



National Transportation Safety Board Aviation Accident Final Report

Location:	LINCOLN, NE	Accident Number:	CHI95LA051
Date & Time:	12/03/1994, 1330 CST	Registration:	N234PC
Aircraft:	P. D. CHAMBERS SWIFT PC-1V8	Aircraft Damage:	Substantial
Defining Event:		Injuries:	2 Fatal

Flight Conducted Under: Part 91: General Aviation - Personal

Analysis

THE EXPERIMENTAL AIRPLANE WAS PERFORMING TOUCH AND GO LANDINGS. THE ENGINE WAS A 330 HORSEPOWER BUICK V-8, APPROVED FOR THE USE OF AUTOMOTIVE GASOLINE FUEL. THE LOCATION OR TIME OF THE LAST REFUELING IS UNKNOWN. SEVERAL WITNESSES DESCRIBED A CESSATION OF ENGINE NOISE, AND THE AIRPLANE DESCENDING VERTICALLY IN A SPIN. THERE WAS NO EVIDENCE OF ROTATION ON THE PROPELLER AT IMPACT, AND WATER WAS FOUND IN THE CARBURETOR.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's failure to maintain control of the airplane, resulting in a stall-spin. Factors were an inadequate preflight and the loss of engine power resulting from water contamination in the automotive fuel.

Findings

Occurrence #1: LOSS OF ENGINE POWER(PARTIAL) - NONMECHANICAL
Phase of Operation: TAKEOFF - INITIAL CLIMB

Findings

1. (F) FLUID,FUEL - CONTAMINATION
2. (F) AIRCRAFT PREFLIGHT - INADEQUATE - PILOT IN COMMAND
3. (F) FLUID - WATER

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

Occurrence #3: LOSS OF CONTROL - IN FLIGHT
Phase of Operation: EMERGENCY DESCENT/LANDING

Findings

4. (C) STALL/SPIN - ENCOUNTERED - PILOT IN COMMAND

Occurrence #4: IN FLIGHT COLLISION WITH TERRAIN/WATER
Phase of Operation: DESCENT - UNCONTROLLED

Findings

5. TERRAIN CONDITION - OPEN FIELD

Factual Information

On December 3, 1994, at 1330 central standard time (CST), an experimental airplane, N234PC, impacted level terrain in an open field, 3/4 miles southeast of the Chambers Airstrip (private), 2 miles southwest of the Lincoln Municipal Airport, Lincoln, Nebraska, and was substantially damaged.

The private pilot and private pilot passenger both sustained fatal injuries.

Visual meteorological conditions existed at the time of the accident and no flight plan was filed. The flight operated under 14 CFR Part 91 as a personal flight, had originated from the Chambers Airstrip approximately 1323 CST and was performing touch and go landings. The pilot did not possess a current medical certificate, nor a current biennial flight review.

Several witnesses described the airplane in the touch and go pattern, a cessation of engine noise, and falling straight down to the ground. Witnesses described no indications that the airplane had skidded or moved upon hitting the ground. The landing gear were imbedded vertically downward into the soft ground, with no indications of forward motion, according to witness statements. The propeller blades and spinner did not exhibit any rotational damage.

Witnesses described the airplane in the landing pattern, at approximately 500 feet, and possibly on a base leg for landing. Descriptions were of the "engine sputtering" and "going silent." Witnesses also described the wings "wobbling," and a vertical, nose low, rotating descent, consistent with descriptions of a spin.

The airplane was registered as an experimental, homebuilt airplane. It was rebuilt from a destroyed 1946 Globe Swift model GC-1B, serial number 1068. The pilot was also the mechanic who rebuilt the airplane as a Patrick Chambers, PC-1V8, serial number 001. The engine was a Buick V-8 automotive engine, and was using automotive gasoline as fuel. No information was available about where or when the airplane was last refueled.

The airplane was granted an experimental airworthiness certificate by the Federal Aviation Administration on October 25, 1988. The FAA airworthiness inspector on scene stated that water was present in the carburetor and carburetor accelerator pump.

Toxicological specimens were tested by the Federal Aviation Administration Civil Aeromedical Institute (CAMI). All tests were negative except 10.000 mg/dl ethanol was detected in the vitreous fluid of the pilot. No ethanol was detected in his blood or urine. CAMI stated on March 21, 1995 that the vitreous fluid retains ethanol longer than the other two fluids, that the indication could be post-mortem formation, and that no impairment would be indicated by these results.

An autopsy was performed by the Lancaster County Coroner Office, Lincoln, Nebraska, on December 5, 1994. Manner of death cited in the reports on both occupants was trauma, sustained in an aircraft accident.

Pilot Information

Certificate:	Private	Age:	43, Male
Airplane Rating(s):	Single-engine Land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	Seatbelt
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	None	Toxicology Performed:	Yes
Medical Certification:	Class 3 Expired	Last FAA Medical Exam:	12/18/1991
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:	3000 hours (Total, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	P. D. CHAMBERS	Registration:	N234PC
Model/Series:	SWIFT PC-1V8 SWIFT PC-1	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	Yes
Airworthiness Certificate:	Experimental	Serial Number:	001
Landing Gear Type:	Tailwheel	Seats:	2
Date/Type of Last Inspection:	Annual	Certified Max Gross Wt.:	1710 lbs
Time Since Last Inspection:	30 Hours	Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	BUICK
ELT:		Engine Model/Series:	V-8
Registered Owner:	PATRICK CHAMBERS	Rated Power:	330 hp
Operator:	PATRICK CHAMBERS	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	LNK, 1214 ft msl	Distance from Accident Site:	2 Nautical Miles
Observation Time:	1345 CST	Direction from Accident Site:	90°
Lowest Cloud Condition:	Clear / 0 ft agl	Visibility	10 Miles
Lowest Ceiling:	None / 0 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	Calm /	Turbulence Type Forecast/Actual:	/
Wind Direction:	360°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	10° C / 2° C
Precipitation and Obscuration:			
Departure Point:	(PVT)	Type of Flight Plan Filed:	None
Destination:	, NE (PVT)	Type of Clearance:	None
Departure Time:	1340 CST	Type of Airspace:	Class D; Class E

Airport Information

Airport:	CHAMBERS AIRSTRIP (PVT)	Runway Surface Type:	
Airport Elevation:	1200 ft	Runway Surface Condition:	Dry; Soft
Runway Used:	35	IFR Approach:	None
Runway Length/Width:	2600 ft	VFR Approach/Landing:	Touch and Go; Traffic Pattern

Wreckage and Impact Information

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

Administrative Information

Investigator In Charge (IIC):	MATTHEW L THOMAS	Report Date:	05/09/1995
Additional Participating Persons:	JACOB E WILSON; LINCOLN, NE EDWARD CARTER; LINCOLN, NE		
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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