



National Transportation Safety Board Aviation Accident Final Report

Location:	Sioux Falls, SD	Accident Number:	CHI01LA060
Date & Time:	01/04/2001, 1046 CST	Registration:	N727SP
Aircraft:	Cessna 172S	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 None
Flight Conducted Under:	Part 91: General Aviation - Instructional		

Analysis

The student pilot lost directional control of the aircraft during a takeoff run while practicing solo touch-and-go landings. The pilot stated that after a successful landing he initiated a takeoff and, "as I added power the airplane seemed to shimmy at which time I tried to correct the plane. As I was unable to correct I powered back to idle and tried to stop which is when the plane went off the left side of the runway and hit a windrow of snow." The pilot reported, "Hitting the snow made the planes [plane's] tail lift and spin around which made the right wing hit the ground causing damage." The pilot stated that his total time in all aircraft was 24.1-hours and all hours were flown in the accident airplane make and model. The pilot reported that he had accumulated 1.4-hours of pilot-in-command time.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: Aircraft directional control not being maintained by the student pilot during the takeoff roll. Factors to the accident were the snow bank and the student pilot's lack of total experience.

Findings

Occurrence #1: LOSS OF CONTROL - ON GROUND/WATER
Phase of Operation: TAKEOFF - ROLL/RUN

Findings

1. (C) DIRECTIONAL CONTROL - NOT MAINTAINED - PILOT IN COMMAND
2. (F) LACK OF TOTAL EXPERIENCE - PILOT IN COMMAND

Occurrence #2: ON GROUND/WATER ENCOUNTER WITH TERRAIN/WATER
Phase of Operation: TAKEOFF - ROLL/RUN

Findings

3. (F) TERRAIN CONDITION - SNOWBANK

Factual Information

On January 4, 2001, at 1046 central standard time, a Cessna 172S, N727SP, piloted by a student pilot, sustained substantial damage during an on-ground collision with the terrain following a loss of directional control during takeoff roll on runway 33 (6,670 feet by 150 feet, frost covered/asphalt), at the Joe Foss Field Airport, Sioux Falls, South Dakota. Visual meteorological conditions prevailed at the time of the accident. The solo-instructional flight was being conducted under the provisions of 14 CFR Part 91 and was not on a flight plan. The student pilot, the sole occupant, reported no injuries. The local flight was departing at the time of the accident.

According to the pilot's written statement, he was practicing solo touch-and-go landings at the time of the accident. The pilot stated that after a successful landing he initiated a takeoff and, "as I added power the airplane seemed to shimmy at which time I tried to correct the plane. As I was unable to correct I powered back to idle and tried to stop which is when the plane went off the left side of the runway and hit a windrow of snow." The pilot reported, "Hitting the snow made the planes [plane's] tail lift and spin around which made the right wing hit the ground causing damage." The pilot reported that his total time in all aircraft was 24.1-hours and all hours were flown in the accident airplane make and model. The pilot reported that he had accumulated 1.4-hours of pilot-in-command time.

Pilot Information

Certificate:	Student	Age:	25, Male
Airplane Rating(s):	None	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 Valid Medical--w/ waivers/lim.	Last FAA Medical Exam:	11/02/2000
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:	24 hours (Total, all aircraft), 24 hours (Total, this make and model), 1 hours (Pilot In Command, all aircraft), 24 hours (Last 90 days, all aircraft), 13 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N727SP
Model/Series:	172S	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Utility	Serial Number:	172S8664
Landing Gear Type:	Tricycle	Seats:	4
Date/Type of Last Inspection:	12/04/2000, Annual	Certified Max Gross Wt.:	2550 lbs
Time Since Last Inspection:	19 Hours	Engines:	1 Reciprocating
Airframe Total Time:	21 Hours at time of accident	Engine Manufacturer:	Lycoming
ELT:	Installed, not activated	Engine Model/Series:	IO-360-L2A
Registered Owner:	Daedalus Inc.	Rated Power:	180 hp
Operator:	Daedalus Inc.	Operating Certificate(s) Held:	None
Operator Does Business As:	Business Aviation School of Aeronautics	Operator Designator Code:	

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	FSD, 1429 ft msl	Distance from Accident Site:	
Observation Time:	1056 CST	Direction from Accident Site:	
Lowest Cloud Condition:	Clear	Visibility	10 Miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	4 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	230°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.78 inches Hg	Temperature/Dew Point:	0°C / -3°C
Precipitation and Obscuration:			
Departure Point:	SIOUX FALLS, SD (FSD)	Type of Flight Plan Filed:	None
Destination:	Sioux Falls, SD (FSD)	Type of Clearance:	VFR
Departure Time:	1046 CST	Type of Airspace:	Class D

Airport Information

Airport:	JOE FOSS FIELD (FSD)	Runway Surface Type:	Asphalt
Airport Elevation:	1429 ft	Runway Surface Condition:	Ice
Runway Used:	33	IFR Approach:	None
Runway Length/Width:	6670 ft / 150 ft	VFR Approach/Landing:	None

Wreckage and Impact Information

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

Administrative Information

Investigator In Charge (IIC):	Andrew T Fox	Report Date:	10/09/2001
Additional Participating Persons:	Dan McKinney; FAA - Rapid City FSDO; Rapid City, SD		
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 pubinquiry@ntsb.gov , or at 800-877-6799. Dockets released after this date are available at http://dms.nts.gov/pubdms/ .		

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