



NATIONAL TRANSPORTATION SAFETY BOARD

Office of Aviation Safety
Western Pacific Region

AIRFRAME EXAMINATION

WPR18LA163

This document contains 13 embedded photos.

A. ACCIDENT

Location: Mountain Home, Idaho
Date: June 2, 2018.
Aircraft: Buchanan (North Wing) Pulse 10 Meter, N62073
NTSB IIC: Elliott Simpson

B. EXAMINATION PARTICIPANTS:

Elliott Simpson
Senior Aviation Accident Investigator
National Transportation Safety Board
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C. SUMMARY

Examination of the hang glider was performed on June 13, 2018. The hang glider sustained damage limited to the control frame and nose junction. The damage exhibited signatures consistent with ground impact. First response personnel indicated that they detached the harness from the apex straps via the carabiner and cut through the radio antenna line, in an effort to remove the pilot.

D. DETAILS OF THE INVESTIGATION

1.0 Airframe

The sail was intact and remained attached to both the left and right leading edge tubes, and all of ribs (Photo 1). The sail was undamaged, except for scratches and serrations at its nose, adjacent to the nose junction (Photo 2).

The left leading-edge tube was undamaged and remained attached to the nose junction joint and the crossbar (Photo 3).

A six-inch-long section of the right leading-edge tube remained attached to the nose plate, which had bent about 90 ° to the left along with the keel beam. The tube separation exhibited bending failure signatures, and the remaining outboard section was undamaged and remained attached to the crossbar (Photo 3).

Both crossbars were intact and remained attached to the keel beam. Both downtubes remained attached to the base tube, keel, and their respective rigging cables. Both downtubes were bent about

70 ° aft, midspan (Photo 4). The base tube was bent about 10 ° midspan, and both wheels remained partially attached but their hubs had shattered.

The king post remained attached to the keel (Photo 5), and except for the front lower cable, all cables were intact, undamaged, and connected at their respective fittings. The left and right front lower cables remained connected to their respective leading-edge tubes, and to each other their steel hoop. The ring had come away from the nose hook, which had bent 90 ° left with the nose plate (Photo 6).

The two harness straps appeared undamaged and remained attached to the apex junction (Photo 7).

2.0 Harness

The harness appeared to be manufactured Moyes Delta Gliders (Australia), and although no serial or model number was present, it appeared to be similar to the “Contour” design (Photo 8, 9).

The main suspension strap remained attached to the slider bar (Photo 10). The outer detangle strip of the strap exhibited fraying. The tilt rope loop was intact at the top of the harness, and continuous around the pulley and through to the adjustable tilt cleat. The inner sling frame and slider assembly appeared to have sustained pre-existing damage to the frame extension tubes, breaking them away at the junction with the rear compression spreader bar (Photo 11). The extension tubes had been repaired with aluminum angle and hose clamps. The remaining webbing members of the suspension system were intact.

The center-mounted towing loops remained attached to the main straps. The blue towing strap remained attached to the right loop, and the quick-release tube was in the locked (unreleased) position (Photo 12). The other side of the strap had been disconnected from the loop at the threaded carabiner, which was unlocked. Examination of the quick-release revealed that it could be activated normally by hand.

The main parachute had partially extracted. The BRS rocket propellant had been removed by Air Force explosive ordinance technicians and was not present.

Both the tow cord parachute, and the tow cord to parachute interconnect line were found intact and separate from the harness (Photo 13). What appeared to be remnants of the tow rope weak-link were found in the flatbed of the winch trailer.

3.0 Photographs



Photo 1 - Sail



Photo 2 – Nose (Photo taken at accident site)



Photo 3 – Nose Junction



Photo 4 – Downtubes and Wheels



Photo 5 – King Post



Photo 6 – Nose Hook and Ring



Photo 7 – Harness Straps



Photo 8 – Harness Underside



Photo 9 – Harness Topside



Photo 10 – Suspension Strap



Photo 11 – Sling Frame



Photo 12 – Tow Strap



Photo 13 – Tow Cord Parachute and Link

Submitted by: Elliott Simpson