



Aviation Investigation Final Report

Location: CASA GRANDE, Arizona Accident Number: LAX85LA249

Date & Time: May 9, 1985, 09:40 Local Registration: N38767

Aircraft: HILLER 12-C Aircraft Damage: Substantial

Defining Event: 2 None

Flight Conducted Under: Part 91: General aviation - Instructional

Analysis

THE PLT WAS DEMONSTRATING AUTOROTATIONS TO A TOUCHDOWN ON A DIRT RWY INTO A 5 KT HEADWIND. ON THE FINAL LANDING HE SAID THAT THE TOUCHDOWN FELT THE SAME AS OTHERS HE HAD DONE.SPEED AT TOUCHDOWN WAS 15 MPH AND THE HELICOPTER SLID FORWARD IN A STRAIGHT LINE FOR A DISTANCE OF ABOUT 3 HELICOPTER LENGHTS. AS IT CAME TO A STOP THE LEFT SIDE OF THE FORWARD CROSSOVER TUBE FAILED, THE LEFT SKID COLLAPSED, AND A MAIN ROTOR BLADE STRUCK THE TAIL BOOM.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be:

Findings

Occurrence #1: GEAR COLLAPSED
Phase of Operation: LANDING - ROLL

Findings

1. (F) LANDING GEAR, SKID ASSEMBLY - FAILURE, PARTIAL

2. (C) JUDGMENT - POOR - PILOT IN COMMAND

3. (F) LANDING GEAR, SKID ASSEMBLY - OVERLOAD

Occurrence #2: PROPELLER/ROTOR CONTACT TO PERSON

Phase of Operation: LANDING - ROLL

Findings 4. (F) MISC ROTORCRAFT, TAIL BOOM - PENETRATED

Page 2 of 6 LAX85LA249

Factual Information

Pilot Information

Certificate:	Airline transport; Flight instructor	Age:	42,Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Unknown
Other Aircraft Rating(s):	Helicopter	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	Airplane multi-engine; Airplane single-engine; Helicopter	Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medicalw/ waivers/lim	Last FAA Medical Exam:	May 1, 1985
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	11140 hours (Total, all aircraft), 360 hours (Total, this make and model), 11000 hours (Pilot In Command, all aircraft), 180 hours (Last 90 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

Page 3 of 6 LAX85LA249

Aircraft and Owner/Operator Information

Aircraft Make:	HILLER	Registration:	N38767
Model/Series:	12-C 12-C	Aircraft Category:	Helicopter
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	1037
Landing Gear Type:	Skid	Seats:	3
Date/Type of Last Inspection:	April 6, 1985 Annual	Certified Max Gross Wt.:	2500 lbs
Time Since Last Inspection:	50 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	6606 Hrs	Engine Manufacturer:	FRANKLIN
ELT:	Not installed	Engine Model/Series:	6V4-200-C33
Registered Owner:	LEHMAN AVIATION, INC.	Rated Power:	200 Horsepower
Operator:		Operating Certificate(s) Held:	None
Operator Does Business As:		Operator Designator Code:	

Meteorological Information and Flight Plan

	3		
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	75 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	5 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	180°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	21°C
Precipitation and Obscuration:	No Obscuration; No Precipita	ation	
Departure Point:	CASA GRANDE , AZ (CGZ)	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	09:20 Local	Type of Airspace:	Class D;Class G

Page 4 of 6 LAX85LA249

Airport Information

Airport:	THREE POINT E58	Runway Surface Type:	Dirt
Airport Elevation:	1389 ft msl	Runway Surface Condition:	Dry
Runway Used:	17	IFR Approach:	None
Runway Length/Width:	3850 ft / 150 ft	VFR Approach/Landing:	Full stop;Simulated forced landing

Wreckage and Impact Information

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

Page 5 of 6 LAX85LA249

Administrative Information

Investigator In Charge (IIC):	Crawford, Alan	
Additional Participating Persons:	R T CURTIS; SCOTTSDALE , AZ	
Original Publish Date:		
Last Revision Date:		
Investigation Class:	Class	
Note:		
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=24722	

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.

Page 6 of 6 LAX85LA249