

# **Aviation Investigation Final Report**

Location: WATSONVILLE, California Accident Number: LAX92LA152

Date & Time: March 27, 1992, 05:35 Local Registration: N149HA

Aircraft: HILLER UH-12E Aircraft Damage: Substantial

**Defining Event:** 1 None

Flight Conducted Under: Part 137: Agricultural

## **Analysis**

THE CERTIFICATED COMMERCIAL PILOT WAS CONDUCTING AERIAL SPRAY OPERATIONS IN A HELICOPTER. ABOUT 30 MINUTES AFTER DEPARTING A NEARBY AIRPORT, THE PILOT WAS TAKING OFF FROM A FIELD TO BEGIN APPLYING THE THIRD LOAD OF AN INSECTICIDE. ABOUT 100 YARDS FROM THE TAKEOFF POINT, THE HELICOPTER'S ENGINE SUDDENLY LOST POWER AND SOUNDED AS IF IT WAS MISFIRING. THE HELICOPTER BEGAN TO DESCEND AND THE PILOT FLARED THE HELICOPTER TO SLOW THE ITS FORWARD MOTION. THE TAIL ROTOR STRUCK THE GROUND AND THE HELICOPTER THEN SETTLED INTO THE FIELD, COLLAPSING THE LANDING GEAR SKIDS. THE WRECKAGE EXAMINATION AT THE ACCIDENT SITE REVEALED WATER IN THE MAIN FUEL SUMP. A POST ACCIDENT EXAMINATION OF THE ENGINE REVEALED CONTAMINATION IN THE FUEL SUMP AND LEFT CARBURETOR SCREEN.

## **Probable Cause and Findings**

The National Transportation Safety Board determines the probable cause(s) of this accident to be: A FAILURE OF THE PILOT TO CONDUCT AN ADEQUATE PRE-FLIGHT INSPECTION OF THE AIRCRAFT TO ENSURE THAT THE FUEL SUPPLY WAS FREE OF CONTAMINATES. CONTRIBUTING TO THIS ACCIDENT WAS FUEL CONTAMINATION.

### **Findings**

Occurrence #1: LOSS OF ENGINE POWER(TOTAL) - NONMECHANICAL

Phase of Operation: TAKEOFF

### Findings

1. (F) FLUID, FUEL - CONTAMINATION

2. (C) AIRCRAFT PREFLIGHT - INADEQUATE - PILOT IN COMMAND

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Occurrence #2: FORCED LANDING

Phase of Operation: DESCENT - EMERGENCY

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Occurrence #3: HARD LANDING

Phase of Operation: DESCENT - EMERGENCY

#### Findings

3. TERRAIN CONDITION - OPEN FIELD

4. LANDING GEAR, SKID ASSEMBLY - COLLAPSED

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# **Factual Information**

## **Pilot Information**

Certificate:	Commercial	Age:	33,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-no waivers/lim.	Last FAA Medical Exam:	October 2, 1991
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	7300 hours (Total, all aircraft), 2800 hours (Total, this make and model), 7200 hours (Pilot In Command, all aircraft), 75 hours (Last 90 days, all aircraft), 30 hours (Last 30 days, all aircraft), 4 hours (Last 24 hours, all aircraft)		

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# **Aircraft and Owner/Operator Information**

Aircraft Make:	HILLER	Registration:	N149HA
Model/Series:	UH-12E UH-12E	Aircraft Category:	Helicopter
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Restricted (Special)	Serial Number:	HA-3049
Landing Gear Type:	Skid	Seats:	3
Date/Type of Last Inspection:	December 5, 1991 100 hour	Certified Max Gross Wt.:	3100 lbs
Time Since Last Inspection:	70 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	4814 Hrs	Engine Manufacturer:	LYCOMING
ELT:	Not installed	Engine Model/Series:	VO-540-CSA
Registered Owner:	HELICAIR AG INC.	Rated Power:	305 Horsepower
Operator:	HELICAIR AG INC.	Operating Certificate(s) Held:	
Operator Does Business As:		Operator Designator Code:	LSMG

# Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Dawn
Observation Facility, Elevation:	SNS ,84 ft msl	Distance from Accident Site:	15 Nautical Miles
Observation Time:	05:50 Local	Direction from Accident Site:	135°
<b>Lowest Cloud Condition:</b>	Unknown	Visibility	5 miles
Lowest Ceiling:	Overcast / 800 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	4 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	270°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	13°C / 12°C
Precipitation and Obscuration:	N/A - None - Fog		
Departure Point:	SALINAS , CA (SNS)	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	05:05 Local	Type of Airspace:	Class G

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# **Airport Information**

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

# 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:	36.950851,-121.719688(est)

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#### **Administrative Information**

Investigator In Charge (IIC): Erickson, Scott

Additional Participating CYNTHIA JESCH; SAN JOSE , CA
Persons: ASI REIGH R. GRANLUND; SAN JOSE , CA

Original Publish Date: August 26, 1993

Last Revision Date: Class

Note:

Investigation Docket: <a href="https://data.ntsb.gov/Docket?ProjectID=27582">https://data.ntsb.gov/Docket?ProjectID=27582</a>

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.

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