



Aviation Investigation Final Report

Location:	BOULDER CITY, Nevada	Accident Number:	LAX92FA247
Date & Time:	June 15, 1992, 13:08 Local	Registration:	N2516D
Aircraft:	PIPER PA-38-112	Aircraft Damage:	Destroyed
Defining Event:		Injuries:	2 Fatal
Flight Conducted Under:	Part 91: General aviation - Instructional		

Analysis

A PIPER PA-38-112 COLLIDED WITH AN UNMARKED POWER TRANSMISSION LINE STATIC CABLE DURING THE TAKEOFF CLIMB AFTER EXECUTING A TOUCH AND GO MANEUVER. THE AIRPLANE WAS AT A CONSTANT AIRSPEED AND LOW ALTITUDE ABOVE THE UPSLOPING TERRAIN LOCATED NORTH OF THE AIRPORT. THE AIRPLANE THEN STRUCK THE STATIC CABLE WITH ITS RIGHT WING AS IT ENTERED A RIGHT TURN. THE 20:1 APPROACH CLEAR ZONE PLANE RATIO FOR THE DEPARTURE END OF THE RUNWAY IS OBSTRUCTED BY AN APPROXIMATE FOUR FOOT HIGH DIRT BERM. RISING TERRAIN CONTINUES NORTH OF THE AIRPORT BUT DOES NOT OBSTRUCT THE 20:1 CLEARANCE RATIO. POWER TRANSMISSION LINES CROSS RUNWAY 33'S EXTENDED CENTERLINE ON A NORTHWESTERLY HEADING ABOUT 3,800 FEET FROM THE RUNWAY END. SUPPORT TOWERS FOR THE POWER TRANSMISSION LINE CABLES ARE ABOUT 60 FEET ABOVE GROUND LEVEL, BUT DID NOT EXTEND INTO THE 20:1 CLEARANCE RATIO. THE POWER TRANSMISSION LINES ARE DEPICTED ON THE SECTIONAL AERONAUTICAL CHART. THE AIRPLANE'S FLAPS WERE FOUND TO BE FULLY EXTENDED. THE PIPER INFORMATION MANUAL DOES NOT PRESCRIBE THE USE OF FULL FLAPS FOR ANY TAKEOFF MANEUVERS.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: THE INSTRUCTOR PILOT'S INADEQUATE SUPERVISION OF THE STUDENT PILOT TO INSURE THE PROPER FLAP SETTING FOR TAKEOFF WHICH RESULTED IN THE PROPER CLIMB RATE NOT BEING ATTAINED. CONTRIBUTING TO THE ACCIDENT WAS RISING TERRAIN.

Findings

Occurrence #1: IN FLIGHT COLLISION WITH OBJECT

Phase of Operation: TAKEOFF - INITIAL CLIMB

Findings

1. (F) TERRAIN CONDITION - RISING
 2. (F) RAISING OF FLAPS - NOT PERFORMED - DUAL STUDENT
 3. (F) OBJECT - WIRE, TRANSMISSION
 4. (C) SUPERVISION - INADEQUATE - PILOT IN COMMAND(CFI)
 5. (C) PROPER CLIMB RATE - NOT ATTAINED - PILOT IN COMMAND(CFI)
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Occurrence #2: IN FLIGHT COLLISION WITH TERRAIN/WATER

Phase of Operation: DESCENT - UNCONTROLLED

Findings

6. (F) TERRAIN CONDITION - RISING
7. OBJECT - WIRE, TRANSMISSION

Factual Information

Pilot Information

Certificate:	Commercial; Flight instructor	Age:	28, Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Right
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	Airplane single-engine; Instrument airplane	Toxicology Performed:	Yes
Medical Certification:	None Valid Medical-w/ waivers/lim	Last FAA Medical Exam:	July 31, 1901
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	970 hours (Total, all aircraft), 155 hours (Total, this make and model), 719 hours (Pilot In Command, all aircraft), 88 hours (Last 90 days, all aircraft), 30 hours (Last 30 days, all aircraft), 5 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	PIPER	Registration:	N2516D
Model/Series:	PA-38-112 PA-38-112	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	38-79A0349
Landing Gear Type:	Tricycle	Seats:	2
Date/Type of Last Inspection:	April 4, 1992 Annual	Certified Max Gross Wt.:	1670 lbs
Time Since Last Inspection:	68 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	4554 Hrs	Engine Manufacturer:	LYCOMING
ELT:	Installed, activated, did not aid in locating accident	Engine Model/Series:	O-235-L2C
Registered Owner:	TOMOHAWK LEASING	Rated Power:	112 Horsepower
Operator:	DESERT SOUTHWEST AIRLINES	Operating Certificate(s) Held:	None
Operator Does Business As:		Operator Designator Code:	

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:		Distance from Accident Site:	
Observation Time:		Direction from Accident Site:	
Lowest Cloud Condition:	Clear	Visibility	50 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	/
Wind Direction:	0°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	26°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	LAS VEGAS , NV (LAS)	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	12:10 Local	Type of Airspace:	Class G

Airport Information

Airport:	BOULDER CITY 61B	Runway Surface Type:	
Airport Elevation:	2201 ft msl	Runway Surface Condition:	
Runway Used:	33	IFR Approach:	None
Runway Length/Width:	3850 ft / 75 ft	VFR Approach/Landing:	None

Wreckage and Impact Information

Crew Injuries:	2 Fatal	Aircraft Damage:	Destroyed
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 Fatal	Latitude, Longitude:	35.989372,-114.810791(est)

Administrative Information

Investigator In Charge (IIC):	Wilcox, Thomas
Additional Participating Persons:	DALE NELSON; LAS VEGAS , NV CHARLES LITTLE; WILLIAMSPORT , PA
Original Publish Date:	August 26, 1993
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=27435

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