



# Aviation Investigation Final Report

<b>Location:</b>	GARNETT, Kansas	<b>Accident Number:</b>	CHI97LA042
<b>Date &amp; Time:</b>	December 13, 1996, 05:30 Local	<b>Registration:</b>	N31SW
<b>Aircraft:</b>	Piper PA-32R-300	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>		<b>Injuries:</b>	1 None
<b>Flight Conducted Under:</b>	Part 135: Air taxi & commuter - Non-scheduled		

## Analysis

The pilot reported that he had started working for the company four days before the accident. He said he had checked the Kansas City weather before he departed Oklahoma City, and expected it to be clear. However, when he arrived at Kansas City, fog had developed. The pilot flew three ILS approaches, but was unable to land due to the fog. He returned to VFR conditions near Garnett Municipal Airport. The pilot reported that as he approached the airport, one fuel tank ran dry. He switched fuel tanks. When he saw the airport, he was too close to make a landing, so he did a 360 degree turn to line up with the runway. However, the aircraft ran out of fuel, and the pilot made a forced landing into a field about 1/2 mile short of the runway. The landing gear was damaged during the landing. The aircraft was examined and no fuel was found in the tanks. The pilot reported that he was not tired or fatigued.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: the pilot's improper in-flight planning/decision, including a delay in proceeding to an alternate airport after encountering fog during a night approach, which resulted in loss of engine power due to fuel exhaustion.

## Findings

Occurrence #1: LOSS OF ENGINE POWER(TOTAL) - NONMECHANICAL  
Phase of Operation: APPROACH - VFR PATTERN - FINAL APPROACH

Findings

1. (F) WEATHER CONDITION - FOG
2. (C) IN-FLIGHT PLANNING/DECISION - IMPROPER - PILOT IN COMMAND
3. (C) FLIGHT TO DESTINATION ALTERNATE - DELAYED - PILOT IN COMMAND
4. (C) FLUID,FUEL - EXHAUSTION

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Occurrence #2: FORCED LANDING

Phase of Operation: EMERGENCY DESCENT/LANDING

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Occurrence #3: GEAR COLLAPSED

Phase of Operation: EMERGENCY LANDING

Findings

5. (F) LIGHT CONDITION - DARK NIGHT
6. (F) TERRAIN CONDITION - OTHER

## Factual Information

On December 13, 1996, at 0530 central standard time (All times CST), a Piper PA-32R-300, N31SW, operated by Safe Wings Aviation, sustained substantial damage during a forced landing one half mile south of Garnett Municipal Airport (K68), Garnett, Kansas. The commercial pilot was not injured. The 14 CFR 135 flight had departed Oklahoma City, Oklahoma, and was en route to Kansas City Downtown Airport (MKC), Kansas City, Missouri. The pilot attempted three instrument approaches to MKC but was unable to land due to weather conditions. The pilot diverted to K68 where visual meteorological conditions existed, but experienced fuel exhaustion prior to landing. An instrument flight plan had been filed but was canceled prior to landing.

The pilot reported that he had started working for the company four days prior to the accident. He reported that he had received training and had flown the same routes which he flew the morning of the accident.

He reported to work at 1400 the afternoon prior to the accident. He departed at 1500 on the first leg of the flight and landed in St. Louis, Missouri, at 1700. At 2115, he departed St. Louis and returned to Kansas City, landing at 2245. At 0010, he flew to Oklahoma City, Oklahoma, and landed there at about 0200. He reported that he departed Oklahoma City between 0230 and 0245 en route back to Kansas City. The pilot reported that he had checked the Kansas City weather before he departed Oklahoma City, and it indicated that the weather was clear. When he arrived at Kansas City, however, fog had set in. He reported that he attempted to fly the ILS Runway 3 approach but he was receiving improper glide slope readings. Then he flew two ILS Runway 19 instrument approaches at MKC but was unable to land due to the fog.

He decided to try to return to VFR conditions so he flew to the southwest. He reported that he saw a city in the distance and Kansas City Center said it was Garnett, Kansas. The pilot proceeded to Garnett Municipal Airport to make a VFR approach and landing. He reported that as he approached the airport, one fuel tank ran dry. He switched fuel tanks and was looking for the airport. He reported that when he saw the airport, he was too close to make a landing so he did a 360 degree turn to line up with the runway. However, as he was lining up for the runway, the aircraft ran out of fuel. He did a forced landing into a field about one half mile short of the runway. The landing gear were damaged during the landing. The time of the accident was approximately 0530.

The pilot reported that he had plenty of rest the day prior to the accident, and that he did not feel tired or fatigued.

The aircraft was examined and no fuel was found in the tanks.

## Pilot Information

<b>Certificate:</b>	Airline transport	<b>Age:</b>	49, Male
<b>Airplane Rating(s):</b>	Single-engine land; Single-engine sea	<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>	No
<b>Instructor Rating(s):</b>	Airplane multi-engine; Airplane single-engine; Instrument airplane	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 1 Valid Medical--no waivers/lim.	<b>Last FAA Medical Exam:</b>	September 10, 1996
<b>Occupational Pilot:</b>	Yes	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	1850 hours (Total, all aircraft), 35 hours (Total, this make and model), 1682 hours (Pilot In Command, all aircraft), 66 hours (Last 90 days, all aircraft), 50 hours (Last 30 days, all aircraft), 8 hours (Last 24 hours, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Piper	<b>Registration:</b>	N31SW
<b>Model/Series:</b>	PA-32R-300 PA-32R-300	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	32R-7680311
<b>Landing Gear Type:</b>	Retractable - Tricycle	<b>Seats:</b>	6
<b>Date/Type of Last Inspection:</b>	October 22, 1996 100 hour	<b>Certified Max Gross Wt.:</b>	3600 lbs
<b>Time Since Last Inspection:</b>	100 Hrs	<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	12569 Hrs	<b>Engine Manufacturer:</b>	Lycoming
<b>ELT:</b>	Installed, not activated	<b>Engine Model/Series:</b>	IO-540-K1G5D
<b>Registered Owner:</b>	SAFE WING AVIATION	<b>Rated Power:</b>	300 Horsepower
<b>Operator:</b>		<b>Operating Certificate(s) Held:</b>	On-demand air taxi (135)
<b>Operator Does Business As:</b>		<b>Operator Designator Code:</b>	

## Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Night/dark
Observation Facility, Elevation:		Distance from Accident Site:	
Observation Time:		Direction from Accident Site:	
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	/ None	Turbulence Type Forecast/Actual:	/
Wind Direction:	0°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	2°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	OKLAHOMA CITY (OKC )	Type of Flight Plan Filed:	IFR
Destination:	KANSAS CITY (MKC )	Type of Clearance:	IFR
Departure Time:	02:45 Local	Type of Airspace:	Class E

## Airport Information

Airport:	GARNETT MUNICIPAL K68	Runway Surface Type:	Asphalt
Airport Elevation:	989 ft msl	Runway Surface Condition:	Dry
Runway Used:	1	IFR Approach:	None
Runway Length/Width:	2400 ft / 45 ft	VFR Approach/Landing:	Forced landing

## 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:	38.279125,-95.230895(est)

## Administrative Information

Investigator In Charge (IIC):	Silliman, James
Additional Participating Persons:	VERLE ENGEL; WICHITA , KS
Original Publish Date:	August 21, 1997
Last Revision Date:	
Investigation Class:	<a href="#">Class</a>
Note:	
Investigation Docket:	<a href="https://data.nts.gov/Docket?ProjectID=10499">https://data.nts.gov/Docket?ProjectID=10499</a>

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