



# **Aviation Investigation Final Report**

Location: Warren, Vermont Accident Number: NYC04LA141

Date & Time: June 16, 2004, 17:20 Local Registration: N21VT

Aircraft: Schleicher ASK-21 Aircraft Damage: Substantial

**Defining Event:** 2 Minor

Flight Conducted Under: Part 91: General aviation - Personal

## **Analysis**

After flying for approximately 2 hours, as the pilots were returning to the airport, the wind "went southwest at 5 knots," decreasing the available lift. Approximately 4 miles from the airport, it became apparent that they were too low to make it to the airport, and they chose a field to land in. While on approach to the field, "persistent sink" made attaining the field "marginal," and it became necessary to increase the pitch of the glider to clear a 15-foot tall tree. As a result, the glider stalled and "mushed" to the ground.

## **Probable Cause and Findings**

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's improper pre-flight and in-flight planning, which resulted in a forced landing after experiencing a loss of thermal lift. A factor was the loss of thermal lift.

### **Findings**

Occurrence #1: FORCED LANDING Phase of Operation: APPROACH

#### **Findings**

- 1. (F) WEATHER CONDITION THERMAL LIFT
- 2. (C) IN-FLIGHT PLANNING/DECISION IMPROPER PILOT IN COMMAND
- 3. (C) PREFLIGHT PLANNING/PREPARATION IMPROPER PILOT IN COMMAND

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

Findings

4. STALL/MUSH - INADVERTENT - PILOT IN COMMAND

Occurrence #3: IN FLIGHT COLLISION WITH TERRAIN/WATER

Phase of Operation: DESCENT - UNCONTROLLED

Findings
5. TERRAIN CONDITION - GROUND

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### **Factual Information**

On June 16, 2004, at 1720 eastern daylight time, a Schleicher ASK-21, N21VT, was substantially damaged during an off airport landing in Warren, Vermont. The two certificated private pilots received minor injuries. Visual meteorological conditions prevailed and no flight plan was filed for the instructional flight conducted under 14 CFR Part 91.

According to the pilot-in-command, the purpose of the flight was to practice cross-country gliding techniques. The pilots departed from the Warren-Sugarbush Airport (0B7), Warren, Vermont, flew about 40 miles to the north, then 20 miles to the southeast, and finally 25 miles to the southwest to return to the airport. The lift was both thermal and ridge lift, with the glider experiencing an average maximum height of 2,800 feet above the ground. After flying for approximately 2 hours, as the pilots were returning to the airport, the wind "went southwest at 5 knots," decreasing the available lift. Approximately 4 miles from the airport, it became apparent that they were too low to make it to the airport, and they chose a field to land in. While on approach to the field, "persistent sink" made attaining the field "marginal," and it became necessary to increase the pitch of the glider to clear a 15-foot tall tree. As a result, the glider stalled and "mushed" to the ground.

The winds reported at the Edward F Knapp State Airport (MPV), Montpelier, Vermont, at 1651, were from 330 degrees at 7 knots.

#### **Pilot Information**

Certificate:	Private	Age:	77,Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Rear
Other Aircraft Rating(s):	Glider	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	Yes
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 Valid Medicalw/ waivers/lim	Last FAA Medical Exam:	February 9, 2004
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	February 3, 2003
Flight Time:	5202 hours (Total, all aircraft), 12 hours (Total, this make and model), 5140 hours (Pilot In Command, all aircraft), 0 hours (Last 90 days, all aircraft), 0 hours (Last 30 days, all aircraft), 0 hours (Last 24 hours, all aircraft)		

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### **Pilot Information**

Certificate:	Private	Age:	54,Male
Airplane Rating(s):	None	Seat Occupied:	Front
Other Aircraft Rating(s):	Glider	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	Yes
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	None None	Last FAA Medical Exam:	
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	June 1, 2003
Flight Time:	550 hours (Total, all aircraft), 6 hours (Total, this make and model), 500 hours (Pilot In Command, all aircraft), 10 hours (Last 90 days, all aircraft), 5 hours (Last 30 days, all aircraft)		

## **Aircraft and Owner/Operator Information**

Aircraft Make:	Schleicher	Registration:	N21VT
Model/Series:	ASK-21	Aircraft Category:	Glider
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	21266
Landing Gear Type:	None	Seats:	2
Date/Type of Last Inspection:	June 11, 2004 Annual	Certified Max Gross Wt.:	1250 lbs
Time Since Last Inspection:	5 Hrs	Engines:	
Airframe Total Time:		Engine Manufacturer:	
ELT:	Not installed	Engine Model/Series:	
Registered Owner:	Sugarbush Soaring Association	Rated Power:	
Operator:		Operating Certificate(s) Held:	None

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## Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	MPV,1165 ft msl	Distance from Accident Site:	12 Nautical Miles
Observation Time:	16:51 Local	Direction from Accident Site:	40°
<b>Lowest Cloud Condition:</b>	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	7 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	330°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.17 inches Hg	Temperature/Dew Point:	24°C / 9°C
Precipitation and Obscuration:	No Obscuration; No Precipita	ation	
Departure Point:	Warren , VT (0B7 )	Type of Flight Plan Filed:	None
Destination:	Warren , VT (0B7 )	Type of Clearance:	None
Departure Time:	13:00 Local	Type of Airspace:	Class G

## Wreckage and Impact Information

Crew Injuries:	2 Minor	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 Minor	Latitude, Longitude:	44.116664,-72.826942

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#### **Administrative Information**

Investigator In Charge (IIC):	Andrews, Jill
Additional Participating Persons:	Sandy Taylor; FAA/FSD0; Portland , ME
Original Publish Date:	July 7, 2005
Last Revision Date:	
Investigation Class:	<u>Class</u>
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=59456

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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 here.

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