

# ***The Gray Hair Department***

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The new gray hairs, recently acquired are the result of the fatal accidents summarized in the following report. One of the accidents aroused considerable controversy at the time of occurrence so it is, for this reason, that more of the details have been noted than usual.

1. Robert Greenbaum and a passenger, Craig Protsman, took off in a rented L-K, registration N22U, at 1440 PST on February 26, 1961, from Skylark Field, Elsinore, California. The L-K was towed by an Aeronca Champion 7DC to an altitude of approximately 2000 feet above the field where the pilot released in moderately strong lift under a large cumulus cloud. Approximately 20 minutes after take-off, the sailplane was observed and heard descending at a high rate of speed in a vertical dive with the right wing missing. The passenger in the rear seat could be seen attempting an egress from the aircraft. He succeeded too low for the parachute to become effective. The left wing of the sailplane struck the field hanger prior to hitting the ground. The right wing of the L-K reached the ground some moments later. Both pilot and passenger were killed.

**Discussion:** The sailplane, at the time of accident, was being used commercially, as a rental ship, available to qualified pilots. It was certificated and licensed with 487.52 hours flight time accumulated since manufacture in 1943. TG-4A Bulletin No. 1 had been accomplished as well as other modifications to improve the performance. Seat belts and shoulder harness were installed. The gross weight at the time of the accident was below the maximum but it is not known whether the CG was within the required limits.

The pilot, Robert Greenbaum, held a temporary private pilot certificate with a glider rating. His total aeronautical experience was 124 glider flights with an accumulated time of 46.41 hours. He had 3 hours dual in the L-K and 4 hours solo. His total dual time was 12.36 hours. The

medical history of the pilot is unknown.

Weather at the time of accident was mostly clear, visibility 20 miles, temperature 65 degrees F, and the wind 8-12 mph and gusty from the WNW. There was a large cumulus buildup directly over the field.

The primary failure of the right wing main spar occurred approximately 24 inches from the wing root or halfway out to the juncture of the main spar and the drag spar. The failure started further outboard at the main spar in the plan view. The leading edge, or D tube structure, appeared to have failed due to a combination of bending and torsion loading. Bending tests were made on 5 wood samples taken from the spar caps of the failed wing in the region of the failure. The tests revealed that the material in the failure area equalled or exceeded the original design limits. In addition, there was no visible evidence that the plywood had deteriorated in either the wood veneers or the glue joints.

**Conclusion:** The structure of the sailplane was airworthy and sound. An application of loads in excess of the design limit load caused a complete failure and separation of the right wing from the fuselage of L-K N22U while in flight. This, in turn, resulted in complete loss of control. The reason for the excessive loading is not known.

2. Opal Walthew, a student pilot, took off from the Enumclaw, Washington Airport in a club-owned 1-26, N3889A, on January 2, 1961, for a local familiarization flight. The tow was good and the pilot made a normal release at 2000 feet above the ground about one mile SW of the field. She flew about at random and practiced a mild stall followed by a normal recovery. When she had descended to an altitude of about 1000 feet above the ground, while on a course toward the airport and ½ mile south, she entered another practice stall.

The sailplane entered a nose down attitude for recovery, but, instead of

a recovery, the dive steepened until the attitude was almost vertical. As the ship neared the ground, it was seen to round out somewhat before disappearing behind a low line of trees. The noise indicated a very high rate of speed.

Contact with the ground was made at an angle of about 15 degrees from the horizontal at a speed later estimated to be 150 mph. The pilot was catapulted 280 feet from the point of contact and killed on impact with the ground. Destruction of the sailplane was almost total.

The pilot's previous flight experience had been in a TG-3A and a 2-22 for a total of approximately 20 hours. The fatal accident occurred during her second flight in the 1-26. The first flight, earlier in the same day, had almost ended in disaster when the towrope had not been released before turning away from the towplane. See Case No. 1, "Gray Hair" column, November, 1961, *Soaring*. The pilot had no known physical deficiencies.

The sailplane, at the time of the accident, was airworthy. It had been flown immediately prior to the fatal flight by another pilot who reported no difficulties or unusual characteristics. The weather was clear and calm with excellent visibility.

**Conclusion:** The cause of the accident is unknown. All possible reasons for the pilot's actions were thoroughly explored.

The only theory not discounted by evidence, or the lack of it, is that the experience of the pilot's previous flight rendered her temporarily incapable of exercising judgment at a critical time.

The delayed reaction or shock from a frightening experience takes many forms and may occur at various time intervals after the experience. From this we are able to draw a lesson. If a student pilot has been shaken or disturbed during a flight, particularly when solo, do not allow the student to fly solo again until confidence has been re-established by more dual flight time. USAF statistics strongly indicate that a repeat of a disturbing situation before completely regaining confidence will, more than 70% of the time, result in another accident.

The classical situation where a pilot crawls out of the wreckage and immediately flies solo again, "to prove he's not scared," is no longer tenable.