



National Transportation Safety Board Aviation Accident Factual Report

Location:	Sylvan Grove, KS	Accident Number:	DEN07LA133
Date & Time:	08/01/2007, 1615 CDT	Registration:	N7441W
Aircraft:	Walker Lancair IV	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 Serious
Flight Conducted Under:	Part 91: General Aviation - Personal		

On August 1, 2007, approximately 1615 central daylight time, a Walker Lancair IV, N7441W, piloted by an airline transport-certificated pilot, was substantially damaged when it collided with terrain during a forced landing following a loss of engine power three miles southeast of Sylvan Grove, Kansas. Visual meteorological conditions prevailed at the time of the accident. The personal flight was being conducted under the provisions of Title 14 Code of Federal Regulations (CFR) Part 91 without a flight plan. The pilot was seriously injured. The cross-country flight originated at Junction City, Kansas (3JC), and was en route to Farmington, New Mexico (FMN). Its final destination was Santa Barbara, California (SBA).

The pilot had just purchased the airplane and was ferrying it home. According to the pilot's accident report dictated to an FAA inspector from his hospital bed, the airplane had been "fully serviced with fuel and oil" prior to his departure. During the initial climb to 10,500 feet, the electronic manifold pressure gauge malfunctioned so he managed power "by throttle position." He reduced power when the number 2 cylinder head temperature increased more than the other cylinder head temperatures. Almost immediately upon leveling off, the engine lost power. When the fuel boost pump was switched to HIGH, the engine "fired and achieved lower power for 30 seconds." Mixture control manipulation restarted the engine, but after a few seconds there was "an explosion and a lot of smoke." The engine stopped but [the propeller] "appeared to be turning freely" all the way down. The pilot made a rapid descent and landed in an open field. The airplane rolled about 400 feet, crested a small rise, then struck a ground depression that collapsed the landing gear and buckled the firewall. The airplane then slid sideways for another 300 feet. The pilot used his cellular telephone to alert authorities of the accident.

FAA inspectors examined the engine, a Continental TSIO-550-B-1-B (s.n. 802008), and found evidence of catastrophic engine failure. An oil line to the turbocharger wastegate actuator had come loose, resulting in oil starvation and high heat distress. A hole in the engine case exposed the number 5 journal and imprints from rod bolt strikes. The airplane was built in 1992. The engine had a total time of 88 hours.

Aircraft and Owner/Operator Information

Aircraft Make:	Walker	Registration:	N7441W
Model/Series:	Lancair IV	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	Yes
Airworthiness Certificate:	Experimental	Serial Number:	LIV-076
Landing Gear Type:	Retractable - Tricycle	Seats:	4
Date/Type of Last Inspection:	08/01/2007, Condition	Certified Max Gross Wt.:	3550 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	90 Hours at time of accident	Engine Manufacturer:	Continental
ELT:	Installed, activated, did not aid in locating accident	Engine Model/Series:	TSIO-550-B
Registered Owner:	Bruce A. Stratton	Rated Power:	350 hp
Operator:	Bruce A. Stratton	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	RSL, 1862 ft msl	Distance from Accident Site:	29 Nautical Miles
Observation Time:	1553 CDT	Direction from Accident Site:	240°
Lowest Cloud Condition:	Few / 3900 ft agl	Visibility	10 Miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	14 knots / 18 knots	Turbulence Type Forecast/Actual:	/
Wind Direction:	150°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.91 inches Hg	Temperature/Dew Point:	32° C / 22° C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Junction City, KS (3JC)	Type of Flight Plan Filed:	None
Destination:	Farmington, NM (FMN)	Type of Clearance:	None
Departure Time:	1355 CST	Type of Airspace:	

Wreckage and Impact Information

Crew Injuries:	1 Serious	Aircraft Damage:	Substantial
Passenger Injuries:	N/A	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Serious	Latitude, Longitude:	38.993889, -99.595278

Administrative Information

Investigator In Charge (IIC):	Arnold W Scott
Additional Participating Persons:	Gary Watson; FAA Flight Standards District Office; Wichita, KS
Investigation Docket:	NTSB accident and incident docket 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/ .