



National Transportation Safety Board Aviation Accident Final Report

Location:	Moneta, VA	Accident Number:	NYC02LA091
Date & Time:	05/01/2002, 0855 EDT	Registration:	N5198D
Aircraft:	Cessna 182A	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 None

Flight Conducted Under: Part 91: General Aviation - Instructional

Analysis

The student pilot had just landed, and made a left turn onto the "teardrop" taxiway. The right brake failed, and the airplane departed the taxiway, went into a ditch, and nosed over. Post-accident examination revealed that the right brake cylinder was out of fluid, and other than a small amount of fluid up on the cylinder shaft, there were no holes or leaks noted. The brake system had been last checked about 4 1/2 months earlier, during the airplane's latest annual inspection.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: A slow leak of brake fluid from the right brake cylinder, which eventually resulted in a loss of right brake effectiveness.

Findings

Occurrence #1: LOSS OF CONTROL - ON GROUND/WATER
Phase of Operation: TAXI

Findings

1. (C) HYDRAULIC SYSTEM,ACTUATOR - LEAK
2. LANDING GEAR,NORMAL BRAKE SYSTEM - INOPERATIVE

Occurrence #2: ON GROUND/WATER ENCOUNTER WITH TERRAIN/WATER
Phase of Operation: TAXI

Factual Information

On May 1, 2002, at 0855 eastern daylight time, a Cessna 182A, N5198D, was substantially damaged while taxiing after landing at Smith Mountain Lake Airport (W91), Moneta, Virginia. The certificated student pilot was not injured. Visual meteorological conditions prevailed at the time, and no flight plan was filed for the solo instructional flight from a private airstrip in Rocky Mount, Virginia, that was conducted under 14 CFR Part 91.

According to the student pilot, he had just landed on runway 23. He made a left turn onto the "teardrop" taxiway, to back taxi down runway 05, when the right brake failed. The airplane then departed the taxiway, went into a ditch, and nosed over.

An examination of the airplane after the accident by a Federal Aviation Administration (FAA) inspector revealed that the right brake cylinder was out of fluid, and other than a small amount of fluid up on the cylinder shaft, there were no holes or leaks noted.

According to the airplane's maintenance logbook, new wheels and brakes were installed on October 10, 1999. There was also a "check brakes" notation, dated December 22, 2001, as part of the logbook entry for the airplane's latest annual inspection.

Student Pilot Information

Certificate:	Student	Age:	50, 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:	12/13/2001
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:	56 hours (Total, all aircraft), 38 hours (Total, this make and model), 56 hours (Pilot In Command, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N5198D
Model/Series:	182A	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	51298
Landing Gear Type:	Tricycle	Seats:	4
Date/Type of Last Inspection:	12/22/2001, Annual	Certified Max Gross Wt.:	2650 lbs
Time Since Last Inspection:	40.1 Hours	Engines:	1 Reciprocating
Airframe Total Time:	2249.4 Hours at time of accident	Engine Manufacturer:	Continental
ELT:	Installed, not activated	Engine Model/Series:	O-470-L
Registered Owner:	Selby G. Venning	Rated Power:	230 hp
Operator:	Selby G. Venning	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	LYH, 938 ft msl	Distance from Accident Site:	25 Nautical Miles
Observation Time:	0854 EDT	Direction from Accident Site:	60°
Lowest Cloud Condition:		Visibility	10 Miles
Lowest Ceiling:	Overcast / 9500 ft agl	Visibility (RVR):	
Wind Speed/Gusts:	5 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	Variable	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.93 inches Hg	Temperature/Dew Point:	13°C / 7°C
Precipitation and Obscuration:			
Departure Point:	Rocky Mount, VA (NONE)	Type of Flight Plan Filed:	None
Destination:	Moneta, VA (W91)	Type of Clearance:	None
Departure Time:	0835 EDT	Type of Airspace:	Class G

Airport Information

Airport:	Smith Mountain Lake (W91)	Runway Surface Type:	Asphalt
Airport Elevation:	892 ft	Runway Surface Condition:	Dry
Runway Used:	23	IFR Approach:	None
Runway Length/Width:	3058 ft / 50 ft	VFR Approach/Landing:	Full Stop; Traffic Pattern

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:	37.107778, -79.593056

Administrative Information

Investigator In Charge (IIC):	Paul R Cox	Report Date:	04/08/2003
Additional Participating Persons:	Manuel Carvalho; FAA/FSDO; Richmond, VA		
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.ntsbt.gov/pubdms/ .		

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The Independent Safety Board Act, as codified at 49 U.S.C. Section 1154(b), precludes the admission into evidence or use of any part of an NTSB report related to an incident or accident in a civil action for damages resulting from a matter mentioned in the report. A factual report that may be admissible under 49 U.S.C. § 1154(b) is available [here](#).