

# **Aviation Investigation Final Report**

Location:	FREDRICKTOWN, M	issouri	Accident Number:	CHI98LA137
Date & Time:	April 29, 1998, 12:0	5 Local	<b>Registration:</b>	N201FM
Aircraft:	Cessna	305	Aircraft Damage:	Substantial
Defining Event:			Injuries:	1 None
Flight Conducted Under:	Part 91: General avi	ation - Personal		

#### **Analysis**

After landing, the pilot applied right rudder to correct a gradual left turning tendency. The airplane abruptly turned to the right. The pilot tried to compensate with left aileron and power. By this time, the airplane had left the runway. The pilot pulled the mixture to full lean. The airplane encountered mud on the down slope of the embankment flanking the runway, and gently nosed over onto its top. Examination of the airplane revealed no anomalies.

## **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 aircraft control after landing. Factors contributing to this accident were the embankment, and the soft , muddy soil making up the embankment.

**Findings** 

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

Findings 1. (C) AIRCRAFT CONTROL - NOT MAINTAINED - PILOT IN COMMAND(CFI)

Occurrence #2: NOSE OVER Phase of Operation: LANDING - ROLL

Findings 2. (F) AIRPORT FACILITIES, RUNWAY/LANDING AREA CONDITION - DROP-OFF/DESCENDING EMBANKMENT 3. (F) TERRAIN CONDITION - SOFT

#### **Factual Information**

On April 29, 1998, at 1205 central daylight time (cdt), a Cessna 305, N201FM, operated by a commercial pilot sustained substantial damage when rolling out after a full stop landing on runway 19 at Fredricktown Regional Airport, Fredricktown, Missouri, the airplane veered to the right, departed the runway, and nosed over. Visual meteorological conditions prevailed at the time of the accident. The personal flight was being conducted under 14 CFR Part 91. There was no flight plan on file. The pilot reported no injuries. The local flight originated at Fredricktown, Missouri, at 1200 cdt.

In his written statement, the pilot said that after landing, he applied right rudder to correct a gradual left turning tendency. The airplane abruptly turned to the right. The pilot said that he tried to compensate with left aileron and power. By this time, the airplane had left the runway. The pilot pulled the mixture to full lean. The airplane encountered mud on the down slope of the embankment flanking the runway, and gently nosed over onto its top.

A Federal Aviation Administration (FAA) inspector examined the airplane in a hangar at Fredricktown Regional Airport. Both wings were bent downward slightly. The wing spars were bent downward and the bottom fabric skin showed wrinkling. The vertical stabilizer and rudder crushed inward. The propeller was bent forward. Flight control continuity was confirmed. Examination of the engine, wheels, brakes, engine controls, and other airplane systems revealed no anomalies.

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Certificate:	Commercial; Flight instructor; Military	Age:	58,Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Front
Other Aircraft Rating(s):	Helicopter	Restraint Used:	
Instrument Rating(s):	Airplane; Helicopter	Second Pilot Present:	No
Instructor Rating(s):	Airplane single-engine	Toxicology Performed:	No
Medical Certification:	Class 1 Valid Medicalw/ waivers/lim	Last FAA Medical Exam:	March 13, 1998
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	7000 hours (Total, all aircraft), 1000 hours (Total, this make and model), 6000 hours (Pilot In Command, all aircraft), 50 hours (Last 90 days, all aircraft), 20 hours (Last 30 days, all aircraft)		

#### **Pilot Information**

### Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N201FM
Model/Series:	305 305	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal; Utility	Serial Number:	22488
Landing Gear Type:	Tailwheel	Seats:	2
Date/Type of Last Inspection:	November 20, 1997 Annual	Certified Max Gross Wt.:	2400 lbs
Time Since Last Inspection:	7 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	3959 Hrs	Engine Manufacturer:	Continental
ELT:	Not installed	Engine Model/Series:	0-470-1
Registered Owner:	TAUM SAUK AVIATION INC.	Rated Power:	213 Horsepower
Operator:	JOHN ROBERT FRANCIS	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:	CGI ,342 ft msl	Distance from Accident Site:	41 Nautical Miles
Observation Time:	11:53 Local	Direction from Accident Site:	121°
Lowest Cloud Condition:	Unknown	Visibility	5 miles
Lowest Ceiling:	Broken / 2200 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	7 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	160°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	17°C / 17°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	(H88)	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	12:00 Local	Type of Airspace:	Class E

#### **Airport Information**

Airport:	FREDRICKTOWN REGIONAL H-88	Runway Surface Type:	Asphalt
Airport Elevation:	879 ft msl	<b>Runway Surface Condition:</b>	Dry
Runway Used:	19	IFR Approach:	None
Runway Length/Width:	4000 ft / 75 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:	37.560977,-90.289619(est)

#### **Administrative Information**

Investigator In Charge (IIC):	Bowling, David	
Additional Participating Persons:	THOMAS R RUSSELL; ST. ANN , MO	
Original Publish Date:	February 15, 2001	
Last Revision Date:		
Investigation Class:	<u>Class</u>	
Note:		
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=10862	

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 <u>here</u>.