



Aviation Investigation Final Report

Location:	Rhome, Texas	Accident Number:	CEN18FA265
Date & Time:	July 12, 2018, 13:30 Local	Registration:	N14842
Aircraft:	ROSE PARRAKEET A-1	Aircraft Damage:	Destroyed
Defining Event:	Loss of control in flight	Injuries:	1 Fatal
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The private pilot had just departed from the airport when witnesses observed the airplane not climbing and about 100 ft above the ground. Another witness observed the airplane a nose-high attitude. The airplane was struggling to gain altitude before it banked "hard" to the right, entered a "sharp" nose-down attitude, and impacted a field near the airport.

Postaccident examination of the airplane revealed no mechanical anomalies that would have precluded normal operation. The ground scarring at the accident site, the crush angle of the airframe, and the observed wing drop before the airplane's descent into terrain were consistent with an exceedance of the airplane's critical angle of attack and a resulting aerodynamic stall.

Probable Cause and Findings

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

The pilot's exceedance of the airplane's critical angle of attack after takeoff, which resulted in an aerodynamic stall.

Findings

Aircraft	Angle of attack - Capability exceeded
Personnel issues	Aircraft control - Pilot

Factual Information

History of Flight

Takeoff	Aerodynamic stall/spin
Takeoff	Loss of control in flight (Defining event)
Uncontrolled descent	Collision with terr/obj (non-CFIT)

On July 12, 2018, about 1330 central daylight time, an experimental Rose Parrakeet A-1 airplane, N14842, was destroyed when it was involved in an accident near Fairview Airport (7TS0), Rhome, Texas. The private pilot sustained fatal injuries. The airplane was operated as a Title 14 *Code of Federal Regulations* Part 91 personal flight.

Two witnesses who were driving on Highway 407 just north of the airport and south of the accident site observed a small airplane that had departed from the airport and was flying "very low" (about 100 ft) over the highway. The witnesses stated that, as the airplane flew north, it was not climbing but was instead flying "flat." The witnesses added that, as airplane flew north past the highway, it banked "hard" to the right and "nose-dived" into terrain.

Another witness stated that he was about 0.5 mile west of the airport when he saw a small airplane taking off from the airport that seemed to be struggling to gain altitude. The witness indicated that the airplane's nose seemed to be "considerably higher" than the tail, and he and his wife could not hear the engine because they were in their pickup truck. The witness also stated that the airplane, as it cleared the runway and crossed the highway, started to bank or roll and then took a "sharp nosedive." The airplane wreckage was subsequently located in a field about 0.3 mile south of the airport.

Pilot Information

Certificate:	Private	Age:	85,Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Single
Other Aircraft Rating(s):	None	Restraint Used:	3-point
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	Yes
Medical Certification:	Class 3 Without waivers/limitations	Last FAA Medical Exam:	June 2, 2015
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	5200 hours (Total, all aircraft), 50 hours (Total, this make and model)		

The pilot's next-door neighbor and friend (who was also a pilot) reported that the accident pilot flew the accident airplane about once per week.

No pilot records were received, and the pilot's recency of flight experience could not be established.

Aircraft and Owner/Operator Information

Aircraft Make:	ROSE	Registration:	N14842
Model/Series:	PARRAKEET A-1	Aircraft Category:	Airplane
Year of Manufacture:	1936	Amateur Built:	
Airworthiness Certificate:	Experimental (Special)	Serial Number:	102
Landing Gear Type:	Tailwheel	Seats:	1
Date/Type of Last Inspection:	Unknown	Certified Max Gross Wt.:	
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	Continental
ELT:	C91 installed	Engine Model/Series:	C85-8FJ
Registered Owner:		Rated Power:	85 Horsepower
Operator:		Operating Certificate(s) Held:	None

According to the pilot's neighbor/friend, the pilot had owned the airplane for about 10 years and performed the maintenance on the airplane. No airplane maintenance records, including the airframe and engine hours, were available for the airplane.

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	AFW, 723 ft msl	Distance from Accident Site:	9 Nautical Miles
Observation Time:	12:53 Local	Direction from Accident Site:	116°
Lowest Cloud Condition:	Few / 5000 ft AGL	Visibility	10 miles
Lowest Ceiling:	Broken / 16000 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	6 knots /	Turbulence Type Forecast/Actual:	None /
Wind Direction:		Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.04 inches Hg	Temperature/Dew Point:	34°C / 19°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Rhome, TX (7TS0)	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:		Type of Airspace:	Class G

Airport Information

Airport:	Fairview Airport 7TS0	Runway Surface Type:	Grass/turf
Airport Elevation:	915 ft msl	Runway Surface Condition:	Soft;Vegetation
Runway Used:	35	IFR Approach:	None
Runway Length/Width:	2861 ft / 75 ft	VFR Approach/Landing:	

Wreckage and Impact Information

Crew Injuries:	1 Fatal	Aircraft Damage:	Destroyed
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Fatal	Latitude, Longitude:	33.100555,-97.426391(est)

The airplane was in a field about 0.3 miles south of the airport and oriented tail to nose on a heading of about 270°. Ground scarring was limited to the planform area of the airplane, and the airframe crush angle was consistent with a nose-low impact attitude. The front of the fuselage (engine compartment) was crushed aft, and the firewall was separated. The fixed landing gear was folded under the fuselage. The cabin section was crushed aft, and the pilot seat was still attached to its mounts. The leading edges of the left and right wings were crushed aft. The empennage was mostly intact and slightly buckled. The airplane showed no evidence of fire or soot.

The instrument panel and cockpit were damaged by impact. The cockpit throttle control was retarded about 1 inch, the primer was in its locked position, the altimeter displayed 920 ft, the altimeter setting was 30.14 inches of mercury, and the tachometer indicated 2.34 hours.

Flight control continuity was established from the cockpit to all flight control surfaces. Impact damage was noted to the flight control cables located under the pilot seat.

The main fuel tank and header tank were attached to the airframe but were breached. The fuel gascolator bowl was found separated from its mount. A small amount of fuel was present in the main fuel tank primer line. Fuel lines were broken open due to impact. The "FUEL SELECT" valve was in the "OFF" position. The area around the fuel valve was damaged by impact. The fuel line leading from fuel selector valve to the engine had a flareless fitting, and the nut of the fitting was loose and could be turned using hand pressure. The threaded portion of the fitting body had white-colored tape around its threads. The fuel system vent hoses and lines were unobstructed.

Engine control continuity was established from the cockpit to the carburetor. The engine was separated at the engine mounts, and the engine had impact damage around the No. 1 cylinder. The bottom of the case had a small hole that resulted from impact damage. Engine valve and drive train continuity to the accessory section was confirmed when the engine was manually rotated. The magnetos were in the "BOTH" position (before first responders moved them to the "OFF" position).

One of the two propeller blades was relatively straight, and the other propeller blade was bent rearward and twisted. The propeller hub displayed inward crushing. The propeller showed no evidence of rotation at the time of impact.

The examination of the airframe and engine revealed no mechanical anomalies that would have precluded normal operation.

Medical and Pathological Information

An autopsy of the pilot, conducted by The Office of the Medical Examiner, Dallas County, Texas, on July 13, 2018, stated that the pilot. His cause of death was blunt force injuries and the manner of death was accident.

Toxicology testing performed at the FAA Forensic Sciences Laboratory detected no carbon monoxide, ethanol, or drugs in the pilot's blood specimens.

Administrative Information

Investigator In Charge (IIC):	Gallo, Mitchell
Additional Participating Persons:	Jolynn Davila; Federal Aviation Administration; North Texas FSDO; Irving, TX Chris Lang; Continental Motors; Mobile, AL
Original Publish Date:	April 20, 2020
Note:	The NTSB traveled to the scene of this accident.
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=97752

The National Transportation Safety Board (NTSB), established in 1967, is an independent federal agency mandated by Congress through the Independent Safety Board Act of 1974 to investigate transportation accidents, determine the probable causes of the accidents, issue safety recommendations, study transportation safety issues, and evaluate the safety effectiveness of government agencies involved in transportation. The NTSB makes public its actions and decisions through accident reports, safety studies, special investigation reports, safety recommendations, and statistical reviews.

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