



# National Transportation Safety Board Aviation Accident Factual Report

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<b>Location:</b>	Sedalia, MO	<b>Accident Number:</b>	CHI01LA194
<b>Date &amp; Time:</b>	07/02/2001, 1859 CDT	<b>Registration:</b>	N902GH
<b>Aircraft:</b>	Houston Challenger II	<b>Aircraft Damage:</b>	Destroyed
<b>Defining Event:</b>		<b>Injuries:</b>	1 Fatal
<b>Flight Conducted Under:</b>	Part 91: General Aviation - Personal		

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## HISTORY OF FLIGHT

On July 2, 2001, at 1859 central daylight time, an experimental amateur-built Houston Challenger II, N902GH, was destroyed when it impacted trees located near the southwest perimeter fence of the Sedalia Airport (DMO), Sedalia, Missouri. The private pilot was fatally injured. The experimental airplane had departed from the pilot's private airstrip about 1854. The intended destination was DMO. Visual meteorological conditions prevailed and no flight plan was filed.

A witness, who was a friend of the pilot, reported that he and the pilot had been doing minor repairs and maintenance on the airplane prior to the flight. He reported the pilot decided to fly the airplane to DMO, but he advised against it because of the high wind speeds. The witness reported that the airplane "ran like new" when it departed for DMO.

Witnesses who were located near the airport reported seeing the airplane flying low, heading north, and then making a wide right turn to the southwest before impacting the trees. One witness said the engine sputtered twice before impacting the trees. Another witness said he heard the engine quit and saw the propeller stop. He reported the engine started again and the airplane turned back toward the airport before crashing into the trees.

## PERSONNEL INFORMATION

The pilot was a private pilot with a single engine land rating. He held a Third Class Medical Certificate that was issued on September 25, 2000. The pilot reported his total flight time was 100 hours during his last medical examination. A witness reported the pilot had purchased the airplane within the last year and had flown it about 2 hours, but not at all within the last 3 or 4 months.

## AIRCRAFT INFORMATION

The airplane was a single engine experimental amateur-built Challenger II. The airplane seated two and had a maximum gross weight of 800 pounds. The engine was a 52 horsepower Rotax 503 engine. The pilot had purchased the airplane within the previous year. There were no maintenance records available and the flight hours on the airplane and engine are unknown.

The two seat experimental airplane did not have a Federal Aviation Administration (FAA) registered "N" number painted on the airplane. No data plate or serial number was found on the airplane. According to FAA records, an Airworthiness Certificate was never issued for the accident airplane.

A witness reported he had flown the airplane and that it had a severe yaw problem and he was afraid to fly in it again. He reported the pilot fabricated and installed "stab fins" on the tip of each horizontal stabilizer, and a large trim tab on the rudder. The witness also stated the pilot removed the doors to the airplane because he had been told it would help eliminate the yaw problem. The witness reported the accident flight was the first flight the pilot had taken with the doors removed.

#### METEOROLOGICAL CONDITIONS

At 1853, the observed weather at DMO was: winds 120 degrees at 7 knots, sky clear, visibility 10 sm, temperature 28 degrees C, dew point 23 degrees C, altimeter 30.10.

#### WRECKAGE AND IMPACT INFORMATION

The airplane impacted trees on the southwest corner of the DMO airport, and was about 900 feet west of the approach end of runway 5. The aircraft wreckage pattern was oriented to the southwest. The airplane impacted the trees approximately 20-25 feet above the ground and it remained lodged in the tree branches. Aircraft parts were found 50 feet in front of the airplane wreckage.

An examination of the airplane revealed flight control continuity. The engine inspection revealed the two stroke Rotax engine exhibited continuity and cylinder compression. Fuel was found in the carburetors.

#### MEDICAL AND PATHOLOGICAL INFORMATION

An autopsy was performed on the pilot at the Heckart Gillespie Funeral Home, Sedalia, Missouri.

A Forensic Toxicology Fatal Accident Report was prepared by the FAA Civil Aeromedical Institute. The results were negative.

#### ADDITIONAL INFORMATION

The FAA was a party to the investigation.

### Pilot Information

<b>Certificate:</b>	Private	<b>Age:</b>	51, Male
<b>Airplane Rating(s):</b>	Single-engine Land	<b>Seat Occupied:</b>	Left
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	Seatbelt, Shoulder harness
<b>Instrument Rating(s):</b>	None	<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	Yes
<b>Medical Certification:</b>	Class 3 Valid Medical--w/ waivers/lim.	<b>Last FAA Medical Exam:</b>	09/25/2000
<b>Occupational Pilot:</b>		<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	100 hours (Total, all aircraft)		

## Aircraft and Owner/Operator Information

Aircraft Make:	Houston	Registration:	N902GH
Model/Series:	Challenger II	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	Yes
Airworthiness Certificate:		Serial Number:	CH20990W0560
Landing Gear Type:	Tricycle	Seats:	2
Date/Type of Last Inspection:		Certified Max Gross Wt.:	800 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	Rotax
ELT:	Not installed	Engine Model/Series:	503
Registered Owner:	Ralph A. Thomas	Rated Power:	52 hp
Operator:	Ralph A. Thomas	Operating Certificate(s) Held:	None

## Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	DMO, 909 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	1853 CDT	Direction from Accident Site:	0°
Lowest Cloud Condition:	Clear	Visibility	10 Miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	7 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	120°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.1 inches Hg	Temperature/Dew Point:	28° C / 23° C
Precipitation and Obscuration:			
Departure Point:	Sedalia, MO (PVT)	Type of Flight Plan Filed:	None
Destination:	Sedalia, MO (DMO)	Type of Clearance:	None
Departure Time:	1854 CDT	Type of Airspace:	Class G

## Airport Information

Airport:	Sedalia Memorial Airport (DMO)	Runway Surface Type:	
Airport Elevation:	909 ft	Runway Surface Condition:	
Runway Used:		IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	Unknown

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 Fatal	<b>Aircraft Damage:</b>	Destroyed
<b>Passenger Injuries:</b>	N/A	<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	1 Fatal	<b>Latitude, Longitude:</b>	

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Jim Silliman
<b>Additional Participating Persons:</b>	Jim Wesley; FAA; Kansas City, MO
<b>Investigation Docket:</b>	NTSB accident and incident docket 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 <a href="mailto:pubinq@ntsb.gov">pubinq@ntsb.gov</a> , or at 800-877-6799. Dockets released after this date are available at <a href="http://dms.nts.gov/pubdms/">http://dms.nts.gov/pubdms/</a> .