



# National Transportation Safety Board Aviation Accident Data Summary

<b>Location:</b>	River Ranch, FL	<b>Accident Number:</b>	MIA02LA057
<b>Date &amp; Time:</b>	02/01/2002, 1324 EST	<b>Registration:</b>	N7878N
<b>Aircraft:</b>	Cessna R172E	<b>Injuries:</b>	2 Serious
<b>Flight Conducted Under:</b>	Part 91: General Aviation - Instructional		

## Analysis

The flight departed and proceeded uneventfully to the La Belle Municipal Airport where an uneventful landing was performed. The flight departed to return to the initial departure airport and during cruise flight, the certified flight instructor (CFI) noted a discrepancy with one of the fuel gauges. He landed uneventfully at a nearby airport, and with the engine running, the CFI checked for fuel leaks and checked both fuel tanks; no leakage was noted and both tanks were found to contain a sufficient quantity of fuel. The CFI elected to depart to the return to the original departure airport and approximately 15 minutes into the flight, oil spots were noted on the windshield. The CFI reported the engine lost power shortly after seeing the oil spots. The CFI maneuvered the airplane for a landing in a field maintaining 85 miles-per-hour (mph), and during the landing roll with the flaps retracted, the airplane collided with a berm and became airborne. The airplane then contacted another berm becoming airborne again for a short distance. The airplane then impacted the ground and came to rest upright. The CFI exited the airplane and obtained assistance for the student who remained in the airplane. Examination of the fuel system, fuel vent system, air induction system, exhaust system, and engine assembly revealed no evidence of preimpact failure or malfunction. The crankshaft fracture was noted to be from overstress. On engine testing of the ignition system components revealed no evidence of preimpact failure or malfunction. Bench testing of fuel injection system components and both magnetos revealed no evidence of preimpact failure, a discrepancy was noted with the condensers of both magnetos. Bench testing of the fuel selector valve and flexible fuel lines revealed no evidence of preimpact failure or malfunction. Testing of fuel from the facility that fueled the airplane revealed no discrepancies that would cause a loss of engine power. No determination was made as to the reason for the reported loss of engine power. Review of the "Flight Manual" for the airplane revealed that for forced landings on unprepared surfaces, full flaps should be used if possible with a 75 mph glide.

## Probable Cause

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The reported loss of engine power due to undetermined reasons. Contributing factors in the accident were an improper flap setting, excessive landing speed, and terrain consisting of berms.

## Findings

Occurrence #1: LOSS OF ENGINE POWER  
Phase of Operation: CRUISE - NORMAL

### Findings

1. (C) REASON FOR OCCURRENCE UNDETERMINED  
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Occurrence #2: FORCED LANDING  
Phase of Operation: EMERGENCY DESCENT/LANDING  
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Occurrence #3: IN FLIGHT COLLISION WITH TERRAIN/WATER  
Phase of Operation: EMERGENCY LANDING

Findings

- 2. (F) IN-FLIGHT PLANNING/DECISION - POOR - PILOT IN COMMAND(CFI)
- 3. (F) AIRSPEED - EXCESSIVE - PILOT IN COMMAND(CFI)
- 4. TERRAIN CONDITION - BERM

### Flight Instructor Information

<b>Certificate:</b>	Flight Instructor; Commercial	<b>Age:</b>	26
<b>Airplane Rating(s):</b>	Single-engine Land	<b>Instrument Rating(s):</b>	Airplane
<b>Other Aircraft Rating(s):</b>	None	<b>Instructor Rating(s):</b>	Airplane Single-engine; Instrument Airplane
<b>Flight Time:</b>	1000 hours (Total, all aircraft), 350 hours (Total, this make and model), 800 hours (Pilot In Command, all aircraft), 350 hours (Last 90 days, all aircraft), 150 hours (Last 30 days, all aircraft)		

### Student Pilot Information

<b>Certificate:</b>		<b>Age:</b>	
<b>Airplane Rating(s):</b>		<b>Instrument Rating(s):</b>	
<b>Other Aircraft Rating(s):</b>		<b>Instructor Rating(s):</b>	
<b>Flight Time:</b>			

### Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Cessna	<b>Registration:</b>	N7878N
<b>Model/Series:</b>	R172E	<b>Engines:</b>	1 Reciprocating
<b>Operator:</b>	Patrick AFB Aero Club	<b>Engine Manufacturer:</b>	Continental
<b>Operating Certificate(s) Held:</b>	None	<b>Engine Model/Series:</b>	IO-360-DB
<b>Flight Conducted Under:</b>	Part 91: General Aviation - Instructional		

### Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Visual Conditions	<b>Condition of Light:</b>	Day
<b>Observation Facility, Elevation:</b>	MLB, 33 ft msl	<b>Weather Information Source:</b>	Weather Observation Facility
<b>Lowest Ceiling:</b>	None	<b>Wind Speed/Gusts, Direction:</b>	5 knots / , 90°
<b>Temperature:</b>	26° C	<b>Visibility</b>	10 Miles
<b>Precipitation and Obscuration:</b>			
<b>Departure Point:</b>	Patrick AFB, FL (COF)	<b>Destination:</b>	

## Wreckage and Impact Information

Crew Injuries:	2 Serious	Aircraft Damage:	Substantial
Passenger Injuries:	N/A	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Latitude, Longitude:	27.740000, -81.100000		

## Administrative Information

Investigator In Charge (IIC):	Timothy W Monville	Adopted Date:	03/30/2004
Investigation Docket:	NTSB accident and incident dockets serve as permanent archival information for the NTSB's investigations. Dockets released prior to June 1, 2009 are publicly available from the NTSB's Record Management Division at <a href="mailto:pubinq@ntsb.gov">pubinq@ntsb.gov</a> , or at 800-877-6799. Dockets released after this date are available at <a href="http://dms.nts.gov/pubdms/">http://dms.nts.gov/pubdms/</a> .		

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