



Aviation Investigation Final Report

Location: Boulder City, Nevada Accident Number: LAX01LA225

Date & Time: June 28, 2001, 13:00 Local Registration: N72218

Aircraft: Cessna U206D Aircraft Damage: Substantial

Defining Event: Injuries: 6 None

Flight Conducted Under: Part 135: Air taxi & commuter - Non-scheduled - Sightseeing

Analysis

The commercial pilot lost control of the airplane during landing on runway 27L. The pilot reported that a 10-knot tailwind gust raised the left wing during touchdown and the airplane veered off the right side of the runway, where it encountered a berm. As the pilot applied power to realign the airplane with the runway, the nose and left main landing gear collapsed.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: the pilot's inadequate compensation for the tailwind gust and subsequent failure to maintain directional control of the airplane while landing.

Findings

Occurrence #1: LOSS OF CONTROL - ON GROUND/WATER Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings

- 1. WEATHER CONDITION TAILWIND
- 2. WEATHER CONDITION GUSTS
- 3. (C) COMPENSATION FOR WIND CONDITIONS INADEQUATE PILOT IN COMMAND
- 4. (C) DIRECTIONAL CONTROL NOT MAINTAINED PILOT IN COMMAND
- 5. (C) GROUND LOOP/SWERVE NOT CORRECTED PILOT IN COMMAND

Occurrence #2: ON GROUND/WATER ENCOUNTER WITH TERRAIN/WATER

Phase of Operation: LANDING - ROLL

Findings 6. TERRAIN CONDITION - BERM

Occurrence #3: GEAR COLLAPSED Phase of Operation: LANDING - ROLL

Findings
7. LANDING GEAR - OVERLOAD

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Factual Information

On June 28, 2001, about 1300 Pacific daylight time, a Cessna U206D single engine airplane, N72218, veered off the runway and collided with a berm during a landing at the Boulder City Municipal Airport, Boulder City, Nevada. The airplane was registered to Riffey Co., LLC, and operated by Lake Mead Air, both of which are based in Boulder City, Nevada. The flight was operated under 14 CFR Part 135 as an on-demand nonscheduled domestic passenger flight. Neither the certificated commercial pilot nor the five passengers were injured; the airplane was substantially damaged. Visual meteorological conditions prevailed, and a company flight plan was filed for the flight, which originated at Grand Canyon Bar Ten airstrip, Colorado City, Arizona, about 1215.

In a written statement provided by the pilot, he reported he was performing a routine landing on runway 27L and the wind was reported as light and variable. During the touchdown, the airplane encountered a "crosswind of approximately 10 knots." The pilot applied left rudder to counteract the effect of the wind and retracted the flaps. At that point the "passenger's knee bumped the throttle," and as a result the manifold pressure increased. The pilot pulled the throttle to idle at the same time the left wing lifted. The airplane then veered to the right side of the runway where it encountered the dirt berm.

The left main landing gear structure separated from the fuselage and the propeller sustained substantial damage. The pilot added in his written statement that no passengers were injured during the event. He also stated there were no mechanical malfunctions or failures with the airplane. The pilot later informed investigators that he wasn't sure if the passenger's knee bumped the throttle.

According to a written statement provided by the left rear seat, pilot-rated passenger, the pilot turned onto final approach at a "relatively high altitude and high airspeed." The airplane was approximately 80 knots over the runway and the airplane "'floated' down the runway in ground effect" as the pilot attempted to maintain control. The airplane bounced upon landing and the pilot pulled back on the control yoke. The airplane touched down and turned 90 degrees to the right toward the edge of the runway. As the airplane's landing gear encountered the gravel on the side of the runway, the airplane slowed and the pilot "regained directional control." The pilot steered the airplane toward the runway centerline and applied power; however, at that point the nose landing gear collapsed and the propeller struck the ground, stopping the engine.

The passenger reported the landing gear was substantially damaged and the airplane came to a stop resting on its left wing. He added that they could not open the doors, so they had to push a window out in the back of the airplane. The passenger stated that the pilot failed to retract the flaps during the event. He also reported the wind as calm at the time of the accident. According to the passenger, he sustained serious neck and back injuries as a result

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of the accident when he was "thrown into the back of the pilot's seat."

Another company pilot reported that the wind was from 140-170 degrees at 9 knots with gusts to 16 knots and dust devil activity east and south of the runway.

The commercial pilot reported having accumulated a total of 705 hours, of which 29 hours were flown in the accident airplane make and model. The 29 hours of Cessna 206 time the pilot had accumulated was flown within the preceding 30 days.

Pilot Information

Certificate:	Commercial	Age:	36,Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medicalno waivers/lim.	Last FAA Medical Exam:	October 24, 2000
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	June 14, 2001
Flight Time:	705 hours (Total, all aircraft), 29 hours (Total, this make and model), 598 hours (Pilot In Command, all aircraft), 60 hours (Last 90 days, all aircraft), 45 hours (Last 30 days, all aircraft), 7 hours (Last 24 hours, all aircraft)		

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Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N72218
Model/Series:	U206D	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	U206-1328
Landing Gear Type:	Tricycle	Seats:	6
Date/Type of Last Inspection:	June 12, 2001 Annual	Certified Max Gross Wt.:	3600 lbs
Time Since Last Inspection:	70 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	18015.6 Hrs at time of accident	Engine Manufacturer:	Continental
ELT:	Installed, not activated	Engine Model/Series:	IO-520-F9
Registered Owner:	Riffey Co. LLC	Rated Power:	285 Horsepower
Operator:	Lake Mead Air	Operating Certificate(s) Held:	On-demand air taxi (135)
Operator Does Business As:		Operator Designator Code:	DOQA

Meteorological Information and Flight Plan

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Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	LAS,2181 ft msl	Distance from Accident Site:	15 Nautical Miles
Observation Time:	11:56 Local	Direction from Accident Site:	270°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	8 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	100°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.03 inches Hg	Temperature/Dew Point:	35°C / 4°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Colorado City , AZ (1Z1)	Type of Flight Plan Filed:	Company VFR
Destination:	Boulder City, NV (61B)	Type of Clearance:	None
Departure Time:	12:15 Local	Type of Airspace:	Class G

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Airport Information

Airport:	Boulder City Municipal 61B	Runway Surface Type:	Asphalt
Airport Elevation:	2201 ft msl	Runway Surface Condition:	Dry
Runway Used:	27L	IFR Approach:	None
Runway Length/Width:	4800 ft / 75 ft	VFR Approach/Landing:	Full stop

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	5 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	6 None	Latitude, Longitude:	35.947498,-114.861114

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Administrative Information

Investigator In Charge (IIC):	Petterson, George
Additional Participating Persons:	Frank J Vavra; Federal Aviation Administration; Las Vegas, NV
Original Publish Date:	April 28, 2004
Last Revision Date:	
Investigation Class:	<u>Class</u>
Note:	The NTSB traveled to the scene of this accident.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=52596

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.

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