



Aviation Investigation Final Report

Location:	Poplarville, Mississippi	Accident Number:	ERA13LA136
Date & Time:	February 17, 2013, 15:30 Local	Registration:	UNREG
Aircraft:	Quicksilver MX2	Aircraft Damage:	Substantial
Defining Event:	Loss of control in flight	Injuries:	1 Fatal
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The noncertificated pilot was conducting his first flight in the unregistered experimental airplane, which he purchased several months before the accident. No logbook entries were found indicating whether the pilot had previous flight experience. The pilot flew the airplane for about 30 minutes near his home before making a low pass over a field about 50 feet above ground level. Witnesses heard the engine power increase as the airplane approached a line of trees and then observed the left wing contact a tree top and the airplane subsequently impact the ground.

A witness reported that the pilot had been consuming alcohol on the day of the accident. Results from toxicological testing indicated the presence of alcohol in the pilot's blood; however, the amount of ethanol detected in the blood was lower than the level that the Federal Aviation Administration has determined pilots may fly, although any amount of ethanol may be impairing. In addition, toxicological testing found narcotic pain medications in the pilot's urine and other tissues; however, none of these narcotics were found in the pilot's blood, which suggests that the pilot likely used narcotics several days before the accident. Therefore, the extent of the pilot's impairment due to use of alcohol and narcotic medications could not be determined.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be:

The noncertificated pilot's decision to make the flight and his failure to maintain clearance from trees while maneuvering at a low altitude.

Findings

Aircraft	Altitude - Not attained/maintained	
Personnel issues	Decision making/judgment - Pilot	
Personnel issues	Alcohol - Pilot	
Personnel issues	(general) - Pilot	
Personnel issues	Total experience - Pilot	
Environmental issues	Tree(s) - Contributed to outcome	

Factual Information

History of Flight

Maneuvering-low-alt flying	Collision with terr/obj (non-CFIT)
Maneuvering-low-alt flying	Loss of control in flight (Defining event)
Uncontrolled descent	Collision with terr/obj (non-CFIT)

On February 17, 2013, about 1530 central standard time, an unregistered experimental Quicksilver MX II airplane, operated by a private individual, was substantially damaged when it impacted terrain following a loss of control while maneuvering near Poplarville, Mississippi. The non-certificated pilot was fatally injured. Visual meteorological conditions prevailed, and no flight plan was filed for the local personal flight conducted under the provisions of Title14 Code of Federal Regulations Part 91.

According to acquaintances of the pilot, the accident flight was the pilot's first flight in the airplane after purchasing it several months prior. They stated that the pilot had been working on the airplane for about a month before the accident, and had recently been performing taxi tests around his residence, a mobile home park. On the day of the accident, a witness observed the pilot taxi the airplane several times around the mobile home park .The witness stated that the wind would "pick him up and then he would settle back down." This witness also reported that the pilot had been seen consuming alcohol on the day of the accident

The pilot took off from a field next to the mobile home park and flew the airplane for about 30 minutes. He then turned the airplane to the west, where he made a low pass over a field, waved to onlookers, and continued towards a tree line. A witness reported the airplane was about level with the tops of the trees, which he estimated to be around 60 feet high. Witnesses observed the airplane's nose rise, and then heard the engine power increase. The left wing dropped and contacted a tree and the airplane subsequently impacted the ground.

An FAA inspector observed a video of the accident flight filmed by an onlooker, and recounted the recorded sequence of events to the NTSB. He stated that the airplane passed onlookers at an estimated altitude of 50 feet above ground level. After reaching a tree line, the airplane's nose began to pitch up and the camera panned away. The engine could be heard increasing in power, and subsequently the sound of impact was heard.

Pilot Information

Certificate:	None	Age:	50
Airplane Rating(s):	None	Seat Occupied:	Right
Other Aircraft Rating(s):	None	Restraint Used:	Unknown
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	Yes
Medical Certification:	None	Last FAA Medical Exam:	
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:			

The pilot, age 50, did not possess a valid FAA airman certificate or medical certificate. The pilot's girlfriend reported that she could not locate a logbook or other record of the pilot's flight experience. One of the witnesses stated that the pilot had taken flight lessons.

Aircraft and Owner/Operator Information	

Aircraft Make:	Quicksilver	Registration:	UNREG
Model/Series:	MX2	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	None	Serial Number:	Unknown
Landing Gear Type:	Tricycle	Seats:	2
Date/Type of Last Inspection:	Unknown	Certified Max Gross Wt.:	720 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	Rotax
ELT:		Engine Model/Series:	582 Model 90
Registered Owner:	On file	Rated Power:	65 Horsepower
Operator:	On file	Operating Certificate(s) Held:	None

The single-engine experimental airplane was powered by a Rotax 582, 65hp, reciprocating engine. The airplane did not contain an FAA airworthiness certificate, and no maintenance logs could be located.

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	HSA,23 ft msl	Distance from Accident Site:	171 Nautical Miles
Observation Time:	15:50 Local	Direction from Accident Site:	25°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	6 knots / None	Turbulence Type Forecast/Actual:	/ None
Wind Direction:	160°	Turbulence Severity Forecast/Actual:	/ N/A
Altimeter Setting:	30.27 inches Hg	Temperature/Dew Point:	14°C / -1°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Poplarville, MS	Type of Flight Plan Filed:	None
Destination:	Poplarville, MS	Type of Clearance:	None
Departure Time:	15:00 Local	Type of Airspace:	

The 1550 recorded weather observation at Stennis International Airport, (HSA), Bay St. Louis, Mississippi, located 25 miles south of the accident site, included wind from 160 degrees at 6 knots, 10 miles visibility, sky clear, temperature 14 degrees C, dew point -1 degrees C, and an altimeter setting of 30.27 inches of mercury.

Wreckage and Impact Information

Crew Injuries:	1 Fatal	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Fatal	Latitude, Longitude:	30.828887,-89.51889(est)

Review of photographs provided by the Federal Aviation Administration (FAA) revealed that the airplane came to rest inverted in a tilled garden surrounded by trees. The left wing remained intact, and the right wing was broken about mid-span. There was a chordwise tear in the cloth of the right wing about 3 feet in length.

Medical and Pathological Information

An autopsy was performed on February 19, 2013 by the Mississippi State Medical Examiner's Office, Jackson, Mississippi. The cause of death was listed as, "multiple blunt trauma." Toxicological testing performed by the medical examiner's office revealed the presence of hydrocodone, dihydrocodeine, caffeine, nicotine, and 0.03% ethyl alcohol in the blood.

Toxicological testing was also performed on the pilot by the FAA Bioaeronautical Science Research Laboratory, Oklahoma City, Oklahoma, which revealed 0.009 (ug/mL, ug/g) of buprenorphine in the liver, and 39 (ug/ml, ug/g) of hydrocodone in the urine.

Buprenorphine and hydrocodone are narcotic pain medications and are marketed under the trade names Subutex and Vicodin, respectively.

Testing also revealed 0.075 (ug/ml, ug/g) of oxymetazoline in the liver. Oxymetazoline is a nasal spray used for treating congestion, and is marketed under the trade name Afrin. Ethanol was detected in vitreous samples in a quantity of 32 mg/dl.

Administrative Information

Investigator In Charge (IIC):	Neylon, John
Additional Participating Persons:	Trey McClure; FSDO/FAA; Jackson, MS
Original Publish Date:	July 30, 2014
Last Revision Date:	
Investigation Class:	<u>Class</u>
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=86238

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 <u>here</u>.