



# Aviation Investigation Final Report

<b>Location:</b>	WARM SPRINGS, Oregon	<b>Accident Number:</b>	SEA85FA137
<b>Date &amp; Time:</b>	June 13, 1985, 21:51 Local	<b>Registration:</b>	N4732
<b>Aircraft:</b>	HILLER UH-12C	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>		<b>Injuries:</b>	1 Serious
<b>Flight Conducted Under:</b>	Part 91: General aviation - Ferry		

## Analysis

DURING A FLT FROM MADRAS, OR TO WALLA WALLA, WA, A LOSS OF ENG POWER OCCURRED DUE TO A FUEL FLOW PROBLEM & THE PLT MADE A SUCCESSFUL AUTOROTATION NEAR WARM SPRINGS, OR. A COMPANY MECHANIC WAS DISPATCHED TO THE HELICOPTER & HE REPAIRED A LOOSE FUEL LINE FITTING. LATE THAT EVENING, THE PLT STARTED & RAN THE ENG FOR ABOUT 10 MIN. HE THEN HOVERED FOR 4 TO 5 MIN BEFORE STARTING HIS DEPARTURE. THE PLT REPORTED THAT DURING DEPARTURE, THE ENG BEGAN LOSING RPM AT ABOUT 40 FT AGL. HE ATTEMPTED TO RESTORE POWER, BUT WAS UNABLE. SUBSEQUENTLY, THE HELICOPTER IMPACTED ON ITS SKID LANDING GEAR & TAIL SKID, THEN CAME TO REST ON ITS LEFT SIDE ABOUT 60 FT FROM THE IMPACT POINT. AN EXAM OF THE FUEL SYSTEM REVEALED THAT THE FUEL STRAINER, KOE/K2250B-2, WAS LOOSE AT BOTH ENGS OF THE GLASS & COULD BE TURNED WITH SLIGHT PRESSURE. THE BOLT AT THE BOTTOM OF THE LOWER PIECE WAS NOT SAFETY WIRED & WAS LOOSE.

## 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  
Phase of Operation: TAKEOFF - INITIAL CLIMB

Findings

1. (C) FUEL SYSTEM, STRAINER - LOOSE
  2. (C) MAINTENANCE - INADEQUATE - COMPANY MAINTENANCE PERSONNEL
  3. (C) FLUID, FUEL - STARVATION
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Occurrence #2: FORCED LANDING

Phase of Operation: DESCENT - UNCONTROLLED

Findings

4. AUTOROTATION - PERFORMED - PILOT IN COMMAND
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Occurrence #3: HARD LANDING

Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings

5. (F) LIGHT CONDITION - NIGHT
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Occurrence #4: ROLL OVER

Phase of Operation: LANDING

## Factual Information

### Pilot Information

<b>Certificate:</b>	Commercial	<b>Age:</b>	24, Male
<b>Airplane Rating(s):</b>	Single-engine land	<b>Seat Occupied:</b>	Center
<b>Other Aircraft Rating(s):</b>	Helicopter	<b>Restraint Used:</b>	
<b>Instrument Rating(s):</b>	None	<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 2 Valid Medical--w/ waivers/lim	<b>Last FAA Medical Exam:</b>	March 5, 1985
<b>Occupational Pilot:</b>	Yes	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	342 hours (Total, all aircraft), 3 hours (Total, this make and model), 230 hours (Pilot In Command, all aircraft), 53 hours (Last 90 days, all aircraft), 23 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

### Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	HILLER	<b>Registration:</b>	N4732
<b>Model/Series:</b>	UH-12C UH-12C	<b>Aircraft Category:</b>	Helicopter
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Utility	<b>Serial Number:</b>	259
<b>Landing Gear Type:</b>	Skid	<b>Seats:</b>	1
<b>Date/Type of Last Inspection:</b>	August 10, 1984 Annual	<b>Certified Max Gross Wt.:</b>	2400 lbs
<b>Time Since Last Inspection:</b>	27 Hrs	<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	734 Hrs	<b>Engine Manufacturer:</b>	FRANKLIN
<b>ELT:</b>	Not installed	<b>Engine Model/Series:</b>	6V4-178-B335
<b>Registered Owner:</b>	AIRCRAFT COMMERCE, LTD.	<b>Rated Power:</b>	178 Horsepower
<b>Operator:</b>		<b>Operating Certificate(s) Held:</b>	None
<b>Operator Does Business As:</b>		<b>Operator Designator Code:</b>	

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Visual (VMC)	<b>Condition of Light:</b>	Dusk
<b>Observation Facility, Elevation:</b>		<b>Distance from Accident Site:</b>	
<b>Observation Time:</b>		<b>Direction from Accident Site:</b>	
<b>Lowest Cloud Condition:</b>	Clear	<b>Visibility</b>	60 miles
<b>Lowest Ceiling:</b>	None	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	/	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	0°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>		<b>Temperature/Dew Point:</b>	10°C / -3°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>		<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>	MADRAS , OR (S33 )	<b>Type of Clearance:</b>	None
<b>Departure Time:</b>	21:50 Local	<b>Type of Airspace:</b>	Class G

## Airport Information

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

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 Serious	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>		<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	1 Serious	<b>Latitude, Longitude:</b>	44.819206,-121.309921(est)

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Stripling, Wallace
<b>Additional Participating Persons:</b>	GEORGE LITTLEFIELD; HILLSBORO , OR
<b>Original Publish Date:</b>	
<b>Last Revision Date:</b>	
<b>Investigation Class:</b>	<a href="#">Class</a>
<b>Note:</b>	
<b>Investigation Docket:</b>	<a href="https://data.nts.gov/Docket?ProjectID=40049">https://data.nts.gov/Docket?ProjectID=40049</a>

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