

National Transportation Safety Board

Office of Aviation Safety

Washington, DC 20594



WPR24FA227

ACCIDENT SITE EXAMINATION

July 8, 2024

TABLE OF CONTENTS

A. ACCIDENT.....	3
B. ACCIDENT SITE EXAMINATION	3
C. SUMMARY	3
D. DETAILS OF THE EXAMINATION.....	3
1.0 ACCIDENT SITE	3
2.0 AIRFRAME EXAMINATION.....	5
3.0 ENGINE EXAMINATION	8
4.0 PROPELLER EXAMINATION	8
5.0 METEOROLOGICAL INFORMATION	9
6.0 ADDITIONAL INFORMATION.....	9
7.0 ITEMS RETAINED.....	10

A. ACCIDENT

Location: Eureka, UT
Date: July 7, 2024
Time: 18:00 MDT Local
01:00 UTC
Airplane: FANTASY AIR SRO ALLEGRO 2007

B. ACCIDENT SITE EXAMINATION

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C. SUMMARY

On July 7, 2024, about 1800 mountain daylight time, a Light Sport Aircraft (LSA) FANTASY AIR SRO ALLEGRO 2007, N969RC, was destroyed when it was involved in an accident near Eureka, Utah. The pilot was fatally injured. The airplane was operated as a Title 14 *Code of Federal Regulations* Part 91 personal flight.

D. DETAILS OF THE EXAMINATION

1.0 Accident Site

GPS Location: 40.04965 / -112.07123
Elevation: 5253 ft mean sea level (MSL)

The accident site was located in dry soil terrain. Ground scars were present and consistent with initial contact by the right wing. The distribution and condition of the wreckage were consistent with a descending, left-turning impact sequence.

The airplane came to rest up right in an open prairie about 1,200 ft west of Holmansville Pass Road. The wreckage was oriented on magnetic heading of about 090°. The nose of the airplane was fracture separated, displaced about 90° to the right and the left and right wings remained attached to the fuselage at the wing root. The cockpit exhibited torsional twisting to the right.



Figure 1: Accident site (Courtesy of Utah Co Sheriff)

The first identified point of contact (FIPC) with terrain was a ground scar/impression about 1.5 ft in diameter and 6 inches deep collocated with the nose of the main wreckage. The debris field was located on a flat open field, radiating about 40 ft from the center of the FIPC. All parts of the airplane were accounted for near the accident site including an airplane control locking device, gust lock found 22 feet, 230° from the impact site.



Figure 2: View of gust lock location on site (Courtesy of Utah Co Sheriff)

2.0 Airframe Examination

TACH: 1059.1 3/29/24 Annual (plus 21.5 from pilots' logbook)

The forward fuselage was mostly destroyed. The cockpit was compressed and displaced to the right from the airplanes centerline due to impact damage. The wing carry-through structure was compressed, flattened, and twisted downward. The instrument panel was impact damaged with multiple instruments displaced.

Examination of the wings revealed that both were constructed of aluminum. The right wing exhibited leading-edge accordion-type compression extending from the wingtip to the wing root. Light ground disturbance beneath the right

wing was noted, consistent with relatively limited soil penetration due to the dry surface conditions.

The left-wing outer section exhibited skin twisting deformation of the upper and lower wing skins consistent with torsional loading. The outboard portion of the left wing, from approximately mid-span, was bent upward about 6 inches.



Figure 3: View of right side of airplane wreckage.

The upper wing carry-through cage remained largely aligned with the wings in the as-found position. During recovery, the left wing was removed to facilitate occupant extraction and was relocated approximately 20 feet from the main wreckage.

Flight control continuity was established from the cockpit controls to their respective flight control surfaces. The left aileron control rod and associated attachments were continuous from the cockpit to approximately the mid-wing area and continued to the left aileron. The left aileron control arm was separated at the wing root. All separations in the flight control push rods were consistent with overload or separations during recovery operations. The left aileron remained attached at the inboard hinge only.

Both flaps were observed in the retracted (up) position. The flaps were separated at their attachment points; these separations were consistent with recovery operations and impact damage. Both ailerons and flaps remained associated with their respective wings.



Figure 4: Front view left wing separated from fuselage.

The rudder remained attached to its respective attachment point on the vertical stabilizer. The right rudder cable was continuous from the rudder to the rudder pedals. The left rudder cable was continuous from the rudder to a point consistent with a cut made by recovery personnel and was traced to the rudder pedals.

Both elevators remained attached to the horizontal stabilizer via its respective attached points. The vertical and horizontal stabilizers exhibited no significant damage. The elevator trim tab was attached to the left elevator and was observed in a downward-deflected position.

Left landing gear remained attached to the fuselage and was mostly undamaged. The right landing gear was folded and sheared off under the wreckage consistent with impact damage.

The overall wreckage and deformation patterns were consistent with a left-turning, descending impact in which the right wing contacted the terrain first, followed by progressive structural failure aft of the passenger seating of the fuselage due to impact forces.



Figure 5: Forward view of wreckage.

3.0 Engine Examination

Engine Manufacturer: ROTAX
Engine Model Number: 912UL
Engine Serial Number: 4408478

The engine remained attached to the engine mount attached points. The engine cowling was separated. The engine and forward portion of the fuselage was impact damaged and displaced to the right. The engine mount had several fractures, consistent with impact damage. All four cylinders remained attached and exhibited impact damage. The intake and exhaust remained attached and exhibited impact damage. Oil filter, ignition system, mechanical fuel pump, were displaced from the engine. The fuel system containment tank was shattered and not distinguishable. Fuel tank attachment hoses were hanging loose with their fittings, but the fuel tank attachment points were unrecognizable. The airframe fuel strainer (gascolator) was not observed with the wreckage.

4.0 Propeller Examination

The airplane was equipped with a three-blade WhirlWind GA-RW3B-68 propeller. All three propeller blades were found near the FIPC. The propeller hub remained attached to the engine. Two of the three blades had separated from the propeller hub, consistent with impact damage. One of the two fractured blades exhibited chordwise striations from the hub spanning $\frac{1}{2}$ way up the blade to the fracture point.

5.0 Meteorological Information

KPVU 072356Z 34013KT 10SM CLR 31/M03 A3007

The crash area was in bowl like terrain surrounded by hills, very dry and flat agricultural area with a solar farm to the north. The day after the crash my survey of the site was interrupted by no fewer than 30 dust devils over a 3-hour period with gusts such that I had to stabilize my footing on 7/8/2024. Property caretaker of the area said winds often spring up to more than 60 mph.

6.0 Additional Information

According to local law enforcement, the smell of fuel was noted, but no liquid fuel was observed.

Additionally, a co-owner of the airplane mentioned that finding the gust lock in the locked position would be unusual. Typically, you remove the lock by unlocking the latch then stowing it. You would not re-lock the latch prior to storing it. Videos online demonstrated that the device was found unlocked.



Figure 6: View of AIRGIZMOS Gust lock

7.0 Items Retained

Dynon SV-D1000 (S/N: 9372) memory module was retained for further examination.

Submitted by:

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