Aviation Investigation Final Report

Location:	Moriarty, New Mexico	**Accident Number:**	DEN05LA108
Date & Time:	July 9, 2005, 12:47 Local	**Registration:**	N916G
Aircraft:	Grob G103	**Aircraft Damage:**	Substantial
Defining Event:		**Injuries:**	2 None
Flight Conducted Under:	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.

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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

Certificate:	Private	**Age:**	32,Male
Airplane Rating(s):	None	**Seat Occupied:**	Front
Other Aircraft Rating(s):	Glider	**Restraint Used:**	
Instrument Rating(s):	None	**Second Pilot Present:**	
Instructor Rating(s):	None	**Toxicology Performed:**	No
Medical Certification:	None	**Last FAA Medical Exam:**	
Occupational Pilot:	No	**Last Flight Review or Equivalent:**	March 1, 2005
Flight Time:	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

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

Meteorological Information and Flight Plan

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

Airport Information

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

Wreckage and Impact Information

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

Administrative Information

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