



MEMORANDUM FOR RECORD

Stephen Stein
Air Safety Investigator
National Transportation Safety Board
Office of Aviation Safety – Western Pacific Region

NTSB Accident Number: WPR18LA034
Aircraft Registration & Make/Model: N52492; Cessna 172P
Accident Location: San Jose, California
Accident Date: November 19, 2017

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

Interview #1 Summary

Chiale Tseng
Pilot-Rated Passenger, Accident Airplane

Interview Date & Time; November 21, 2017; 1322 PT

Mr. Tseng reported that he had sustained a compression fracture between ribs at his T10 and T12 vertebrae during the impact.

According to the pilot-rated passenger, at the time of the accident he had accumulated a total of 200 flight hours and about 5 hours of the accident airplane. He had flown with Squadron 2 since July 2017 after his previous flight school went bankrupt and was forced to close. During the accident flight, he was operating the radios, while the pilot-in-command flew the airplane. They had planned to fly the “Bay Tour”, a route of flight that is popular with Bay Area flight traffic. Prior to departure, they topped off the fuel tanks, sumped the tanks, checked the oil level and then started the airplane. They taxied the airplane to the engine run-up area and performed a magneto check. Mr. Tseng did not recall what the results were. During takeoff, the pilot-in-command announced their airspeeds. During the initial climb and just after they confirmed the airplane had achieved a positive rate of climb, the airplane felt like it had stopped climbing. The pilot-rated passenger confirmed they were not climbing and informed the pilot-in-command who

struggled to maintain control of the airplane for the rest of the flight. He declared an emergency with air traffic control, but didn't recall the subsequent details of the accident flight.

According to Mr. Tseng, in September 2017, he was in the right seat of the accident airplane during a flight with a friend. During cruise flight they heard a loud noise accompanied by a heavy vibration. When they landed the airplane, the flight school owner replaced a cylinder.

The pilot-rated passenger stated that he held a private pilot certificate with a rating for single-engine land and instrument airplane. His most recent first-class medical certificate was issued on July 13, 2017, which did not include any limitations. According to the pilot-rated passenger, his flight time included 233 hours of total flight time in all aircraft of which 9 hours had been accumulated in the accident airplane make and model.

Interview #2 Summary

Chiale Tseng

Pilot-Rated Passenger, Accident Airplane

Interview Date & Time; April 22, 2019; 1540 PT

The NTSB attempted to reach Mr. Tseng by email and did not receive a response. Mr. Tseng was also contacted on the telephone number he provided, which had been disconnected.



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Interview #1 Summary

Jerry Toms

Principal Maintenance Inspector, Federal Aviation Administration

Electronic Mail Correspondence Date & Time; May 4, 2018; 0633 PT

Mr. Toms received the carburetor that was retrieved from the accident airplane and provided oversight during the unit's test and examination. According to Mr. Toms' summary observations,

"The physical damage to that carburetor and the casting made it impossible to perform many of the dynamic tests and measurements. The venture was non—existent; and mounting features prohibited standardized checks. The throttle was separated from the carburetor body and other anomalies.

The needle valve and seat were intact, with no damage and no contamination present
The main jet was clean with no damage
The float met clearance specifications and moved freely its full travel
The accelerator pump suffered damage to the leather piston seal, but the source of the damage could not be determined

The accelerator pump check valve system was clean with no anomalies and no visible contaminants

The static float position was slightly low but would have little impact on any operational issues.

No operational issues could be assessed based on the severe damage to casting, throttle, venturi and mounting features.”



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Interview #1 Summary

Mike McClelland
Owner, McClelland Aviation

Interview Date & Time; November 21, 2017; 1124 PT

Mr. McClelland stated that he had been involved with the flying club, Squadron 2, since 1992 and a partial owner since 2008. He began his work with them as a mechanic and worked full time until 2009. Now he performs some inspections. He stated that his mechanic, Terry Nguyen, performs all of the service work for McClelland Aviation while he orders parts and manages the billing, similar to a Director of Operations.

The flying club is owned by two people including Mr. McClelland and employs a general manager and about 12 contract flight instructors with no full time employees. The maintenance operation, known as McClelland Aviation, uses some college students as part time employees who primarily function as PSI test proctors, but also may assist in the maintenance facility as well. McClelland Aviation has been servicing the flying club's airplanes since before 2003 when McClelland Aviation was incorporated. Mr. Nguyen is a full-time airframe and powerplant mechanic without inspection authorization (IA). Mr. McClelland holds an inspection authorization as does his part time IA mechanic, Mark Crouch. The maintenance facility services

the 10 aircraft that are owned by him and used by the flying club. These aircraft include a Piper Aero, Piper Archer, multiple Cessna 172s, and a Cessna 182. The facility services these airplanes and outside aircraft as well.

During services, they typically perform work on one airplane at a time. He added that several can be “stacked up at once” when waiting on parts, at which time he will bring in his part time mechanic to assist. The company does not have any written procedures, but they follow manufacturer checklists and service manuals.

Mr. McClelland reported that the accident airplane had a “nuisance oil leak.” They pulled the no. 2 cylinder and observed an oil leak around the base ring and subsequently ordered a new engine, but used PRC on it as a temporary repair to keep the leak from expanding.



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Interview #1 Summary

Ting Ting Chiu
Pilot-Rated Passenger, Accident Airplane

Interview Date & Time; November 21, 2017; 1500 PT

Ms. Chiu stated that she began her flight training in 2015 in Fresno in a PA-38 and received her private pilot certificate in July 2016 through a Part 141 flight school known as Mazzei Flying Service. She received her instrument rating in June 2017 and then transferred to Squadron 2 for her multi-engine rating and to build time in a Cessna 172. At the time of the accident she had accumulated a total of about 5 hours in the accident airplane make and model and 25 total hours flying a Duchess, with a total flight time of about 280 hours.

During the accident flight, she was seated in the front left seat as pilot-in-command and seated to her right was her friend Mr. Tseng, a pilot-rated passenger. A friend of theirs was seated in the row 2 left seat behind Ting Ting. They had agreed that she would assume command of the airplane while Mr. Tseng worked the radio and she would call out items from the checklist for him to verify. They computed weight and balance, takeoff distance and roll with full fuel tanks. After a preflight inspection they taxied the airplane to the run-up area. She ran the engine up to 1,800 rpm and observed a 50 rpm drop when she selected the right and left magnetos

individually, within a difference of 75 rpm. With the carburetor heat on they observed a drop of no more than 100 rpm. Ms. Chiu reported that she followed the aircraft checklist for each procedure, then selected both fuel tanks and departed after she received a clearance from air traffic control. At a takeoff speed of about 55 knots they lifted off the runway surface with all instrument indications in the green. During the initial climb, about 50 feet indicated altitude, the pilot perceived a decreasing climb rate and airspeed with an rpm drop. The airplane would not climb any further. At the time of the loss in climb rate rpm she observed that the engine harmonic became rough and then quiet. Her right seat passenger stated that they need to land and announced "MAYDAY, MAYDAY" to air traffic control. The pilot attempted to keep the airspeed above stall while she performed a wide turn and remarked that a tight turn would have stalled the airplane. During the turn she allowed the airplane to descend a little and eventually observed a green field and the airport, but estimated that the airplane would not reach the airport. The nose then dropped and the airspeed increased incrementally. As the airplane subsequently descended into the ground, she retarded the mixture control to idle/cutoff and changed the fuel selector to the OFF position just before impact. Later, the pilot noted that she was unable to maintain altitude before she entered the wide turn. During the flight she was wear noise cancelling headphones and remarked that the engine sounded normal during the takeoff roll.

Interview #2 Summary

Ting Ting Chiu

Pilot-Rated Passenger, Accident Airplane

Interview Date & Time; April 22, 2019; 1606 PT

The NTSB attempted to reach Ms, Chiu by email and did not receive a response. Ms. Chiu was also contacted on the telephone number she provided, which had been disconnected.