



National Transportation Safety Board Aviation Accident Final Report

Location:	Longmont, CO	Accident Number:	CEN14LA267
Date & Time:	06/01/2014, 0915 MDT	Registration:	N206ND
Aircraft:	DIAMOND AIRCRAFT IND INC DA20-C1	Aircraft Damage:	Substantial
Defining Event:	Loss of engine power (total)	Injuries:	1 None
Flight Conducted Under:	Part 91: General Aviation - Personal		

Analysis

The pilot reported that the engine lost all power after the airplane took off and climbed to about 400 feet. He then made a forced landing to a field adjacent to the airport. The airplane struck the ground nose first and skidded about 150 feet before coming to a stop; the nose gear was sheared off. During a postaccident examination of the airplane, only a few drops of fuel were recovered from the wing and gascolator fuel drains; no fuel could be seen in either tank. The pilot noted that fuel had been leaking from the tanks for three days before the examination. However, even if minimal fuel had been present during the accident flight, more than a few drops should have drained out of the gascolator drain. Had the pilot done a thorough preflight inspection, he should have noted the lack of fuel in the tanks.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: A loss of engine power due to fuel exhaustion. Contributing to the accident was the pilot's inadequate preflight inspection.

Findings

Aircraft	Fuel - Fluid level (Cause)
Personnel issues	Preflight inspection - Pilot (Factor)

Factual Information

On June 1, 2014, about 0915 mountain daylight time, a Diamond DA 20-C1, N206ND, collided with terrain after the engine lost power near Longmont, Colorado. The commercial pilot, the sole occupant on board, was not injured. The airplane was substantially damaged. The airplane was registered to and operated by the pilot under the provisions of 14 Code of Federal Regulations Part 91 as a personal flight. Visual meteorological conditions prevailed at the time of the accident, and no flight plan had been filed. The local flight was originating when the accident occurred.

In a telephone interview, the pilot said the airplane had just come out of an annual inspection and his mechanic had performed a post-maintenance engine functional test up to full power. All systems operated normally and the engine performed well. The accident flight was a test flight after the annual inspection. The pilot said prior to takeoff, he also ran the engine up to full power. No anomalies were noted. The pilot took off and after climbing to about 400 feet, the engine lost power. The pilot made a forced landing in a field adjacent to the airport. The airplane struck the ground nose first, shearing off the nose gear, and skidded about 150 feet before coming to a stop. The empennage was separated from the fuselage.

On June 4, three Federal Aviation Administration inspectors examined the airplane in the presence of the pilot. According to the lead inspector, the airplane was equipped with two fuel drains --- one for the fuel tank and one for the gascolator. Only a few drops of fuel were recovered from each drain. No fuel could be seen in the fuel tank. The pilot said fuel had been leaking from the fuel tank for three days before the FAA inspectors arrived. According to the FAA inspector's report, if there had been minimal fuel aboard the airplane, fuel greater than a few drops would have drained out of the gascolator drain during the examination.

History of Flight

Initial climb	Loss of engine power (total) (Defining event)
Emergency descent	Off-field or emergency landing
Landing	Collision with terr/obj (non-CFIT)
Prior to flight	Aircraft servicing event

Pilot Information

Certificate:	Commercial	Age:	73
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	Airplane Single-engine	Toxicology Performed:	No
Medical Certification:	Class 3 With Waivers/Limitations	Last Medical Exam:	05/01/2014
Occupational Pilot:	No	Last Flight Review or Equivalent:	06/01/2013
Flight Time:	(Estimated) 1400 hours (Total, all aircraft), 700 hours (Total, this make and model)		

Aircraft and Owner/Operator Information

Aircraft Manufacturer:	DIAMOND AIRCRAFT IND INC	Registration:	N206ND
Model/Series:	DA20-C1	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Utility	Serial Number:	C0020
Landing Gear Type:	Tricycle	Seats:	2
Date/Type of Last Inspection:		Certified Max Gross Wt.:	1764 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	Continental
ELT:	Not installed	Engine Model/Series:	IO-240-B
Registered Owner:	KOSAIR INC	Rated Power:	125 hp
Operator:	KOSAIR INC	Air Carrier Operating Certificate:	None

Meteorological Information and Flight Plan

Observation Facility, Elevation:	KLMO, 5055 ft msl	Observation Time:	0914 MDT
Distance from Accident Site:		Condition of Light:	Day
Direction from Accident Site:		Conditions at Accident Site:	Visual Conditions
Lowest Cloud Condition:	Clear	Temperature/Dew Point:	23°C / 11°C
Lowest Ceiling:	None	Visibility	10 Miles
Wind Speed/Gusts, Direction:	3 knots, 160°	Visibility (RVR):	
Altimeter Setting:	29.93 inches Hg	Visibility (RVV):	
Precipitation and Obscuration:			
Departure Point:	Longmont, CO (KLMO)	Type of Flight Plan Filed:	
Destination:	Longmont, CO (KLMO)	Type of Clearance:	None
Departure Time:	0900 MDT	Type of Airspace:	Class G

Airport Information

Airport:	Vance Brand (KLMO)	Runway Surface Type:	Concrete
Airport Elevation:	5055 ft	Runway Surface Condition:	Dry
Runway Used:	29	IFR Approach:	None
Runway Length/Width:	4799 ft / 75 ft	VFR Approach/Landing:	Forced Landing

Wreckage and Impact Information

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

Administrative Information

Investigator In Charge (IIC):	Arnold W Scott	Adopted Date:	10/27/2014
Additional Participating Persons:			
Publish Date:	10/27/2014		
Investigation Docket:	http://dms.nts.gov/pubdms/search/dockList.cfm?mKey=89327		

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