



Aviation Investigation Final Report

Location: FIVE POINTS, California Accident Number: LAX85FA132

Date & Time: February 3, 1985, 12:30 Local Registration: N5323V

Aircraft: HILLER UH12E Aircraft Damage: Substantial

Defining Event: 1 Minor

Flight Conducted Under: Part 137: Agricultural

Analysis

WHILE PERFORMING AN AG FLIGHT THE HELICOPTER'S ENGIN SUDDENLY LOST POWER. AT THE TIME THE AIRCRAFT WAS NEAR ITS MAX ALLOWABLE GROSS WEIGHT AND IT WAS BETWEEN 3-5FT AGL. AS THE AIRCRAFT YAWED LEFT AND DESCENDED. THE PILOT IN COMMAND ATTEMPTED TO LAND ON A SMALL DIRT ROAD. THE PILOT INCOMMAND MISSED THE ROAD, COLLIDED WITH THE EMBANKMENT OF OF A CANAL AND THE AIRCRAFT ROLLED OVER. EXAMINATION OF THE ENGINE REVEALED THAT THE ROD BOLTS TO THE #1 CON ROD WERE BROKEN. ONE OF THE NUTS HAD BACKED OFF FROM THE ROD BOLT. EXAMINATION OF THE BOLTS IN THE OTHER 5 CYLINDERS DISCLOSED THAT NONE OF THEM HAD BEEN TIGHTENED IN ACCORDANCE WITH MANUFACTURER'S OVERHAUL SPECIFICATIONS. THE AIRCRAFT'S OWNER PERFORMED THE LAST MOH ON THE ENGINE 907 HOURS PRIOR TO THE ACCIDENT.

Probable Cause and Findings

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

Findings

Occurrence #1: LOSS OF ENGINE POWER(TOTAL) - MECH FAILURE/MALF

Phase of Operation: MANEUVERING - AERIAL APPLICATION

Findings

1. (C) ENGINE ASSEMBLY, OTHER - UNDERTORQUED

2. (F) MAINTENANCE, OVERHAUL - IMPROPER - OTHER MAINTENANCE PERSONNEL

Occurrence #2: FORCED LANDING Phase of Operation: DESCENT

Findings

3. (C) EMERGENCY PROCEDURE - ATTEMPTED - PILOT IN COMMAND

4. (C) ALTITUDE - INADEQUATE - PILOT IN COMMAND

Occurrence #3: IN FLIGHT COLLISION WITH TERRAIN/WATER

Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings

5. TERRAIN CONDITION - DIRT BANK/RISING EMBANKMENT

6. (C) PROPER TOUCHDOWN POINT - NOT POSSIBLE - PILOT IN COMMAND

Occurrence #4: ROLL OVER

Phase of Operation: LANDING - FLARE/TOUCHDOWN

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Factual Information

Pilot Information

Certificate:	Commercial	Age:	42,Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Center
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 2 Valid Medical-w/ waivers/lim	Last FAA Medical Exam:	June 11, 1984
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	10000 hours (Total, all aircraft), 3000 hours (Total, this make and model), 15 hours (Last 90 days, all aircraft), 3 hours (Last 24 hours, all aircraft)		

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Aircraft and Owner/Operator Information

Aircraft Make:	HILLER	Registration:	N5323V
Model/Series:	UH12E UH12E	Aircraft Category:	Helicopter
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal; Restricted (Special)	Serial Number:	942
Landing Gear Type:		Seats:	3
Date/Type of Last Inspection:	August 4, 1984 100 hour	Certified Max Gross Wt.:	3100 lbs
Time Since Last Inspection:	53 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	3767 Hrs	Engine Manufacturer:	LYCOMING
ELT:	Not installed	Engine Model/Series:	V0540-C1A
Registered Owner:	COALINGA COMMUTER & CARGO AL	Rated Power:	305 Horsepower
Operator:	WESTSIDE AG AVIATION	Operating Certificate(s) Held:	
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:		Distance from Accident Site:	
Observation Time:		Direction from Accident Site:	
Lowest Cloud Condition:	Unknown	Visibility	15 miles
Lowest Ceiling:	Overcast / 3000 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	7 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	90°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	7°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	FIVE POINTS , CA	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	12:25 Local	Type of Airspace:	Class G

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Airport Information

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

Wreckage and Impact Information

Crew Injuries:	1 Minor	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Minor	Latitude, Longitude:	36.380649,-120.130645(est)

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Administrative Information

Investigator In Charge (IIC):	Pollack, Wayne	
Additional Participating Persons:	ROBERT BECKLEY; FRESNO , CA	
Original Publish Date:		
Last Revision Date:		
Investigation Class:	<u>Class</u>	
Note:		
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=24468	

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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.

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