



NATIONAL TRANSPORTATION SAFETY BOARD

Office of Aviation Safety
Western Pacific Region

May 27, 2017

ON SCENE EXAMINATION

WPR17FA107

This document contains 8 embedded photos.

A. ACCIDENT

Location: Ephrata, WA
Date: May 26, 2017
Aircraft: Schleicher ASW 28-18E, Registration #63KR, Serial #28721
NTSB IIC: Samantha Link

B. EXAMINATION PARTICIPANTS:

Samantha Link
Aviation Accident Investigator
National Transportation Safety Board
505 South 336th Street, Suite 540
Federal Way, WA 98003

William Crittenden
Principal Operations Inspector
Federal Aviation Administration
6133 E Rutter Avenue
Spokane, WA 99212

C. SUMMARY

On scene examination of the airframe and engine was conducted on May 27, 2017 in a freshly plowed field about eight miles west of Ephrata, Washington. No anomalies were noted during the examination.

D. DETAILS OF THE INVESTIGATION

1.0 Airframe Examination

- The Initial point of contact was a small crater with shattered plexiglass around it. In addition, a narrow, straight trench was extending from the small crater consistent with nose and right wing impact.
- There was no disturbed dirt on the left side of the fuselage, nor anywhere else in the freshly plowed field.
- The airplane came to rest upright and was positioned in the same general direction as, and about 15 feet away from, these initial impact marks.
 - Just aft of the cabin, there was dirt splattered at a 45-degree angle along the top of the glider and the inboard left wing. The dirt was obviously damp, but with an unknown substance.

- There were two water bottles located within the cabin area. One was filled with a light pink liquid, and one bottle was empty and crushed. Otherwise there was no evidence of other liquid items in the cabin area.
- The cabin area was heavily damaged. The nose cone was intact, but the forward fuselage was crushed aft, and the cabin side walls were crushed outward.
- The right wing was still secured to the fuselage and mostly intact
 - There was a dirt coding along the outboard leading edge of the right wing
 - The inboard trailing edge sustained delamination
- The left wing was slid forward at its attachment point to the fuselage; otherwise it was mostly intact and exhibited limited visual damage.
- Both the left- and right-wing winglets departed the airframe and were present in the vicinity of the wreckage.
- The aft fuselage, just before the empennage, was almost completely severed. The empennage was folded sideways next to the forward portion of the aft fuselage, with the rudder and elevator closest to the front of the glider.
 - Where the aft fuselage folded, there was a small mound of dirt. In addition, there was dirt located within the fuselage.
- The vertical stabilizer and rudder were intact, secured, and exhibited limited visible damage.
 - The rudder was manipulated and the rudder pedals within the cockpit moved
- The right horizontal stabilizer/elevator were fractured slightly inboard of center
- The left horizontal stabilizer/elevator was mostly undamaged
- The elevator surface was moved, and control continuity was established to a break in the aft fuselage.
 - Control continuity was then established from the control stick to same break
 - The fractured surface was consistent with overload
- The landing Gear handle in the cockpit was in the down and locked position
 - Landing gear handle is a manual lever that is moved between two indents. The forward indent is extended, and the aft indent is retracted.
 - When we unlocked the landing gear handle, the push/pull tubes were seized and could not be moved.
- The fuel shutoff valve was found in between the open and closed positions
 - When manipulated by hand, it moved freely with no resistance
- The engine deploy lever was found in the stowed position
 - When manipulated by hand, it moved freely with no resistance
- The control stick was still secured in place, however, the push/pull tubes beneath the stick were bent and bound.
- The cabin controls for the airbrakes and ailerons were bound and could not be manipulated by hand
 - As the wings were loosened for removal, pressure was relieved and control continuity was established from the control stick to both the aileron surfaces, and from the airbrake control to the airbrakes
- During the recovery process about a small amount of fuel was removed from the glider.

1.1 Airframe Photos



Figure 1: The First Identified Point of Impact in Relation to Glider



Figure 2: Glider with Surrounding Terrain



Figure 3: Right Wing

Intentionally left blank. Please proceed to next page.



Figure 4: Cabin Area

Intentionally left blank. Please proceed to next page.



Figure 5: Aft Cabin and Left Wing Root

Intentionally left blank. Please proceed to next page.



Figure 6: Empennage

2.0 Engine Examination

- The engine was found in the retracted, secured, and locked position
 - Engine compartment was extremely clean and pristine
 - The hinges that extend the engine sustained no visible damage
 - The forward engine stop was undamaged
 - There was a line of dirt along the propeller consistent with the seam of the engine compartment doors when they are closed
- The propeller was moved from side to side and it moved freely with no binding or grinding noted

2.1 Engine Photos



Figure 7: Engine Compartment

Intentionally left blank. Please proceed to next page.



Figure 8: Engine Hinge and Forward Stop

END.

Submitted by: Samantha Link