



# Aviation Investigation Final Report

<b>Location:</b>	LA JUNTA, Colorado	<b>Accident Number:</b>	DEN00LA002
<b>Date &amp; Time:</b>	October 1, 1999, 20:06 Local	<b>Registration:</b>	N6406P
<b>Aircraft:</b>	Piper PA-24-250	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>		<b>Injuries:</b>	1 Serious, 1 Minor
<b>Flight Conducted Under:</b>	Part 91: General aviation - Personal		

## Analysis

The pilot and pilot-certificated passenger were on a return cross-country flight that originated from Washington, D.C., with a final destination of Lancaster, California. They departed Missouri earlier in the day, and had planned a stop in Colorado. While approaching Colorado's La Junta airport for landing, the aircraft encountered wind shifts, downdrafts and turbulent weather conditions. As the pilot turned onto final approach during one of several unsuccessful landing attempts, the aircraft impacted the ground at an elevation of 4,500 feet msl in dark night conditions.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot-in-command's failure to maintain a proper altitude during final approach to landing, and his misjudgment of altitude clearances. Factors were the sudden windshift, downdraft and turbulent weather conditions, the dark night, and the pilot's lack of familiarity with the geographic area.

## Findings

Occurrence #1: IN FLIGHT ENCOUNTER WITH WEATHER  
Phase of Operation: APPROACH - VFR PATTERN - FINAL APPROACH

### Findings

1. (F) WEATHER CONDITION - SUDDEN WINDSHIFT

2. (F) WEATHER CONDITION - DOWNDRAFT
3. (F) WEATHER CONDITION - TURBULENCE

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Occurrence #2: IN FLIGHT COLLISION WITH TERRAIN/WATER  
Phase of Operation: APPROACH - VFR PATTERN - FINAL APPROACH

Findings

4. TERRAIN CONDITION - GRASS
5. PROPER ALTITUDE - NOT MAINTAINED - PILOT IN COMMAND
6. LACK OF FAMILIARITY WITH GEOGRAPHIC AREA - PILOT IN COMMAND
7. LIGHT CONDITION - DARK NIGHT
8. ALTITUDE/CLEARANCE - MISJUDGED - PILOT IN COMMAND

## Factual Information

On October 1, 1999, at 2006 mountain daylight time, a Piper PA-24-250, N6406P, was substantially damaged when it collided with terrain while on final approach to landing at La Junta Municipal Airport, Junta, Colorado. The private pilot received minor injuries, and the private pilot certificated passenger was seriously injured. Night visual meteorological conditions prevailed, and no flight plan was filed for the personal cross-country flight being conducted under Title 14 CFR Part 91. The flight originated from Fredericktown Regional Airport, Fredericktown, Missouri, at 1530 central daylight time.

According to the pilot, prior to departure from Fredericktown, he received an outlook weather briefing from Missouri's Columbia Automated Flight Service Station (AFSS) the previous evening, and a standard weather briefing on the morning of the accident. The pilot stated that the weather "appeared normal with 20 knot headwinds, weather clear." While en route, he monitored several airport's ATIS (Automatic Terminal Information Service) reports, and the weather appeared "normal."

In the pilot's accident report, he stated that while en route to La Junta, he noted the aircraft's groundspeed to be 113 knots with a 20 to 30 knot headwind, as indicated on his Global Position System (GPS) receiver. As he approached La Junta, the wind shifted from a headwind to a tailwind and the GPS indicated the groundspeed to be 165 to 170 knots. As he approached the airport for landing, the turbulence increased with "wind direction shifts." He stated that he maintained an altitude of 5,000 feet above mean sea level (msl) while on a downwind to runway 8 (the airport's elevation is 4,238 feet msl; the Federal Aviation Administration recommends traffic pattern altitudes to be conducted at 1,000 feet above ground level [agl] unless otherwise specified.) As he turned onto final approach, the aircraft encountered a downdraft and began to lose altitude, then impacted the ground. During the impact sequence, the aircraft sustained damage to both wings, nose gear, and propeller.

Following the accident, the pilot was interviewed by the Otero County Sheriff's Department. The pilot stated in the interview that he and his father were on a cross-country flight that originated from Washington, D.C., with a final destination of Lancaster, California. During a stop at La Junta, he initially attempted to land on runway 8, but the "wind was strong and [he] missed the runway." He aborted the landing and was planning to return for another landing attempt. He stated that he was "heading east and [was] unfamiliar with the terrain," then struck the ground at an elevation of 4,500 feet msl in dark night conditions. According to the Sheriff's report, when asked if he had experienced any mechanical problems with the aircraft, he stated, "no, that it was just pilot error." The passenger was also interviewed while in the hospital. He stated that "the wind was strong and they misjudged the land around the airport."

## Pilot Information

<b>Certificate:</b>	Private	<b>Age:</b>	53, 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>	Class 3 Valid Medical--w/ waivers/lim	<b>Last FAA Medical Exam:</b>	March 17, 1999
<b>Occupational Pilot:</b>	UNK	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	690 hours (Total, all aircraft), 286 hours (Total, this make and model), 690 hours (Pilot In Command, all aircraft), 34 hours (Last 90 days, all aircraft), 28 hours (Last 30 days, all aircraft), 10 hours (Last 24 hours, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Piper	<b>Registration:</b>	N6406P
<b>Model/Series:</b>	PA-24-250 PA-24-250	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	24-1516
<b>Landing Gear Type:</b>	Retractable - Tricycle	<b>Seats:</b>	4
<b>Date/Type of Last Inspection:</b>	June 17, 1999 Annual	<b>Certified Max Gross Wt.:</b>	3000 lbs
<b>Time Since Last Inspection:</b>	36 Hrs	<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	4220 Hrs	<b>Engine Manufacturer:</b>	Lycoming
<b>ELT:</b>	Installed, activated, aided in locating accident	<b>Engine Model/Series:</b>	O-540
<b>Registered Owner:</b>	DANNY C. & RALPH C. OLSEN	<b>Rated Power:</b>	250 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>	LHX ,4238 ft msl	<b>Distance from Accident Site:</b>	
<b>Observation Time:</b>	19:53 Local	<b>Direction from Accident Site:</b>	
<b>Lowest Cloud Condition:</b>	Scattered / 8000 ft AGL	<b>Visibility</b>	10 miles
<b>Lowest Ceiling:</b>	None	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	25 knots / 32 knots	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	20°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>	29 inches Hg	<b>Temperature/Dew Point:</b>	12°C / 3°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	FREDERICKTOWN , MO (H88 )	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>	(LHX )	<b>Type of Clearance:</b>	None
<b>Departure Time:</b>	15:30 Local	<b>Type of Airspace:</b>	Class G

## Airport Information

<b>Airport:</b>	LA JUNTA MUNICIPAL LHX	<b>Runway Surface Type:</b>	Asphalt
<b>Airport Elevation:</b>	4238 ft msl	<b>Runway Surface Condition:</b>	Dry
<b>Runway Used:</b>	8	<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>	6852 ft / 100 ft	<b>VFR Approach/Landing:</b>	Full stop

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 Minor	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>	1 Serious	<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	1 Serious, 1 Minor	<b>Latitude, Longitude:</b>	37.980667,-103.540138(est)

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Scott, B. beach
<b>Additional Participating Persons:</b>	RANDALL M HOLDER; DENVER , CO
<b>Original Publish Date:</b>	June 21, 2000
<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=47494">https://data.nts.gov/Docket?ProjectID=47494</a>

The National Transportation Safety Board (NTSB) is an independent federal agency charged by Congress with investigating every civil aviation accident in the United States and significant events in other modes of transportation—railroad, transit, highway, marine, pipeline, and commercial space. We determine the probable causes of the accidents and events we investigate, and issue safety recommendations aimed at preventing future occurrences. In addition, we conduct transportation safety research studies and offer information and other assistance to family members and survivors for each accident or event we investigate. We also serve as the appellate authority for enforcement actions involving aviation and mariner certificates issued by the Federal Aviation Administration (FAA) and US Coast Guard, and we adjudicate appeals of civil penalty actions taken by the FAA.

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](#).