



Aviation Investigation Final Report

Location:	CHULA VISTA, California	Accident Number:	LAX91LA390
Date & Time:	September 10, 1991, 16:45 Local	Registration:	N2618D
Aircraft:	Bell 47G-3B-2	Aircraft Damage:	Substantial
Defining Event:		Injuries:	2 Minor
Flight Conducted Under:	Part 91: General aviation		

Analysis

THE PILOT WAS CONDUCTING A MAINTENANCE TEST FLIGHT OVER LAND IN A HELICOPTER EQUIPPED WITH A FLOAT LANDING GEAR. HIS FIRST AUTOROTATION WAS TERMINATED WITH A POWER RECOVERY. DURING HIS SECOND AUTOROTATION THE ENGINE FAILED. THE PILOT MISJUDGED HIS AUTOROTATIVE LANDING FLARE AND THE HELICOPTER TOUCHED DOWN WITH A FORWARD GROUND SPEED AND TUMBLED ALONG ITS GROUND PATH.

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 THE PROPER AIRSPEED AND MISJUDGING THE LANDING FLARE ALTITUDE. THE POWERPLANT FAILURE FOR AN UNDETERMINED REASON AND THE UNSUITABLE TERRAIN FOR THE FLOAT EQUIPPED HELICOPTER WERE FACTORS IN THE ACCIDENT.

Findings

Occurrence #1: LOSS OF ENGINE POWER
Phase of Operation: APPROACH - VFR PATTERN - FINAL APPROACH

- Findings
1. SINGLE ENGINE AIRCRAFT
 2. (F) POWERPLANT - UNDETERMINED

Occurrence #2: FORCED LANDING

Phase of Operation: DESCENT - EMERGENCY

Findings

3. (F) AUTOROTATION - PERFORMED - PILOT IN COMMAND

Occurrence #3: HARD LANDING

Phase of Operation: DESCENT - EMERGENCY

Findings

4. (F) TERRAIN CONDITION - NONE SUITABLE

5. (C) FLARE - IMPROPER - PILOT IN COMMAND

6. (C) AIRSPEED - EXCESSIVE - PILOT IN COMMAND

7. (C) ALTITUDE - MISJUDGED - PILOT IN COMMAND

Factual Information

Pilot Information

Certificate:	Commercial; Flight instructor	Age:	40, Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	Helicopter	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	Airplane single-engine; Helicopter	Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medical-w/ waivers/lim	Last FAA Medical Exam:	October 8, 1991
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	2514 hours (Total, all aircraft), 100 hours (Total, this make and model), 2283 hours (Pilot In Command, all aircraft), 17 hours (Last 90 days, all aircraft), 8 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Bell	Registration:	N2618D
Model/Series:	47G-3B-2 47G-3B-2	Aircraft Category:	Helicopter
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	6676
Landing Gear Type:	Float	Seats:	3
Date/Type of Last Inspection:	September 10, 1991 Annual	Certified Max Gross Wt.:	2950 lbs
Time Since Last Inspection:	2 Hrs	Engines:	1 Turbo shaft
Airframe Total Time:	12811 Hrs	Engine Manufacturer:	ALLISON
ELT:	Not installed	Engine Model/Series:	250-C20
Registered Owner:	K & L HELICOPTERS	Rated Power:	318 Horsepower
Operator:	K & L HELICOPTERS	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:	SEE ,385 ft msl	Distance from Accident Site:	15 Nautical Miles
Observation Time:	16:46 Local	Direction from Accident Site:	211°
Lowest Cloud Condition:	Scattered / 3000 ft AGL	Visibility	25 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	7 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	290°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	24°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	EL CAJON , CA (SEE)	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	16:00 Local	Type of Airspace:	Class G

Airport Information

Airport:		Runway Surface Type:	
Airport Elevation:		Runway Surface Condition:	
Runway Used:	0	IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	Forced landing

Wreckage and Impact Information

Crew Injuries:	1 Minor	Aircraft Damage:	Substantial
Passenger Injuries:	1 Minor	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 Minor	Latitude, Longitude:	33.150405,-117.279594(est)

Administrative Information

Investigator In Charge (IIC):	Wall, James
Additional Participating Persons:	INSPECTOR JENNIFER RESKIN; SAN DIEGO , CA INSPECTOR JOHN ELLER; SCOTTSDALE , AZ
Original Publish Date:	May 3, 1993
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=27356

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