



RECORD OF CONVERSATION

**All persons listed were interviewed by Michael Hicks, Air Safety Investigator
Western Pacific Region**

The following is a summary of conversation:

JESSE ALEXANDER McNEIL (16SEP2020@1742PDT)

The pilot reported that 24AUG2020 he had departed from Lake McConaughy, NE, in his recently purchased Lake LA-4 amphibious airplane, with a destination of Litchfield, IL to pick up a friend, Corey Hale. The pilot and passenger departed K3LF Litchfield, IL and flew to OGA in Ogallala, NE to pick up a second friend Stephan Primke. 24AUG2020@1000 mdt, the occupants of the airplane departed OGA for RWL. 25AUG2020@0700 mdt, the three occupants departed RWL for 1U7.

During the flight from OGA to RWL, the pilot stated that he had experienced a mechanical malfunction of the airplane's trim system. About one hour into the flight, the pilot described that the trim selector switch located between the left and right front seats (down to the right), would not hold the pilot's desired trim setting, and would automatically reset the trim switch and trim system, to a nose down default trim position. The hydraulic pressure gauge remained in the green around 1,200 psi. About 100 mph at cruise power, he was able to reset the trim, but every 5-8 seconds, he felt the nose down attitude, and he felt the "pull" on the control wheel.

The pilot explained that after he moved the trim switch back to his desired trim setting, the trim selector switch continued to reset the airplane's trim to a nose down attitude. He recalled that the switch would reset every 5-8 seconds, and he had directed the right front seat passenger to reset the switch, each time the trim switch would default to the full down position. The passengers switched places with each other to share the responsibility of manipulating the trim switch, by rotating from the right front to rear seat. The pilot noted that each time that the trim switch failed to hold the pilot's desired trim setting, the airplane would descend.

During landing at RWL, he noticed that the long runway 04 was under construction and landed on runway 29. During landing, he felt like the airplane's altitude was higher than expected. With engine power in the idle position, the airplane landed hard in a flat three-point landing profile. The pilot taxied to parking and located maintenance personal, shut down the airplane systems and began to troubleshoot the issue. The pilot called a mechanic by the name of Ray and the pilot was told to remove the inspection panel because there is a silver part (trim actuator) that disperses the hydraulic fluid to the trim surfaces.

The pilot captured via cell phone footage, the trim position failure and sent the video to Ray. The pilot performed the task as instructed but saw nothing loose or leaking. The pilot asked one of the passengers to push down on the trim actuator, while the pilot checked for hydraulic fluid leakage and the security of trim actuator, which revealed no anomalies? Ray recommended replacing the O-rings in the trim actuator. The pilot was not able to correct the intermittent malfunction and elected to refuel the airplane. The pilot asked his passenger (Mr. Hale) to assist in refueling the airplane, and about 1830 mdt, they buttoned up the airplane with the intent of departing in the morning.

The pilot and passengers drove to a local hotel, had dinner, and bedded down in separate rooms about 2100 mdt. The pilot elected to continue with the plan to depart in the morning and make the same adjustments to the trim system as they had on the flight to RWL by adjusting the intermittent trim position handle, as he didn't feel that the conditions would prevent taking off in the morning. The pilot's intent was to fly from RWL to 1U7 (Bear Lake County Airport- Paris, ID) a distance of 187nm.

About 0600 mdt the pilot and two passengers, made their way from the hotel to the airport. 0630mdt, the passengers unbuckled the long seat belt used for the rear seat, and put their bags in the tunnel, located behind the rear seat. The pilot performed the airplane's preflight inspection and boarded the airplane with Mr. Hale seated in the rear seat and Mr. Primke seated in the right front.

About 0700 mdt, the doors closed, and the pilot recalled that a left quartering crosswind existed at the time, and he elected to depart from runway 29. His intent was to takeoff and establish a climb, retract the landing gear about 100 ft AGL, turn left upwind, turn left downwind, and then turn left again to accomplish a mid-field crossing and exit the airspace to the WNW. He performed an engine run-up with no anomalies. ENG RPM -1,800; magneto drop check, propeller check, and suction gauge check. The flaps extended and retracted as advertised, and the hydraulic pressure gauge indicated normal range 700-1,250psi. The Low hydraulic pressure sensor in this airplane kicks on at different PSI (700, 800, etc.) and this hydraulic system PSI gauge was internal as opposed to external like some other Lake airplanes.

When the run-up was complete, he checked on both passengers and taxied to runway 29. During the takeoff roll, his right hand was on the throttle located above his head, and his left hand was on the control wheel. With the flaps down, he applied full power and initiated the takeoff roll. After consuming about $\frac{3}{4}$ of the runway length, the airplane ascended, but no one was monitoring the trim switch. The airplane would not climb, and he pulled back on the control wheel to compensate for the nose down attitude. The last time that he manipulated the trim position handle, was before the takeoff roll. The next thing that he recalled was the helicopter ride.

A friend of the pilot heard about the accident and he and his wife drove to the accident site. There were construction workers on sight, and they saw that the landing gear was retracted, and it became apparent to them that he could not climb. It appeared to the couple, that the pilot was trying to turn back to the airport and the airplane struck a large pile of asphalt and rubbish located in the open area between runway 29 and runway 04.

The pilot recalled that after onboarding the first passenger at 3LF (F.E. 690.5 ft), they took on 35 gallons of 100LL, and that the takeoff was sluggish. After arriving at OGA (F.E. 3,279.3 ft) to onboard the second passenger, they took on 30 gallons of 100LL, and the takeoff was again sluggish. He recalled that he took on 12 gallons of 100LL at RWL for a total of 22 gallons.

MGW is 2,600 lbs.

FL (PILOT)= 160

FR (PAX)= 170

R (PAX)= 192

BACKPACKS AND CARGO= All heavy stuff went in the cargo tunnel.

25 lbs. per backpack =75

20 lbs. (oil, etc.)

20 lb. ballast that he used single pilot (he'd put it up front)

20 lbs. of (sleeping bags and accessories)

20 lbs. of misc. items

200 lbs. max tunnel cargo weight per POH