



National Transportation Safety Board Aviation Accident Final Report

Location:	Nacogdoches, TX	Accident Number:	DFW05LA115
Date & Time:	05/01/2005, 1900 CDT	Registration:	N204RH
Aircraft:	Lancair Legacy	Aircraft Damage:	Destroyed
Defining Event:		Injuries:	2 None
Flight Conducted Under:	Part 91: General Aviation - Personal		

Analysis

The 20,000-hour pilot reported that while maneuvering at an altitude of 700-800 feet above ground level (agl), when the "sound of the engine suddenly changed" followed by a loss of engine power. The pilot initiated a forced landing to an open field. As the airplane touched down, the main landing gear separated and the airplane skidded to a stop in an upright position. Subsequently, a post crash fire ensued and destroyed the airplane. The pilot added that about three to four minutes prior to the change in the engine sound, he verified on the engine monitoring instrument that all indications were within the green bands. No mechanical anomalies were found during an engine examination. The reason for the loss of engine power was undetermined.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The loss of engine power for undetermined reasons.

Findings

Occurrence #1: LOSS OF ENGINE POWER
Phase of Operation: CRUISE

Findings

1. (C) REASON FOR OCCURRENCE UNDETERMINED

Occurrence #2: FORCED LANDING
Phase of Operation: EMERGENCY DESCENT/LANDING

Occurrence #3: ON GROUND/WATER ENCOUNTER WITH TERRAIN/WATER
Phase of Operation: EMERGENCY LANDING

Occurrence #4: GEAR COLLAPSED
Phase of Operation: EMERGENCY LANDING

Factual Information

On May 1, 2005, approximately 1900 central daylight time, a single-engine Lancair Legacy homebuilt experimental airplane, N204RH, registered to and operated by the pilot, was destroyed during a forced landing following a reported loss of engine power while maneuvering near Nacogdoches, Texas. The airline transport pilot and pilot rated passenger were not injured. Visual meteorological conditions prevailed, and a flight plan was not filed for the 14 Code of Federal Regulations Part 91 personal flight. The local flight originated from the A. L. Mangham Jr. Regional Airport (OCH), near Nacogdoches, Texas, approximately 1845.

The 20,000-hour pilot reported in the Pilot/Operator Aircraft Accident Report (NTSB Form 6120.1/2) that he was maneuvering at an altitude of 700-800 feet above ground level (agl), when the "sound of the engine suddenly changed" followed by a loss of engine power. As the pilot pitched the airplane up, "to trade airspeed for altitude," he verified the throttle, propeller, and mixture control positions. The pilot stated that he switched from the right fuel tank to the left fuel tank and cycled the throttle, but the engine continued to lose power, as he initiated a forced landing to an open field.

As the airplane touched down, the main landing gear "sheered off" and the airplane skidded to a stop in an upright position. Subsequently, a post-crash fire ensued and both occupants evacuated the airplane.

The pilot added that about three to four minutes prior to the change in the engine sound, he verified on the engine monitoring instrument that all indications were within the green bands.

Examination of the airplane by an Federal Aviation Administration (FAA) inspector, who responded to the accident site, revealed that the fuselage and inboard portions of the airplane were consumed by the fire.

The wreckage of airplane, which had accumulated approximately 30.1-hours since new, and the Teledyne Continental Motors IO-550-N13B engine which had accumulated 23.7-hours since new, were recovered to the facilities of Air Salvage of Dallas, near Lancaster, Texas, for further examination.

Examination of the engine was conducted on June 9, 2005, at the facilities of Teledyne Continental, of Mobile, Alabama, under the supervision of an NTSB representative. The examination revealed that rotational continuity was established throughout the engine and accessory gearbox when the propeller was rotated by hand. The top and bottom sparkplugs were removed and when compared to the Champion Aviation Check-A-Plug Wear Guide (Part Number AV-27), displayed signatures of normal operation. All six cylinders remained attached to the crankcase and were fire damaged. Cylinder #1, #2, #3, #4, #5, and #6 pistons, rings, pins, and connecting rods remained intact and free of anomalies. The crankshaft and counterweight were free of anomalies.

The reason for the reported loss of engine power could not be determined.

Pilot Information

Certificate:	Airline Transport	Age:	60, Male
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 1 With Waivers/Limitations	Last Medical Exam:	12/01/2004
Occupational Pilot:		Last Flight Review or Equivalent:	01/01/2004
Flight Time:	20000 hours (Total, all aircraft), 32 hours (Total, this make and model), 19000 hours (Pilot In Command, all aircraft), 31 hours (Last 90 days, all aircraft), 31 hours (Last 30 days, all aircraft), 3 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Manufacturer:	Lancair	Registration:	N204RH
Model/Series:	Legacy	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	Yes
Airworthiness Certificate:	Experimental	Serial Number:	L2K-226
Landing Gear Type:	Tailwheel	Seats:	2
Date/Type of Last Inspection:	Annual	Certified Max Gross Wt.:	2450 lbs
Time Since Last Inspection:	30.1 Hours	Engines:	1 Reciprocating
Airframe Total Time:	30.1 Hours	Engine Manufacturer:	Teledyne Continental
ELT:	Installed, not activated	Engine Model/Series:	IO-550-N13B
Registered Owner:	Randall M Hurst	Rated Power:	310 hp
Operator:	Randall M Hurst	Air Carrier Operating Certificate:	None

Meteorological Information and Flight Plan

Observation Facility, Elevation:	LFK, 296 ft msl	Observation Time:	1953 CDT
Distance from Accident Site:	21 Nautical Miles	Condition of Light:	Day
Direction from Accident Site:	180°	Conditions at Accident Site:	Visual Conditions
Lowest Cloud Condition:	Clear	Temperature/Dew Point:	18° C / 10° C
Lowest Ceiling:	None	Visibility	10 Miles
Wind Speed/Gusts, Direction:	Calm, Variable	Visibility (RVR):	
Altimeter Setting:	30.09 inches Hg	Visibility (RVV):	
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Nacogdoches, TX (OCH)	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	1845 CDT	Type of Airspace:	

Wreckage and Impact Information

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

Administrative Information

Investigator In Charge (IIC):	Alexander Lemishko	Adopted Date:	09/13/2005
Additional Participating Persons:	Tom Schmitt; Federal Aviation Administration; Houston, TX		
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/ .		

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