



Aviation Investigation Final Report

Location:	Hillsboro, Kansas	Accident Number:	CEN14LA205
Date & Time:	April 18, 2014, 13:45 Local	Registration:	UNREG
Aircraft:	Quicksilver GT400	Aircraft Damage:	Substantial
Defining Event:	Loss of control in flight	Injuries:	1 Fatal
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

After completing the assembly of the unregistered airplane, the pilot made a high-speed taxi on the grass strip and the airplane veered off the runway. He taxied back to attempt a takeoff and, after takeoff, the airplane made a steep right. The airplane continued the flight, and the left wing collided with a tree. The pilot was ejected from the cockpit, and the airplane continued into a pond. The airplane did not contain a seatbelt. Continuity of the flight controls was confirmed, and no anomalies were noted with the engine or systems during postaccident examination. Weather in the area included a gusting wind up to 20 knots.

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 unregistered airplane in gusting wind conditions.

Findings

Personnel issues	Aircraft control - Pilot
Aircraft	(general) - Not attained/maintained
Personnel issues	Decision making/judgment - Pilot
Environmental issues	Gusts - Effect on operation

Factual Information

History of Flight

Initial climb	Loss of control in flight (Defining event)
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On April 18, 2014, about 1345 central daylight time, an unregistered Quicksilver GT400 airplane, collided with a tree and impacted water after takeoff from a private grass strip near Hillsboro, Kansas. The commercial pilot, who was the sole occupant, was fatally injured. The airplane sustained substantial damage. The airplane was owned and operated by a private individual under the provisions of 14 Code of Federal Regulations Part 91 as a personal flight. Visual meteorological conditions prevailed for the flight and no flight plan was filed. The flight was originating at the time of the accident and was destined for Alfred Schroeder Field Airport (M66), Hillsboro, Kansas.

According to the responding Federal Aviation Administration (FAA) inspector, the airplane had undergone extensive maintenance and the pilot assembled portions of the airplane prior to departure. After the airplane was fully assembled, the pilot attempted to start the engine. When the engine did not start, he poured fuel into a cylinder from the spark plug opening and the engine started. The pilot taxied onto the grass strip and made one high speed taxi and veered off the runway. He returned to the beginning of the runway and departed. After takeoff, the airplane made a steep right turn to the north and climbed to about 100 feet above the ground. The airplane continued north and the left wing collided with a tree. The pilot was ejected from the cockpit and the airplane continued into the pond next to the tree.

An acquaintance reportedly suggested that the pilot should trailer the airplane to the airport. The pilot stated he "had to fly it to the airport" and continued to assemble the airplane. The intended airport, M66, was 1.5 miles away. The acquaintance witnessed the accident.

Pilot Information

Certificate:	Commercial	Age:	69
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Front
Other Aircraft Rating(s):	None	Restraint Used:	None
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	Yes
Medical Certification:	Class 3 With waivers/limitations	Last FAA Medical Exam:	November 30, 1998
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:			

The pilot, age 69, held a commercial pilot certificate with ratings for single engine land, multi-engine

land and instrument airplane. On November 30, 1998, he was issued a third class special restriction medical certificate with the limitations that it was not valid for night flying or by color signal control. On the medical certificate application he reported that his flight experience included 20 total hours and 0 hours in the past 6 months. On prior applications he reported 4,500 flight hours in 1991 and 1992, 30 flight hours in 1994, and 40 flight hours in 1995.

The pilot's logbooks and records were not available during the investigation; therefore his total flight experienced could not be determined.

Aircraft and Owner/Operator Information

Aircraft Make:	Quicksilver	Registration:	UNREG
Model/Series:	GT400	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	Yes
Airworthiness Certificate:	None	Serial Number:	-
Landing Gear Type:	Tricycle	Seats:	1
Date/Type of Last Inspection:	Unknown	Certified Max Gross Wt.:	
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	Rotax
ELT:	Not installed	Engine Model/Series:	503
Registered Owner:	Donald Dahl	Rated Power:	50 Horsepower
Operator:	Donald Dahl	Operating Certificate(s) Held:	None

According to marketing information from the Quicksilver Aircraft website, the GT400 is described as an ultralight. The airplane is built from a kit, with a single seat, high wing, and tricycle landing gear. It can be equipped with either a 47 horsepower Rotax R447 or a 50 horsepower Rotax R503 engine. The airplane has a removable 5 gallon fuel tank. With the R503 engine, the airplane's empty weight would have been about 316 pounds. The manufacturer's information also notes that the pilot is responsible for operating the aircraft in accordance with the applicable Federal and State regulations. The airplanes logbooks were unavailable during the investigation so the extent of the maintenance performed, complete airplane configuration and performance information could not be confirmed.

There was no record of the airplane being registered with the FAA or having been issued an airworthiness certificate. FAA regulation Part 103 describes an ultralight as having a single occupant, empty weight of 254 pounds or less, fuel capacity not exceeding 5 gallons, not capable of exceeding 55 knots and a stall speed less than 24 knots.

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	KEWK,1532 ft msl	Distance from Accident Site:	15 Nautical Miles
Observation Time:	13:55 Local	Direction from Accident Site:	190°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	11 knots / 18 knots	Turbulence Type Forecast/Actual:	/
Wind Direction:	170°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.23 inches Hg	Temperature/Dew Point:	19°C / 6°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Hillsboro, KS	Type of Flight Plan Filed:	None
Destination:	HILLSBORO, KS (M66)	Type of Clearance:	None
Departure Time:	13:45 Local	Type of Airspace:	Class G

At 1355, the automated weather observation at Newton City Airport (KEWK), Newton, Kansas, which was 15 miles south-southwest of the accident site, reported: wind from 170 degrees at 11 knots gusting to 18 knots, 10 miles visibility, a clear sky, temperature 66° Fahrenheit (F), dew point 43° F, and altimeter setting 30.24 inches of mercury. According to the FAA, witnesses reported weather in the area as gusting wind from 15-20 knots and a clear sky.

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:	38.315834,-97.217498(est)

The wooden propeller was shattered and splintered near the wreckage area. The FAA inspector confirmed continuity of the flight controls. The engine components were continuous from the front to the back when the propeller was rotated by hand. The airplane did not contain a seatbelt.

Medical and Pathological Information

An autopsy was performed on the pilot at the Frontier Midwest Morgue, Kansas City, Kansas, on April 19, 2014. The cause of death was blunt traumatic injuries. The FAA Civil Aeromedical Institute completed a Final Forensic Toxicology Fatal Accident Report which revealed no tested for drugs detected.

Administrative Information

Investigator In Charge (IIC):	Lindberg, Joshua
Additional Participating Persons:	Richard Stevens; Federal Aviation Administration; Wichita, KS
Original Publish Date:	December 19, 2014
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=89087

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](#).