



National Transportation Safety Board Aviation Accident Final Report

Location:	Coldwater, MI	Accident Number:	CHI03LA002
Date & Time:	10/02/2002, 1912 EDT	Registration:	N633KF
Aircraft:	Tanner Kitfox	Aircraft Damage:	Substantial
Defining Event:		Injuries:	2 None

Flight Conducted Under: Part 91: General Aviation - Instructional

Analysis

The experimental amateur-built airplane received substantial damage during a forced landing. The instructional flight experienced a total loss of engine power during the eighth takeoff in a series of touch and go landings. The airplane was climbing through 200 feet above ground level when the engine quit and a left 90-degree turn was executed so as to land in a grassy area. An engine restart was not attempted. Examination of the wreckage confirmed flight control continuity, electrical continuity of the ignition system, engine continuity, and engine compression. Fuel was found in both engine carburetors, oil was found within the engine, and coolant was present in the coolant tank.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The low altitude at which an undetermined loss of engine power occurred following takeoff.

Findings

Occurrence #1: LOSS OF ENGINE POWER
Phase of Operation: TAKEOFF - INITIAL CLIMB

Findings

1. (C) REASON FOR OCCURRENCE UNDETERMINED

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

Occurrence #3: IN FLIGHT COLLISION WITH TERRAIN/WATER
Phase of Operation: EMERGENCY LANDING

Findings

2. TERRAIN CONDITION - GRASS

Factual Information

On October 2, 2002, at 1912 eastern daylight time, an experimental amateur-built Tanner Kitfox, N633KF, was substantially damaged during a forced landing following a takeoff from runway 03 (3,500 feet by 75 feet, asphalt) at Branch County Memorial Airport, Coldwater, Michigan. The airplane experienced a total loss of engine power during climb. Visual meteorological conditions prevailed at time of the accident. The 14 CFR Part 91 instructional flight was not operating on a flight plan. The certified flight instructor (CFI) and pilot were uninjured. The local flight originated at 1800.

The CFI stated that they were performing touch and go's and at 200 feet above ground during the eighth takeoff, there was a total loss of engine power. They then made a left 90-degree turn to a grassy area without attempting to restart the engine. He stated that the airplane impacted at a high sink rate.

Examination of the wreckage was performed by the Federal Aviation Administration. The airplane was resting inverted about 220 feet west of the centerline and 300 feet from the approach end of runway 21. Flight control continuity was confirmed. The fuel shut off valve was in the on position.

The airplane was powered by a Rotax 582LC, serial number 3916612, engine with a total time since overhaul of 232.7 hours and 6 hours were since its last inspection. The engine contained oil and coolant water was present in the coolant tank. Fuel was present in the fuel tank and in both carburetor bowls. The engine was rotated by hand and thumb compression and continuity were confirmed. Electrical continuity of the engine was confirmed upon examination of the ignition system. The spark plugs did not contain debris.

Pilot Information

Certificate:	Flight Instructor; Commercial	Age:	45, Male
Airplane Rating(s):	Multi-engine Land; Single-engine Land; Single-engine Sea	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; Instrument Airplane	Toxicology Performed:	No
Medical Certification:	Class 3 Valid Medical--w/ waivers/lim.	Last FAA Medical Exam:	09/18/2001
Occupational Pilot:		Last Flight Review or Equivalent:	02/24/2001
Flight Time:	4200 hours (Total, all aircraft), 120 hours (Total, this make and model), 3000 hours (Pilot In Command, all aircraft), 70 hours (Last 90 days, all aircraft), 20 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

Student Pilot Information

Certificate:	Student	Age:	, Male
Airplane Rating(s):	Single-engine Land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	None	Second Pilot Present:	Yes
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:	50 hours (Total, all aircraft), 7 hours (Total, this make and model), 0 hours (Pilot In Command, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Tanner	Registration:	N633KF
Model/Series:	Kitfox	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	Yes
Airworthiness Certificate:	Experimental	Serial Number:	633
Landing Gear Type:	Tailwheel	Seats:	2
Date/Type of Last Inspection:	Annual	Certified Max Gross Wt.:	950 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	Rotax
ELT:		Engine Model/Series:	582LC
Registered Owner:	Sport Truck LLC	Rated Power:	65 hp
Operator:	Sport Truck LLC	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	OEB, 944 ft msl	Distance from Accident Site:	
Observation Time:	1839 EDT	Direction from Accident Site:	
Lowest Cloud Condition:	Scattered / 7000 ft agl	Visibility	10 Miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	3 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	290°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.98 inches Hg	Temperature/Dew Point:	26 °C / 18 °C
Precipitation and Obscuration:			
Departure Point:	Coldwater, MI (OEB)	Type of Flight Plan Filed:	None
Destination:	Unknown	Type of Clearance:	
Departure Time:	1800 EDT	Type of Airspace:	Class E

Airport Information

Airport:	Branch County Airport (OEB)	Runway Surface Type:	Asphalt
Airport Elevation:	959 ft	Runway Surface Condition:	Dry
Runway Used:	03	IFR Approach:	None
Runway Length/Width:	3500 ft / 75 ft	VFR Approach/Landing:	Forced Landing; Touch and Go

Wreckage and Impact Information

Crew Injuries:	2 None	Aircraft Damage:	Substantial
Passenger Injuries:	N/A	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 None	Latitude, Longitude:	41.933611, -85.052778

Administrative Information

Investigator In Charge (IIC):	Mitchell F Gallo	Report Date:	09/30/2003
Additional Participating Persons:	Dave Kepple; Federal Aviation Administration; South Bend, IN		
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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