



Aviation Investigation Final Report

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| Location: | QUINCY, California | Accident Number: | LAX83LA429 |
| Date & Time: | September 8, 1983, 10:00 Local | Registration: | N619H |
| Aircraft: | ENSTROM F-28C | Aircraft Damage: | Substantial |
| Defining Event: | | Injuries: | 3 None |
| Flight Conducted Under: | Part 91: General aviation | | |

Analysis

THE ACFT WAS ON A FLT TO A RADIO TRANSMITTER SITE AT ABOUT THE 7000 FT LEVEL IN MOUNTAINOUS TERRAIN. DURING ARRIVAL TO THE HELIPAD, THE PLT NOTICED THAT SEVERAL VEHICLES WERE PARKED ON THE LANDING SURFACE. WHILE IN A HOVER, HE MANEUVERED THE HELICOPTER TO AN ADJACENT ROAD & BEGAN INSPECTING IT FOR SUITABILITY AS A LANDING AREA. HE DECIDED THAT THE ROAD WAS UNSATISFACTORY & APPLIED POWER & COLLECTIVE TO BEGIN A LEFT CLIMBING TURN. ACCORDING TO ALL STATEMENTS, THE ENG'S RESPONSE TO THE POWER DEMAND WAS A GRADUAL POWER FADE UNTIL IT QUIT. SUBSEQUENTLY, THE ACFT LANDED HARD IN A BUSH COVERED AREA & WAS DAMAGED. THE ENG WAS EXAMED & OPERATIONALLY TESTED, BUT NO ABNORMALITIES WERE NOTED. THE DENSITY ALTITUDE WAS CALCULATED TO BE ABOUT 7800 TO 8650 FT. ACCORDING TO THE FLT MANUAL, AT THE ESTIMATED WEIGHT, THE HELICOPTER'S HOVERING CEILING WAS 13,000 FT IN GROUND EFFECT & 8300 FT OUT OF GROUND EFFECT.

Probable Cause and Findings

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

Findings

Occurrence #1: LOSS OF CONTROL - IN FLIGHT
Phase of Operation: LANDING

Findings

1. (F) WEATHER CONDITION - HIGH DENSITY ALTITUDE
2. OBJECT - VEHICLE
3. AIRPORT FACILITIES, RUNWAY/LANDING AREA CONDITION - UNAVAILABLE
4. ABORTED LANDING - PERFORMED - PILOT IN COMMAND
5. CLIMB - INITIATED - PILOT IN COMMAND
6. MANEUVER - INITIATED - PILOT IN COMMAND
7. (C) ROTOR RPM - NOT MAINTAINED - PILOT IN COMMAND

Occurrence #2: FORCED LANDING

Phase of Operation: LANDING

Occurrence #3: HARD LANDING

Phase of Operation: LANDING - FLARE/TOUCHDOWN

Factual Information

Pilot Information

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|----------------------------------|---|--|------------------|
| Certificate: | Commercial | Age: | 42, Male |
| Airplane Rating(s): | Single-engine land; Multi-engine land | Seat Occupied: | Left |
| Other Aircraft Rating(s): | Helicopter | Restraint Used: | |
| Instrument Rating(s): | Airplane | Second Pilot Present: | No |
| Instructor Rating(s): | | Toxicology Performed: | No |
| Medical Certification: | Class 2 Valid Medical--no waivers/lim. | Last FAA Medical Exam: | November 4, 1981 |
| Occupational Pilot: | No | Last Flight Review or Equivalent: | |
| Flight Time: | 3310 hours (Total, all aircraft), 110 hours (Total, this make and model), 3000 hours (Pilot In Command, all aircraft), 24 hours (Last 90 days, all aircraft), 8 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft) | | |

Aircraft and Owner/Operator Information

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|--------------------------------------|-----------------------|---------------------------------------|-----------------|
| Aircraft Make: | ENSTROM | Registration: | N619H |
| Model/Series: | F-28C F-28C | Aircraft Category: | Helicopter |
| Year of Manufacture: | | Amateur Built: | |
| Airworthiness Certificate: | Normal | Serial Number: | 380 |
| Landing Gear Type: | Skid | Seats: | 3 |
| Date/Type of Last Inspection: | March 11, 1983 Annual | Certified Max Gross Wt.: | 2350 lbs |
| Time Since Last Inspection: | 101 Hrs | Engines: | 1 Reciprocating |
| Airframe Total Time: | 935 Hrs | Engine Manufacturer: | LYCOMING |
| ELT: | Installed, activated | Engine Model/Series: | H10-360-E1AD |
| Registered Owner: | DAVID E. CALDWELL | Rated Power: | 205 Horsepower |
| Operator: | | Operating Certificate(s) Held: | None |
| Operator Does Business As: | | Operator Designator Code: | |

Meteorological Information and Flight Plan

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|---|----------------------------------|---|----------|
| 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: | Clear | Visibility | 50 miles |
| Lowest Ceiling: | None | Visibility (RVR): | |
| Wind Speed/Gusts: | 10 knots / | Turbulence Type Forecast/Actual: | / |
| Wind Direction: | 220° | Turbulence Severity Forecast/Actual: | / |
| Altimeter Setting: | | Temperature/Dew Point: | 16°C |
| Precipitation and Obscuration: | No Obscuration; No Precipitation | | |
| Departure Point: | QUINCY , CA (201) | Type of Flight Plan Filed: | None |
| Destination: | | Type of Clearance: | None |
| Departure Time: | 09:30 Local | Type of Airspace: | Class G |

Airport Information

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|-----------------------------|-------------|----------------------------------|----------------|
| Airport: | | Runway Surface Type: | Dirt |
| Airport Elevation: | 7000 ft msl | Runway Surface Condition: | Vegetation |
| Runway Used: | 0 | IFR Approach: | None |
| Runway Length/Width: | | VFR Approach/Landing: | Forced landing |

Wreckage and Impact Information

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|----------------------------|--------|-----------------------------|----------------------------|
| Crew Injuries: | 1 None | Aircraft Damage: | Substantial |
| Passenger Injuries: | 2 None | Aircraft Fire: | None |
| Ground Injuries: | N/A | Aircraft Explosion: | None |
| Total Injuries: | 3 None | Latitude, Longitude: | 39.959232,-121.000045(est) |

Administrative Information

Investigator In Charge (IIC): Rich, Jeff

Additional Participating Persons:

Original Publish Date:

Last Revision Date:

Investigation Class: [Class](#)

Note:

Investigation Docket: <https://data.ntsb.gov/Docket?ProjectID=23848>

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](#).