



Aviation Investigation Final Report

Location: Proctorville, Ohio Accident Number: CHI07CA007

Date & Time: October 10, 2006, 17:20 Local Registration: N5103R

Aircraft: Steinbaum Kitfox IV Aircraft Damage: Substantial

Defining Event: 2 None

Flight Conducted Under: Part 91: General aviation - Personal

Analysis

The amateur-built airplane was damaged during a forced landing following a loss of engine power while in the traffic pattern for landing. The pilot reported that the airplane's engine lost power "at the point of left downwind to base." He reported that the airplane was at 500 feet above ground level and over a river when the loss of power occurred. There was a soccer field with children playing on his left side and residences on his right side. He reported that he chose a field that he estimated to be 400 feet long and attempted an off-airport landing. He touched down on the left main landing gear first due to an incline in the field and trees and a brush pile that he avoided during the landing approach. He reported that the landing gear mount failed and the airplane slid to a stop. The pilot reported that subsequent to the accident the automotive style fuel line filter was found to be obstructed.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The blocked fuel filter which resulted in the loss of engine power. The residential area where the power loss occurred, the trees, the sloped landing site, and the unsuitable terrain encountered during the forced landing were contributing factors.

Findings

Occurrence #1: LOSS OF ENGINE POWER

Phase of Operation: APPROACH - VFR PATTERN - DOWNWIND

Findings

1. (C) FUEL SYSTEM, FILTER - BLOCKED (TOTAL)

Occurrence #2: FORCED LANDING

Phase of Operation: EMERGENCY DESCENT/LANDING

Occurrence #3: IN FLIGHT COLLISION WITH TERRAIN/WATER

Phase of Operation: EMERGENCY DESCENT/LANDING

Findings

2. (F) TERRAIN CONDITION - RESIDENTIAL AREA

- 3. (F) OBJECT TREE(S)
- 4. (F) TERRAIN CONDITION OTHER
- 5. (F) UNSUITABLE TERRAIN OR TAKEOFF/LANDING/TAXI AREA ENCOUNTERED PILOT IN COMMAND

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Factual Information

The amateur-built airplane was damaged during a forced landing following a loss of engine power while in the traffic pattern for landing. The pilot reported that the airplane's engine quit "at the point of left downwind to base." He reported that the airplane was at 500 feet above ground level and over a river when the loss of power occurred. There was a soccer field with children playing on his left side and residences on his right side. He reported that he chose a field that he estimated to be 400 feet long and attempted an off-airport landing. He touched down on the left main landing gear first due to an incline in the field and trees and a brush pile that he avoided during the landing approach. He reported that the landing gear mount failed and the airplane slid to a stop. The pilot reported that subsequent to the accident the automotive style fuel line filter was found to be obstructed.

Pilot Information

Certificate:	Private	Age:	49,Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 With waivers/limitations	Last FAA Medical Exam:	September 1, 2006
Occupational Pilot:		Last Flight Review or Equivalent:	December 1, 2004
Flight Time:	417 hours (Total, all aircraft), 21 hours (Total, this make and model), 21 hours (Last 90 days, all aircraft), 16 hours (Last 30 days, all aircraft), 4 hours (Last 24 hours, all aircraft)		

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Aircraft and Owner/Operator Information

Aircraft Make:	Steinbaum	Registration:	N5103R
Model/Series:	Kitfox IV	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	Yes
Airworthiness Certificate:	Experimental (Special)	Serial Number:	1672
Landing Gear Type:	Tailwheel	Seats:	2
Date/Type of Last Inspection:	September 1, 2006 Condition	Certified Max Gross Wt.:	1050 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	94 Hrs at time of accident	Engine Manufacturer:	Rotax
ELT:	Installed, not activated	Engine Model/Series:	65
Registered Owner:	On file	Rated Power:	65
Operator:	On file	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:		Distance from Accident Site:	
Observation Time:		Direction from Accident Site:	
Lowest Cloud Condition:		Visibility	
Lowest Ceiling:		Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	/
Wind Direction:		Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	
Precipitation and Obscuration:			
Departure Point:	HUNTINGTON, WV (I41)	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	17:00 Local	Type of Airspace:	

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Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	1 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 None	Latitude, Longitude:	38.458332,-82.319999

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Administrative Information

Investigator In Charge (IIC):	Brannen, John
Additional Participating Persons:	
Original Publish Date:	November 29, 2007
Last Revision Date:	
Investigation Class:	<u>Class</u>
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=64800

The National Transportation Safety Board (NTSB) is an independent federal agency charged by Congress with investigating every civil aviation accident in the United States and significant events in other modes of transportation—railroad, transit, highway, marine, pipeline, and commercial space. We determine the probable causes of the accidents and events we investigate, and issue safety recommendations aimed at preventing future occurrences. In addition, we conduct transportation safety research studies and offer information and other assistance to family members and survivors for each accident or event we investigate. We also serve as the appellate authority for enforcement actions involving aviation and mariner certificates issued by the Federal Aviation Administration (FAA) and US Coast Guard, and we adjudicate appeals of civil penalty actions taken by the FAA.

The NTSB does not assign fault or blame for an accident or incident; rather, as specified by NTSB regulation, "accident/incident investigations are fact-finding proceedings with no formal issues and no adverse parties ... and are not conducted for the purpose of determining the rights or liabilities of any person" (Title 49 *Code of Federal Regulations* section 831.4). Assignment of fault or legal liability is not relevant to the NTSB's statutory mission to improve transportation safety by investigating accidents and incidents and issuing safety recommendations. In addition, statutory language prohibits the admission into evidence or use of any part of an NTSB report related to an accident in a civil action for damages resulting from a matter mentioned in the report (Title 49 *United States Code* section 1154(b)). A factual report that may be admissible under 49 *United States Code* section 1154(b) is available here.

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