
		NTSB ID: FTW94FA140		Aircraft Registration Number: N190AR	
		Occurrence Date: 04/30/1994		Most Critical Injury: Fatal	
		Occurrence Type: Accident		Investigated By: NTSB	
Location/Time					
Nearest City/Place ARROYO CITY		State TX	Zip Code 78583	Local Time 1325	Time Zone CDT
Airport Proximity: Off Airport/Airstrip		Distance From Landing Facility:		Direction From Airport:	
Aircraft Information Summary					
Aircraft Manufacturer CESSNA		Model/Series 150M		Type of Aircraft Airplane	
Sightseeing Flight: No			Air Medical Transport Flight: No		
Narrative					
Brief narrative statement of facts, conditions and circumstances pertinent to the accident/incident:					
<p>HISTORY OF THE FLIGHT</p> <p>On April 30, 1994, at 1325 central daylight time, a Cessna 150M, N190AR, was destroyed when it collided with the ground near Arroyo City, Texas. The airplane had been rented to the commercial pilot for a local personal flight. There was no flight plan filed and visual meteorological conditions prevailed. The pilot and the one passenger received fatal injuries.</p> <p>Ground witnesses, one mile away, reported seeing the airplane flying straight and level at an estimated altitude of 150 to 300 feet AGL. They stated that shortly after crossing a road and a set of power lines, the airplane started a gradual pitch up that continued until the airplane was vertical. The witnesses then observed the airplane to stop climbing, do a brief tail slide, and then pitch vertically nose down into the ground.</p> <p>A video camera with a tape inside was recovered from the accident site. The video showed the progression of portions of the flight, including the last moments prior to impact. The tape contained audio as well as video recordings. The recording began at the beginning of the cassette.</p> <p>All of the following times were measured in minutes and seconds from the beginning of the tape. Between video tape time 00:00 and 01:37, the tape contained various shots of the ramp area at the Brownsville airport. There were two brief views of the accident airplane during this segment. Between 01:38 and 03:29, there were shots taken outside the right window. The airplane was at altitude in a level cruise attitude over flat terrain and engine noises could be heard in the background. At 03:29, the camera panned onto the instrument panel. At 03:58, from 03:58 until 04:22, there was footage of a grass fire on the ground, a decrease in power was heard, along with a comment "call fire department."</p> <p>Starting at 04:22 and running to 04:34, there was a view of a downwind approach to the fire shot from the right side of the airplane. Altitude at this time was estimated as being between 10 and 20 feet AGL. The engine noise decreased slightly during this sequence. Between 04:34 and 05:02, the tape showed the airplane banking left, still at low altitude and at 04:58, the comment "crop duster style" was heard. At 05:02, the airplane overflew a canal with brush on either side and an unidentifiable sound is heard from the bottom of the airplane.</p> <p>At 05:03, the tape shows the airplane straight and level at low altitude over a field. At 05:08, a set of power lines is visible out the front windshield and at 05:14, the comment "under or over" is heard, followed at 05:16, by the comment "over." Between 05:14 and 05:29, the camera showed a view of the airplane entering a steep pull up, followed by laughter and screaming. At 05:25, the stall warning horn activated and a left bank is discernable. This was followed by an expletive at 05:28, and another unintelligible comment at 05:29, and a vertical field of view of the cultivated field. The portion of the video tape that ran between 05:26 and 05:29, was damaged. At various points during the video, the engine instruments were visible. All of the engine power instruments were</p>					
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Narrative (Continued)

within high cruise power setting parameters throughout the taped sequences.

WITNESSES

Several witnesses were identified during the investigation; however, only two provided written statements. One eyewitness said that he observed the airplane flying northeast at approximately 300 feet altitude and that it went straight up approximately 20 to 50 feet, and then came straight back down. Another witness, who was the last person to fly the airplane prior to the accident flight, stated that it had performed normally on his flight.

PERSONNEL INFORMATION

The pilot's personal log books were not located during the investigation. Records retrieved from the FAA Airman's Records Branch indicated that he had been issued a commercial pilot certificate with airplane single engine land and instrument privileges on December 21, 1985. These records also indicated that he had last applied for a medical certificate on June 1, 1987. At the time of his last application for a medical, the pilot indicated he had flown a total of 250 hours.

Records requested from the fixed base operator where the pilot rented the airplane indicated that he had last filled out a "Pilot Check-Out Record" on September 16, 1985. At that time, he indicated he held a commercial certificate. The only other records that the FBO was able to produce on the pilot was the airplane rental slip filled out on the date of the accident.

AIRCRAFT INFORMATION

An audit of the airplane's maintenance records did not reveal any outstanding discrepancies that would have affected its airworthiness. It had last had an annual inspection on May 31, 1993, a 100 hour inspection on February 21, 1994, and an oil change on April 2, 1994. The FBO reported that the airplane had been topped off with 100LL aviation fuel prior to departure. The airplane was within the prescribed limits for weight and balance at the time of the accident.

WRECKAGE AND IMPACT INFORMATION


The airplane crashed in a flat cultivated field, approximately 900 feet west of Texas Farm to Market Road 1847. The road ran north and south, and the power lines seen in the video ran parallel to the road on the west side. It was estimated that the lines were 45 feet high.

The aircraft came to rest on a measured heading of 343 degrees with both wing leading edges imbedded in the mud. Both wings had leading edge compression damage aft to a point aft of the main spar. The airplane had not moved forward or laterally after initial impact. The tail was found folded down with the tie down ring in the mud. The nose gear wheel was found immediately behind the left horizontal stabilizer. According to rescue personnel, both occupants were strapped in when they arrived and that they cut both aft door posts to effect removal. The rescue personnel also stated that there was a large amount of fuel visible at the accident site when they responded.

All of the flight controls had remained attached to the airframe and control continuity was established to all, except where the rescue personnel had cut the aileron cables. The main gear and both struts remained in their relative positions. The engine was found displaced aft through the fire wall and both magnetos and the generator had penetrated through the instrument panel.

MEDICAL AND PATHOLOGICAL INFORMATION

Autopsies and toxicology tests were performed on both occupants. The autopsies were performed by a private company, "Pathology", in Harlingen, Texas. The toxicology studies were performed by the FAA Civil Aeromedical Institute. There were no significant findings on either individual.

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Narrative (Continued)


TESTS AND RESEARCH

Video Reconstruction: The video camera with the tape jammed in it was removed from the accident site by responding Texas Department of Public Safety (DPS) officers. It was subsequently turned over to the NTSB investigator-in-charge at the DPS offices in Harlingen. The camera was subsequently turned over to a commercial video service for tape removal, case replacement, and splicing of one tear and break in the tape which was located at the end of the flight sequence. A copy of the tape was provided to Cessna Aircraft, who were able, at the request of the Board, to get instrument readings by freeze-framing the tape. Their report is contained as a separate attachment to this report.

ADDITIONAL INFORMATION

Wreckage Release: The wreckage was released to the owner's representative on July 26, 1994, and all of the retained records were returned at that time. The retained video camera and original tape out of the airplane were released to the owner's representative on August 16, 1994.

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		Occurrence Date: 04/30/1994			
		Occurrence Type: Accident			
Landing Facility/Approach Information					
Airport Name	Airport ID:	Airport Elevation Ft. MSL	Runway Used 0	Runway Length	Runway Width
Runway Surface Type:					
Runway Surface Condition:					
Type Instrument Approach: NONE					
VFR Approach/Landing: None					
Aircraft Information					
Aircraft Manufacturer CESSNA		Model/Series 150M		Serial Number 15078755	
Airworthiness Certificate(s): Normal					
Landing Gear Type: Tricycle					
Homebuilt Aircraft? No	Number of Seats: 2	Certified Max Gross Wt.	1600 LBS	Number of Engines: 1	
Engine Type: Reciprocating	Engine Manufacturer: CONTINENTAL		Model/Series: O-200-A	Rated Power: 100 HP	
- Aircraft Inspection Information					
Type of Last Inspection 100 Hour	Date of Last Inspection 02/1994	Time Since Last Inspection 83 Hours		Airframe Total Time 4556 Hours	
- Emergency Locator Transmitter (ELT) Information					
ELT Installed? Yes	ELT Operated? Yes		ELT Aided in Locating Accident Site? No		
Owner/Operator Information					
Registered Aircraft Owner HUNT PAN AM AVIATION, INC.		Street Address 505 S. MINNESOTA AVE.			
		City BROWNSVILLE	State TX	Zip Code 78521	
Operator of Aircraft Same as Reg'd Aircraft Owner		Street Address Same as Reg'd Aircraft Owner			
		City	State	Zip Code	
Operator Does Business As:			Operator Designator Code:		
- Type of U.S. Certificate(s) Held: None					
Air Carrier Operating Certificate(s):					
Operating Certificate:			Operator Certificate:		
Regulation Flight Conducted Under: Part 91: General Aviation					
Type of Flight Operation Conducted: Personal					

 <p>National Transportation Safety Board FACTUAL REPORT AVIATION</p>	NTSB ID: FTW94FA140
	Occurrence Date: 04/30/1994
	Occurrence Type: Accident

First Pilot Information

Name On File	City On File	State On File	Date of Birth On File	Age 26
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Sex: M	Seat Occupied: Left	Principal Profession: Unknown	Certificate Number: On File
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Certificate(s): Commercial

Airplane Rating(s): Single-engine Land

Rotorcraft/Glider/LTA: None

Instrument Rating(s): Airplane

Instructor Rating(s): None

Type Rating/Endorsement for Accident/Incident Aircraft? No	Current Biennial Flight Review?
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Medical Cert.: None	Medical Cert. Status: Expired	Date of Last Medical Exam: 06/1987
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- Flight Time Matrix	All A/C	This Make and Model	Airplane Single Engine	Airplane Multi-Engine	Night	Instrument		Rotorcraft	Glider	Lighter Than Air
						Actual	Simulated			
Total Time	250									
Pilot In Command(PIC)										
Instructor										
Last 90 Days	1									
Last 30 Days	1									
Last 24 Hours	1									

Seatbelt Used? Yes	Shoulder Harness Used? No	Toxicology Performed? Yes	Second Pilot? No
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Flight Plan/Itinerary

Type of Flight Plan Filed: None

Departure Point BROWNSVILLE	State TX	Airport Identifier BRO	Departure Time 1300	Time Zone CDT
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Destination Local Flight	State	Airport Identifier	
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Type of Clearance: None

Type of Airspace: Class G

Weather Information

Source of Briefing:
No record of briefing

Method of Briefing:

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	Occurrence Type: Accident

Weather Information					
WOF ID	Observation Time	Time Zone	WOF Elevation	WOF Distance From Accident Site	Direction From Accident Site
BRO	1346	CDT	23 Ft. MSL	160 NM	15 Deg. Mag.
Sky/Lowest Cloud Condition: Scattered			1500 Ft. AGL	Condition of Light: Day	
Lowest Ceiling: Overcast		2500 Ft. AGL	Visibility: 12	SM	Altimeter: 29.00 "Hg
Temperature: 23 °C	Dew Point: 19 °C	Wind Direction: 270		Density Altitude: Ft.	
Wind Speed: 15	Gusts:	Weather Conditions at Accident Site: Visual Conditions			
Visibility (RVR): 0 Ft.	Visibility (RVV) 0	SM	Intensity of Precipitation: Light		
Restrictions to Visibility: None					
Type of Precipitation: Rain					

Accident Information		
Aircraft Damage: Destroyed	Aircraft Fire: None	Aircraft Explosion: None

Classification: U.S. Registered/U.S. Soil					
- Injury Summary Matrix	Fatal	Serious	Minor	None	TOTAL
First Pilot	1				1
Second Pilot					
Student Pilot					
Flight Instructor					
Check Pilot					
Flight Engineer					
Cabin Attendants					
Other Crew					
Passengers	1				1
- TOTAL ABOARD -	2				2
Other Ground	0	0	0		0
- GRAND TOTAL -	2	0	0		2

National Transportation Safety Board

FACTUAL REPORT

AVIATION



NTSB ID: FTW94FA140

Occurrence Date: 04/30/1994

Occurrence Type: Accident

Administrative Information

Investigator-In-Charge (IIC)

WARREN V. WANDEL,

Additional Persons Participating in This Accident/Incident Investigation:

RICHARD J BOCHYNSKI
FAA FSDO
SAN ANTONIO, TX 78216