blood sugar.

Sue Sherbert Wife of the Accident Pilot

Electronic Mail Received: November 1, 2014; 1508 PT

The pilot's wife reported that she was unable to locate any records for the accident airplane or the pilot.

Interview Summary

Sue Sherbert

Wife of the Accident Pilot

Electronic Mail Received: January 8, 2016; 1046 PT

The pilot's wife estimates that he had accumulated approximately 350 - 400 hours in the accident airplane.



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Interview Summary

Howard Siedlecki

Owner and President, Sunshine Aircraft Repair, Inc.

Interview date/time: July 8, 2016; 1446 PDT

Inteviewer was Stein.

Mr. Siedlecki was asked to participate in the investigation as a technical advisor, as his resume includes several years of experience servicing Ranger engines. Several photographs of the engine were submitted to Mr. Siedlecki who was asked to provide his observations to the NTSB.

According to the technical advisor, if the engine came apart, there would be evidence of scoring on the bearing surfaces and on the crankshaft, which was not present in this engine. In addition, there did not appear to be anything missing or anything unusual about the engine that would suggest a mechanical anomaly. He added that the crankcase is strong, but can be penetrated with enough force. When asked about the crankshaft, the technical expert reported that he observed a bend at the forward rod journal, which is the first week point of the crankshaft and is likely the first failure point. Mr. Siedlecki did not observe any signs of lubrication distress or overheating, normally indicated by melted pieces of babbit. He also stated that the photographs displayed a large hole in the oil reservoir indicative of a breach and added that the engine crankcase and oil reservoir did not exhibit any signs of an oil starvation. Mr. Siedlecki reported that based on this information, the airplane appears to have impacted the ground nose first at an angle and was under power at the time of impact.