



Aviation Investigation Final Report

Location:	Spanaway, Washington	Accident Number:	SEA01LA045
Date & Time:	February 3, 2001, 10:45 Local	Registration:	N58LA
Aircraft:	Alexander MA-5 Charger	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

After taxiing from the far end of the field and performing his pre-takeoff run-up check, the pilot experienced problems with his VHF radio and intercom. While he was attempting to correct the problems, he allowed the engine to idle in serious carburetor icing conditions for three or four minutes. After correcting the communications equipment problems, the pilot pulled onto the runway and took off without applying the carburetor heat to eliminate any carburetor ice that may have accumulated since the run-up check. After reaching an altitude of about 200 feet above the ground, the engine began to lose power. Because the loss of power made it impossible to maintain altitude, the pilot attempted a forced landing on a nearby golf course. Although the touchdown was successful, the main landing gear collapsed when the aircraft encountered rough/uneven terrain during the landing roll. A post accident inspection of the engine did not reveal any evidence of anomalies or malfunctions that would have contributed to the loss of power.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: the pilot's failure to apply carburetor heat prior to takeoff while operating in serious carburetor icing conditions. Factors include operating in serious carburetor icing conditions, and rough/uneven terrain in the area of the forced landing.

Findings

Occurrence #1: LOSS OF ENGINE POWER(PARTIAL) - NONMECHANICAL Phase of Operation: CLIMB

Findings 1. (C) CARBURETOR HEAT - NOT USED - PILOT IN COMMAND 2. (F) WEATHER CONDITION - CARBURETOR ICING CONDITIONS

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

Occurrence #3: GEAR COLLAPSED Phase of Operation: LANDING - ROLL

Findings

3. (F) TERRAIN CONDITION - ROUGH/UNEVEN

Factual Information

On February 3, 2001, approximately 1045 Pacific standard time, an experimental Alexander MA-5 Charger, N58LA, experienced a gear collapse during a forced landing that occurred after a partial loss of power during the climb out from Shady Acres Airport, Spanaway, Washington. The private pilot, who was the sole occupant, was not injured, but the aircraft, which was owned and operated by the pilot, sustained substantial damage. The 14 CFR Part 91 local personal pleasure flight took place in visual meteorological conditions. No flight plan had been filed. The ELT, which was activated by the accident sequence, was turned off at the scene.

According to the pilot, after taxiing from the far end of the field and completing his pre-takeoff run-up, he experienced problems with his intercom and VHF radio. While attempting to correct these problems, the aircraft's engine continued to run at idle for three or four minutes without the application of carburetor heat. When he was finished working with the radio problems, the pilot pulled onto the runway and took off without applying carburetor heat to eliminate any carburetor ice that may have accumulated since the run-up check. After the aircraft reached an altitude of about 200 feet above the ground, the engine slowly began to lose power. Being unable to make it back to the airport, the pilot attempted to execute a forced landing on the grounds of a nearby golf course. Although the touchdown was successful, the main landing gear collapsed when the aircraft encountered rough/uneven terrain during the landing roll.

At the time of the accident, the temperature was 41 degrees Fahrenheit and the dew point was 41 degrees Fahrenheit. Plotting these temperatures on the Carburetor Icing Probability Chart (attached) revealed that serious carburetor icing could be expected at cruise, climb or idle power. In addition, the pilot of another aircraft that was flying in the area approximately the same time as the subject aircraft took off, reported he experienced carburetor icing at cruise power.

A post-accident inspection of the engine did not reveal any evidence of malfunctions or anomalies that would have contributed to the loss of power.

Pilot Information

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Certificate:	Private	Age:	73,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 Medicalw/ waivers/lim	Last FAA Medical Exam:	March 27, 2000
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	July 28, 1990
Flight Time:	1340 hours (Total, all aircraft), 5 hour aircraft)	rs (Last 90 days, all aircraft), 1 hours (Last 30 days, all

Aircraft and Owner/Operator Information

Aircraft Make:	Alexander	Registration:	N58LA
Model/Series:	MA-5 Charger	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	Yes
Airworthiness Certificate:	Experimental (Special)	Serial Number:	074
Landing Gear Type:	Tailwheel	Seats:	2
Date/Type of Last Inspection:	July 10, 2000 Annual	Certified Max Gross Wt.:	1550 lbs
Time Since Last Inspection:	16 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	1302 Hrs at time of accident	Engine Manufacturer:	Lycoming
ELT:	Installed, activated, did not aid in locating accident	Engine Model/Series:	O-320-B2B
Registered Owner:	James P. McGinnis	Rated Power:	160 Horsepower
Operator:		Operating Certificate(s) Held:	None

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:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	/
Wind Direction:		Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	5°C / 5°C
Precipitation and Obscuration:	No Obscuration; No Precipitat	tion	
Departure Point:	Spanaway, WA (WA61)	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	10:42 Local	Type of Airspace:	Class G

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:	47.049575,-122.35997(est)

Administrative Information

Investigator In Charge (IIC):	Anderson, Orrin
Additional Participating Persons:	Earl Koenig; Seattle FSDO
Original Publish Date:	July 30, 2001
Last Revision Date:	
Investigation Class:	<u>Class</u>
Note:	The NTSB traveled to the scene of this accident.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=51712

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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 <u>here</u>.