



Aviation Investigation Final Report

Location: KAUNAKAKAI, Hawaii Accident Number: LAX99LA226

Date & Time: June 22, 1999, 19:45 Local Registration: N595H

Aircraft: Enstrom F28C Aircraft Damage: Substantial

Defining Event: 2 Minor

Flight Conducted Under: Part 91: General aviation - Personal

Analysis

The pilot reported the helicopter was running well with no mechanical difficulties. During an after dusk departure from a ranch, he encountered a dust devil. Dust and grass blew into the cockpit blinding the pilot. While attempting to land, the helicopter collided with trees.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot encountered a dust devil during the takeoff transition from a dirt and grass area resulting in a loss of vision, disorientation, and subsequent collision with trees.

Findings

Occurrence #1: IN FLIGHT COLLISION WITH OBJECT

Phase of Operation: TAKEOFF

Findings

- 1. (F) AIRPORT FACILITIES, RUNWAY/LANDING AREA CONDITION LOOSE OBJECTS
- 2. (C) UNSUITABLE TERRAIN OR TAKEOFF/LANDING/TAXI AREA ATTEMPTED PILOT IN COMMAND
- 3. (F) WEATHER CONDITION DUST DEVIL/WHIRLWIND
- 4. (C) BECAME LOST/DISORIENTED ENCOUNTERED PILOT IN COMMAND
- 5. LIGHT CONDITION DUSK
- 6. OBJECT TREE(S)
- 7. (C) ALTITUDE/CLEARANCE NOT MAINTAINED PILOT IN COMMAND

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Factual Information

On June 22, 1999, about 1945 hours Hawaiian standard time, an Enstrom F28C, N595H, sustained substantial damage when it collided with trees during departure from a ranch at Kaunakakai, on the island of Molokai, Hawaii. The commercial pilot/ owner and passenger both sustained minor injuries. They were departing on a local personal flight and operating under the provisions of 14 CFR Part 91. Visual meteorological conditions prevailed and no flight plan was filed.

The pilot stated the helicopter was running well and there was no mechanical failure. He estimated winds were variable from 040 to 080 degrees, and gusting from 25 to 35 knots. He entered hovering flight prior to departure and determined all systems were working, but noted it was after dusk. He stated that during the transition for departure he encountered a dust devil; blowing dust and debris filled the cockpit. Dirt got in his eyes, obscuring his vision as his eyes watered, and the helicopter collided with the trees as he tried to put it down.

The pilot declined to complete a pilot/operator report. Federal Aviation Administration records indicated the pilot's total time was 2,500 hours.

Pilot Information

Certificate:	Commercial	Age:	40,Male
Airplane Rating(s):	None	Seat Occupied:	Right
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 Medicalno waivers/lim.	Last FAA Medical Exam:	July 13, 1998
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	2500 hours (Total, all aircraft), 7 hours (Last 90 days, all aircraft)		

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Aircraft and Owner/Operator Information

Aircraft Make:	Enstrom	Registration:	N595H
Model/Series:	F28C F28C	Aircraft Category:	Helicopter
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	372
Landing Gear Type:	Skid	Seats:	3
Date/Type of Last Inspection:	December 24, 1998 Annual	Certified Max Gross Wt.:	2350 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	3650 Hrs	Engine Manufacturer:	Lycoming
ELT:		Engine Model/Series:	HIO-360-E1AD
Registered Owner:	RANDALL N. SPEAR	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:	Dusk
Observation Facility, Elevation:	HMK ,454 ft msl	Distance from Accident Site:	6 Nautical Miles
Observation Time:	19:54 Local	Direction from Accident Site:	315°
Lowest Cloud Condition:	Scattered	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	10 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	70°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	23°C / 16°C
Precipitation and Obscuration:	No Obscuration; No Precipit	ation	
Departure Point:		Type of Flight Plan Filed:	None
Destination:	HONOLULU , HI (HNL)	Type of Clearance:	
Departure Time:	19:45 Local	Type of Airspace:	Class G

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Airport Information

Airport:		Runway Surface Type:	
Airport Elevation:		Runway Surface Condition:	Dry
Runway Used:	0	IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	None

Wreckage and Impact Information

Crew Injuries:	2 Minor	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 Minor	Latitude, Longitude:	21.129941,-157.209548(est)

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Administrative Information

Investigator In Charge (IIC):	Plagens, Howard	
Additional Participating Persons:	GERALD PARROTT; HONOLULU , HI	
Original Publish Date:	August 14, 2001	
Last Revision Date:		
Investigation Class:	<u>Class</u>	
Note:		
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=46636	

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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