



# Aviation Investigation Final Report

<b>Location:</b>	SHIELDS, Kansas	<b>Accident Number:</b>	CHI97LA286
<b>Date &amp; Time:</b>	September 6, 1997, 18:00 Local	<b>Registration:</b>	N9228D
<b>Aircraft:</b>	Piper PA-22	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>		<b>Injuries:</b>	2 None
<b>Flight Conducted Under:</b>	Part 91: General aviation - Ferry		

## Analysis

The pilot reported that during the takeoff initial climb from a farm field, at an altitude of 150 to 200 feet agl, a loss of engine power occurred. He landed the airplane straight ahead in a sunflower field. The airplane rolled about 55 feet prior to the nose gear collapsing and the airplane nosing over. The last annual on the airplane was in 1989. The accident occurred during a ferry flight. The airplane had been started and allowed to run periodically over the last several years. The pilot and two mechanics worked on the airplane for about six hours prior to the accident flight during which time the fuel tanks were flushed and fresh fuel was added.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: a loss of engine power from undetermined reasons.

### Findings

Occurrence #1: LOSS OF ENGINE POWER  
Phase of Operation: TAKEOFF - INITIAL CLIMB

#### Findings

1. (C) REASON FOR OCCURRENCE UNDETERMINED
2. MAINTENANCE, ANNUAL INSPECTION - EXCEEDED

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Occurrence #2: FORCED LANDING

Phase of Operation: EMERGENCY LANDING AFTER TAKEOFF  
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Occurrence #3: IN FLIGHT COLLISION WITH TERRAIN/WATER  
Phase of Operation: EMERGENCY LANDING AFTER TAKEOFF

Findings

3. TERRAIN CONDITION - CROP  
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Occurrence #4: NOSE OVER  
Phase of Operation: EMERGENCY LANDING AFTER TAKEOFF

## Factual Information

On September 6, 1997, at 1800 central daylight time, a Piper PA- 22, N9228D, flown by a commercial pilot collided with a sunflower crop and nosed over following a loss of engine power on takeoff from a farm field in Shields, Kansas. The airplane was being operated under 14 CFR Part 91 on a ferry flight to Topeka, Kansas, where it was to have an annual inspection, with an intermediate stop a Dighton, Kansas for fuel. The pilot and passenger were not injured. The airplane was substantially damaged. Visual meteorological conditions existed and no flight plan was filed.

The pilot reported that upon reaching an altitude of 150 - 200 feet after taking off on a freshly mowed farm field, the engine lost power. He stated that he applied a second notch of flaps and landed the airplane straight ahead in a field containing 8 foot high sunflowers. He reported the landing was very smooth and after about 55 feet of ground run, the nose gear collapsed and the airplane gently nosed over.

The pilot reported that the airplane's last annual inspection was in 1989. The airplane had not been flown; however, the owner would start the airplane every month until he passed away about three years prior to the accident. The accident pilot stated that he then ran the airplane every two or three months up until a year prior to the accident. The airplane had been hangared for about the last year.

The pilot reported that he and two mechanics worked on the airplane for approximately six hours prior to the accident. He stated they flushed the fuel system, put in fresh fuel, and ran the airplane up three times prior to the takeoff. It ran good all three times.

## Pilot Information

<b>Certificate:</b>	Commercial; Flight instructor; Military	<b>Age:</b>	51, Male
<b>Airplane Rating(s):</b>	Single-engine land; Multi-engine land	<b>Seat Occupied:</b>	Left
<b>Other Aircraft Rating(s):</b>	Helicopter	<b>Restraint Used:</b>	
<b>Instrument Rating(s):</b>	Airplane; Helicopter	<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>	Airplane multi-engine; Airplane single-engine; Helicopter; Instrument airplane	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 2 Valid Medical-w/ waivers/lim	<b>Last FAA Medical Exam:</b>	January 28, 1997
<b>Occupational Pilot:</b>	UNK	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	8357 hours (Total, all aircraft), 28 hours (Total, this make and model), 5739 hours (Pilot In Command, all aircraft), 120 hours (Last 90 days, all aircraft), 32 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Piper	<b>Registration:</b>	N9228D
<b>Model/Series:</b>	PA-22 PA-22	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	22-6288
<b>Landing Gear Type:</b>	Tricycle	<b>Seats:</b>	4
<b>Date/Type of Last Inspection:</b>	August 25, 1989 Annual	<b>Certified Max Gross Wt.:</b>	2000 lbs
<b>Time Since Last Inspection:</b>	5 Hrs	<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	11053 Hrs	<b>Engine Manufacturer:</b>	Lycoming
<b>ELT:</b>	Installed, not activated	<b>Engine Model/Series:</b>	O-320-B2A
<b>Registered Owner:</b>	GILL FARMS, INC.	<b>Rated Power:</b>	160 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>	7 knots /	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	140°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>		<b>Temperature/Dew Point:</b>	27°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>		<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>	DIGHTON , KS (K65 )	<b>Type of Clearance:</b>	None
<b>Departure Time:</b>	00:00 Local	<b>Type of Airspace:</b>	Class G

## Airport Information

<b>Airport:</b>	PRIVATE AIRSTRIP	<b>Runway Surface Type:</b>	Grass/turf
<b>Airport Elevation:</b>	2800 ft msl	<b>Runway Surface Condition:</b>	Dry
<b>Runway Used:</b>	18	<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>	1300 ft / 20 ft	<b>VFR Approach/Landing:</b>	Forced landing

## 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>	38.479557,-100.45948(est)

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Sullivan, Pamela
<b>Additional Participating Persons:</b>	VERLE ENGEL; WICHITA , KS
<b>Original Publish Date:</b>	April 24, 1998
<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=10696">https://data.nts.gov/Docket?ProjectID=10696</a>

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