



Aviation Investigation Final Report

Location:	VERNILLION, South Dakota	Accident Number:	CHI98LA117
Date & Time:	April 5, 1998, 12:00 Local	Registration:	N34066
Aircraft:	Taylorcraft BC12-65	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The pilot landed the airplane on runway 12, a gravel airstrip. He reported the winds were out of the south at 15 knots, gusting to 20 knots. He stated that after landing, the main landing gear contacted sand, while he was making a 180 degree turn to back taxi. The tail of the airplane rose, when the sand was contacted, and the wind caught the tail, resulting in the airplane nosing over.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: the pilot's failure (or inability) to properly compensate for wind conditions, while taxiing. Factors associated with the accident were: the sandy terrain, and the gusty tailwind condition.

Findings

Occurrence #1: NOSE OVER
Phase of Operation: TAXI - FROM LANDING

Findings

1. (F) AIRPORT FACILITIES, RUNWAY/LANDING AREA CONDITION - LOOSE GRAVEL/SANDY
2. (F) WEATHER CONDITION - TAILWIND
3. (F) WEATHER CONDITION - GUSTS
4. (C) COMPENSATION FOR WIND CONDITIONS - INADEQUATE - PILOT IN COMMAND

Factual Information

On April 5, 1998, at 1200 central daylight time, a Taylorcraft BC12-65, N34066, operated by a commercial pilot nosed over while taxiing at the Davidson Airport, Vermillion, South Dakota. The pilot was not injured. The airplane was substantially damaged. Visual meteorological conditions prevailed. The flight was operating under 14 CFR Part 91 without a flight plan. The flight originated from the Vermillion Airport shortly before the accident.

The pilot reported that after a 1.5 hour local flight he entered the traffic pattern for runway 12 at the Davidson Airport to assess the wind conditions. He reported the winds were from the south so he elected to land on gravel runway 21. He reported that after landing the main landing gear contacted sand as he was turning around to back taxi on the runway. The pilot reported, "The tail rose and the wind picked it up and turned the aircraft over."

The airplane came to rest inverted damaging the propeller, rudder, and one wing strut.

Pilot Information

Certificate:	Commercial; Flight instructor	Age:	25, Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	Airplane single-engine; Instrument airplane	Toxicology Performed:	No
Medical Certification:	Class 1 Valid Medical-w/ waivers/lim	Last FAA Medical Exam:	February 4, 1998
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	
Flight Time:	465 hours (Total, all aircraft), 19 hours (Total, this make and model), 291 hours (Pilot In Command, all aircraft), 45 hours (Last 90 days, all aircraft), 34 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Taylorcraft	Registration:	N34066
Model/Series:	BC12-65 BC12-65	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	2930
Landing Gear Type:	Tailwheel	Seats:	2
Date/Type of Last Inspection:	August 14, 1997 Annual	Certified Max Gross Wt.:	1200 lbs
Time Since Last Inspection:	76 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	2796 Hrs	Engine Manufacturer:	Continental
ELT:	Installed, not activated	Engine Model/Series:	A-65-8
Registered Owner:	DAVID D. HOWARD	Rated Power:	65 Horsepower
Operator:		Operating Certificate(s) Held:	None
Operator Does Business As:		Operator Designator Code:	

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:		Distance from Accident Site:	
Observation Time:		Direction from Accident Site:	
Lowest Cloud Condition:	Unknown	Visibility	10 miles
Lowest Ceiling:	Overcast / 3000 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	15 knots / 20 knots	Turbulence Type Forecast/Actual:	/
Wind Direction:	180°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	(VMR)	Type of Flight Plan Filed:	None
Destination:	(VMR)	Type of Clearance:	None
Departure Time:	10:24 Local	Type of Airspace:	Class E

Airport Information

Airport:	HAROLD DAVIDSON FIELD VMR	Runway Surface Type:	Gravel
Airport Elevation:	1140 ft msl	Runway Surface Condition:	Dry
Runway Used:	21	IFR Approach:	None
Runway Length/Width:	1400 ft / 40 ft	VFR Approach/Landing:	Full stop

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 None	Latitude, Longitude:	42.780475,-96.92015(est)

Administrative Information

Investigator In Charge (IIC):	Sullivan, Pamela
Additional Participating Persons:	JAMES R WALLINGFORD; RAPID CITY , SD
Original Publish Date:	October 30, 1998
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=10847

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](#).