



National Transportation Safety Board Aviation Accident Final Report

Location:	HURST, TX	Accident Number:	FTW94LA291
Date & Time:	09/01/1994, 2210 CDT	Registration:	N2064J
Aircraft:	BELL 206-L4	Aircraft Damage:	Substantial
Defining Event:		Injuries:	2 None

Flight Conducted Under: Part 91: General Aviation - Instructional

Analysis

DURING RECURRENT TRAINING, NIGHT AUTOROTATIONS WERE BEING CONDUCTED. THE COMMERCIAL PILOT UNDER INSTRUCTION WAS HAVING DIFFICULTIES KEEPING THE HELICOPTER ALIGNED WITH THE RUNWAY PRIOR TO TOUCH DOWN. HE HAD COMPLETED 3 AUTOROTATIONS WITH A 180 DEGREE TURN. ON THE FOURTH AUTOROTATION, THE HELICOPTER WAS NOT ALIGNED. WHILE THE INSTRUCTOR PILOT ATTEMPTED TO CORRECT THE HELICOPTER'S ALIGNMENT, IT TOUCHED DOWN HARD WITH THE NOSE LEFT OF CENTERLINE. THE TAILBOOM FLEXED, RESULTING IN WRINKLES TO THE TAILBOOM SKIN.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: THE CERTIFICATED FLIGHT INSTRUCTOR'S INADEQUATE SUPERVISION. A FACTOR WAS THE PILOT'S FAILURE TO MAINTAIN PROPER LANDING ALIGNMENT.

Findings

Occurrence #1: HARD LANDING
Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings

1. EMERGENCY PROCEDURE - SIMULATED - PILOT IN COMMAND(CFI)
2. (F) PROPER ALIGNMENT - NOT MAINTAINED - DUAL STUDENT
3. TOUCHDOWN - IMPROPER - DUAL STUDENT
4. (C) SUPERVISION - INADEQUATE - PILOT IN COMMAND(CFI)
5. MISC ROTORCRAFT, TAIL BOOM - BUCKLED

Factual Information

On September 1, 1994, at 2210 central daylight time, a Bell 206- L4 helicopter, N2064J, was substantially damaged during landing near Hurst, Texas. The certificated flight instructor and commercial pilot receiving instruction were not injured. Visual meteorological conditions prevailed for the dark night instructional flight.

In the instructor's pilot/operator report, he stated the pilot was having difficulties keeping the helicopter aligned with the runway prior to touch down. The student had completed 3 autorotations with a 180 degree turn. On the fourth autorotation, the helicopter was not aligned. While the instructor pilot attempted to correct the helicopter's alignment, it touched down with the nose left of centerline. The tailboom flexed, resulting in wrinkles in the tailboom skin.

According to the pilot, the helicopter touched down hard in a level attitude with the nose to the left.

Pilot Information

Certificate:	Airline Transport; Flight Instructor; Commercial	Age:	51, Male
Airplane Rating(s):	Single-engine Land	Seat Occupied:	Left
Other Aircraft Rating(s):	Helicopter	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	Airplane; Helicopter	Second Pilot Present:	Yes
Instructor Rating(s):	Helicopter; Instrument Helicopter	Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medical--w/ waivers/lim.	Last FAA Medical Exam:	06/24/1994
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:	8000 hours (Total, all aircraft), 150 hours (Total, this make and model), 7000 hours (Pilot In Command, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	BELL	Registration:	N2064J
Model/Series:	206-L4 206-L4	Aircraft Category:	Helicopter
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Experimental; Normal	Serial Number:	52028
Landing Gear Type:	Skid	Seats:	7
Date/Type of Last Inspection:	08/25/1994, 100 Hour	Certified Max Gross Wt.:	4450 lbs
Time Since Last Inspection:	17 Hours	Engines:	1 Turbo Shaft
Airframe Total Time:	509 Hours	Engine Manufacturer:	ALLISON
ELT:	Installed, not activated	Engine Model/Series:	250-C30P
Registered Owner:	BELL HELICOPTER TEXTRON	Rated Power:	490 hp
Operator:	BELL HELICOPTER TEXTRON	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Night/Dark
Observation Facility, Elevation:	, 0 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	0000	Direction from Accident Site:	0°
Lowest Cloud Condition:	Clear / 0 ft agl	Visibility	15 Miles
Lowest Ceiling:	None / 0 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	5 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	Variable	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	
Precipitation and Obscuration:			
Departure Point:	(2F2)	Type of Flight Plan Filed:	Company VFR
Destination:	, TX (2F2)	Type of Clearance:	None
Departure Time:	2015 CDT	Type of Airspace:	Class G

Airport Information

Airport:	BHT2 TRAINING STRIP (2F2)	Runway Surface Type:	Asphalt
Airport Elevation:	524 ft	Runway Surface Condition:	Wet
Runway Used:	36	IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	Simulated Forced Landing; Traffic Pattern

Wreckage and Impact Information

Crew Injuries:	2 None	Aircraft Damage:	Substantial
Passenger Injuries:	N/A	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 None	Latitude, Longitude:	

Administrative Information

Investigator In Charge (IIC):	DOUGLAS D WIGINGTON	Report Date:	03/27/1995
Additional Participating Persons:	THEODORE SOPRENUK; FORT WORTH, TX		
Publish Date:			
Investigation Docket:	NTSB accident and incident dockets serve as permanent archival information for the NTSB's investigations. Dockets released prior to June 1, 2009 are publicly available from the NTSB's Record Management Division at pubinquiry@ntsb.gov , or at 800-877-6799. Dockets released after this date are available at http://dms.ntsbt.gov/pubdms/ .		

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