



MEMORANDUM for RECORD

Ralph E. Hicks
Senior Air Safety Investigator
Eastern Region Aviation

Date: October 8, 2019
Wreckage Examination
NTSB Accident Number: ERA19LA286 – Dalton, Georgia

HISTORY OF FLIGHT

On September 28, 2019, at 1909 eastern daylight time, an unregistered amateur-built experimental light-sport Solo Wings Windlass weight-shift control aircraft was substantially damaged when it collided with terrain shortly after takeoff from Pratermill Flight Park (GA72), Dalton, Georgia. The airline transport pilot was fatally injured. The aircraft was privately owned and operated under the provisions of Title 14 Code of Federal Regulations Part 91 as a personal flight. Visual meteorological conditions prevailed, and no flight plan was filed for the local flight.

WRECKAGE EXAMINATION

General:

The wreckage was examined on October 8, 2019 by an NTSB Senior Air Safety Investigator and the FAA Coordinator at the owner's facility at Pratermill Flight Park. The airframe was partially disassembled and outside, adjacent to a small hangar and workshop. The engine and propeller were inside the hangar on a workbench. The owner removed the engine from the airframe during the recovery of the wreckage.

The wing and tubular frame were examined. The wing material was free of cuts or holes and remained attached to the frame. The flight control wires and cables were in place; however, some ends were cut or disconnected during recovery. The pilot's seat was missing. The throttle assembly was still attached and the throttle cable was cut during recovery. The hour meter (Tiny-Tach) was damaged from impact and would not power up. The BRS airplane recovery parachute remained inside its container; the rocket was saftied.



Photo 1 – Weight-Shift Aircraft Wing and Frame

The composite, ground adjustable propeller blades were fractured and fragmented near the blade roots; the propeller hub remained attached to the engine. The leading edge of the blades revealed chordwise scratching and leading edge damage on the surfaces. The leading edge strip on one blade was deformed from impact. The fibers on the fractured areas near the hub were bent in the direction opposite of rotation.

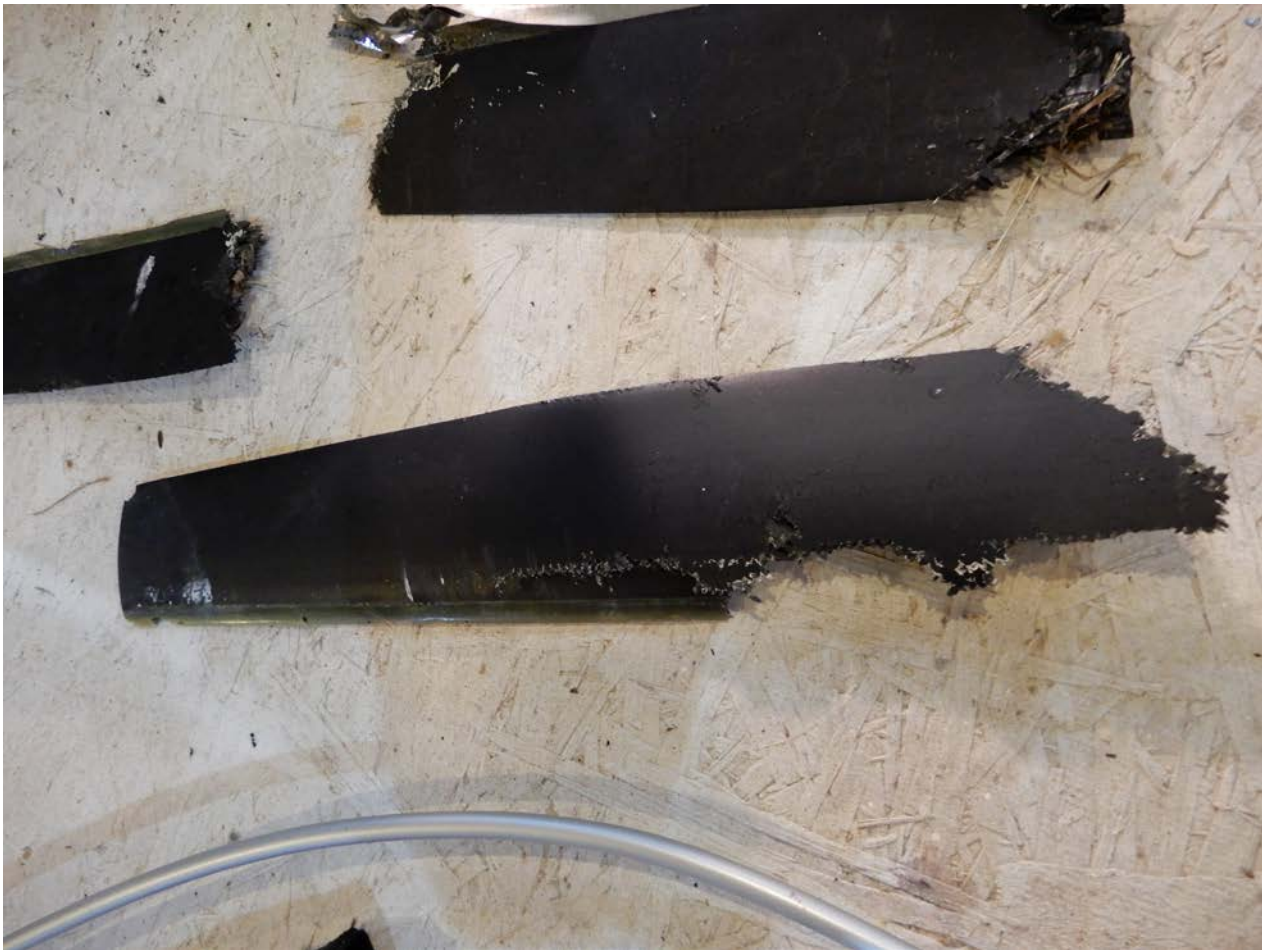


Photo 2 – Fractured Propeller Blades – Notes Chordwise Scratching

The engine case was free of cracks or holes. One of the two carburetors was missing. The owner reported that it was not found during the wreckage recovery. The recovered carburetor was separated from the engine during impact. It was normal in appearance. The fuel pump was normal in appearance. The in-line fuel filter was clean and unobstructed.

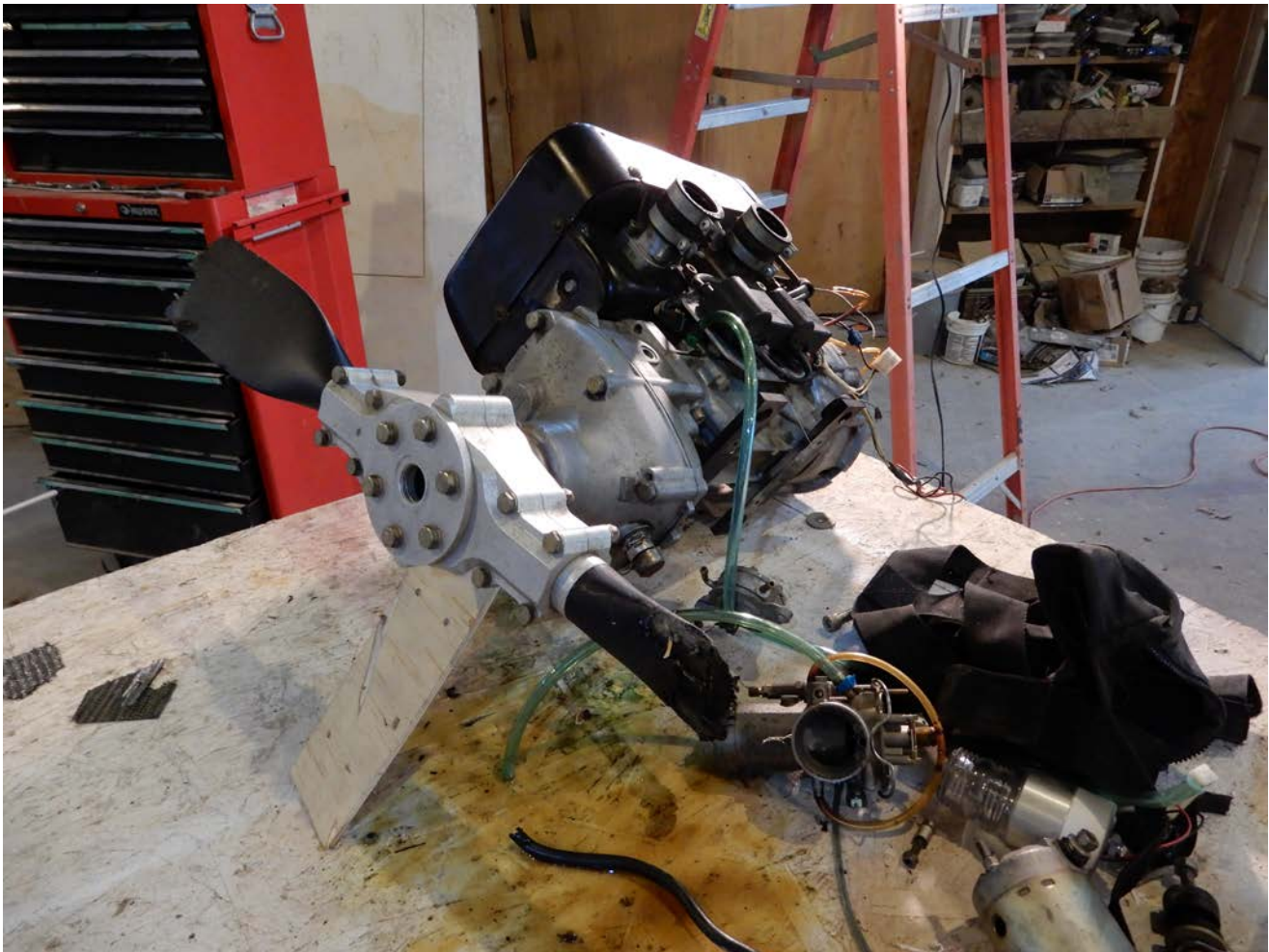


Photo 3 – Engine and Propeller Assembly

One spark plug was removed from each cylinder. The electrodes were normal in color and wear when compared to a Champion Check-A-Plug chart. The propeller was turned manually to check for internal engine continuity. The engine turned through smoothly with no binding or unusual noise. Suction and compression were observed on both cylinders.