



Aviation Investigation Final Report

Location:	Elyria, Ohio	Accident Number:	CHI07CA217
Date & Time:	July 16, 2007, 19:30 Local	Registration:	N804DC
Aircraft:	Chrapczynski M1 Midget Mustang	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 None
Flight Conducted Under:	Part 91: General aviation - Flight test		

Analysis

The experimental airplane was substantially damaged during a hard landing following a loss of engine power after takeoff on runway 25 (5,002 feet by 100 feet, dry asphalt). The accident occurred during the first flight of the amateur-built airplane. The pilot stated that he had conducted over 4 hours of ground and taxi testing prior to the first flight. He noted that immediately prior to the accident takeoff he conducted a "high speed taxi run" and observed no problems with the engine. The pilot reported that during the takeoff roll the airplane accelerated to approximately 75 mph and lifted off "normally". He stated: "Within seconds after liftoff, the engine began "sputtering and slowing down." The "sputtering increased in intensity" and the pilot "realized that flight could no longer be maintained." He elected to execute an emergency landing in the grass area adjacent to the runway. He extended his glide in order to insure clearance to people located on the parallel taxiway positioned to assist in the event of an emergency. As result of the extended glide, the airspeed decayed and the airplane was "practically on a stall." He noted that the landing gear collapsed due to the resulting "rough landing" and the airplane subsequently "skidded to a halt" in the grass area near midfield. No anomalies consistent with a significant loss of engine power were found.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's failure to maintain proper glide speed during the forced landing after takeoff, which resulted in an inadvertent stall/mush condition and a hard landing. A contributing factor was the loss of engine power after takeoff for undetermined reasons.

Findings

Occurrence #1: LOSS OF ENGINE POWER

Phase of Operation: TAKEOFF

Findings

1. (F) REASON FOR OCCURRENCE UNDETERMINED

Occurrence #2: FORCED LANDING

Phase of Operation: EMERGENCY LANDING AFTER TAKEOFF

Occurrence #3: HARD LANDING

Phase of Operation: EMERGENCY LANDING AFTER TAKEOFF

Findings

2. (C) AIRSPEED - NOT MAINTAINED - PILOT IN COMMAND

3. (C) STALL/MUSH - INADVERTENT - PILOT IN COMMAND

4. TERRAIN CONDITION - GRASS

Occurrence #4: GEAR COLLAPSED

Phase of Operation: EMERGENCY LANDING AFTER TAKEOFF

Findings

5. (F) LANDING GEAR - OVERLOAD

Factual Information

The experimental airplane was substantially damaged during a hard landing following a loss of engine power after takeoff on runway 25 (5,002 feet by 100 feet, dry asphalt). The accident occurred during the first flight of the amateur-built airplane. The pilot stated he had conducted over 4 hours of ground and taxi testing prior to the first flight. He noted that immediately prior to the accident takeoff he conducted a "high speed taxi run" and observed no problems with the engine. The pilot reported that during the takeoff roll the airplane accelerated to approximately 75 mph and lifted off "normally". He stated: "Within seconds of liftoff, the engine began "sputtering and slowing down." The "sputtering increased in intensity" and the pilot "realized that flight could no longer be maintained." He elected to execute an emergency landing in the grass area adjacent to the runway. He extended his glide in order to insure clearance to people located on the parallel taxiway positioned to assist in the event of an emergency. As result of the extended glide, the airspeed decayed and the airplane was "practically on a stall." He noted that the landing gear collapsed due to the resulting "rough landing" and the airplane subsequently "skidded to a halt" in the grass area near midfield. A post accident inspection did not reveal any anomalies associated with a significant loss of engine power. The engine had accumulated approximately 500 hours since overhaul.

Pilot Information

Certificate:	Private	Age:	55, Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Single
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 With waivers/limitations	Last FAA Medical Exam:	April 1, 2007
Occupational Pilot:	No	Last Flight Review or Equivalent:	April 1, 2007
Flight Time:	616 hours (Total, all aircraft), 0 hours (Total, this make and model), 470 hours (Pilot In Command, all aircraft), 6 hours (Last 90 days, all aircraft), 2 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Chrapczynski	Registration:	N804DC
Model/Series:	M1 Midget Mustang	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	Yes
Airworthiness Certificate:	Experimental (Special)	Serial Number:	1054
Landing Gear Type:	Tailwheel	Seats:	1
Date/Type of Last Inspection:	January 1, 2007 Condition	Certified Max Gross Wt.:	1092 lbs
Time Since Last Inspection:	0 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	0 Hrs at time of accident	Engine Manufacturer:	Continental
ELT:	Not installed	Engine Model/Series:	O-200-A
Registered Owner:	On file	Rated Power:	100 Horsepower
Operator:	On file	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	LPR,793 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	18:53 Local	Direction from Accident Site:	
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	/
Wind Direction:		Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	26°C / 14°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Elyria, OH (LPR)	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	19:15 Local	Type of Airspace:	

Airport Information

Airport:	Lorain County Regional Airport LPR	Runway Surface Type:	Asphalt
Airport Elevation:	793 ft msl	Runway Surface Condition:	Dry
Runway Used:	25	IFR Approach:	None
Runway Length/Width:	5002 ft / 100 ft	VFR Approach/Landing:	None

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 None	Latitude, Longitude:	41.344165,-82.177497

Administrative Information

Investigator In Charge (IIC):	Sorensen, Timothy
Additional Participating Persons:	Dave Pesarchick; FAA-Cleveland FSDO; Cleveland, OH
Original Publish Date:	October 31, 2007
Last Revision Date:	
Investigation Class:	Class
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=66492

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](#).