



National Transportation Safety Board Aviation Accident Final Report

Location:	ABINGDON, VA	Accident Number:	NYC98LA121
Date & Time:	06/01/1998, 1830 EDT	Registration:	N485AJ
Aircraft:	Cawood FISHER CLASSIC	Aircraft Damage:	Destroyed
Defining Event:		Injuries:	1 Serious
Flight Conducted Under:	Part 91: General Aviation - Personal		

Analysis

The homebuilt departed the runway and was climbing through 200 feet (AGL) when the pilot started a gentle turn to reverse course. Halfway through the turn the engine lost power. The pilot completed the course reversal, but was unable to maneuver to a suitable landing area because of limited attitude and airspeed, and the airplane collided with a track hoe. Water was found in both carburetors and main fuel screen. According to the pilot/builder, the position of the fuel tank sump required the airplane to be in a level attitude in order to completely drain water from the tank.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's inadequate preflight of the airplane which resulted in water contamination of the fuel system. A factor was the location of the fuel tank's sump.

Findings

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

Findings

1. (F) FUEL SYSTEM,DRAIN - INADEQUATE
 2. (C) AIRCRAFT PREFLIGHT - INADEQUATE - PILOT IN COMMAND
 3. (F) AIRCRAFT/EQUIPMENT INADEQUATE - PRODUCTION/DESIGN PERSONNEL
 4. FUEL SYSTEM - CONTAMINATION,WATER
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Occurrence #2: FORCED LANDING
Phase of Operation: EMERGENCY LANDING AFTER TAKEOFF

Occurrence #3: IN FLIGHT COLLISION WITH OBJECT
Phase of Operation: EMERGENCY LANDING AFTER TAKEOFF

Findings

5. OBJECT - OTHER

Factual Information

On June 1, 1998, at 1830 eastern daylight time, a home built Fisher Classic airplane, N485AJ, was destroyed during a forced landing and collision with a track hoe at Virginia Highlands Airport (VJI), Abingdon, Virginia. The certificated private pilot was seriously injured. Visual meteorological conditions prevailed for the personal flight, and no flight plan was filed for the flight conducted under 14 CFR Part 91.

During a telephone interview, the pilot stated that after completing the preflight inspection, he ran the airplane's engine for 20 to 30 minutes before departing Runway 24. After takeoff he climbed to 200 feet above ground level (AGL), then started a gentle turn to reverse course. Halfway through the turn, he felt a loss in power. He completed his course reversal, but was unable to maneuver to a suitable landing area because of limited attitude and airspeed. Just prior to impacting the track hoe the pilot pitched the nose of the airplane up in an attempt to avoid the obstacle, however the airplane impacted the track hoe belly first.

A Federal Aviation Administration Inspector examined the wreckage on June 1, 1998. The examination revealed that both carburetor bowls were 1/4 full of water, and that 2 tablespoons of water were found in the main fuel screen. Total time on the airplane was 19 hours.

In a telephone interview, the pilot, who also built the airplane, stated the position of the fuel tank sump prevented him from checking the lowest point in the fuel tank, and once the airplane was level, water was allowed to flow from the back of the tank to the engine collection point.

Pilot Information

Certificate:	Private	Age:	43, Male
Airplane Rating(s):	Single-engine Land	Seat Occupied:	Rear
Other Aircraft Rating(s):	None	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	02/24/1997
Occupational Pilot:	Last Flight Review or Equivalent:		
Flight Time:	496 hours (Total, all aircraft), 19 hours (Total, this make and model), 495 hours (Pilot In Command, all aircraft), 5 hours (Last 90 days, all aircraft), 4 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Cawood	Registration:	N485AJ
Model/Series:	FISHER CLASSIC FISHER CLA	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	Yes
Airworthiness Certificate:	Experimental	Serial Number:	C065
Landing Gear Type:	Tailwheel	Seats:	2
Date/Type of Last Inspection:	08/30/1997, Annual	Certified Max Gross Wt.:	850 lbs
Time Since Last Inspection:	19 Hours	Engines:	1 Reciprocating
Airframe Total Time:	19 Hours	Engine Manufacturer:	Hirth
ELT:	Not installed	Engine Model/Series:	2706-2C2
Registered Owner:	DON EUGENE CAWOOD	Rated Power:	65 hp
Operator:	DON EUGENE CAWOOD	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	TRI, 1519 ft msl	Distance from Accident Site:	220 Nautical Miles
Observation Time:	1853 EDT	Direction from Accident Site:	25°
Lowest Cloud Condition:	Scattered / 7000 ft agl	Visibility	10 Miles
Lowest Ceiling:	None / 0 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	6 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	280°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	26° C / 14° C
Precipitation and Obscuration:			
Departure Point:	(VJH)	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	1825 EDT	Type of Airspace:	Class E

Airport Information

Airport:	VIRGINIA HIGHLANDS (VJI)	Runway Surface Type:	Asphalt
Airport Elevation:	2088 ft	Runway Surface Condition:	Dry
Runway Used:	24	IFR Approach:	None
Runway Length/Width:	4470 ft / 75 ft	VFR Approach/Landing:	Forced Landing

Wreckage and Impact Information

Crew Injuries:	1 Serious	Aircraft Damage:	Destroyed
Passenger Injuries:	N/A	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Serious	Latitude, Longitude:	

Administrative Information

Investigator In Charge (IIC):	DAVID S MUZIO	Report Date:	12/08/1998
Additional Participating Persons:	EDWIN G SHIELDS; CHARLESTON, VA		
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 pubinquiry@ntsb.gov , or at 800-877-6799. Dockets released after this date are available at http://dms.nts.gov/pubdms/ .		

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