



National Transportation Safety Board Aviation Accident Final Report

Location:	Waynesburg, PA	Accident Number:	NYC02LA004
Date & Time:	10/02/2001, 1100 EDT	Registration:	N21468
Aircraft:	Rich Woodstock I	Aircraft Damage:	Minor
Defining Event:		Injuries:	1 Serious
Flight Conducted Under:	Part 91: General Aviation - Personal		

Analysis

The student pilot/builder of the glider made five successful tow releases and landings from a paved runway, and was making his first tow release from grass. The driver towed the glider to the starting point, the student pilot got onboard, and he and another individual installed the canopy. The student pilot/builder checked the security of the canopy with a "push-up" on it, then began the glider tow. At liftoff, about 38 knots, the glider hit a clump of grass, and the canopy departed the airframe. The student pilot raised his left arm to protect his face, and thought he must have pulled back on the control stick as he avoided the canopy. The glider stalled about 10 feet in the air, then hit the ground. The student pilot/builder had difficulty latching the canopy prior to previous tows, and felt that the latching mechanism may have been twisted.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: An improperly secured canopy latch, which resulted in canopy separation during liftoff and the pilot's subsequent loss of control. A factor was the improper installation of the latch.

Findings

Occurrence #1: AIRFRAME/COMPONENT/SYSTEM FAILURE/MALFUNCTION
Phase of Operation: TAKEOFF

Findings

1. WINDOW,CANOPY - UNLATCHED
2. (F) MAINTENANCE,INSTALLATION - IMPROPER - OWNER/BUILDER
3. (C) AIRCRAFT PREFLIGHT - INADEQUATE - PILOT IN COMMAND

Occurrence #2: LOSS OF CONTROL - IN FLIGHT
Phase of Operation: TAKEOFF

Findings

4. WINDOW,CANOPY - SEPARATION

Occurrence #3: HARD LANDING
Phase of Operation: OTHER

Factual Information

On October 2, 2001, about 1100 eastern daylight time, a homebuilt Woodstock I glider, N21468, received minor damage when the canopy came off during a ground tow release at Greene County Airport (WAY), Waynesburg, Pennsylvania. The certificated student pilot was seriously injured. Visual meteorological conditions prevailed at the time of the accident, and no flight plan was on file for the local personal flight, which was conducted under 14 CFR Part 91.

According to the student pilot, who was also the builder of the glider, the accident tow release was the fifth of six that were planned for the day. The purposes of the tow releases were to check the glider before a long test flight and to accustom the student pilot to the glider's flight characteristics.

According to the driver of the tow vehicle, the student pilot/builder had made the earlier successful tow releases and landings from a paved runway, and was making his first tow release from grass. The driver towed the glider to the starting point, the student pilot boarded it, and he and another individual installed the canopy.

The student pilot/builder reported that he checked the security of the canopy with a "push-up" on it, then began the glider tow. Glider liftoff occurred about 38 knots. At liftoff, the glider hit a clump of grass, and the canopy departed the airframe. The student pilot/builder raised his left arm to protect his face, and pulled back on the control stick as he avoided the canopy. The glider stalled about 10 feet in the air and hit the ground. The student pilot/builder suffered a compression fracture of the second lumbar vertebrae.

The student pilot/builder later stated that he had had trouble latching the canopy prior to previous tows, and felt that although he pushed up on it to check it, the latching mechanism was probably twisted.

Student Pilot Information

Certificate:	Student	Age:	72, Male
Airplane Rating(s):	None	Seat Occupied:	Single
Other Aircraft Rating(s):	None	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 Valid Medical--w/ waivers/lim.	Last FAA Medical Exam:	08/28/2001
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:	44 hours (Total, all aircraft), 1 hours (Total, this make and model), 11 hours (Pilot In Command, all aircraft), 7 hours (Last 90 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Rich	Registration:	N21468
Model/Series:	Woodstock I	Aircraft Category:	Glider
Year of Manufacture:		Amateur Built:	Yes
Airworthiness Certificate:	Experimental	Serial Number:	01
Landing Gear Type:	Tailwheel	Seats:	1
Date/Type of Last Inspection:	09/30/2001, Continuous Airworthiness	Certified Max Gross Wt.:	450 lbs
Time Since Last Inspection:	1 Hours	Engines:	0
Airframe Total Time:	1 Hours at time of accident	Engine Manufacturer:	
ELT:	Not installed	Engine Model/Series:	
Registered Owner:	Harry Rich	Rated Power:	
Operator:	Harry Rich	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	AFJ, 1184 ft msl	Distance from Accident Site:	20 Nautical Miles
Observation Time:	1655 EDT	Direction from Accident Site:	350°
Lowest Cloud Condition:	Clear	Visibility	10 Miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	9 knots / 15 knots	Turbulence Type Forecast/Actual:	/
Wind Direction:	220°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.03 inches Hg	Temperature/Dew Point:	23°C / 11°C
Precipitation and Obscuration:			
Departure Point:	Waynesburg, PA (WAY)	Type of Flight Plan Filed:	None
Destination:	Waynesburg, PA	Type of Clearance:	None
Departure Time:	1100 EDT	Type of Airspace:	Class G

Airport Information

Airport:	Greene County (WAY)	Runway Surface Type:	Grass/turf
Airport Elevation:		Runway Surface Condition:	Dry
Runway Used:	27	IFR Approach:	Unknown
Runway Length/Width:	3500 ft / 75 ft	VFR Approach/Landing:	Unknown

Wreckage and Impact Information

Crew Injuries:	1 Serious	Aircraft Damage:	Minor
Passenger Injuries:	N/A	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Serious	Latitude, Longitude:	

Administrative Information

Investigator In Charge (IIC):	Paul R Cox	Report Date:	01/02/2002
Additional Participating Persons:	Ron Barrone; FAA/FSDO; Allegheny, PA		
Publish Date:			
Investigation Docket:	NTSB accident and incident dockets serve as permanent archival information for the NTSB's investigations. Dockets released prior to June 1, 2009 are publicly available from the NTSB's Record Management Division at pubinq@ntsb.gov , or at 800-877-6799. Dockets released after this date are available at http://dms.ntsbt.gov/pubdms/ .		

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