



National Transportation Safety Board Aviation Accident Final Report

Location:	OXFORD, MA	Accident Number:	IAD98LA025
Date & Time:	02/01/1998, 1000 EST	Registration:	N78222
Aircraft:	Cessna 172K	Aircraft Damage:	Substantial
Defining Event:		Injuries:	2 None

Flight Conducted Under: Part 91: General Aviation - Personal

Analysis

The pilot said that he applied back pressure to the yoke to reduce a nose wheel vibration during landing and the airplane began 'hopping.' The pilot also attempted to retract the flaps during the landing sequence in an effort to increase braking ability. During that time, the airplane drifted to the right, struck a snowbank, nosed over, and came to rest inverted. According to the pilot, 'The airplane drifted right and struck the snowbank, probably because I was reaching for the flaps.' The pilot had 100 hours of flight experience, 20 hours of which were in make and model.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be:
The pilot's failure to maintain directional control.

Findings

Occurrence #1: LOSS OF CONTROL - ON GROUND/WATER
Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings

1. LANDING GEAR, NOSE GEAR - VIBRATION
2. (F) REMEDIAL ACTION - EXCESSIVE - PILOT IN COMMAND
3. (C) DIRECTIONAL CONTROL - NOT MAINTAINED - PILOT IN COMMAND

Occurrence #2: ON GROUND/WATER COLLISION WITH OBJECT
Phase of Operation: LANDING - ROLL

Findings

4. TERRAIN CONDITION - SNOWBANK

Factual Information

On February 1, 1998, at 1000 eastern standard time, a Cessna 172K, N78222, was substantially damaged after a loss of control during landing at the Oxford Airport (43M), Oxford, Massachusetts. The certificated private pilot and passenger were not injured. Visual meteorological conditions prevailed for the local personal flight that originated at 43M, at 0950. No flight plan had been filed for the flight conducted under 14 CFR Part 91.

The pilot said he departed runway 02, completed a traffic pattern, and returned to land. He said the airplane touched down in the first one-third of the runway. The airplane then began to vibrate as soon as the nose wheel touched down. He attempted to reduce the vibration by applying back pressure to the yoke. He said that after applying back pressure, "...the airplane started hopping on me." The pilot said the airplane bounced twice after the initial touchdown.

The pilot also attempted to retract the flaps during the landing sequence in an effort to increase braking ability. During that time, the airplane drifted to the right, struck a snowbank, nosed over, and came to rest inverted. According to the pilot, "The airplane drifted right and struck the snowbank, probably because I was reaching for the flaps."

The pilot reported that there were no mechanical deficiencies with the airplane. When questioned about the performance of the airplane, the pilot said, "The aircraft was fine." He said he completed a preflight using the checklist prior to departure and did not notice anything unusual.

According to a report from a Federal Aviation Administration Aviation Safety Inspector, "The nose wheel had very little air in it. However, it tested OK [at] 25 lbs. PSI."

The pilot stated that when weather permitted, he flew on a weekly basis. He last flew 2 weeks prior to the accident flight and had accumulated approximately 100 hours of total flight experience.

Pilot Information

Certificate:	Private	Age:	42, Male
Airplane Rating(s):	Single-engine Land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	Seatbelt
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:	10/23/1996
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:	100 hours (Total, all aircraft), 20 hours (Total, this make and model), 15 hours (Last 90 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N78222
Model/Series:	172K 172K	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	17257535
Landing Gear Type:	Tricycle	Seats:	4
Date/Type of Last Inspection:	05/15/1997, Annual	Certified Max Gross Wt.:	2150 lbs
Time Since Last Inspection:	97 Hours	Engines:	1 Reciprocating
Airframe Total Time:	4819 Hours	Engine Manufacturer:	Lycoming
ELT:	Installed, not activated	Engine Model/Series:	O-320
Registered Owner:	JOHNSON AVIATION INC	Rated Power:	160 hp
Operator:	JOHNSON AVIATION INC	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	ORH, 1009 ft msl	Distance from Accident Site:	7 Nautical Miles
Observation Time:	1054 EST	Direction from Accident Site:	60°
Lowest Cloud Condition:	Clear / 0 ft agl	Visibility	10 Miles
Lowest Ceiling:	None / 0 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	4 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	60°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	-1° C / -9° C
Precipitation and Obscuration:			
Departure Point:	(43M)	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	0950 EST	Type of Airspace:	Class G

Airport Information

Airport:	OXFORD AIRPORT (43M)	Runway Surface Type:	Asphalt
Airport Elevation:	763 ft	Runway Surface Condition:	Dry
Runway Used:	2	IFR Approach:	None
Runway Length/Width:	2047 ft / 50 ft	VFR Approach/Landing:	Traffic Pattern

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:	

Administrative Information

Investigator In Charge (IIC):	BRIAN C RAYNER	Report Date:	02/22/2001
Additional Participating Persons:	FRANK RYS; WINDSOR LOCKS, CT		
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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