



# Aviation Investigation Final Report

<b>Location:</b>	Cypress, Texas	<b>Accident Number:</b>	CEN11LA348
<b>Date &amp; Time:</b>	May 21, 2011, 12:00 Local	<b>Registration:</b>	N55754
<b>Aircraft:</b>	Piper J3C	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>	Loss of engine power (partial)	<b>Injuries:</b>	2 Minor
<b>Flight Conducted Under:</b>	Part 91: General aviation - Personal		

## Analysis

According to the pilot, the airplane stopped climbing during the initial climb, and began losing power. The pilot made an off-airport forced landing in a large yard behind a residence. During the landing roll, the airplane struck a fence and several trees, and came to rest upright. No preaccident mechanical malfunctions or failures were found that would have precluded normal operation. The pilot did not report using carburetor heat after engine start, during taxi, or during takeoff. According to a carburetor icing probability chart, an airplane operating in the ambient conditions at the time of the accident could expect a serious risk of carburetor icing while at glide power and a risk of icing at cruise power. Engine operations at low power settings during ground operations are similar to that of operations at glide power, making it likely the carburetor built up icing prior to takeoff. The airplane’s engine most likely experienced carburetor icing which resulted in the loss of engine power.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The loss of engine power due to carburetor ice.

## Findings

<b>Environmental issues</b>	Conducive to carburetor icing - Contributed to outcome
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## Factual Information

### History of Flight

<b>Initial climb</b>	Loss of engine power (partial) (Defining event)
<b>Landing</b>	Off-field or emergency landing
<b>Landing</b>	Collision with terr/obj (non-CFIT)

On May 21, 2011, about 1200 central daylight time, a Piper J3C-65, N55754, was substantially damaged when it impacted terrain at Cypress, Texas. The airplane was owned by a private individual and operated by another private individual. The pilot and pilot rated passenger sustained minor injuries. Visual meteorological conditions prevailed and a flight plan had been not filed for the 14 Code of Federal Regulations Part 91 personal flight. At the time of the accident the airplane was departing Dry Creek Airport (TS07), Cypress, Texas, for a flight to Sport Flyers Airport (27XS), Brookshire, Texas.

According to statements from both occupants the airplane stopped climbing during the initial climb, and began losing power and descending. The pilot made an off-airport forced landing in a large yard behind a residence. During the landing roll-out the airplane struck a fence and several trees, and came to rest upright. There was a significant fuel spill, but no postimpact fire. The impacts partially separated the left wing and damaged the engine, mounts, forward fuselage, empennage, and both wings.

An examination of the airplane showed no preimpact anomalies with the engine. The pilot did not report using carburetor heat after engine start, during taxi, or during take-off. According to a carburetor icing probability chart, an airplane operating in the ambient conditions at the time of the accident could expect a serious risk of carburetor icing while at glide power and a risk of icing at cruise power.

## Flight instructor Information

<b>Certificate:</b>	Commercial; Flight instructor	<b>Age:</b>	55, Male
<b>Airplane Rating(s):</b>	Single-engine land	<b>Seat Occupied:</b>	Front
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	
<b>Instrument Rating(s):</b>	Airplane	<b>Second Pilot Present:</b>	Yes
<b>Instructor Rating(s):</b>	Airplane single-engine; Instrument airplane	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 2 With waivers/limitations	<b>Last FAA Medical Exam:</b>	March 15, 2010
<b>Occupational Pilot:</b>	No	<b>Last Flight Review or Equivalent:</b>	March 22, 2010
<b>Flight Time:</b>	(Estimated) 2244 hours (Total, all aircraft), 57 hours (Total, this make and model), 2125 hours (Pilot In Command, all aircraft), 39 hours (Last 90 days, all aircraft), 1 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

## Other flight crew Information

<b>Certificate:</b>	Private	<b>Age:</b>	64, Male
<b>Airplane Rating(s):</b>	Single-engine land	<b>Seat Occupied:</b>	Rear
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	
<b>Instrument Rating(s):</b>	None	<b>Second Pilot Present:</b>	Yes
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 3 With waivers/limitations	<b>Last FAA Medical Exam:</b>	May 5, 2011
<b>Occupational Pilot:</b>	No	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	(Estimated)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Piper	<b>Registration:</b>	N55754
<b>Model/Series:</b>	J3C 65	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	10118
<b>Landing Gear Type:</b>	Tailwheel	<b>Seats:</b>	2
<b>Date/Type of Last Inspection:</b>	October 16, 2010 Annual	<b>Certified Max Gross Wt.:</b>	1220 lbs
<b>Time Since Last Inspection:</b>	77 Hrs	<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	4323 Hrs as of last inspection	<b>Engine Manufacturer:</b>	CONTINENTAL
<b>ELT:</b>	C91A installed, not activated	<b>Engine Model/Series:</b>	A-75-8
<b>Registered Owner:</b>	On file	<b>Rated Power:</b>	75 Horsepower
<b>Operator:</b>	On file	<b>Operating Certificate(s) Held:</b>	None

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Visual (VMC)	<b>Condition of Light:</b>	Day
<b>Observation Facility, Elevation:</b>	KDWH, 152 ft msl	<b>Distance from Accident Site:</b>	8 Nautical Miles
<b>Observation Time:</b>	11:53 Local	<b>Direction from Accident Site:</b>	53°
<b>Lowest Cloud Condition:</b>	Scattered / 3800 ft AGL	<b>Visibility</b>	9 miles
<b>Lowest Ceiling:</b>	Broken / 4400 ft AGL	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	7 knots /	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	160°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>	29.89 inches Hg	<b>Temperature/Dew Point:</b>	29°C / 21°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	Cypress, TX (TS07)	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>	Brookshire, TX (27XS)	<b>Type of Clearance:</b>	None
<b>Departure Time:</b>	12:00 Local	<b>Type of Airspace:</b>	Warning area

## Airport Information

<b>Airport:</b>	Dry Creek Airport TS07	<b>Runway Surface Type:</b>	
<b>Airport Elevation:</b>	152 ft msl	<b>Runway Surface Condition:</b>	
<b>Runway Used:</b>		<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>		<b>VFR Approach/Landing:</b>	Forced landing

## Wreckage and Impact Information

<b>Crew Injuries:</b>	2 Minor	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>		<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	2 Minor	<b>Latitude, Longitude:</b>	29.98611,-95.6875(est)

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Latson, Thomas
<b>Additional Participating Persons:</b>	Raymond L McCall; FAA Houston FSDO; Houston, TX
<b>Original Publish Date:</b>	January 31, 2013
<b>Last Revision Date:</b>	
<b>Investigation Class:</b>	<a href="#">Class</a>
<b>Note:</b>	
<b>Investigation Docket:</b>	<a href="https://data.ntsb.gov/Docket?ProjectID=79168">https://data.ntsb.gov/Docket?ProjectID=79168</a>

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