



National Transportation Safety Board Aviation Accident Final Report

Location:	Chickaloon, AK	Accident Number:	ANC05LA021
Date & Time:	01/01/2005, 1400 AST	Registration:	N4262D
Aircraft:	Maule M-7	Aircraft Damage:	Substantial
Defining Event:		Injuries:	2 Serious, 2 Minor
Flight Conducted Under:	Part 91: General Aviation - Personal		

Analysis

The 14 CFR Part 91 personal flight was operating in VFR conditions. A witness reported seeing the airplane flying low over a highway when it struck power lines that crossed the highway. The accident site is located in a gently rolling, wide mountain valley, and the power lines were about 30 feet above the highway. The cables did not break immediately, and the airplane pulled the cables free from the poles on both sides of the highway, and snapped the top six feet and cross arm off one pole, carrying the cables and debris about 100 yards to the airplane's final resting place. An examination revealed all the major airframe components and flight controls were present, and flight-control continuity was established. One propeller blade had extensive leading edge gouging, chord-wise scratches, and torsional twisting and bending. An examination of the engine revealed no preimpact mechanical anomalies. The pilot and front seat passenger, who were both seriously injured, said they had no recollection of the accident. The pilot did not indicate in his written report to the NTSB that there was any preimpact mechanical problems with the airplane.

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 altitude/clearance during cruise flight, which resulted in an in-flight collision with power lines, and an uncontrolled descent and collision with terrain. A factor associated with the accident was the power lines.

Findings

Occurrence #1: IN FLIGHT COLLISION WITH OBJECT
Phase of Operation: CRUISE

Findings

1. (F) OBJECT - WIRE, TRANSMISSION
 2. (C) ALTITUDE/CLEARANCE - NOT MAINTAINED - PILOT IN COMMAND
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Occurrence #2: IN FLIGHT COLLISION WITH TERRAIN/WATER
Phase of Operation: DESCENT - UNCONTROLLED

Findings

3. TERRAIN CONDITION - GROUND

Factual Information

On January 1, 2005, about 1400 Alaska standard time, a wheel-equipped Maule M-7 airplane, N4262D, sustained substantial damage during an in-flight collision with power lines, and subsequent collision with terrain, about 65 miles east-northeast of Chickaloon, Alaska. The airplane was being operated by the pilot as a visual flight rules (VFR) personal local flight under Title 14, CFR Part 91, when the accident occurred. The commercial pilot and one passenger received serious injuries, and the two remaining passengers received minor injuries. Visual meteorological conditions prevailed, and no flight plan was filed. The flight departed Anderson Lake Airport, Wasilla, Alaska, about 1245.

During a telephone conversation with the National Transportation Safety Board (NTSB) investigator-in-charge (IIC) on January 1, the Alaska State Trooper at the accident site said a witness reported the airplane was flying at a low altitude over the highway when it struck power lines that crossed the highway. He said it was unknown if the pilot was attempting to land on the highway.

The NTSB IIC did not travel to the accident site, however, information and photographs were provided by personnel from the FAA, utility company, and airplane recovery company, who did travel to the site. The accident site is located in a gently rolling, wide mountain valley with a state highway running through it. The highway has numerous clear stretches in excess of a mile long. The terrain is typically tundra covered, with sparse, low growing spruce trees. At the time of the accident, the terrain was covered with one to three feet of snow.

While flying over the highway the airplane collided with two power cables. According to the utility company, the power poles where the cables cross the highway are 44 feet tall, and placed 100 feet from the centerline of the highway. The power cables sag from pole to pole, crossing the highway about 25-30 feet above the highway, and were not marked. At the accident site, the highway is gently sloping, and relatively straight for several miles. When struck by the airplane, the cables did not break immediately. The airplane pulled the cables free from the poles on both sides of the highway, and snapped the top six feet and cross arm off one of the poles. The airplane carried the cables and debris to its final resting place, about 100 yards from the cable crossing. The airplane came to rest in a level, upright attitude in the snow, about 50 feet off of the edge of the highway. The wings were folded back, and the forward portion of the passenger cabin was extensively damaged. Rescue crews cut the forward portion of the cabin apart to extricate the pilot and front seat passenger. Rescue and recovery crews reported copious amounts of fuel present.

During interviews with the IIC on March 30, the pilot and front seat passenger, who were both seriously injured in the accident, said they had no independent recollection of the accident. The pilot said he was told by the rear seat passenger that she heard one of them (pilot or front seat passenger) say "what was that" but had no idea what was happening prior to the accident. The fourth passenger was a two-year old child. The pilot said typically he would have been flying eight to nine hundred feet above ground level, unless he were making an emergency landing. He said there were no known mechanical anomalies with the airplane prior to the accident, and he did not indicate in his written report to the NTSB that the airplane had a mechanical problem which precipitated the accident.

On January 5, the airplane was examined by the IIC accompanied by a aviation safety inspector from the FAA at a storage facility. All the major airframe components and flight controls were

present. Control continuity was established for all the flight controls. The flap handle was mechanically captured in the flaps retracted position, and the flaps had damage consistent with them being retracted during impact. The throttle was friction locked about one-inch from the full throttle position. The propeller control was broken off, and the mixture control was about one-quarter inch from the full rich position. One of the propeller blades had extensive leading edge gouging, chord-wise scratches, and torsional twisting and bending.

On March 29, the airplane was again examined by the IIC accompanied by the engine manufacturer's representative. The engine and associated components were removed from the airframe, and taken to an engine shop. The engine was disassembled and inspected. Clean fuel was found in the carburetor, and no evidence of any mechanical anomaly was discovered with the carburetor. The magnetos were bench tested, and no anomalies were found. The vacuum pump was intact, and appeared to function normally. The engine was disassembled, examined, and no preimpact mechanical deficiencies were found.

Pilot Information

Certificate:	Flight Instructor; Commercial	Age:	42, Male
Airplane Rating(s):	Single-engine Land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	Airplane	Second Pilot Present:	
Instructor Rating(s):	Airplane Single-engine	Toxicology Performed:	No
Medical Certification:	Class 3 With Waivers/Limitations	Last FAA Medical Exam:	09/01/2003
Occupational Pilot:		Last Flight Review or Equivalent:	09/01/2003
Flight Time:	1313 hours (Total, all aircraft), 93 hours (Total, this make and model), 1213 hours (Pilot In Command, all aircraft), 10 hours (Last 90 days, all aircraft), 2 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Maule	Registration:	N4262D
Model/Series:	M-7	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	23061C
Landing Gear Type:	Tailwheel	Seats:	5
Date/Type of Last Inspection:	04/01/2004, Annual	Certified Max Gross Wt.:	2500 lbs
Time Since Last Inspection:	142 Hours	Engines:	1 Reciprocating
Airframe Total Time:	583 Hours as of last inspection	Engine Manufacturer:	Lycoming
ELT:	Installed, not activated	Engine Model/Series:	O-540
Registered Owner:	David Barnes	Rated Power:	235 hp
Operator:	David Barnes	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:		Distance from Accident Site:	
Observation Time:		Direction from Accident Site:	
Lowest Cloud Condition:	Clear	Visibility	20 Miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	/
Wind Direction:		Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Anderson Lake, AK (OAK1)	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	1245 AST	Type of Airspace:	

Wreckage and Impact Information

Crew Injuries:	1 Serious	Aircraft Damage:	Substantial
Passenger Injuries:	1 Serious, 2 Minor	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 Serious, 2 Minor	Latitude, Longitude:	62.000000, -146.750000

Administrative Information

Investigator In Charge (IIC): Lawrence R Lewis **Report Date:** 12/20/2005

Additional Participating Persons: Charlotte Lockett; Anchorage FSDO-03; Anchorage, AK

Publish Date:

Investigation Docket: NTSB accident and incident dockets serve as permanent archival information for the NTSB's investigations. Dockets released prior to June 1, 2009 are publicly available from the NTSB's Record Management Division at pubinq@ntsb.gov, or at 800-877-6799. Dockets released after this date are available at <http://dms.nts.gov/pubdms/>.

The National Transportation Safety Board (NTSB), established in 1967, is an independent federal agency mandated by Congress through the Independent Safety Board Act of 1974 to investigate transportation accidents, determine the probable causes of the accidents, issue safety recommendations, study transportation safety issues, and evaluate the safety effectiveness of government agencies involved in transportation. The NTSB makes public its actions and decisions through accident reports, safety studies, special investigation reports, safety recommendations, and statistical reviews.

The Independent Safety Board Act, as codified at 49 U.S.C. Section 1154(b), precludes the admission into evidence or use of any part of an NTSB report related to an incident or accident in a civil action for damages resulting from a matter mentioned in the report. A factual report that may be admissible under 49 U.S.C. § 1154(b) is available [here](#).