Aviation Investigation Final Report

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

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

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:**	HIO-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

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 (2O1)	**Type of Flight Plan Filed:**	None
Destination:		**Type of Clearance:**	None
Departure Time:	09:30 Local	**Type of Airspace:**	Class G

Airport Information

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

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