



National Transportation Safety Board Aviation Accident Final Report

Location:	Belen, NM	Accident Number:	CEN12FA174
Date & Time:	03/01/2012, 0535 MDT	Registration:	N273TE
Aircraft:	HEMP TIMOTHY LEGACY 2000	Aircraft Damage:	Destroyed
Defining Event:	Miscellaneous/other	Injuries:	2 Fatal
Flight Conducted Under:	Part 91: General Aviation - Personal		

Analysis

The experimental airplane collided with power lines shortly after takeoff and before sunrise. No distress calls from the pilot were reported, and no one witnessed the accident. The airplane was severely fragmented, and the debris path extended over 900 feet beyond the initial contact with the power lines consistent with a high-velocity impact. Examination of the engine and airframe did not reveal any preexisting mechanical anomalies that would have precluded normal operation.

Two occupants were on board the airplane, the pilot and the pilot-rated owner of the airplane. Witnesses reported that the pilot and pilot-rated passenger flew together because the pilot-rated passenger did not have a valid medical certificate. The pilot's most recent medical certificate had the following restrictions: "must wear corrective lenses" and "limited to daytime flight only" due to color vision limitations. The investigation revealed that the power lines were barely visible on the horizon in the desertlike terrain during daylight hours. Although it could not be determined whether the pilot or the pilot-rated passenger was at the controls at the time of the accident, it is likely that the flight's conduct before sunrise and the pilot's restriction for daytime flight only due to color vision limitations made the identification of the power lines more difficult.

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 clearance from power lines while maneuvering after takeoff. Contributing to the accident was the pilot's decision to operate the airplane during the hours of darkness when he had a restriction for daytime flight only due to color vision limitations.

Findings

Aircraft	Altitude - Not attained/maintained (Cause)
Personnel issues	Color-vision - Pilot (Factor) Use of equip/info - Pilot (Cause) Decision making/judgment - Pilot (Cause)

Factual Information

On March 1, 2012, approximately 0535 mountain standard time, an experimental Lancair Legacy 2000, N273TE, registered to the pilot-rated passenger, was destroyed when it collided with power lines and impacted the ground shortly after takeoff from the Alexander Municipal Airport (E80), Belen, New Mexico. The pilot and pilot-rated passenger were fatally injured. Dark night visual meteorological conditions prevailed and no flight plan was filed for the 14 Code of Federal Regulations Part 91 flight. The flight's intended destination was Falcon Field, Mesa, Arizona.

The PNM Power Company of Albuquerque, New Mexico, recorded a voltage spike at 0535 on a three phase power line that runs south of E80. Company personnel who dispatched to identify the problem discovered three primary power lines cut and the lower common line separated, and the wreckage of the airplane scattered beyond the damaged lines. There were no radio distress calls reported from the airplane after takeoff and there were no eye witnesses of the accident. Local FBO personnel indicated that the airplane was being flown to Mesa, Arizona, for maintenance and calibration of the fuel system.

PERSONNEL INFORMATION

The pilot had about 1,013 hours of flight time as reported on his last FAA medical certificate (Third Class) dated September 28, 2011. He held a Commercial Pilot Certificate (Airplane Single Engine Land, Instrument, Flight Instructor, Ground Instructor). According to a friend, he had about 46 hours in the accident airplane. The pilot was a friend of the pilot-rated passenger who owned the airplane. According to people who knew him at the local FBO, the pilot and pilot-rated passenger always flew together because the pilot-rated passenger did not have a valid medical certificate.

The pilot's most recent medical (September 28, 2011), had restrictions. The restrictions were: 'Must Wear Corrective Lenses' and 'Limited to Daytime Flight Only' due to color vision limitations.

The pilot-rated passenger held a Private Pilot Certificate (Airplane Single Engine Land, Airframe and Powerplant Mechanic), with a restriction for night flight. His reported flight experience was 750 total hours as reported on his last application for a FAA medical certificate, dated August 4, 2009. His application was denied for medical conditions.

It is unknown whether the pilot or the pilot-rated passenger was at the controls at the time of the accident.

AIRCRAFT INFORMATION

The 2005 model Lancair Legacy 2000 was powered by a Continental IO-550-N engine. Records for the airframe and engine were not found. It was reported from local FBO personnel that the airplane was well maintained and had about 154 hours total time.

WRECKAGE AND IMPACT INFORMATION

Evidence at the accident site showed that the airplane had collided with 25-foot high power lines about 1.2 miles west of the departure end of runway 21. The first ground impact mark was found about 900 feet beyond the damaged power lines. Debris from the airplane was scattered beyond the initial ground impact point for about 500 feet on an approximate heading of 020

degrees magnetic.

Since the power lines were a main source for the area, the damaged power lines were repaired prior to the arrival of NTSB investigators.

The airplane was severely fragmented and documentation was limited on-scene. The wreckage debris path, which extended over 900 feet beyond the initial contact with the power lines, was consistent with a high velocity impact with the power lines. Examination of the engine did not reveal a pre-existing mechanical anomalies. Flight control continuity was confirmed from the cockpit to all flight control surfaces and all separations of flight control cables, rods, and bellcranks, showed signatures of overload due to impact forces.

The three-bladed propeller assembly was found separated from the engine. The crankshaft showed evidence of torsional separation just aft of the propeller flange. All three propeller blades were found secured within the propeller hub. One blade was buckled longitudinally along its span with moderate torsional twisting. The second blade had some torsional twisting, and the third blade was relatively undamaged.

MEDICAL AND PATHOLOGICAL INFORMATION

Autopsies were performed on the pilot and the pilot-rated passenger. No preexisting medical conditions were found that may have contributed to the accident. Toxicology tests on both the pilot and pilot-rated passenger were negative.

ADDITIONAL INFORMATION

The wreckage was released to the owner's representative.

History of Flight

Maneuvering-low-alt flying	Miscellaneous/other (Defining event)
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Pilot Information

Certificate:	Flight Instructor; Commercial	Age:	63
Airplane Rating(s):	Single-engine Land	Seat Occupied:	Right
Other Aircraft Rating(s):	None	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	Airplane Single-engine	Toxicology Performed:	Yes
Medical Certification:	Class 2 With Waivers/Limitations	Last Medical Exam:	09/28/2011
Occupational Pilot:	No	Last Flight Review or Equivalent:	04/20/2011
Flight Time:	(Estimated) 1013 hours (Total, all aircraft), 46 hours (Total, this make and model), 1 hours (Last 24 hours, all aircraft)		

Pilot-Rated Passenger Information

Certificate:	Private	Age:	57
Airplane Rating(s):	Single-engine Land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	None	Toxicology Performed:	Yes
Medical Certification:	None None	Last Medical Exam:	08/04/2009
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	(Estimated) 750 hours (Total, all aircraft), 60 hours (Total, this make and model), 60 hours (Last 90 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Manufacturer:	HEMP TIMOTHY	Registration:	N273TE
Model/Series:	LEGACY 2000	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	Yes
Airworthiness Certificate:	Experimental	Serial Number:	L2K164
Landing Gear Type:	Retractable - Tricycle	Seats:	2
Date/Type of Last Inspection:	07/21/2011, Conditional	Certified Max Gross Wt.:	
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	154 Hours	Engine Manufacturer:	CONT MOTOR
ELT:	Installed, not activated	Engine Model/Series:	IO-550-N
Registered Owner:	WESTBROOK GEORGE J	Rated Power:	310 hp
Operator:	WESTBROOK GEORGE J	Air Carrier Operating Certificate:	None

Meteorological Information and Flight Plan

Observation Facility, Elevation:		Observation Time:	0530 MDT
Distance from Accident Site:		Condition of Light:	Night
Direction from Accident Site:		Conditions at Accident Site:	Visual Conditions
Lowest Cloud Condition:	Clear	Temperature/Dew Point:	30°C / 4°C
Lowest Ceiling:	None	Visibility	25 Miles
Wind Speed/Gusts, Direction:	10 knots, 180°	Visibility (RVR):	
Altimeter Setting:	30.01 inches Hg	Visibility (RVV):	
Precipitation and Obscuration:			
Departure Point:	Belen, NM (E80)	Type of Flight Plan Filed:	Unknown
Destination:	Mesa, AZ (FFZ)	Type of Clearance:	None
Departure Time:	0534 MDT	Type of Airspace:	Unknown

Airport Information

Airport:	Alexander Municipal Airport (E80)	Runway Surface Type:	
Airport Elevation:	5194 ft	Runway Surface Condition:	Dry
Runway Used:	N/A	IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	Unknown

Wreckage and Impact Information

Crew Injuries:	1 Fatal	Aircraft Damage:	Destroyed
Passenger Injuries:	1 Fatal	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 Fatal		

Administrative Information

Investigator In Charge (IIC):	Alexander Lemishko	Adopted Date:	09/24/2014
Additional Participating Persons:	Dick M Stone; FAA FSDO Albuquerque; Albuquerque, NM		
Publish Date:	09/24/2014		
Investigation Docket:	http://dms.nts.gov/pubdms/search/dockList.cfm?mKey=83001		

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