



Aviation Investigation Final Report

Location:	WESTMINSTER, Maryland	Accident Number:	NYC98LA109
Date & Time:	May 15, 1998, 13:20 Local	Registration:	N83MC
Aircraft:	Deberry MA-5	MARQUART	Aircraft Damage: Destroyed
Defining Event:		Injuries:	1 Minor
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

After takeoff, about 100 feet above the ground, the airplane suffered a complete power loss. The pilot activated the wobble pump, but the engine would not respond. He tried to dissipate airspeed and altitude with skidding S-turns to remain over the runway. The pilot said he then intentionally stalled the airplane because the runway had no overrun, and the terrain dropped sharply, about 100 feet, into a creek and trees. The airplane stalled from about a 30 foot height, impacted left wing, nose down, and came to rest upside down, just off the end of the runway. It was consumed by fire. The pilot said he felt the airplane was on fire in flight, before the crash. Examination revealed the carburetor flexible inlet line had failed at the sleeve fitting.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: Failure of a fuel line fitting which led to an engine failure and fire. A factor was the lack of suitable terrain for the forced landing.

Findings

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

Findings

1. (C) FUEL SYSTEM,LINE FITTING - FAILURE

Occurrence #2: FORCED LANDING
Phase of Operation: EMERGENCY LANDING AFTER TAKEOFF

Occurrence #3: FIRE
Phase of Operation: EMERGENCY LANDING AFTER TAKEOFF

Findings
2. (C) FUEL SYSTEM,LINE FITTING - LEAK

Occurrence #4: LOSS OF CONTROL - IN FLIGHT
Phase of Operation: EMERGENCY LANDING AFTER TAKEOFF

Findings
3. STALL - INTENTIONAL - PILOT IN COMMAND

Occurrence #5: IN FLIGHT COLLISION WITH TERRAIN/WATER
Phase of Operation: EMERGENCY LANDING AFTER TAKEOFF

Findings
4. (F) TERRAIN CONDITION - NONE SUITABLE

Factual Information

On May 15, 1998, about 1320 Eastern Daylight Time, a homebuilt Deberry Marquart MA-5, N83MC, was destroyed during a forced landing after takeoff from Clearview Airpark Airport (2W2), Westminster, Maryland. The certificated private pilot received minor injuries. Visual meteorological conditions prevailed at the time of the accident. No flight plan was filed for the personal flight conducted under 14 CFR Part 91.

The accident airplane was the fourth airplane to be constructed by the pilot, and had 27 hours of total flight time. He stated it "performed normally on takeoff," then experienced a complete power loss about 100 feet above ground. The pilot activated the wobble pump, but the engine would not respond. He then "S-turned" by using the rudder to slip the airplane. His stated his intention was to bleed off airspeed and altitude, so as to remain over the runway. Then, he intentionally stalled the airplane at about 30 feet, and it impacted left wing, nose down. It came to rest upside down, just off the end of the runway, and fire consumed it. The pilot stated he intentionally stalled the airplane because there was no runway overrun, and the terrain dropped sharply, about 100 feet, into a creek and trees.

In a statement to a Federal Aviation Administration (FAA) Inspector, the pilot said he felt the airplane was on fire in flight, before the crash. According to the Inspector, "Investigation at the accident site and engine teardown inspection support this supposition. The carburetor flexible inlet line failed at the sleeve fitting, causing a fuel jet effect or blowtorch effect due to the higher fuel pressure from the action of the wobble pump.... Unable to determine if the failure of the flexible fuel line was due to improper manufacture of the line or improper installation."

Pilot Information

Certificate:	Private	Age:	47, Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Rear
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	October 17, 1997
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	
Flight Time:	4884 hours (Total, all aircraft), 27 hours (Total, this make and model), 4794 hours (Pilot In Command, all aircraft), 37 hours (Last 90 days, all aircraft), 23 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Deberry	Registration:	N83MC
Model/Series:	MARQUART MA-5 MARQUART M	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	Yes
Airworthiness Certificate:	Experimental (Special)	Serial Number:	0191
Landing Gear Type:	Tailwheel	Seats:	2
Date/Type of Last Inspection:	April 2, 1998 Annual	Certified Max Gross Wt.:	1850 lbs
Time Since Last Inspection:	27 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	27 Hrs	Engine Manufacturer:	Lycoming
ELT:	Installed, not activated	Engine Model/Series:	O-320-A2B
Registered Owner:	STEVEN W. DEBERRY	Rated Power:	150 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:	KBW ,146 ft msl	Distance from Accident Site:	29 Nautical Miles
Observation Time:	12:54 Local	Direction from Accident Site:	140°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	/
Wind Direction:	0°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	29°C / 11°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	(2W2)	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	13:20 Local	Type of Airspace:	Class G

Airport Information

Airport:	CLEARVIEW AIRPARK 2W2	Runway Surface Type:	Asphalt
Airport Elevation:	810 ft msl	Runway Surface Condition:	Dry
Runway Used:	31	IFR Approach:	None
Runway Length/Width:	1845 ft / 30 ft	VFR Approach/Landing:	Forced landing

Wreckage and Impact Information

Crew Injuries:	1 Minor	Aircraft Damage:	Destroyed
Passenger Injuries:		Aircraft Fire:	On-ground
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Minor	Latitude, Longitude:	39.569297,-76.999183(est)

Administrative Information

Investigator In Charge (IIC):	Cox, Paul
Additional Participating Persons:	LINDA M NEVIN; BALTIMORE, MD
Original Publish Date:	December 8, 1998
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=39562

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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](#).