



Aviation Investigation Final Report

Location:	Washburn, North Dakota	Accident Number:	CHI05LA154
Date & Time:	June 19, 2005, 17:30 Local	Registration:	N774T
Aircraft:	Cessna A188B	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 None
Flight Conducted Under:	Part 137: Agricultural		

Analysis

The tailwheel aerial application airplane sustained substantial damage on impact with terrain and crops during takeoff. The pilot reported the tailwheel separated from the airplane during the takeoff. The pilot stated, " [Took] off with cross wind 10-15 [knots]. Locking tail wheel broke. Aircraft turned into wind. Ended up in wheat field next to runway."

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The separation of the tailwheel assembly, the pilot's directional control of the airplane not possible during the takeoff, and the unsuitable terrain the pilot encountered.

Findings

Occurrence #1: AIRFRAME/COMPONENT/SYSTEM FAILURE/MALFUNCTION
Phase of Operation: TAKEOFF

Findings

1. (C) LANDING GEAR, TAILWHEEL ASSEMBLY - SEPARATION
2. (C) DIRECTIONAL CONTROL - NOT POSSIBLE - PILOT IN COMMAND

Occurrence #2: IN FLIGHT COLLISION WITH TERRAIN/WATER

Phase of Operation: EMERGENCY LANDING AFTER TAKEOFF

Findings

3. TERRAIN CONDITION - CROP

4. (C) UNSUITABLE TERRAIN OR TAKEOFF/LANDING/TAXI AREA - ENCOUNTERED - PILOT IN COMMAND

Factual Information

On June 19, 2005, about 1730 central daylight time, a Cessna A188B, N774T, piloted by a commercial pilot, sustained substantial damage on impact with terrain and crops during takeoff from runway 26 at the Washburn Municipal Airport (5C8), near Washburn, North Dakota. The pilot reported the tailwheel separated from the airplane during the takeoff. The flight was operating under 14 CFR Part 137. Visual meteorological conditions prevailed at the time of the accident. No flight plan was on file. The pilot reported no injuries. The local aerial application flight was originating from 5C8 at the time of the accident.

The pilot's accident report stated:

[Took] off with cross wind 10-15 [knots]. Locking tail wheel broke. Aircraft turned into wind. Ended up in wheat field next to runway.

At 1652, the recorded weather at the Bismarck Municipal Airport, near Bismarck, North Dakota, was: Wind 010 degrees at 13 knots; visibility 10 statute miles; sky condition scattered 4,900 feet; temperature 31 degrees C; dew point 18 degrees C; altimeter 29.91 inches of mercury.

Pilot Information

Certificate:	Commercial	Age:	72, Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Center
Other Aircraft Rating(s):	Helicopter	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 2 With waivers/limitations	Last FAA Medical Exam:	April 1, 2005
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	18000 hours (Total, all aircraft), 3000 hours (Total, this make and model), 20 hours (Last 90 days, all aircraft), 15 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N774T
Model/Series:	A188B	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Restricted (Special)	Serial Number:	188-01756T
Landing Gear Type:	Tailwheel	Seats:	1
Date/Type of Last Inspection:	May 1, 2005 Annual	Certified Max Gross Wt.:	4200 lbs
Time Since Last Inspection:	30 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	2400 Hrs at time of accident	Engine Manufacturer:	Teledyne Continental
ELT:	Not installed	Engine Model/Series:	IO-520-D
Registered Owner:	JAMESTOWN AVIATION INC	Rated Power:	300 Horsepower
Operator:	JAMESTOWN AVIATION INC	Operating Certificate(s) Held:	
Operator Does Business As:		Operator Designator Code:	CTHG

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	BIS,1661 ft msl	Distance from Accident Site:	37 Nautical Miles
Observation Time:	16:52 Local	Direction from Accident Site:	160°
Lowest Cloud Condition:	Scattered / 4900 ft AGL	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	13 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	10°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.9 inches Hg	Temperature/Dew Point:	31°C / 18°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Washburn, ND	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	17:30 Local	Type of Airspace:	

Airport Information

Airport:	WASHBURN MUNI 5C8	Runway Surface Type:	Concrete
Airport Elevation:	1905 ft msl	Runway Surface Condition:	Dry
Runway Used:	26	IFR Approach:	None
Runway Length/Width:	3700 ft / 60 ft	VFR Approach/Landing:	None

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:	47.353054,-101.027496

Administrative Information

Investigator In Charge (IIC):	Malinowski, Edward
Additional Participating Persons:	Verl Addison; Federal Aviation Administration; Fargo, ND
Original Publish Date:	April 25, 2006
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=61821

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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](#).