



Aviation Investigation Final Report

Location:	Houston, Texas	Accident Number:	FTW03LA149
Date & Time:	May 10, 2003, 11:25 Local	Registration:	N711JJ
Aircraft:	Bellanca 7GCBC	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 Serious, 1 Minor
Flight Conducted Under:	Part 91: General aviation - Instructional		

Analysis

During takeoff initial climb, the flight instructor reduced the power to "simulate a partial power emergency." The student pilot hesitated long enough for the flight instructor to request full power. When power was increased, "the engine started coughing." The flight instructor "assumed a loss of power" and aborted the takeoff. Subsequently, the airplane struck a ditch at departure end of the runway coming to rest upright.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The flight instructor's poor decision to initiate a simulated emergency without having a suitable area for a forced landing.

Findings

Occurrence #1: LOSS OF ENGINE POWER(PARTIAL) - NONMECHANICAL
Phase of Operation: TAKEOFF - INITIAL CLIMB

Findings

1. EMERGENCY PROCEDURE - SIMULATED - PILOT IN COMMAND(CFI)
2. (C) IN-FLIGHT PLANNING/DECISION - POOR - PILOT IN COMMAND(CFI)
3. ALTITUDE - LOW

Occurrence #2: IN FLIGHT COLLISION WITH TERRAIN/WATER

Phase of Operation: EMERGENCY LANDING AFTER TAKEOFF

Findings

4. TERRAIN CONDITION - DITCH

Factual Information

On May 10, 2003, approximately 1125 central daylight time, a Bellanca 7GCBC single-engine tailwheel-equipped airplane, N711JJ, sustained substantial damage during an aborted takeoff following a partial loss of engine power from the Houston-Southwest Airport, near Houston, Texas. The certificated flight instructor (CFI) sustained minor injuries and the student pilot sustained serious injuries. The airplane was registered to a private individual and operated by Texas Taildraggers of Houston, Texas. Visual meteorological conditions prevailed, and a flight plan was not filed for the 14 Code of Federal Regulations Part 91 instructional flight. The local flight was originating at the time of the accident.

Information from the Pilot/Operator Aircraft Accident Report Form (NTSB Form 6120.1/2) and an FAA inspector, who responded to the accident site, revealed that the student pilot was receiving instruction on short field takeoffs and landings along with emergency procedures. After lift off from runway 9, with approximately 2,000 feet of runway remaining, the 1,450-hour CFI reduced the power to "simulate a partial power emergency." The student pilot "hesitated long enough for the CFI to request full power and continue normal flight." When power was increased, "the engine started coughing." The CFI "assumed a loss of engine power and elected to abort the takeoff." Subsequently, the airplane struck a ditch at departure end of the runway coming to rest upright.

The FAA inspector reported that the left wing was bent up approximately 70 degrees outboard of the wing strut attaching point, and the left main landing gear was separated. Engine and control continuity was established. The engine was examined by an FAA inspector and was found to be free of anomalies.

Sugar Land Regional Airport (SGR), located 12 miles northwest of the accident site was the nearest weather reporting station. At 1100, SGR was reporting wind from 180 degrees at 12 knots gusting to 18 knots, and visibility 8 statute miles. The temperature was 28 degrees Celsius and the dew point was 23 degrees Celsius.

Flight instructor Information

Certificate:	Commercial; Flight instructor	Age:	40, Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Rear
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	Airplane single-engine; Instrument airplane	Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medical-w/ waivers/lim	Last FAA Medical Exam:	October 20, 2000
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	April 26, 2002
Flight Time:	1450 hours (Total, all aircraft), 640 hours (Total, this make and model), 1385 hours (Pilot In Command, all aircraft), 258 hours (Last 90 days, all aircraft), 108 hours (Last 30 days, all aircraft), 4 hours (Last 24 hours, all aircraft)		

Student pilot Information

Certificate:	Student	Age:	Male
Airplane Rating(s):	None	Seat Occupied:	Front
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	Yes
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 Unknown	Last FAA Medical Exam:	October 15, 2002
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	
Flight Time:	1 hours (Total, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Bellanca	Registration:	N711JJ
Model/Series:	7GCBC	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	1139-79
Landing Gear Type:	Tailwheel	Seats:	2
Date/Type of Last Inspection:	100 hour	Certified Max Gross Wt.:	1650 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	Lycoming
ELT:	Installed, not activated	Engine Model/Series:	O-320-A2D
Registered Owner:	Jerry Parker	Rated Power:	150 Horsepower
Operator:	Texas Taildraggers	Operating Certificate(s) Held:	None
Operator Does Business As:	Texas Taildraggers	Operator Designator Code:	

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	SGR,82 ft msl	Distance from Accident Site:	12 Nautical Miles
Observation Time:	11:00 Local	Direction from Accident Site:	302°
Lowest Cloud Condition:	Scattered / 25000 ft AGL	Visibility	8 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	12 knots / 18 knots	Turbulence Type Forecast/Actual:	/
Wind Direction:	180°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.8 inches Hg	Temperature/Dew Point:	28°C / 23°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Houston, TX (AXH)	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:		Type of Airspace:	Class E

Airport Information

Airport:	HOUSTON-SOUTHWEST AXH	Runway Surface Type:	Asphalt
Airport Elevation:	68 ft msl	Runway Surface Condition:	Dry
Runway Used:	9	IFR Approach:	None
Runway Length/Width:	5000 ft / 100 ft	VFR Approach/Landing:	Traffic pattern

Wreckage and Impact Information

Crew Injuries:	1 Serious, 1 Minor	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Serious, 1 Minor	Latitude, Longitude:	29.65611,-95.476669

Administrative Information

Investigator In Charge (IIC):	Ragogna, Jason
Additional Participating Persons:	Louis F Ebersole; FAA FSDO; Houston, TX
Original Publish Date:	December 30, 2003
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=56994

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](#).