

<u>NATIONAL TRANSPORTATION SAFETY BOARD</u>		Time	Date
RECORD OF: <input checked="" type="checkbox"/> VISIT <input type="checkbox"/> CONFERENCE <input type="checkbox"/> TELEPHONE CALL		9:05 am	1/24/2009
Name (s) of Person (s) contacted or in conference and location		Routing	
Interview conducted with pilot. Present in-person were representatives		Symbol	Initials
of Cessna, TCM and Cape Air. Present on a phone was Victor Smith,			
who represented the pilot. His phone number was [REDACTED] His work			
phone is (202) 776-3978, and e-mail is: [REDACTED]			
Subject:			
ERA09IA140			
Digest:			
See attached.			
Conclusions, Action Taken, or Required:			
The digest was reviewed with them during the conversation and they agreed with the content.			
Date	Title	Signature	
1/24/2009	Senior Air Safety Investigator	Timothy W. Monville	

Phone interview with pilot January 24, 2009.

The pilot provided his address, pilot certificate information, medical certificate information, and also relayed that he has greater than 25,000 hours, of which approximately 20,000 hours are in the incident make and model airplane. He reported he was hired by Hyannis Air Service doing business as (DBA) Cape Air in May 1993, and has been with them continuously since that date. He is only qualified in the Cessna 402C aircraft.

The incident flight was the pilot's fourth leg that day in the incident airplane.

Prior to the first flight that day from RSW to EYW, flight 9396, he requested fuel. A total of 15.0 gallons of fuel were added to each main fuel tank. After fueling the fuel quantity gauges indicated 500 pounds total. The 55 minute flight (block time) to EYW was uneventful and was flown at 7,000 feet. He operated the airplane with each fuel selector positioned to its respective tank. He did not crossfeed during this flight. After landing at EYW 15.0 gallons of fuel were added into each main tank. He did not recall the left or right fuel gauge reading after the fueling. He stated he did not recall a difference between the left and right fuel quantity indications.

The second flight that day from EYW to RSW, flight 9397, was uneventful and flown at 6,000 feet. The flight lasted approximately 55 minutes (block time). He operated the airplane with each fuel selector positioned to its respective tank. He did not crossfeed during this flight. After landing at RSW 30.0 gallons of fuel were added into each main tank. He watched the fueling and also checked the fuel slip. After fueling, the fuel quantity gauges indicated a total of 650 pounds; the left fuel quantity gauge indicated 350 pounds and the right fuel quantity gauge indicated 300 pounds.

The third flight that day from RSW to EYW, was flight 9398. Before departure he noted the 50 pound fuel imbalance. The flight departed with each fuel selector positioned to its respective fuel tank, and climbed to 7,000 feet. Upon reaching cruise, he set cruise power, then moved the right fuel selector to the left main fuel tank position (crossfeed). He stated that he believed he flew in this condition for 15-20 minutes in order to balance the fuel load. At the end of the estimated time he repositioned the right fuel selector to its respective tank then began to descend. He did not recall the left or right fuel quantity gauge readings at the end of the crossfeeding. The block time was 55 minutes or maybe 1 hour. No fuel was added at EYW.

The fourth flight that day from EYW to RSW (incident flight), was flight 9399. The turn time from the previous flight was 20 minutes. He was on an IFR clearance. He did not visually inspect the fuel tanks before departure. Before takeoff he noted the left fuel quantity gauge indicated 300 pounds and the right fuel quantity gauge indicated 200 pounds. He did a quick engine run-up before takeoff to check the operation of the magnetos with no discrepancies reported. He does not recall the seating positions but noted a male was in the co-pilot's seat. He did brief the passengers. A total of 6 passengers were on-board. The flight departed with each fuel selector positioned to its respective tank, and while climbing to 6,000 feet, he noted the airplane appeared to be right wing heavy (slightly). He noted this but did not perform any action. He set cruise power and noted during cruise flight the left fuel quantity gauge indicated 280 pounds and the right fuel quantity gauge indicated 160 pounds. Approximately ½ way into the flight during

cruise flight, he repositioned the left fuel selector valve to the right main tank position (crossfeed) and left it there for approximately 15 minutes. At that time the left fuel quantity gauge indicated 300 pounds and the right indicated between 100 and 90 pounds. He repositioned the left fuel selector to its respective tank position. At that time the flight was 60 to 55 nautical miles from RSW. Air traffic control communications were transferred from Miami Air Route Traffic Control Center (Miami ARTCC), and then to Fort Myers Approach Control. He obtained the automated terminal information service (ATIS) from RSW, and when the flight was approaching Marco Island, the left fuel quantity gauge was indicating 300 pounds and the right fuel quantity gauge indicated 50 pounds. He stated he was "starting to get concerned." When approaching Naples, Fort Myers Approach Control instructed him to descend to 4,000 feet. He was "still seeing 300 pounds on the left and below 50 pounds on the right." He never operates the airplane below 100 pounds in either tank, and later stated he thought the fuel load difference was an indication issue. He stated, "I was working on that problem" and when asked he stated he meant in his head. All engine instruments were normal. When the flight was past Naples while flying at 4,000 feet over land, he was just about to call operations reporting in-bound and the right engine began surging first. He looked at the right fuel gauge and it indicated 0. The left fuel quantity gauge at that time indicated 300 pounds or "maybe north of that." He immediately moved the right fuel selector to the left tank position (crossfeed), which restored engine power. He did not consider this an emergency at that time. The left engine then began surging, followed by the right engine. He repositioned the right fuel selector to its respective tank, adjusted power, and visually checked the positions of the fuel selectors, mixture controls, engine instruments, and magnetos. With respect to the magneto switches, he only visually verified they were on. Unable to maintain altitude due to the loss of power from both engines, he declared an emergency with Fort Myers Approach Control and advised he needed to fly to APF. He was cleared to APF, did a 180 turn towards there, and while flying at 3,000 feet he feathered the propellers and looking for the APF airport. He saw the runway end identifier lights (REILS), and Fort Myers Approach asked him if he could see the APF airport. He stated he did, and aimed for the middle of the airport. The runway lights for runway 14 came into view and he lined up for runway 14. He held the gear until he was sure he could land on the runway then blew down the gear with the emergency blow down bottle. He landed with full flaps, and rolled to the end of the runway then rolled onto a taxiway and stopped. He turned around to the passengers and the fire department (FD) showed up. He talked with FD personnel but doesn't recall too much more. He did not recall moving the fuel selectors and stated he didn't think he did. He also recalled that the right fuel quantity gauge precipitously went from 50 pounds to 0.

He didn't recall making aileron trim adjustments to counter the wing heavy condition. He knew he should have had between 200 and 250 pounds in the aircraft; he thought it was an indication problem.

At the time that both engines had lost power, he put both auxiliary fuel pumps on the low position and left them there. He feathered the propellers after the power was lost on both engines. The left propeller stopped quickly but the right propeller took some time. Both propellers did go into the feathered position. He landed with both propellers feathered/stopped.

With respect to air traffic control, Fort Myers Approach Control told him that Naples Air Traffic Control Tower knew of the problem and were waiting for his arrival. He did not talk with Naples air traffic control tower. When asked if he perceived any issues with air traffic control he said no.

The pilot reported to the Cessna representative question that flight 9398 was a normal descent and handoff when the flight was approximately 30 miles from Key West. The turn time on the ground at Key West was approximately 20 minutes.

The pilot reported to the Teledyne Continental motors representative that when the right engine surged the right fuel tank indicated zero. He moved to right fuel selector to the crossfeed position and noticed the fuel flow decrease and immediately selected left tank. The engine responded and he did not consider that an emergency at that time. A short time later the left engine began surging, but he knew he had plenty of fuel. He knew that there was no fuel in the right tank but adequate fuel in the left tank. The left then right engines began surging again. He positioned each fuel selector to each respective main tank position, declared an emergency, and initiated a 180 degree turn. He reported he did not have time to restart the engines. He reported he did not notice the fuel flow on the left engine when the left engine was surging.

He never had an engine failure in his career while at Hyannis Air Service.