June 12, 2019

WPR19FA163 FAA Interview Records Harlow Voorhees AFS 850

Witnesses:

Ashley Whittington Front Desk Clerk Sterling Flight Training Center

Concord, CA 94520

I interviewed Ms. Whittington at Sterling Flight Training Center on 6/10/2019.

Ms. Whittington works at the customer service desk and is responsible for providing aircraft keys and a portable box containing aircraft information to students and renter pilots. She described the procedure where the renter fills out a "Dispatch Sheet" that contains aircraft number, pilot name, departure and arrival times. The sheet contains maintenance status of the airplane and user status concerning the pilot. The pilot/renter signs the Dispatch Sheet and presents it to the clerk. The clerk verifies the pilot is authorized to fly the aircraft and hands out the keys/aircraft box.

On Sunday 6/9/2019, Pilot Colin Um arrived at Sterling between 1630 and 1700PDT and Ms. Whittington observed him enter the pilot/student briefing room. Thereafter, he appeared at the front desk and presented her with the Dispatch Sheet. She verified his authorization to fly the aircraft and handed him the keys/box. She was familiar with Mr. Um and described him as "quiet". She recalled greeting him and did not notice anything unusual in his demeanor or conduct. She did notice that he did not verify the aircraft start time (compare numbers on dispatch sheet with numbers in aircraft box) and she considered that unusual because it is the common check for students/renters to ensure proper billing. Mr. Um proceeded out to the aircraft and she did not have further contact with him.

Sterling Flight Training Center utilizes Flight Circle, a computer based scheduling system, and Mr. Um scheduled N7943C from 1700-1900 on 6/9/2019. The system does not contain flight plan data and does not include passenger information. Ms. Whittington was unaware of Mr. Um's destination or flight plan and did not observe any passengers. She did not observe his preflight or any other

actions, once he left the front desk area. It was her understanding the aircraft had been flown previously that day and would be fueled and ready for flight.

David Caligiuri Renter Pilot

I interviewed Mr. Caligiuri at Sterling Flight Training Center on 6/10/2019.

Mr. Caligiuri rented N7943C on the afternoon of 6/9/2019 from 1300-1500PDT for a local flight with a family member. He stated he flew the aircraft for approximately 2 hours at an altitude of 2000' MSL or below. He made several touch and go landings for practice during his flight. He reported that the aircraft operated normally during this flight and recalled no anomalies or discrepancies.

Ralph Neumeister CFI Sterling Flight Training Center

I interviewed Mr. Neumeister at Sterling Flight Center on 6/10/2019.

Mr. Neumeister flew N7943C on the morning of 6/9/2019 with a student on a training flight lasting approximately 1.5 hours and observed no anomalies or discrepancies in its operation.

Mr. Neumeister reported training flights with Mr. Um during his recent private pilot training at Sterling and found him to be a quiet and conscientious student. He could recall no instances where he had doubts or concerns with his ability and judgement.

Mr. Joseph D. Chagas CFI Sterling Flight Training Center

Mr. Chagas is a highly experienced and full time CFI who was Mr. Um's primary instructor and I interviewed him on 6/10/2019.

Mr. Um started flight training at Sterling (Part 61) in June of 2018 and completed his private pilot practical test on 5/31/2019, 9 days prior to the accident. Mr. Um was a 22-year old college student enrolled at University of California Berkeley in a mechanical engineering program. He indicated interest in pursuing further

flight training, and recently discussed ways to build flight hours in preparation for an instrument rating.

Mr. Chagas assessed Mr. Um as a quiet and careful person who progressed through pilot training with competence. He stated Mr. Um had slow progress during the 2018/2019 winter due to weather but resumed in the spring and finished without difficulty. He mentioned that Mr. Um excelled in flight by reference to instruments and recovery from unusual attitudes. He was unaware of Mr. Um having personal problems, use of any medications, any illness, or poor morale/frustrations. Mr. Um reportedly wore corrective lenses during flight and had challenges with crosswind landings but overcame these without excessive difficulty.

Mr. Chagas related that the location of the accident was directly beneath the practice area the school uses in training students. He stated that typical altitudes during training are from 2500' to 3500' MSL. He did not recall ever climbing to 5,000' with Mr. Um.

Mr. Um's last record of flight time approx. 85 hours, with 30 in last 90 days, all in PA-28-151. No WINGS participation or known Safety Seminars

Mr. Chagas had no prior knowledge of the accident flight or Mr. Um's plan. He had no specific discussion concerning Mr. Um's flying after private pilot training other than to suggest cross-country flights in preparation for the instrument rating.

In summary, Mr. Chagas found Mr. Um to be an above average student who demonstrated care in his flying. He stated it was his understanding that Mr. Um's family was financing his flight training and were aware of this activity. He had no concerns regarding Mr. Um's safety prior to the accident and was shocked and saddened by the event.

Jeffery Heitzeberg

<u>Designated Pilot Examiner</u>

I interviewed DPE Heitzeberg by telephone on 6/12/2019

Mr. Heitzeberg conducted a private pilot practical test with Mr. Um on 5/31/2019 at Concord, CA in the accident aircraft. He reported Mr. Um passed the test without problems. The oral portion was a little weak but satisfactory. The flight portion was above average and Mr. Um exhibited satisfactory performance in all maneuvers. Mr. Heitzeberg recalled conducting several stall series and 2 engine

failures which the applicant performed well. He also performed well on in flight scenarios including un-planned diversion to an alternate airport.

In summary, the DPE reported no concerns regarding Mr. Um in his ability to fly or for any other reason.

Bill Hannan Air Traffic Manager Concord Tower

I interviewed Bill Hannan ATM KCCR by telephone on 6/10/2019. He stated that N7943C was handled by CCR tower on the afternoon of 6/9/2019 without incident or problem. The aircraft departed Runway 1R and requested a straight out departure. There were no further communications with ATC. After takeoff, radar data shows the aircraft climb to an altitude of 5300'MSL in a space of 9 to 11 nautical miles.

Preliminary (uncertified) NCT Radar Data:

- 5300' 70 Knots GS
- 5100' 120 Knots GS
- 5000' 100 Knots GS
- 4500' 150 Knots GSD
- 4100' 170 Knots GS

(Note: Floor of NCT coverage is reported at 4100' in vicinity of accident. A formal request for AT Data was filed with ATO WSA on 6/10/2019)

KCCR Weather Observation at time of departure:

Wind 020/8 10 Miles Vis Clear Sky Temp 34C/93.5F Altimeter 2996

Mr. Mike Bruno Owner Sterling Flight Training Center

I interviewed Mr. Bruno at Oakland FSDO on 6/12/2019.

Mr. Bruno reported his follow up actions on the evening of 6/9/2019 when he learned N7943C was involved in the accident. He stated he had never experienced a serious accident involving his flight school and recounted difficulties in contacting emergency numbers provided by the pilot. The pilot did

not provide a family member contact to the school. Mr. Bruno met the pilot's father the day after the accident and learned that the pilot never informed his family of his flight training, nor did he advise of earning his private pilot certificate. Mr. Bruno was unaware of who funded the year long flight training.

In summary, Mr Bruno advised that on the evening of 6/9/2019, Mr. Um's father received a telephone call from the Contra Costa County Sheriff advising his son was the pilot in an aircraft accident and was deceased. This was reportedly the first time the father had any awareness of his son's flying.

Accident Witness Interviews

Mrs. Kathryn Rege Mr. David Rege Clayton, CA 94517

Mr. and Mrs. Rege were eyewitnesses to the accident and I interviewed them in person at their place of business in Walnut Creek, CA on 6/11/2019. I interviewed Mrs. Rege first, followed by an interview where both were present and participated.

Mr. and Mrs. Rege were fishing in their boat on the afternoon on 6/9/2019 at approximately 1730PDT. They were located in the Broad Slough of the San Joaquin River near Antioch, CA. Their boat was anchored adjacent to Winter Island headed in a southerly direction towards Antioch. Mrs. Rege was in the front part of the boat and Mr. Rege was in the stern attaching bait to his fishing line. They both described relatively quiet conditions on the surface with approximately 5 other vessels and at least one jet ski nearby. They described the surface as glassy and air temperature was quite hot with no wind.

Mr. Rege heard the noise of an airplane engine. He described this as "strained" and "variable in volume" as in an aircraft performing maneuvers. He is not a pilot or involved in aviation, but he has experience observing crop dusters. The noise prompted him to look up at which time he observed an airplane overhead. In his words, this airplane was "performing tricks". He described it as more than one erratic maneuver where the aircraft appeared to be engaging in stunts near the surface. He then observed it descend towards the surface over Broad Slough approximately ¼ mile south of his position and pull up abruptly. He reported it then climbed erratically followed by a final descent where it impacted the water with a loud noise and a noticeable splash. He described the impact location as the

Broad Slough between Winter Island and Kimball Island (approximately ¼ mile from his vantage point)

Prior to the impact, Mr. Rege called out to his wife "Look at that, he is doing tricks". Mrs. Rege thought he might be referring to a jet ski, but realized he was pointing out an airplane in flight. She was able to spot the aircraft just prior to the impact and observed the accident. She did not observe the erratic flying described by her husband. She reported first seeing the aircraft appear to be in a descent and described what she believed to be a vapor trail "surrounding it". Almost immediately, she saw it impact the surface and make a very large noise.

In my interview, I used a small model airplane and asked Mr. and Mrs. Rege to show me the path and attitude they observed by way of the model. I questioned them independently to avoid one or the other "suggesting" an observation. Both described the impact as "nose down" and "wing low" and "high velocity". Mrs. Rege thought she observed the left wing low but was unsure. Mr. Rege could not recall which wing was low. Neither could describe a direction of flight nor estimate an altitude when they first observed the aircraft.

Mr. Rege estimated that 30 seconds transpired between his first becoming aware of the aircraft and the impact. His wife confirmed that a period of time transpired between him calling out to her and her observation of the impact.

After observing the impact, both witnesses experienced shock and disbelief in what they saw. They contacted 911 almost immediately and learned other calls had also come in. Both noted that several other boats remained stationary for a few minutes followed by several proceeding to what they described as a debris field.

They also both observed a single jet ski and a small white and black boat make an immediate departure from the area following the accident. They both expressed surprise/concern by this action because there was no delay in their leaving the area and they disappeared rapidly down a canal. This observation caused them to wonder if the 2 watercraft might have some connection with the accident aircraft.

## Witness Statement Analysis:

Mr. Rege experienced a traumatic aviation event that happened quickly. His recollections were very convincing but may not be fully reliable because he may have misunderstood the images he was processing. His description of the aircraft climbing out in a near vertical attitude following its first observed pass over the slough does not sound like a feasible maneuver for a PA-28. He believed he saw it rotating on its longitudinal axis followed by a dive under control leading to the accident, which seems unlikely.

Mrs. Rege's observations do confirm a timeframe of up to 30 seconds where her husband had visual contact with the accident airplane and lends credibility to the possibility that the aircraft was being operated in a deliberate manner and not involved in an uncontrolled dive.

In summary, more information is necessary to verify the witness reports. We are obtaining detailed military radar data from Travis AFB which may have a record os the accident aircraft at a lower altitude than 4100'. We have been unsuccessful in contacting another eyewitness (Mrs. Sharon Holder 925 783 6340) but will try and identify other witnesses as the investigation continues.

## FAA Safety Team Involvement

FAASTeam personnel assisted the FSDO assigned IIC in this investigation by providing operational interviews and collection of data. This accident appears to involve an area of risk faced by both Flight Training providers and newly certificated pilots. During training, a student is under supervision of a CFI. After certification, the pilot is on his/her own and may undertake risky flights or attempt risky maneuvers without the assistance of the instructor. There may be a reluctance of a CFI or school to interfere or meddle with a new pilot's decisions and there is also a need for the new flyer to gain experience and reinforce/consolidate new skills.

This pilot may have benefited from continued involvement by a CFI in planning and choosing personal flights. The Oakland FAASTeam plans to raise this concept with local CFIs and schools in future aviation safety discussions.

Another issue involves knowledge of proposed flights by schools and aircraft rental companies. In this case, the school was aware the pilot blocked out 2 hours of aircraft time between 1700-1900 but was unaware of any destinations or flight planning. The school did not know if passengers were carried which all added to the stress and confusion associated with response to a missing aircraft or accident. An emergency response plan is a basic safety attribute that is valuable for any aviation organization and the Oakland FAASTeam intends to promote this concept during safety outreach with Flight Training providers and aircraft renters.

Fabian,

The Contra Costa Sheriff deputy who supervised the recovery of the accident aircraft (Sean/will get his last name tomorrow) reported two more eye witnesses who observed the aircraft performing what appeared to be stunts prior to impact. He is sending me their contact information tomorrow. He specifically asked them to describe what they saw and they both report seeing the aircraft climb and perform what appeared to be a loop. Both witnesses were certain they did not observe one vertical descent to the surface. These witnesses were Vietnamese and one required an interpreter.

He also reported sending Berkeley PD to the pilot's apartment for investigation. Two roommates were identified who stated they did not know Mr. Um very well and had no knowledge of his flights or activities on the day of the accident.

The deputy also has some wreckage that appears to have human remains imbedded. I provided your email and asked him to contact you for instructions.

Our Front Line Manager Greg Daggett has obtained radar data from USAF Travis. I will review and forward to you tomorrow.

**Best Regards** 

Harlow

Harlow Voorhees Aviation Safety SLT Lead FAA Safety Team (FAASTeam) AFS-850 General Aviation and Commercial Division

The SLT values your input. Please submit at: feedback link.