



National Transportation Safety Board Aviation Accident Final Report

Location:	Owensville, MO	Accident Number:	CHI03LA158
Date & Time:	06/01/2003, 1900 CDT	Registration:	N68778
Aircraft:	Cessna 152	Aircraft Damage:	Substantial
Defining Event:		Injuries:	2 None
Flight Conducted Under:	Part 91: General Aviation - Personal		

Analysis

The airplane sustained substantial damage when it impacted a fence and a ditch after overrunning the runway on takeoff. The pilot reported he taxied the airplane onto the runway centerline and applied full power to the airplane's engine while holding the brakes. The pilot noted he released the brakes and the airplane began to roll. The pilot stated the airplane would not lift-off before 1/2 to 3/4 of the runway was used. The pilot reported he decided to execute an aborted takeoff and reduced engine power to idle and applied brakes. The pilot noted the airplane overran the end of the runway where it impacted a barbwire fence and a ditch. The pilot reported the airplane's loaded weight and center of gravity were within the performance limitations of the airplane at the time of the accident flight. The airplane's weight and balance was calculated using information obtained from data given by the pilot and the airplane was found to be within performance limitations.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's delayed attempt to perform an aborted takeoff and subsequent overrun. Contributing factors to the accident were the fence and the ditch.

Findings

Occurrence #1: OVERRUN

Phase of Operation: TAKEOFF

Findings

1. (C) ABORTED TAKEOFF - DELAYED - PILOT IN COMMAND

Occurrence #2: ON GROUND/WATER COLLISION WITH OBJECT

Phase of Operation: TAKEOFF - ABORTED

Findings

2. (F) OBJECT - FENCE

3. (F) TERRAIN CONDITION - DITCH

Factual Information

On June 1, 2003, about 1900 central daylight time, a Cessna 152, N68778, operated by St. Charles Flying Service as a rental airplane, sustained substantial damage during an aborted takeoff when it departed the end of runway 9 (1,800 feet by 100 feet, turf) and impacted a fence at Winter Field Airport, Owensville, Missouri. Visual meteorological conditions prevailed at the time of the accident. The private pilot and his passenger reported no injuries. The 14 CFR Part 91 personal flight was not operating on a flight plan. The flight was originating at the time of the accident with an intended destination of St. Charles Municipal Airport (3SQ), St. Charles, Missouri.

The pilot reported he taxied the airplane onto the runway centerline and applied full power to the airplane's engine while holding the brakes. The pilot noted he released the brakes and the airplane began to roll. The pilot stated, "Approximately 1/2 to 3/4 the runway was used and the decision was made that the airplane would not lift-off and climb." The pilot reported he reduced engine power to idle and applied brakes. The pilot noted the airplane had not stopped by the end of the runway and impacted a barbwire fence and a ditch.

The pilot reported he performed a weight and balance calculation and a takeoff performance calculation prior to takeoff on the accident flight. The pilot noted the airplane's loaded weight and center of gravity were within the performance limitations of the airplane. The pilot stated he used 10 degrees of flaps on takeoff and calculated his takeoff distance to be 950 feet.

The airplane's weight and balance was calculated using information obtained from the pilot. The airplane's empty weight was reported as 1,155 pounds with a moment-arm of 29.6 inches. The pilot indicated his weight as 220 pounds and his passenger's weight as 180 pounds. The pilot noted the airplane contained 14 gallons, or 84 pounds, of fuel. The airplane's total weight at the time of the accident flight was calculated to be 1,639 pounds with a moment of 53,618 inches per pound. The center of gravity was calculated to be 32.7 inches aft of the datum line. The maximum certificated gross weight for the airplane was 1,670 pounds. The forward center of gravity limitation was 31.0 inches aft of the datum line and the aft center of gravity limitation was 36.5 inches aft of the datum line.

The airplane's takeoff performance was calculated using the pilot's operating handbook. The ground roll distance for takeoff was calculated to be about 825 feet and the take-off distance over a 50-foot obstacle was calculated to be 1,530 feet with a temperature of 19 degrees Celsius and a pressure altitude of 898 feet.

The pilot reported no mechanical malfunctions with the airplane or the airplane's engine prior to the accident.

Pilot Information

Certificate:	Flight Instructor; Commercial	Age:	19, Male
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	Airplane Multi-engine; Airplane Single-engine	Toxicology Performed:	No
Medical Certification:	Class 1 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	08/13/2002
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:	417 hours (Total, all aircraft), 50 hours (Total, this make and model), 367 hours (Pilot In Command, all aircraft), 77 hours (Last 90 days, all aircraft), 44 hours (Last 30 days, all aircraft), 3 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N68778
Model/Series:	152	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	15282372
Landing Gear Type:	Tricycle	Seats:	2
Date/Type of Last Inspection:	04/07/2003, Annual	Certified Max Gross Wt.:	1670 lbs
Time Since Last Inspection:	45.5 Hours	Engines:	1 Reciprocating
Airframe Total Time:	9082.7 Hours at time of accident	Engine Manufacturer:	Lycoming
ELT:	Installed, not activated	Engine Model/Series:	O-235-L2C
Registered Owner:	Dennis Donnelly	Rated Power:	100 hp
Operator:	St. Charles Flying Service	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	VIH, 1148 ft msl	Distance from Accident Site:	17 Nautical Miles
Observation Time:	1653 CDT	Direction from Accident Site:	225°
Lowest Cloud Condition:	Clear	Visibility	10 Miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	6 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	120°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.99 inches Hg	Temperature/Dew Point:	19° C / 11° C
Precipitation and Obscuration:			
Departure Point:	Owensville, MO (6M06)	Type of Flight Plan Filed:	None
Destination:	St. Charles, MO (3SQ)	Type of Clearance:	None
Departure Time:	1900 CDT	Type of Airspace:	Class G

Airport Information

Airport:	Winter Field Airport (6M06)	Runway Surface Type:	Grass/turf; Gravel
Airport Elevation:	960 ft	Runway Surface Condition:	Dry
Runway Used:	09	IFR Approach:	None
Runway Length/Width:	1800 ft / 100 ft	VFR Approach/Landing:	None

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	1 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 None	Latitude, Longitude:	38.333333, -91.516667

Administrative Information

Investigator In Charge (IIC):	Edward Malinowski	Report Date:	11/25/2003
Additional Participating Persons:	Bob Linenweber; FAA- St. Louis FSDO; St. Ann, MO		
Publish Date:			
Investigation Docket:	NTSB accident and incident dockets 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 pubinq@ntsb.gov , or at 800-877-6799. Dockets released after this date are available at http://dms.nts.gov/pubdms/ .		

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