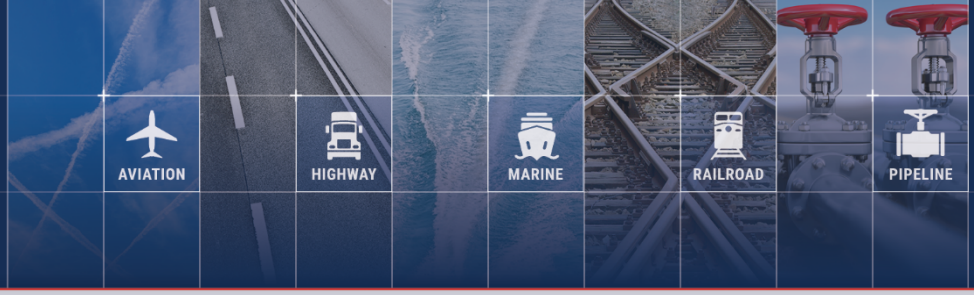

Aviation Investigation Final Report

Location:	WARREN, Vermont	**Accident Number:**	IAD99FA004
Date & Time:	October 5, 1998, 14:30 Local	**Registration:**	N5213G
Aircraft:	Cessna 305A	**Aircraft Damage:**	Destroyed
Defining Event:		**Injuries:**	1 Minor
Flight Conducted Under:	Part 91: General aviation		

Analysis

During takeoff for a glider tow operation, the towplane and the glider both became airborne. An FAA Inspector witnessed the takeoff and said his attention was drawn to the 'erratic pitch changes' of the glider. The glider pilot's canopy was open, and the pilot repeatedly attempted to close the canopy. Pitch changes and climbs above the tow plane accompanied each attempt to close the canopy. As the towrope reached a vertical position, the towplane struck the ground, nosed over, and came to rest inverted. The towrope separated, and the glider continued past the towplane, rolled left to an inverted position and impacted the ground. The towrope in use at the time of the accident employed a 'Sweitzer Ring' to attach at the tow plane and a 'Tost Ring' to attach at the glider. Both rings were attached to their respective airplanes and both release mechanisms were operational. According to the 1998 Soaring Flight Manual sponsored by the Soaring Society of America: 'When the sailplane is too high, it can pull the tail of the towplane up, making it difficult, if not impossible, for the towplane to take off... If corrective action is not taken, the only alternative for the tow pilot is to release the towline...If for any reason, the sailplane pilot loses sight of the towplane, he should release immediately.'

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The glider pilot's failure to perform the emergency tow release and abort the takeoff. A factor in the accident was the glider pilot's improper decision to make repeated attempts to close the canopy in flight.

Findings

Occurrence #1: LOSS OF CONTROL - IN FLIGHT
Phase of Operation: TAKEOFF - INITIAL CLIMB

Findings
1. (F) DOOR,EXTERIOR CREW - OPEN
2. (F) IMPROPER DECISION - PILOT OF OTHER AIRCRAFT
3. (C) EMERGENCY PROCEDURE - NOT PERFORMED - PILOT OF OTHER AIRCRAFT
4. (C) ABORTED TAKEOFF - NOT PERFORMED - PILOT OF OTHER AIRCRAFT
5. AIRCRAFT CONTROL - NOT POSSIBLE - PILOT IN COMMAND

Occurrence #2: IN FLIGHT COLLISION WITH TERRAIN/WATER
Phase of Operation: TAKEOFF - INITIAL CLIMB

Findings
6. TERRAIN CONDITION - GROUND

Factual Information

HISTORY OF FLIGHT

On October 5, 1998, at 1430 eastern daylight time, a Cessna 305A, N5213G, and a Burkhart Grob G103C glider, N103VT, were destroyed after collision with terrain during takeoff from runway 04 at the Warren Sugarbush Airport (0B7), Warren, Vermont. The certificated commercial pilot in the Cessna received minor injuries. In the Grob, the certificated commercial pilot received serious injuries and the passenger sustained fatal injuries. Visual meteorological conditions prevailed for the local sightseeing flight that originated at 0B7, at 1430. No flight plan was filed for the flight conducted under 14 CFR Part 91.

The airplanes were involved in a glider tow operation. The glider pilot was to provide a sightseeing tour of the seasonal foliage to the passenger.

A Federal Aviation Administration (FAA) Aviation Safety Inspector witnessed the accident. In a written statement the Inspector said:

"My attention was drawn to the glider by its erratic pitch changes. As I concentrated on the glider I saw that the rear canopy had opened and the person in the rear seat extended an arm toward the open canopy. At the same time, the glider pitched up rather steeply and the arm returned inside the glider. With the canopy still open, the glider reduced its pitch but remained on high tow. This effort to close the canopy occurred at least three times with the glider going higher and higher. Toward the end of the runway, the tow plane began to descend then pitch up once or twice then descend and impact the ground. As the tow plane impacted the ground, the glider, which was much higher and still on the tow rope, continued forward and climbing and the tow rope became almost vertical...[which] separated from the glider and fell in a pile by the tow plane. The glider continued...beyond the tow plane...rolled left to the inverted position...and impacted the ground..."

In an interview, the Inspector stated that the Cessna came to rest inverted, and the Grob struck the ground approximately 30 degrees past vertical and also came to rest inverted. He added:

"The [Cessna's] engine power sounded normal the entire time. On tow and prior to impact, the engine was running at full power."

In an interview the day after the accident, the tow plane pilot reported he had no recollection of the accident.

In a written statement, the glider pilot's wife said her husband "...has absolutely no independent memory of the glider accident."

The accident occurred during the hours of daylight approximately 44 degrees, 07 minutes north latitude, and 72 degrees, 49 minutes west longitude.

PERSONNEL INFORMATION

The tow plane pilot held a commercial pilot's certificate with ratings for airplane single engine land, single engine sea, glider, and instrument airplane. He also held a flight instructor's certificate with ratings for glider and instrument airplane.

The tow plane pilot's most recent FAA second class medical certificate was issued May 26, 1998.

The pilot of the tow plane reported 5,078 hours of total flight experience, 1,245 hours of which were in the Cessna 305A. The pilot reported 80 hours of flight experience in the 90 days prior to the accident, and 25 hours in the 30 days prior; all in the Cessna 305A. On October 5, 1998, the pilot performed 13 glider tows prior to the accident flight.

The glider pilot held a commercial pilot's certificate with ratings for airplane single engine land, glider, and instrument airplane.

His most recent FAA second class medical certificate was issued June 26, 1997. The pilot reported 440 hours of flight experience on that date.

A review of the glider pilot's logbook revealed 859 hours of total flight experience, of which 121 hours were in gliders. The pilot received a commercial glider rating June 30, 1998 and reported 36 hours of glider time since that date. The pilot reported 42 hours of flight experience in the Grob, 4 hours of which were in the 90 days prior to the accident and 1.6 hours were in the 30 days prior. On the day of the accident, the pilot flew one glider flight prior to the accident flight.

AIRCRAFT INFORMATION

The tow plane was a Cessna 305A, N5213G, with 13,194.7 hours of total time. The airplane was on an annual inspection program. The last annual inspection was performed May 15, 1998, and the airplane accrued 262.7 hours of time since that date.

The glider was a Grob 103C Twin III Acro, N103VT, with 1,873.5 hours of total time. The glider was on an annual inspection program. The last annual inspection was performed August 12, 1998, and the glider had accrued 9.5 hours since that date.

METEOROLOGICAL INFORMATION

Weather reported at the Barre-Montpelier Airport, 16 miles east of Sugarbush was: clear skies

with winds from 300 degrees at 14 knots gusting to 21 knots.

AERODROME INFORMATION

The Warren-Sugarbush Airport was situated on a plateau in mountainous terrain at 1,470 feet elevation. The paved asphalt runway was 2,575 feet long and 30 feet wide. The runway was oriented 040 and 220 degrees with a convex bow along the linear axis. There was no line of sight from one runway end to the other.

The airport terminal building, hangars, and aircraft parking were all on the North side of the runway.

WRECKAGE AND IMPACT INFORMATION

Both airplanes were examined at the site on October 6, 1998. All major components were accounted for at the scene. The towrope in use at the time of the accident employed a 'Sweitzer Ring' to attach at the tow plane and a 'Tost Ring' to attach at the glider.

The Cessna came to rest inverted, 252 feet from the departure end of runway 04, facing the opposite direction of travel. All four blades were separated from the propeller hub. The hub and spinner remained attached to the engine propeller flange. The turf displayed parallel slash marks perpendicular to the wreckage path for a distance of 66 feet prior to the main wreckage. Splinters and fragments of wood were embedded in the slash marks.

Control continuity was established to all flight control surfaces and the tow rope was still attached at the tow release mechanism. The mechanism was tested several times and found to be operational. The towrope and the sweitzer ring attached to the Cessna were intact.

Examination of the tost-ring end of the towrope revealed the tost ring was not attached. The braided loop that attached the tost ring was unraveled and the rope end was frayed.

The glider impacted terrain 30 degrees to the left of the takeoff path and 75 feet beyond the Cessna. The nose section, rudder pedals, tost release mechanism, and nose wheel were buried in the impact crater. The forward instrument panel was destroyed by impact and the aft instrument panel was destroyed by impact and removal by rescue personnel. Control continuity was established from the flight control surfaces to the cockpit area.

Further examination of the impact crater revealed the tost ring with the tost ring mechanism. The tost ring mechanism was tested and found to be operational.

On October 7, 1998, the engine of the Cessna started and ran on the airframe.

ADDITIONAL INFORMATION

The glider pilot received training for his glider rating at Stowe, Vermont.

In a telephone interview, one flight instructor for the glider pilot said:

"He certainly did it in a hurry. We open in the middle of April and he got his license on the 27th. He was young, impetuous, and impatient. He flew as many airplanes as he could get his hands on as quick as he could. I was involved in his instruction. He got his solo flights and I prepped him for his check ride. I think in judgement he might have been lacking a little bit. He struck me as being impetuous. He was impatient. He wanted to do everything right now."

In both written statements and telephone interviews, the operator of the glider school said the glider pilot wanted to fly the higher performance Grob glider but did not meet the experience level required by the school's insurance company. He said the pilot elected to fly at Sugarbush where he had access to higher performance gliders.

According the 1998 Soaring Flight Manual sponsored by the Soaring Society of America:

"The correct position for a normal takeoff...is directly behind the towplane and no higher than the top of the towplane's fuselage. This position should be maintained until after the towplane has taken off.

A common error is the application of too much backpressure on the control stick during takeoff. This can cause the sailplane to 'kite' into the air and become excessively high above the towplane.

When the sailplane is too high, it can pull the tail of the towplane up, making it difficult, if not impossible, for the towplane to take off. In an extreme situation, the propeller may be forced into the ground, causing the towplane to nose over. If corrective action is not taken, the only alternative for the tow pilot is to release the towline...

If for any reason, the sailplane pilot loses sight of the towplane, he should release immediately."

The airplane wreckage was released to the owner on October 7, 1998.

Pilot Information

Certificate:	Commercial	**Age:**	59,Male
Airplane Rating(s):	Single-engine land; Single-engine sea	**Seat Occupied:**	Front
Other Aircraft Rating(s):	Glider	**Restraint Used:**	
Instrument Rating(s):	Airplane	**Second Pilot Present:**	No
Instructor Rating(s):	Glider; Instrument airplane	**Toxicology Performed:**	No
Medical Certification:	Class 2 Valid Medical--w/ waivers/lim	**Last FAA Medical Exam:**	May 26, 1998
Occupational Pilot:	Yes	**Last Flight Review or Equivalent:**	
Flight Time:	5078 hours (Total, all aircraft), 1245 hours (Total, this make and model), 4967 hours (Pilot In Command, all aircraft), 80 hours (Last 90 days, all aircraft), 25 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	**Registration:**	N5213G
Model/Series:	305A 305A	**Aircraft Category:**	Airplane
Year of Manufacture:		**Amateur Built:**	
Airworthiness Certificate:	Normal	**Serial Number:**	21573
Landing Gear Type:	Tailwheel	**Seats:**	2
Date/Type of Last Inspection:	May 15, 1998 Annual	**Certified Max Gross Wt.:**	2100 lbs
Time Since Last Inspection:	262 Hrs	**Engines:**	1 Reciprocating
Airframe Total Time:	13194 Hrs	**Engine Manufacturer:**	Continental
ELT:	Installed, activated, did not aid in locating accident	**Engine Model/Series:**	O470-11B
Registered Owner:	RED TAIL AVIATION, INC	**Rated Power:**	213 Horsepower
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
Observation Facility, Elevation:	MPV ,1165 ft msl	**Distance from Accident Site:**	16 Nautical Miles
Observation Time:	14:53 Local	**Direction from Accident Site:**	113°
Lowest Cloud Condition:	Clear	**Visibility**	10 miles
Lowest Ceiling:	None	**Visibility (RVR):**	
Wind Speed/Gusts:	14 knots / 21 knots	**Turbulence Type Forecast/Actual:**	/
Wind Direction:	300°	**Turbulence Severity Forecast/Actual:**	/
Altimeter Setting:	30 inches Hg	**Temperature/Dew Point:**	12°C / 1°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	(0B7)	**Type of Flight Plan Filed:**	None
Destination:		**Type of Clearance:**	None
Departure Time:	14:30 Local	**Type of Airspace:**	Class G

Airport Information

Airport:	WARREN SUGARBUSH AIRPORT 0B7	**Runway Surface Type:**	Asphalt
Airport Elevation:	1470 ft msl	**Runway Surface Condition:**	Dry
Runway Used:	4	**IFR Approach:**	None
Runway Length/Width:	2575 ft / 30 ft	**VFR Approach/Landing:**	None

Wreckage and Impact Information

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

Administrative Information

Investigator In Charge (IIC):	Rayner, Brian
Additional Participating Persons:	JOHN P ENEMARK; PORTLAND , ME
Original Publish Date:	June 22, 2000
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=44132

Aviation Investigation Final Report

Location:	WARREN, Vermont	**Accident Number:**	IAD99FA004
Date & Time:	October 5, 1998, 14:30 Local	**Registration:**	N103VT
Aircraft:	Burkhart Grob G 103C	**Aircraft Damage:**	Destroyed
Defining Event:		**Injuries:**	1 Fatal, 1 Serious
Flight Conducted Under:	Part 91: General aviation		

Analysis

During takeoff for a glider tow operation, the towplane and the glider both became airborne. An FAA Inspector witnessed the takeoff and said his attention was drawn to the 'erratic pitch changes' of the glider. The glider pilot's canopy was open, and the pilot repeatedly attempted to close the canopy. Pitch changes and climbs above the tow plane accompanied each attempt to close the canopy. As the towrope reached a vertical position, the towplane struck the ground, nosed over, and came to rest inverted. The towrope separated, and the glider continued past the towplane, rolled left to an inverted position and impacted the ground. The towrope in use at the time of the accident employed a 'Sweitzer Ring' to attach at the tow plane and a 'Tost Ring' to attach at the glider. Both rings were attached to their respective airplanes and both release mechanisms were operational. According to the 1998 Soaring Flight Manual sponsored by the Soaring Society of America: 'When the sailplane is too high, it can pull the tail of the towplane up, making it difficult, if not impossible, for the towplane to take off... If corrective action is not taken, the only alternative for the tow pilot is to release the towline...If for any reason, the sailplane pilot loses sight of the towplane, he should release immediately.'

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The glider pilot's failure to perform the emergency tow release and abort the takeoff. A factor in the accident was the glider pilot's improper decision to make repeated attempts to close the canopy in flight.

Findings

Occurrence #1: LOSS OF CONTROL - IN FLIGHT
Phase of Operation: TAKEOFF - INITIAL CLIMB

Findings
1. (F) DOOR,EXTERIOR CREW - OPEN
2. (F) IMPROPER DECISION - PILOT IN COMMAND
3. (C) EMERGENCY PROCEDURE - NOT PERFORMED - PILOT IN COMMAND
4. (C) ABORTED TAKEOFF - NOT PERFORMED - PILOT IN COMMAND

Occurrence #2: IN FLIGHT COLLISION WITH TERRAIN/WATER
Phase of Operation: DESCENT - UNCONTROLLED

Findings
5. TERRAIN CONDITION - GROUND

Factual Information

HISTORY OF FLIGHT

On October 5, 1998, at 1430 eastern daylight time, a Cessna 305A, N5213G, and a Burkhart Grob G103C glider, N103VT, were destroyed after collision with terrain during takeoff from runway 04 at the Warren Sugarbush Airport (0B7), Warren, Vermont. The certificated commercial pilot in the Cessna received minor injuries. In the Grob, the certificated commercial pilot received serious injuries and the passenger sustained fatal injuries. Visual meteorological conditions prevailed for the local sightseeing flight that originated at 0B7, at 1430. No flight plan was filed for the flight conducted under 14 CFR Part 91.

The airplanes were involved in a glider tow operation. The glider pilot was to provide a sightseeing tour of the seasonal foliage to the passenger.

A Federal Aviation Administration (FAA) Aviation Safety Inspector witnessed the accident. In a written statement the Inspector said:

"My attention was drawn to the glider by its erratic pitch changes. As I concentrated on the glider I saw that the rear canopy had opened and the person in the rear seat extended an arm toward the open canopy. At the same time, the glider pitched up rather steeply and the arm returned inside the glider. With the canopy still open, the glider reduced its pitch but remained on high tow. This effort to close the canopy occurred at least three times with the glider going higher and higher. Toward the end of the runway, the tow plane began to descend then pitch up once or twice then descend and impact the ground. As the tow plane impacted the ground, the glider, which was much higher and still on the tow rope, continued forward and climbing and the tow rope became almost vertical...[which] separated from the glider and fell in a pile by the tow plane. The glider continued...beyond the tow plane...rolled left to the inverted position...and impacted the ground..."

In an interview, the Inspector stated that the Cessna came to rest inverted, and the Grob struck the ground approximately 30 degrees past vertical and also came to rest inverted. He added:

"The [Cessna's] engine power sounded normal the entire time. On tow and prior to impact, the engine was running at full power."

In an interview the day after the accident, the glider pilot reported he had no recollection of the accident.

In a written statement, the glider pilot's wife said her husband "...has absolutely no independent memory of the glider accident."

The accident occurred during the hours of daylight approximately 44 degrees, 07 minutes north latitude, and 72 degrees, 49 minutes west longitude.

PERSONNEL INFORMATION

The tow plane pilot held a commercial pilot's certificate with ratings for airplane single engine land, single engine sea, glider and instrument airplane. He also held a flight instructor's certificate with ratings for glider and instrument airplane.

The tow plane pilot's most recent FAA second class medical certificate was issued May 26, 1998.

The pilot of the tow plane reported 5,078 hours of total flight experience, 1,245 hours of which were in the Cessna 305A. The pilot reported 80 hours of flight experience in the 90 days prior to the accident, and 25 hours in the 30 days prior; all in the Cessna 305A. On October 5, 1998, the pilot performed 13 glider tows prior to the accident flight.

The glider pilot held a commercial pilot's certificate with ratings for airplane single engine land, glider, and instrument airplane.

His most recent FAA second class medical certificate was issued June 26, 1997. The pilot reported 440 hours of flight experience on that date.

A review of the glider pilot's logbook revealed 859 hours of total flight experience, of which 121 hours were in gliders. The pilot received a commercial glider rating June 30, 1998 and reported 36 hours of glider time since that date. The pilot reported 42 hours of flight experience in the Grob, 4 hours of which were in the 90 days prior to the accident and 1.6 hours were in the 30 days prior. On the day of the accident, the pilot flew one glider flight prior to the accident flight.

AIRCRAFT INFORMATION

The tow plane was a Cessna 305A, N5213G, with 13,194.7 hours of total time. The airplane was on an annual inspection program. The last annual inspection was performed May 15, 1998 and the airplane accrued 262.7 hours of time since that date.

The glider was a Grob 103C Twin III Acro, N103VT, with 1,873.5 hours of total time. The glider was on an annual inspection program. The last annual inspection was performed August 12, 1998 and the glider had accrued 9.5 hours since that date.

METEOROLOGICAL INFORMATION

Weather reported at the Barre-Montpelier Airport, 16 miles east of Sugarbush was: clear skies

with winds from 300 degrees at 14 knots gusting to 21 knots.

AERODROME INFORMATION

The Warren-Sugarbush Airport was situated on a plateau in mountainous terrain at 1,470 feet elevation. The paved asphalt runway was 2,575 feet long and 30 feet wide. The runway was oriented 040 and 220 degrees with a convex bow along the linear axis. There was no line of sight from one runway end to the other.

The airport terminal building, hangars, and aircraft parking were all on the North side of the runway.

WRECKAGE AND IMPACT INFORMATION

Both airplanes were examined at the site on October 6, 1998. All major components were accounted for at the scene. The towrope in use at the time of the accident employed a 'Sweitzer Ring' to attach at the tow plane and a 'Tost Ring' to attach at the glider.

The Cessna came to rest inverted, 252 feet from the departure end of runway 04, facing the opposite direction of travel. All four blades were separated from the propeller hub. The hub and spinner remained attached to the engine propeller flange. The turf displayed parallel slash marks perpendicular to the wreckage path for a distance of 66 feet prior to the main wreckage. Splinters and fragments of wood were embedded in the slash marks.

Control continuity was established to all flight control surfaces and the tow rope was still attached at the tow release mechanism. The mechanism was tested several times and found to be operational. The towrope and the sweitzer ring attached to the Cessna were intact.

Examination of the tost-ring end of the towrope revealed the tost ring was not attached. The braided loop that attached the tost ring was unraveled and the rope end was frayed.

The glider impacted terrain 30 degrees to the left of the takeoff path and 75 feet beyond the Cessna. The nose section, rudder pedals, tost release mechanism, and nose wheel were buried in the impact crater. The forward instrument panel was destroyed by impact and the aft instrument panel was destroyed by impact and removal by rescue personnel. Control continuity was established from the flight control surfaces to the cockpit area.

Further examination of the impact crater revealed the tost ring with the tost ring mechanism. The tost ring mechanism was tested and found to be operational.

On October 7, 1998, the engine of the Cessna started and ran on the airframe.

ADDITIONAL INFORMATION

The glider pilot received training for his glider rating at Stowe, Vermont.

In a telephone interview, one flight instructor for the glider pilot said:

"He certainly did it in a hurry. We open in the middle of April and he got his license on the 27th. He was young, impetuous, and impatient. He flew as many airplanes as he could get his hands on as quick as he could. I was involved in his instruction. He got his solo flights and I prepped him for his check ride. I think in judgement he might have been lacking a little bit. He struck me as being impetuous. He was impatient. He wanted to do everything right now."

In both written statements and telephone interviews, the operator of the glider school said the glider pilot wanted to fly the higher performance Grob glider but did not meet the experience level required by the school's insurance company. He said the pilot elected to fly at Sugarbush where he had access to higher performance gliders.

According the 1998 Soaring Flight Manual sponsored by the Soaring Society of America:

"The correct position for a normal takeoff...is directly behind the towplane and no higher than the top of the towplane's fuselage. This position should be maintained until after the towplane has taken off.

A common error is the application of too much backpressure on the control stick during takeoff. This can cause the sailplane to 'kite' into the air and become excessively high above the towplane.

When the sailplane is too high, it can pull the tail of the towplane up, making it difficult, if not impossible, for the towplane to take off. In an extreme situation, the propeller may be forced into the ground, causing the towplane to nose over. If corrective action is not taken, the only alternative for the tow pilot is to release the towline...

If for any reason, the sailplane pilot loses sight of the towplane, he should release immediately."

Pilot Information

Certificate:	Commercial	**Age:**	36,Male
Airplane Rating(s):	Single-engine land	**Seat Occupied:**	Rear
Other Aircraft Rating(s):	Glider	**Restraint Used:**	
Instrument Rating(s):	Airplane	**Second Pilot Present:**	No
Instructor Rating(s):	None	**Toxicology Performed:**	No
Medical Certification:	Class 2 Valid Medical--w/ waivers/lim	**Last FAA Medical Exam:**	June 26, 1997
Occupational Pilot:	No	**Last Flight Review or Equivalent:**	
Flight Time:	859 hours (Total, all aircraft), 42 hours (Total, this make and model), 80 hours (Last 90 days, all aircraft), 37 hours (Last 30 days, all aircraft), 4 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Burkhart Grob	**Registration:**	N103VT
Model/Series:	G 103C G 103C	**Aircraft Category:**	Glider
Year of Manufacture:		**Amateur Built:**	
Airworthiness Certificate:	Normal	**Serial Number:**	34141
Landing Gear Type:		**Seats:**	2
Date/Type of Last Inspection:	August 12, 1998 100 hour	**Certified Max Gross Wt.:**	1323 lbs
Time Since Last Inspection:	98 Hrs	**Engines:**	Unknown
Airframe Total Time:	1873 Hrs	**Engine Manufacturer:**	
ELT:	Not installed	**Engine Model/Series:**	
Registered Owner:	SUGARBUSH SOARING ASSOCIATION	**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
Observation Facility, Elevation:	MPV ,1165 ft msl	**Distance from Accident Site:**	16 Nautical Miles
Observation Time:	14:53 Local	**Direction from Accident Site:**	113°
Lowest Cloud Condition:	Clear	**Visibility**	10 miles
Lowest Ceiling:	None	**Visibility (RVR):**	
Wind Speed/Gusts:	14 knots / 21 knots	**Turbulence Type Forecast/Actual:**	/
Wind Direction:	300°	**Turbulence Severity Forecast/Actual:**	/
Altimeter Setting:	30 inches Hg	**Temperature/Dew Point:**	12°C / 1°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	(0B7)	**Type of Flight Plan Filed:**	None
Destination:		**Type of Clearance:**	None
Departure Time:	14:30 Local	**Type of Airspace:**	Class G

Airport Information

Airport:	WARREN SUGARBUSH AIRPORT 0B7	**Runway Surface Type:**	Asphalt
Airport Elevation:	1470 ft msl	**Runway Surface Condition:**	Dry
Runway Used:	4	**IFR Approach:**	None
Runway Length/Width:	2575 ft / 30 ft	**VFR Approach/Landing:**	None

Wreckage and Impact Information

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

Administrative Information

Investigator In Charge (IIC):	Rayner, Brian
Additional Participating Persons:	JOHN P ENEMARK; PORTLAND , ME
Original Publish Date:	June 22, 2000
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=44132