



Aviation Investigation Final Report

Location:	MINDEN, Nevada	Accident Number:	LAX91LA229
Date & Time:	May 24, 1991, 17:46 Local	Registration:	N503V
Aircraft:	GLASER-DIRKS DG-500M	Aircraft Damage:	Substantial
Defining Event:		Injuries:	2 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

THE CERTIFICATED COMMERCIAL PILOT AND A PASSENGER WERE DEPARTING IN A MOTORIZED GLIDER ON THE THIRD FLIGHT OF THE DAY FOR A PERSONAL FLIGHT IN THE LOCAL AREA. THE GLIDER'S ENGINE IS A MODIFIED SNOW MOBILE DESIGN AND IS STOWABLE. AT ABOUT 150 FEET ABOVE THE GROUND, THE ENGINE LOST POWER AND THE PILOT MANEUVERED THE GLIDER TOWARD AN EMERGENCY LANDING AREA. DURING THE LANDING, THE EMPENNAGE STRUCK THE EDGE OF A DITCH, SEVERING THE TAIL ASSEMBLY. THE PILOT AND PASSENGER WERE NOT INJURED. AFTER THE FIRST FLIGHT, THE PILOT ADJUSTED THE ENGINE CARBURETOR MAIN AND IDLE JETS TO A LEAN FUEL/AIR MIXTURE. EXAMINATION OF THE ENGINE REVEALED A HOLE IN THE TOP OF ONE OF THE CYLINDER PISTONS. THE CARBURETOR MIXTURE IS SET AT THE FACTORY AND IS ONLY TO BE ADJUSTED BY TRAINED PERSONNEL OR AN AVIATION MECHANIC.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: AN ENGINE FAILURE PRODUCED AS A RESULT OF THE PILOT IMPROPERLY ADJUSTING THE CARBURETOR MIXTURE JET.

Findings

Occurrence #1: LOSS OF ENGINE POWER(PARTIAL) - MECH FAILURE/MALF
Phase of Operation: TAKEOFF - INITIAL CLIMB

Findings

1. SINGLE ENGINE AIRCRAFT
2. (F) FUEL SYSTEM,CARBURETOR - ASSEMBLY
3. (C) MAINTENANCE,ADJUSTMENT - IMPROPER - PILOT IN COMMAND
4. (F) ENGINE ASSEMBLY,PISTON - MELTED

Occurrence #2: FORCED LANDING

Phase of Operation: DESCENT - EMERGENCY

Occurrence #3: IN FLIGHT COLLISION WITH TERRAIN/WATER

Phase of Operation: MANEUVERING - TURN TO LANDING AREA (EMERGENCY)

Findings

5. TERRAIN CONDITION - DITCH

Factual Information

Pilot Information

Certificate:	Commercial; Flight instructor	Age:	52, Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Unknown
Other Aircraft Rating(s):	Glider	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	Glider	Toxicology Performed:	No
Medical Certification:	None Expired	Last FAA Medical Exam:	May 18, 1989
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	
Flight Time:	2585 hours (Total, all aircraft), 18 hours (Total, this make and model), 2527 hours (Pilot In Command, all aircraft), 21 hours (Last 90 days, all aircraft), 12 hours (Last 30 days, all aircraft), 3 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	GLASER-DIRKS	Registration:	N503V
Model/Series:	DG-500M DG-500M	Aircraft Category:	Glider
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Utility	Serial Number:	5E24M12
Landing Gear Type:	Retractable - Tailwheel	Seats:	2
Date/Type of Last Inspection:	January 2, 2000 Unknown	Certified Max Gross Wt.:	1819 lbs
Time Since Last Inspection:	12 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	12 Hrs	Engine Manufacturer:	Bombardier
ELT:	Not installed	Engine Model/Series:	535C
Registered Owner:	GEDDINGS T. ROBINSON	Rated Power:	60 Horsepower
Operator:	GEDDINGS T. ROBINSON	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:		Distance from Accident Site:	
Observation Time:		Direction from Accident Site:	
Lowest Cloud Condition:	Scattered / 9000 ft AGL	Visibility	40 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	8 knots / 10 knots	Turbulence Type Forecast/Actual:	/
Wind Direction:	290°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	22°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:		Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	VFR
Departure Time:	17:45 Local	Type of Airspace:	

Airport Information

Airport:	DOUGLAS COUNTY MEV	Runway Surface Type:	Dirt
Airport Elevation:	4718 ft msl	Runway Surface Condition:	Dry
Runway Used:	3	IFR Approach:	None
Runway Length/Width:	5289 ft / 75 ft	VFR Approach/Landing:	None

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:	39.009777,-119.7499(est)

Administrative Information

Investigator In Charge (IIC):	Erickson, Scott
Additional Participating Persons:	EARL MORGAN; RENO , NV
Original Publish Date:	May 27, 1993
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=27220

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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](#).