



Aviation Investigation Final Report

| Location: | WENATCHEE, Washington | Accident Number: | SEA92LA141 |
|-------------------------|--|----------------------|------------|
| Date & Time: | June 29, 1992, 08:00 Local | Registration: | N17301 |
| Aircraft: | Bell-World 47D1 | Aircraft Damage: | Destroyed |
| Defining Event: | | Injuries: | 2 None |
| Flight Conducted Under: | Part 91: General aviation - Other work use | | |

Analysis

WHILE TRANSITIONING FROM A HOVER TO FORWARD FLIGHT THE PILOT ENCOUNTERED DECAYING RPM AND ATTEMPTED TO EXECUTE AN EMERGENCY LANDING. DURING THE LANDING, THE TAILBOOM IMPACTED A TREE. THE PILOT REPORTED THAT HE SUSPECTED CARBURETOR ICING AS THE CAUSE OF THE POWER LOSS. THE ACCIDENT OCCURRED AT AN ELEVATION APPROXIMATELY 1000 FEET HIGHER THAN THE WENATCHEE AIRPORT WHICH LIES 5 MILES NORTHEAST. THE SURFACE WEATHER OBSERVATION AT THE AIRPORT TAKEN 15 MINUTES BEFORE THE ACCIDENT RECORDED A 63/59 DEGREE TEMPERATURE/DEW POINT WITH BROKEN/OVERCAST CEILINGS. THE BASE CEILING (BROKEN) WAS REPORTED AT 1800 FEET ABOVE THE AIRPORT ELEVATION.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: CARBURETOR ICE AND THE PILOT IN COMMAND'S NOT BEING ABLE TO MAINTAIN CLEARANCE. FACTORS CONTRIBUTING TO THE ACCIDENT WERE: CARBURETOR ICING CONDITIONS AND TREE(S).

Findings

Occurrence #1: LOSS OF ENGINE POWER(TOTAL) - NONMECHANICAL Phase of Operation: HOVER

Findings

(C) FUEL SYSTEM, CARBURETOR - ICE
(F) WEATHER CONDITION - CARBURETOR ICING CONDITIONS

Occurrence #2: FORCED LANDING Phase of Operation: DESCENT - EMERGENCY

Occurrence #3: IN FLIGHT COLLISION WITH OBJECT Phase of Operation: LANDING

Findings 3. (F) OBJECT - TREE(S) 4. (C) CLEARANCE - NOT POSSIBLE - PILOT IN COMMAND

Factual Information

Pilot Information

| Certificate: | Commercial | Age: | 38,Male |
|---------------------------|---|-----------------------------------|-------------------|
| Airplane Rating(s): | None | Seat Occupied: | Left |
| 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: | December 12, 1991 |
| Occupational Pilot: | UNK | Last Flight Review or Equivalent: | |
| Flight Time: | 181 hours (Total, all aircraft), 71 hours (Total, this make and model), 125 hours (Pilot In Command, all aircraft) | | |

Aircraft and Owner/Operator Information

| Aircraft Make: | Bell-World | Registration: | N17301 |
|-----------------------------------|-------------------------------|-----------------------------------|-----------------|
| Model/Series: | 47D1 47D1 | Aircraft Category: | Helicopter |
| Year of Manufacture: | | Amateur Built: | |
| Airworthiness Certificate: | Normal | Serial Number: | WH5016 |
| Landing Gear Type: | Skid | Seats: | 2 |
| Date/Type of Last Inspection: | May 24, 1992 Unknown | Certified Max Gross Wt.: | 2350 lbs |
| Time Since Last Inspection: | 12 Hrs | Engines: | 1 Reciprocating |
| Airframe Total Time: | 1915 Hrs | Engine Manufacturer: | FRANKLIN |
| ELT: | | Engine Model/Series: | GV335AB |
| Registered Owner: | POWDER RIVER HELICOPTERS INC. | Rated Power: | 200 Horsepower |
| Operator: | POWDER RIVER HELICOPTERS INC. | 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: | EAT ,1245 ft msl | Distance from Accident Site: | 5 Nautical Miles |
| Observation Time: | 07:45 Local | Direction from Accident Site: | 32° |
| Lowest Cloud Condition: | Unknown | Visibility | 10 miles |
| Lowest Ceiling: | Broken / 1800 ft AGL | Visibility (RVR): | |
| Wind Speed/Gusts: | 11 knots / | Turbulence Type Forecast/Actual: | / |
| Wind Direction: | 120° | Turbulence Severity Forecast/Actual: | / |
| Altimeter Setting: | 29 inches Hg | Temperature/Dew Point: | 17°C / 15°C |
| Precipitation and Obscuration: | No Obscuration; No Precipitation | | |
| Departure Point: | MALAGA , WA | Type of Flight Plan Filed: | None |
| Destination: | | Type of Clearance: | None |
| Departure Time: | 07:45 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 None | Aircraft Damage: | Destroyed |
|------------------------|--------|-------------------------|----------------------------|
| Passenger Injuries: | 1 None | Aircraft Fire: | None |
| Ground Injuries: | N/A | Aircraft Explosion: | None |
| Total Injuries: | 2 None | Latitude, Longitude: | 47.369541,-120.349098(est) |

Administrative Information

| Investigator In Charge (IIC): | Mccreary, Steven | |
|--------------------------------------|--|--|
| Additional Participating Persons: | J. DODGE; RENTON , WA | |
| Original Publish Date: | September 28, 1993 | |
| Last Revision Date: | | |
| Investigation Class: | <u>Class</u> | |
| Note: | | |
| Investigation Docket: | https://data.ntsb.gov/Docket?ProjectID=42845 | |

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