



# Aviation Investigation Final Report

<b>Location:</b>	JANESVILLE, Wisconsin	<b>Accident Number:</b>	CHI99LA016
<b>Date &amp; Time:</b>	November 1, 1998, 20:01 Local	<b>Registration:</b>	N8069M
<b>Aircraft:</b>	Cessna 310I	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>		<b>Injuries:</b>	1 Minor, 2 None
<b>Flight Conducted Under:</b>	Part 91: General aviation - Personal		

## Analysis

A preflight inspection was conducted in the hangar. The airplane was then pulled from the hangar by use of a tow bar. The pilot and two passengers boarded the airplane and departed on a local flight. During the landing gear retraction a loud bang was heard. Attempts to extend the gear were unsuccessful and an emergency landing was initiated. During the final approach the engines were shut down. When it was obvious that the airplane would touch down short of the runway an attempt to regain power was initiated; however, restoration of power was not sufficient to avoid impact with the terrain 750 feet short of the runway. An examination subsequent to the accident found the tow bar adjacent to the airplane in the field.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's inadequate preflight inspection in which he failed to remove the tow bar from the nose gear. Also causal was his misjudgment of distance and altitude from the runway which resulted in both his premature shutdown of the engines and an undershoot of the runway.

## Findings

Occurrence #1: AIRFRAME/COMPONENT/SYSTEM FAILURE/MALFUNCTION  
Phase of Operation: STANDING - PRE-FLIGHT

### Findings

1. (C) AIRCRAFT PREFLIGHT - INADEQUATE - PILOT IN COMMAND

- 2. (C) MISCELLANEOUS EQUIPMENT - NOT REMOVED - PILOT IN COMMAND
- 3. (F) LANDING GEAR,NOSE GEAR - JAMMED

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Occurrence #2: WHEELS UP LANDING  
Phase of Operation: EMERGENCY LANDING

Findings

- 4. (C) IN-FLIGHT PLANNING/DECISION - POOR - PILOT IN COMMAND

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Occurrence #3: UNDERSHOOT  
Phase of Operation: EMERGENCY LANDING

Findings

- 5. (C) DISTANCE - MISJUDGED - PILOT IN COMMAND
- 6. ENGINE SHUTDOWN - PREMATURE - PILOT IN COMMAND

## Factual Information

On November 1, 1998, at 2001 central standard time, a Cessna 310I, N8069M, sustained substantial damage during an undershoot to runway 4 (6,701' X 150' dry/asphalt) at Rock County Airport, near Janesville, Wisconsin. The pilot said that because the nose landing gear would not extend an emergency landing was initiated. He said that during the emergency landing the engine power was reduced to zero and the landing was short of the runway. The pilot and one passenger reported no injuries, while the pilot rated passenger reported minor injuries. The personal 14 CFR Part 91 flight was operating in visual meteorological conditions. No flight plan was on file. The local flight departed at 1825.

In his written statement, the owner/pilot indicated that the pre-flight was conducted in the hangar. He said he decided to pull the airplane out of the hangar by use of a tow bar, after which using an auxiliary power unit the engines were started. The pilot was in the left seat during the engine startup. After stowing the auxiliary power unit, the other passengers boarded the airplane and the airplane departed on a local flight. During the landing gear retraction a "... loud bang was heard... ." He said that when he attempted to lower the landing gear utilizing both normal and emergency landing gear extension procedures; he was unable to obtain a safe gear down indication. After making a low pass over the airport, it was determined that the nose landing gear was not extended. He said he then decided that an emergency landing would have to be conducted. He stated that during the final approach the engines were shut down, and the fuel and electrical switches were turned off. The pilot said that it then became apparent that the airplane would touch down short of the runway. At that point the pilot/passenger in the right seat took the controls and an attempt to regain power was initiated; however, the airplane impacted the terrain 750 feet short of the runway, prior to restoration of sufficient power to avoid the undershoot.

After the accident the tow bar was found adjacent to the airplane in the field. A subsequent examination of the airplane revealed no pre-accident anomalies.

## Pilot Information

<b>Certificate:</b>	Private	<b>Age:</b>	41, Male
<b>Airplane Rating(s):</b>	Single-engine land; Multi-engine land	<b>Seat Occupied:</b>	Left
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	
<b>Instrument Rating(s):</b>	Airplane	<b>Second Pilot Present:</b>	Yes
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 3 Valid Medical--no waivers/lim.	<b>Last FAA Medical Exam:</b>	May 12, 1998
<b>Occupational Pilot:</b>	UNK	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	433 hours (Total, all aircraft), 195 hours (Total, this make and model), 140 hours (Pilot In Command, all aircraft), 32 hours (Last 90 days, all aircraft), 7 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Cessna	<b>Registration:</b>	N8069M
<b>Model/Series:</b>	310I 310I	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	310I-0069
<b>Landing Gear Type:</b>	Retractable - Tricycle	<b>Seats:</b>	6
<b>Date/Type of Last Inspection:</b>	October 8, 1998 Annual	<b>Certified Max Gross Wt.:</b>	5100 lbs
<b>Time Since Last Inspection:</b>	4 Hrs	<b>Engines:</b>	2 Reciprocating
<b>Airframe Total Time:</b>	5470 Hrs	<b>Engine Manufacturer:</b>	Continental
<b>ELT:</b>	Installed, not activated	<b>Engine Model/Series:</b>	IO-470-U
<b>Registered Owner:</b>	DAVID C. MURDY	<b>Rated Power:</b>	260 Horsepower
<b>Operator:</b>		<b>Operating Certificate(s) Held:</b>	None
<b>Operator Does Business As:</b>		<b>Operator Designator Code:</b>	

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Visual (VMC)	<b>Condition of Light:</b>	Night/dark
<b>Observation Facility, Elevation:</b>	JVL ,808 ft msl	<b>Distance from Accident Site:</b>	
<b>Observation Time:</b>	20:07 Local	<b>Direction from Accident Site:</b>	
<b>Lowest Cloud Condition:</b>	Unknown	<b>Visibility</b>	12 miles
<b>Lowest Ceiling:</b>	Overcast / 5000 ft AGL	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	11 knots /	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	50°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>	30 inches Hg	<b>Temperature/Dew Point:</b>	
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	(JVL )	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>		<b>Type of Clearance:</b>	VFR
<b>Departure Time:</b>	18:00 Local	<b>Type of Airspace:</b>	Class D

## Airport Information

<b>Airport:</b>	ROCK COUNTY JVL	<b>Runway Surface Type:</b>	Asphalt
<b>Airport Elevation:</b>	808 ft msl	<b>Runway Surface Condition:</b>	Dry
<b>Runway Used:</b>	4	<b>IFR Approach:</b>	
<b>Runway Length/Width:</b>	6701 ft / 150 ft	<b>VFR Approach/Landing:</b>	Full stop

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 None	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>	1 Minor, 1 None	<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	1 Minor, 2 None	<b>Latitude, Longitude:</b>	42.680286,-89.009162(est)

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Wilson, Stephen
<b>Additional Participating Persons:</b>	ROBERT G BRANDT; MILWAUKEE , WI CHESTER J CYBULSKI; MILWAUKEE , WI
<b>Original Publish Date:</b>	July 2, 1999
<b>Last Revision Date:</b>	
<b>Investigation Class:</b>	<a href="#">Class</a>
<b>Note:</b>	
<b>Investigation Docket:</b>	<a href="https://data.nts.gov/Docket?ProjectID=45181">https://data.nts.gov/Docket?ProjectID=45181</a>

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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](#).