



# Aviation Investigation Final Report

---

<b>Location:</b>	Moriarty, New Mexico	<b>Accident Number:</b>	DEN05LA108
<b>Date &amp; Time:</b>	July 9, 2005, 12:47 Local	<b>Registration:</b>	N916G
<b>Aircraft:</b>	Grob G103	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>		<b>Injuries:</b>	2 None
<b>Flight Conducted Under:</b>	Part 91: General aviation - Glider tow		

---

## Analysis

The tow plane pilot said that the winds were 5 to 15 knots "from the west or northwest" and that "25 knot gusts were not uncommon." During the takeoff roll, he saw an "extreme dust devil right in front [of the airplane]" and "paper-sized pieces of cardboard spinning sharply." He momentarily lost control of the tow plane, then noticed the glider was no longer in tow. He flew an abbreviated traffic pattern and landed. It was then that he noticed his propeller had sustained a ground strike. The glider pilot said that after an uneventful aero tow, the tow plane started "pulling up and then touched back down." He said the "left wing [was] low and [the] tail high and right.." He then saw a "puff of smoke" and "couldn't tell if the tow plane had crashed, or was about to crash." He elected to release and perform an emergency landing from an altitude of 75 to 100 feet. After turning 90 degrees to the right, the glider was "close to the ground" so the pilot "leveled the wings and tried to flare." The glider impacted terrain and ground looped, causing substantial damage. Both pilots agreed that the "puff of smoke" seen by the glider pilot was actually dust thrown in the air during the tow plane's propeller strike.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: the glider pilot's intentional tow release at too low an altitude when he erroneously perceived the tow plane was about to crash. A contributing factor was the unsuitable terrain on which to

make a landing.

## Findings

Occurrence #1: DRAGGED WING, ROTOR, POD, FLOAT OR TAIL/SKID  
Phase of Operation: EMERGENCY LANDING

### Findings

1. (C) GLIDER/TOW RELEASE - INTENTIONAL - PILOT IN COMMAND
2. (C) VISUAL/AURAL PERCEPTION - PILOT IN COMMAND
3. (C) ALTITUDE - LOW
4. (F) UNSUITABLE TERRAIN OR TAKEOFF/LANDING/TAXI AREA - ENCOUNTERED - PILOT IN COMMAND

## Factual Information

On July 9, 2005, at 1247 mountain daylight time, a Grob G103, N916G, operated by the Albuquerque Soaring Club and piloted by a private pilot, was substantially damaged when it impacted terrain during an emergency landing at Moriarty Airport, Moriarty, New Mexico. Visual meteorological conditions prevailed at the time of the accident. The local personal flight was being conducted under Title 14 CFR Part 91 without a flight plan. The pilot and passenger were not injured. The flight was originating at the time of the accident.

The tow plane pilot said that the winds were 5 to 15 knots "from the west or northwest" and that "25 knot gusts were not uncommon." During the takeoff roll, he saw an "extreme dust devil right in front [of the airplane]" and "paper-sized pieces of cardboard spinning sharply." He momentarily lost control of the tow plane, then noticed the glider was no longer in tow. He flew an abbreviated traffic pattern and landed. It was then that he noticed his propeller had sustained a ground strike.

The glider pilot said that after an uneventful aero tow, the tow plane started "pulling up and then touched back down." He said the "left wing [was] low and [the] tail high and right.." He then saw a "puff of smoke" and "couldn't tell if the tow plane had crashed, or was about to crash." He elected to release and perform an emergency landing from an altitude of 75 to 100 feet. After turning 90 degrees to the right, the glider was "close to the ground" so the pilot "leveled the wings and tried to flare." The glider impacted terrain and ground looped. A pilot-rated witness said that the pilot "appeared to be attempting a downwind landing when the right wingtip impacted the ground and broke off the glider." Post-accident examination revealed a severed right wing and a severed fuselage aft of the cockpit.

Both pilots agreed that the "puff of smoke" seen by the glider pilot was actually dust thrown in the air during the tow plane's propeller strike.

## Pilot Information

<b>Certificate:</b>	Private	<b>Age:</b>	32, Male
<b>Airplane Rating(s):</b>	None	<b>Seat Occupied:</b>	Front
<b>Other Aircraft Rating(s):</b>	Glider	<b>Restraint Used:</b>	
<b>Instrument Rating(s):</b>	None	<b>Second Pilot Present:</b>	
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	None	<b>Last FAA Medical Exam:</b>	
<b>Occupational Pilot:</b>	No	<b>Last Flight Review or Equivalent:</b>	March 1, 2005
<b>Flight Time:</b>	335 hours (Total, all aircraft), 93 hours (Total, this make and model), 308 hours (Pilot In Command, all aircraft), 4 hours (Last 90 days, all aircraft), 1 hours (Last 30 days, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Grob	<b>Registration:</b>	N916G
<b>Model/Series:</b>	G103	<b>Aircraft Category:</b>	Glider
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	3753
<b>Landing Gear Type:</b>	Hull	<b>Seats:</b>	2
<b>Date/Type of Last Inspection:</b>	January 1, 2005 Annual	<b>Certified Max Gross Wt.:</b>	1279 lbs
<b>Time Since Last Inspection:</b>		<b>Engines:</b>	0
<b>Airframe Total Time:</b>	2846 Hrs as of last inspection	<b>Engine Manufacturer:</b>	
<b>ELT:</b>	Not installed	<b>Engine Model/Series:</b>	
<b>Registered Owner:</b>	Albuquerque Soaring Club	<b>Rated Power:</b>	
<b>Operator:</b>		<b>Operating Certificate(s) Held:</b>	None

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Visual (VMC)	<b>Condition of Light:</b>	Day
<b>Observation Facility, Elevation:</b>	CQC,6200 ft msl	<b>Distance from Accident Site:</b>	17 Nautical Miles
<b>Observation Time:</b>	12:53 Local	<b>Direction from Accident Site:</b>	250°
<b>Lowest Cloud Condition:</b>	Clear	<b>Visibility</b>	10 miles
<b>Lowest Ceiling:</b>	None	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	6 knots / 14 knots	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	0°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>	30.23 inches Hg	<b>Temperature/Dew Point:</b>	29°C / 2°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	Moriarty, NM (0E0 )	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>	Moriarty, NM (0E0 )	<b>Type of Clearance:</b>	Unknown
<b>Departure Time:</b>		<b>Type of Airspace:</b>	

## Airport Information

<b>Airport:</b>	Moriarty Airport 0E0	<b>Runway Surface Type:</b>	Asphalt
<b>Airport Elevation:</b>	6199 ft msl	<b>Runway Surface Condition:</b>	Dry
<b>Runway Used:</b>	260	<b>IFR Approach:</b>	Unknown
<b>Runway Length/Width:</b>	7700 ft / 75 ft	<b>VFR Approach/Landing:</b>	Unknown

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 None	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>	1 None	<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	2 None	<b>Latitude, Longitude:</b>	34.986946,-106.01583

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Scott, Arnold
<b>Additional Participating Persons:</b>	James L Malarsie; FAA Flight Standards District Office; Albuquerque, NM
<b>Original Publish Date:</b>	December 20, 2005
<b>Last Revision Date:</b>	
<b>Investigation Class:</b>	<a href="#">Class</a>
<b>Note:</b>	
<b>Investigation Docket:</b>	<a href="https://data.nts.gov/Docket?ProjectID=61931">https://data.nts.gov/Docket?ProjectID=61931</a>

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 [here](#).