



Aviation Investigation Final Report

Location:	LAREDO, Texas	Accident Number:	FTW97LA150
Date & Time:	April 3, 1997, 18:30 Local	Registration:	N90485
Aircraft:	Bell BH-47G2	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 None
Flight Conducted Under:	Part 91: General aviation - Positioning		

Analysis

The pilot was in the process of purchasing the helicopter from a business located at the airport. After a successful acceptance flight earlier that morning, the pilot landed the helicopter on the ramp, shut down, and finalized the deal. He had driven a trailer to the airport to transport the helicopter back to Louisiana after the purchase. The pilot stated that he descended slowly down to the trailer platform, positioning the left skid as close to the left rail as possible. Upon touch down, the helicopter slid about 1 inch to the right, but the left skid looked square to the left rail. As the pilot lowered the collective, he felt the helicopter drifting to the right skid and applied power and left lateral cyclic to arrest the drift. Subsequently, the craft banked sharply to the left and the rotor blades struck the ground. As the helicopter rolled to the left, the tail boom was severed. According to the pilot, this was the first time that he had landed on a stationary trailer. A FAA inspector reported that the width of the trailer was about 4 inches wider than the helicopter's landing skids.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's failure to maintain alignment while landing on a stationary trailer. A factor was the pilot's lack of experience in trailer landing operations.

Findings

Occurrence #1: LOSS OF CONTROL - IN FLIGHT
Phase of Operation: HOVER

Findings

1. (C) PROPER ALIGNMENT - NOT MAINTAINED - PILOT IN COMMAND
2. (F) LACK OF TOTAL EXPERIENCE IN TYPE OPERATION - PILOT IN COMMAND

Factual Information

On April 3, 1997, approximately 1830 central standard time, a Bell 47 helicopter, N90485, was substantially damaged following a loss of control while attempting to land on a stationary transport trailer, at Laredo International Airport, Laredo, Texas. The commercial rated pilot, the sole occupant, was not injured. Visual meteorological conditions prevailed for the Title 14 CFR Part 91 personal flight.

During an interview with the investigator-in-charge, the pilot stated that he was in the process of purchasing the helicopter from a business located at the airport. After a successful acceptance flight earlier that morning, the pilot landed the helicopter on the ramp, shut down, and finalized the deal. He had driven a trailer to the airport to transport the helicopter back to Louisiana after the purchase.

The person that sold the helicopter to the pilot stated that he and the pilot discussed loading the helicopter onto the trailer utilizing a crane, but the pilot optioned to hover and land the aircraft on the trailer. Several witnesses observed the helicopter hovering over the trailer and attempting to land. They reported that as the helicopter touched down on the trailer, the right skid "slid off" the right side of the trailer. They subsequently observed the helicopter roll to the left and impact the ground, with the rotor blades striking the ground first.

The pilot stated that he descended slowly down to the trailer platform, positioning the left skid as close to the left rail as possible. He further stated that upon touch down, the helicopter slid about 1 inch to the right, but the left skid looked square to the left rail. As he lowered the collective, he felt the helicopter drifting to the right skid and applied power and left lateral cyclic to arrest the drift. Subsequently, the craft banked sharply to the left and the rotor blades struck the ground. As the helicopter rolled to the left, the tail boom was severed.

According to the pilot, this was the first time that he had landed on a trailer. A FAA inspector reported that the width of the trailer was about 4 inches wider than the helicopter's landing skids.

Pilot Information

Certificate:	Commercial; Private	Age:	44,Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	Helicopter	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 Valid Medical-w/ waivers/lim	Last FAA Medical Exam:	January 20, 1996
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	278 hours (Total, all aircraft), 83 hours (Total, this make and model), 214 hours (Pilot In Command, all aircraft), 27 hours (Last 90 days, all aircraft), 27 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Bell	Registration:	N90485
Model/Series:	BH-47G2 BH-47G2	Aircraft Category:	Helicopter
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	696
Landing Gear Type:	Skid	Seats:	2
Date/Type of Last Inspection:	March 1, 1997 Annual	Certified Max Gross Wt.:	2450 lbs
Time Since Last Inspection:	2 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	11082 Hrs	Engine Manufacturer:	Lycoming
ELT:		Engine Model/Series:	VO-435-A1F
Registered Owner:	LOUIS MCCARTHY	Rated Power:	235 Horsepower
Operator:		Operating Certificate(s) Held:	None
Operator Does Business As:	PEGASUS AIRCRAFT LEASING INC.	Operator Designator Code:	

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	LRD ,627 ft msl	Distance from Accident Site:	
Observation Time:	18:47 Local	Direction from Accident Site:	
Lowest Cloud Condition:	Scattered / 2500 ft AGL	Visibility	8 miles
Lowest Ceiling:	Broken / 5000 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	15 knots / None	Turbulence Type Forecast/Actual:	/
Wind Direction:	120°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	26°C / 19°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	(LRD)	Type of Flight Plan Filed:	Unknown
Destination:	(LRD)	Type of Clearance:	
Departure Time:	18:30 Local	Type of Airspace:	Class E

Airport Information

Airport:	LAREDO INTERNATIONAL LRD	Runway Surface Type:	
Airport Elevation:	627 ft msl	Runway Surface Condition:	
Runway Used:	0	IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	None

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 None	Latitude, Longitude:	27.550485,-99.459487(est)

Administrative Information

Investigator In Charge (IIC): Lemishko, Alexander

Additional Participating Persons: STEVE D HOMER; SAN ANTONIO , TX

Original Publish Date: August 25, 1997

Last Revision Date:

Investigation Class: [Class](#)

Note:

Investigation Docket: <https://data.nts.gov/Docket?ProjectID=20192>

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](#).