



# Aviation Investigation Final Report

<b>Location:</b>	DEXTER, Iowa	<b>Accident Number:</b>	CHI96LA338
<b>Date &amp; Time:</b>	August 24, 1996, 15:00 Local	<b>Registration:</b>	N8217T
<b>Aircraft:</b>	Cessna 175	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>		<b>Injuries:</b>	2 None
<b>Flight Conducted Under:</b>	Part 91: General aviation - Personal		

## Analysis

The pilot reported that he was south of the private airstrip, and had lined up the airplane for a straight in landing to the north on the 1800 foot grass runway. Also, he reported that there was a tailwind of approximately 5 knots during landing. When he applied the brakes on the grass runway, the tires began to skid. The airplane went off the end of the runway, through a fence, and impacted a ditch. The aircraft operating handbook data indicated that the airplane's landing performance was adequate for the landing runway, and the local conditions.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: the pilot's inadequate short field landing procedure/technique. The tailwind and grass runway were related factors.

## Findings

Occurrence #1: OVERRUN  
Phase of Operation: LANDING - ROLL

### Findings

1. (F) TERRAIN CONDITION - GRASS
2. (C) SHORT FIELD LANDING/PROCEDURE - INADEQUATE - PILOT IN COMMAND
3. (F) WEATHER CONDITION - TAILWIND
4. PROPER TOUCHDOWN POINT - NOT ATTAINED - PILOT IN COMMAND

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Occurrence #2: ON GROUND/WATER COLLISION WITH OBJECT  
Phase of Operation: LANDING - ROLL

Findings

5. OBJECT - FENCE

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Occurrence #3: ON GROUND/WATER ENCOUNTER WITH TERRAIN/WATER  
Phase of Operation: LANDING - ROLL

Findings

6. TERRAIN CONDITION - DITCH

## Factual Information

On August 24, 1996, at 1500 central daylight time (cdt), a Cessna 175, N8217T, was substantially damaged during landing. The airplane collided with a fence, and a ditch at the end of the approximately 1,800 foot long private grass runway, near Dexter, Iowa. The pilot and passenger were uninjured in the accident. The 14 CFR Part 91 flight was operating in visual meteorological conditions, and no flight plan had been filed.

The pilot reported on NTSB Form 6120.1/2 that this was a local photographic flight. The pilot reported that the takeoff was made to the south. For landing the pilot reported that he was south of the private airstrip, and lined up the airplane for a straight in landing to the north. A tailwind was reported by the pilot of approximately 5 knots during landing. During landing roll the pilot reported that when he applied the brakes on the grass runway the tires began to skid. The pilot reported that the airplane went past the end of the runway, hitting the fence and ditch.

The local elevation around Dexter, Iowa, is approximately 1,300 feet above mean sea level. The Cessna pilot manual lists the landing ground roll distance for a Cessna 175, at 2,500 feet elevation, at 2,350 pounds, with 40 degrees of flaps, on a hard surface runway, at 50 degrees fahrenheit, as 620 feet. The total landing distance over a 50 foot obstacle with all of the above conditions, is listed at 1,220 feet.

The airplane's nose strut was broken off, the firewall, propeller and cowling were bent.

### Pilot Information

<b>Certificate:</b>	Private	<b>Age:</b>	77, Male
<b>Airplane Rating(s):</b>	Single-engine land	<b>Seat Occupied:</b>	Left
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	
<b>Instrument Rating(s):</b>	None	<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	None None	<b>Last FAA Medical Exam:</b>	
<b>Occupational Pilot:</b>	No	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	1460 hours (Total, all aircraft), 10 hours (Last 90 days, all aircraft), 5 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>	N8217T
<b>Model/Series:</b>	175 175	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	17556917
<b>Landing Gear Type:</b>	Tricycle	<b>Seats:</b>	4
<b>Date/Type of Last Inspection:</b>	Annual	<b>Certified Max Gross Wt.:</b>	2350 lbs
<b>Time Since Last Inspection:</b>		<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>		<b>Engine Manufacturer:</b>	Continental
<b>ELT:</b>	Installed, activated, aided in locating accident	<b>Engine Model/Series:</b>	GO-300-D
<b>Registered Owner:</b>	LEON THOMPSON	<b>Rated Power:</b>	175 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>	Day
<b>Observation Facility, Elevation:</b>		<b>Distance from Accident Site:</b>	
<b>Observation Time:</b>		<b>Direction from Accident Site:</b>	
<b>Lowest Cloud Condition:</b>	Clear	<b>Visibility</b>	10 miles
<b>Lowest Ceiling:</b>	None	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	5 knots /	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	180°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>		<b>Temperature/Dew Point:</b>	
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>		<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>		<b>Type of Clearance:</b>	None
<b>Departure Time:</b>	14:15 Local	<b>Type of Airspace:</b>	Class E

## Airport Information

<b>Airport:</b>	PRIVATE STRIP	<b>Runway Surface Type:</b>	Grass/turf
<b>Airport Elevation:</b>		<b>Runway Surface Condition:</b>	
<b>Runway Used:</b>	36	<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>	1800 ft / 75 ft	<b>VFR Approach/Landing:</b>	Straight-in

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 None	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>	1 None	<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	2 None	<b>Latitude, Longitude:</b>	41.509685,-94.220626(est)

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Boldenow, David
<b>Additional Participating Persons:</b>	MAX TIDWELL; DES MOINES , IA
<b>Original Publish Date:</b>	December 23, 1996
<b>Last Revision Date:</b>	
<b>Investigation Class:</b>	<a href="#">Class</a>
<b>Note:</b>	
<b>Investigation Docket:</b>	<a href="https://data.ntsb.gov/Docket?ProjectID=10390">https://data.ntsb.gov/Docket?ProjectID=10390</a>

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