



National Transportation Safety Board Aviation Accident Data Summary

Location:	PALMDALE, CA	Accident Number:	LAX86LA203
Date & Time:	05/01/1986, 1910 PDT	Registration:	N4239J
Aircraft:	BELL 47G-2	Injuries:	2 None
Flight Conducted Under:	Part 91: General Aviation - Personal		

Analysis

THE HELICOPTER LANDED HARD IN THE DESERT WHILE ON A VFR PERSONAL FLT. THE PLT INDICATED THAT HE JUST DEPARTED A MOUNTIAN AREA FOR REFUELING. HE ALSO INDICATED HE WAS DISORIENTED AND THE COMPASS WAS INOPERABLE. HE DECIDED TO LAND AND CHECK THE FUEL QUANTITY. HE STATED HE MISJUDGED THE LANDING, THE TAIL HIT THE DESERT FLOOR AND THE MAIN ROTOR STRUCK AND SEVERED THE TAIL BOOM. APRX 1 QUART OF FUEL WAS DRAINED FROM THE ENTIRE FUEL SYSTEM. ACCORDING TO THE MANUFACTURERS OPERATORS MANUAL FOR THE BELL 47G, THE FUEL CAPACITY IS 43 GALLONS TOTAL WITH 41 GALLONS USABLE.

Probable Cause

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

Findings

Occurrence #1: FORCED LANDING

Phase of Operation: DESCENT - EMERGENCY

Findings

1. (F) FLUID,FUEL - LOW LEVEL
2. (F) PRECAUTIONARY LANDING - INTENTIONAL - PILOT IN COMMAND
3. (F) FLIGHT/NAV INSTRUMENTS,COMPASS - INOPERATIVE
4. (F) FUEL SUPPLY - INADEQUATE - PILOT IN COMMAND
5. (C) FUEL CONSUMPTION CALCULATIONS - IMPROPER - PILOT IN COMMAND
6. (F) BECAME LOST/DISORIENTED - INADVERTENT - PILOT IN COMMAND

Occurrence #2: HARD LANDING

Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings

7. (C) FLARE - IMPROPER - PILOT IN COMMAND
8. (F) DESIGN STRESS LIMITS OF AIRCRAFT - EXCEEDED - PILOT IN COMMAND

Pilot Information

Certificate:	Flight Instructor; Commercial; Private	Age:	25
Airplane Rating(s):	Single-engine Land	Instrument Rating(s):	None
Other Aircraft Rating(s):	Helicopter	Instructor Rating(s):	Helicopter
Flight Time:	1943 hours (Total, all aircraft), 1538 hours (Total, this make and model), 1870 hours (Pilot In Command, all aircraft), 90 hours (Last 90 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	BELL	Registration:	N4239J
Model/Series:	47G-2 47G-2	Engines:	1 Reciprocating
Operator:	RIVERSIDE AIR SERVICE	Engine Manufacturer:	FRANKLIN
Operating Certificate(s) Held:	None	Engine Model/Series:	6VS-335-A
Flight Conducted Under:	Part 91: General Aviation - Personal		

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	PMD, 0 ft msl	Weather Information Source:	Weather Observation Facility
Lowest Ceiling:	None / 0 ft agl	Wind Speed/Gusts, Direction:	11 knots / , 260°
Temperature:		Visibility	35 Miles
Precipitation and Obscuration:			
Departure Point:	PALMDALE, CA (PMD)	Destination:	

Airport Information

Airport:	PALMDALE (PMD)	Runway Surface Type:	Dirt
Runway Used:	0	Runway Surface Condition:	Dry
Runway Length/Width:			

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	1 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Latitude, Longitude:			

Administrative Information

Investigator In Charge (IIC): THOMAS H WILCOX

Adopted 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 pubinq@ntsb.gov, or at 800-877-6799. Dockets released after this date are available at <http://dms.nts.gov/pubdms/>.

The National Transportation Safety Board (NTSB), established in 1967, is an independent federal agency mandated by Congress through the Independent Safety Board Act of 1974 to investigate transportation accidents, determine the probable causes of the accidents, issue safety recommendations, study transportation safety issues, and evaluate the safety effectiveness of government agencies involved in transportation. The NTSB makes public its actions and decisions through accident reports, safety studies, special investigation reports, safety recommendations, and statistical reviews.

The Independent Safety Board Act, as codified at 49 U.S.C. Section 1154(b), precludes the admission into evidence or use of any part of an NTSB report related to an incident or accident in a civil action for damages resulting from a matter mentioned in the report.