



# **Aviation Investigation Final Report**

Location:	NORTH ADAMS, Massa	chusetts	Accident Number:	BFO95LA046
Date & Time:	April 15, 1995, 13:00 Local		Registration:	N5725S
Aircraft:	SCHWEIZER	SC2-33A	Aircraft Damage:	Substantial
Defining Event:			Injuries:	2 None
Flight Conducted Under:	Part 91: General aviation - Instructional			

## Analysis

THE CFI REPORTED THAT THE GLIDER ENCOUNTERED A WIND GUST WHILE UNDER TOW SHORTLY AFTER TAKEOFF, AND THE TOW ROPE SEPARATED. THE CFI REPORTED THAT HE TURNED THE GLIDER AROUND TO LAND ON THE GRASS ADJACENT TO THE RUNWAY. DURING THE FORCED LANDING THE CFI INTENTIONALLY GROUND LOOPED THE AIRPLANE TO AVOID HITTING THE BLAST FENCE AT THE END OF THE RUNWAY. POSTACCIDENT EXAMINATION OF THE TOW ROPE REVEALED THAT THE 220 FOOT LONG, 5/16TH INCH, YEAR OLD, YELLOW PROPYLENE ROPE BROKE ABOUT 37 FEET FROM THE TOW AIRPLANE. THE CFI STATED THAT THE ACCIDENT COULD HAVE BEEN PREVENTED IF HE HAD USED A DIFFERENT TOW ROPE SYSTEM AND THAT THERE WAS NO INSPECTION PROGRAM FOR TOW ROPES.

#### **Probable Cause and Findings**

The National Transportation Safety Board determines the probable cause(s) of this accident to be: the failure of the tow rope during the initial climb. Related factors are the gusty wind conditions, the low altitude at which the failure occurred, the tailwind during the emergency landing roll, and the CFI's intentional ground loop due to the obstacle (fence) in the glider's path.

**Findings** 

Occurrence #1: MISCELLANEOUS/OTHER Phase of Operation: TAKEOFF Findings

(F) WEATHER CONDITION - GUSTS
(C) GLIDER LAUNCH/TOW EQUIPMENT - FAILURE, TOTAL
(F) ALTITUDE - NOT AVAILABLE

Occurrence #2: ON GROUND/WATER ENCOUNTER WITH TERRAIN/WATER Phase of Operation: EMERGENCY LANDING AFTER TAKEOFF

Findings

- 4. (F) WEATHER CONDITION TAILWIND
- 5. (F) OBJECT FENCE
- 6. (F) GROUND LOOP/SWERVE INTENTIONAL PILOT IN COMMAND

#### **Factual Information**

On April 15, 1995, at 1300 eastern daylight time, N5725S, a Schweizer SC2-33A glider, registered to Mohawk Soaring Club Inc. of Alpus, New York, ground looped after landing at Harriman- and-West Airport in North Adams, Massachusetts. Visual meteorological conditions prevailed and a flight plan was not filed. The certificated flight instructor (CFI) and the certificated private pilot (glider aero tow) were not injured. The airplane sustained substantial damage. The local, instructional flight was conducted under 14 CFR 91.

The CFI reported that the certificated glider pilot had not flown consistently over the winter, and requested that the CFI accompany him on the accident flight. The CFI stated that the glider pilot handled the flight controls and maintained "...proper position behind the towplane..." but when the glider was about 250 feet above the ground, "...we encountered a wind gust...developed a minor amount of slack in the towrope. About three or four seconds after the rope became taut [again] it parted." The CFI reported that he assumed command of the glider and turned back to the airport where he performed a downwind landing on the grass strip adjacent to the runway. He stated that during the landing roll he intentionally ground looped the glider to avoid colliding with the blast fence at the end of the runway.

The tow rope was examined after the accident by an FAA Safety Inspector. The examination revealed that the 220 foot long, 5/16th inch, yellow propylene rope broke about 37 feet from the tow airplane. The CFI reported that the rope was about one year old, and that he inspected the rope during his preflight inspection. He stated that there was no evidence of it coming apart.

The reported wind at the time of the accident was 290 degrees at 20 knots, with gusts to 29 knots. The pilot stated that the accident could have been prevented if he had used a different tow rope system, and that there was no inspection program for tow ropes.

#### **Pilot Information**

Certificate:	Commercial; Flight instructor	Age:	58,Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Rear
Other Aircraft Rating(s):	Glider; Helicopter	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	Glider	Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medicalw/ waivers/lim	Last FAA Medical Exam:	October 5, 1994
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	
Flight Time:	1533 hours (Total, all aircraft), 28 hours (Total, this make and model), 1160 hours (Pilot In Command, all aircraft), 6 hours (Last 90 days, all aircraft), 4 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

#### Aircraft and Owner/Operator Information

Aircraft Make:	SCHWEIZER	Registration:	N5725S
Model/Series:	SC2-33A SC2-33A	Aircraft Category:	Glider
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Utility	Serial Number:	69
Landing Gear Type:	Tailwheel	Seats:	2
Date/Type of Last Inspection:	May 21, 1994 Annual	Certified Max Gross Wt.:	1040 lbs
Time Since Last Inspection:	81 Hrs	Engines:	Unknown
Airframe Total Time:	2131 Hrs	Engine Manufacturer:	
ELT:		Engine Model/Series:	
Registered Owner:	MOHAWK SOARING CLUB INC.,	Rated Power:	
Operator:		Operating Certificate(s) Held:	None
Operator Does Business As:		Operator Designator Code:	

#### Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
<b>Observation Facility, Elevation:</b>	ALB ,285 ft msl	Distance from Accident Site:	28 Nautical Miles
Observation Time:	12:50 Local	Direction from Accident Site:	287°
Lowest Cloud Condition:	Scattered / 5500 ft AGL	Visibility	40 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	20 knots / 29 knots	Turbulence Type Forecast/Actual:	/
Wind Direction:	290°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	7°C / -7°C
Precipitation and Obscuration:	No Obscuration; No Precipita	tion	
Departure Point:	, MA (2B6 )	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	14:00 Local	Type of Airspace:	Class G

## **Airport Information**

Airport:	HARRIMAN-AND-WEST 2BG	Runway Surface Type:	Asphalt
Airport Elevation:	654 ft msl	Runway Surface Condition:	Dry
Runway Used:	11	IFR Approach:	None
Runway Length/Width:	4300 ft / 100 ft	VFR Approach/Landing:	Forced landing

## Wreckage and Impact Information

Crew Injuries:	2 None	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 None	Latitude, Longitude:	

#### **Administrative Information**

Drake-nurse, Beverley
BERTRAND J LABBE; WINDSOR LOCKS, CT
December 19, 1995
<u>Class</u>
https://data.ntsb.gov/Docket?ProjectID=9041

The National Transportation Safety Board (NTSB) is an independent federal agency charged by Congress with investigating every civil aviation accident in the United States and significant events in other modes of transportation—railroad, transit, highway, marine, pipeline, and commercial space. We determine the probable causes of the accidents and events we investigate, and issue safety recommendations aimed at preventing future occurrences. In addition, we conduct transportation safety research studies and offer information and other assistance to family members and survivors for each accident or event we investigate. We also serve as the appellate authority for enforcement actions involving aviation and mariner certificates issued by the Federal Aviation Administration (FAA) and US Coast Guard, and we adjudicate appeals of civil penalty actions taken by the FAA.

The NTSB does not assign fault or blame for an accident or incident; rather, as specified by NTSB regulation, "accident/incident investigations are fact-finding proceedings with no formal issues and no adverse parties ... and are not conducted for the purpose of determining the rights or liabilities of any person" (Title 49 *Code of Federal Regulations* section 831.4). Assignment of fault or legal liability is not relevant to the NTSB's statutory mission to improve transportation safety by investigating accidents and incidents and issuing safety recommendations. In addition, statutory language prohibits the admission into evidence or use of any part of an NTSB report related to an accident in a civil action for damages resulting from a matter mentioned in the report (Title 49 *United States Code* section 1154(b)). A factual report that may be admissible under 49 *United States Code* section 1154(b) is available <u>here</u>.