



Aviation Investigation Final Report

Location:	Kahului, Maui, Hawaii	Accident Number:	WPR14CA375
Date & Time:	September 13, 2014, 14:00 Local	Registration:	N197BH
Aircraft:	Eurocopter AS 350 B2	Aircraft Damage:	Substantial
Defining Event:	Controlled flight into terr/obj (CFIT)	Injuries:	2 None
Flight Conducted Under:	Part 91: General aviation - Flight test		

Analysis

According to the pilot, a cart that housed an auxiliary power unit was positioned near the helicopter and used to start its engine. After engine start, ground personnel did not remove the cart from the helipad. The pilot reported that shortly after lift off to a hover, to perform track and balance checks, the tail rotor struck the forward portion of the cart. The helicopter sustained substantial damage to the tail boom and tail rotor. The pilot reported no preimpact mechanical malfunctions or failures with the helicopter that would have precluded normal operation.

Probable Cause and Findings

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

The pilot's failure to maintain clearance from the cart while hovering. Contributing to the accident was the failure of ground personnel to remove the cart from the helipad.

Findings

Personnel issues	Monitoring environment - Pilot
Personnel issues	Forgotten action/omission - Ground crew
Environmental issues	Ground vehicle - Contributed to outcome

Factual Information

History of Flight

Maneuvering-hover	Controlled flight into terr/obj (CFIT) (Defining event)
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Pilot Information

Certificate:	Commercial	Age:	56
Airplane Rating(s):	None	Seat Occupied:	Right
Other Aircraft Rating(s):	Helicopter	Restraint Used:	3-point
Instrument Rating(s):	Helicopter	Second Pilot Present:	No
Instructor Rating(s):	Helicopter	Toxicology Performed:	No
Medical Certification:	Class 2 Without waivers/limitations	Last FAA Medical Exam:	May 21, 2014
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	February 15, 2014
Flight Time:	(Estimated) 19618 hours (Total, all aircraft), 11343 hours (Total, this make and model), 19618 hours (Pilot In Command, all aircraft), 220 hours (Last 90 days, all aircraft), 77 hours (Last 30 days, all aircraft), 3 hours (Last 24 hours, all aircraft)		

Passenger Information

Certificate:		Age:	
Airplane Rating(s):		Seat Occupied:	Left
Other Aircraft Rating(s):		Restraint Used:	3-point
Instrument Rating(s):		Second Pilot Present:	No
Instructor Rating(s):		Toxicology Performed:	No
Medical Certification:		Last FAA Medical Exam:	
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:			

Aircraft and Owner/Operator Information

Aircraft Make:	Eurocopter	Registration:	N197BH
Model/Series:	AS 350 B2 B2	Aircraft Category:	Helicopter
Year of Manufacture:	1992	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	2666
Landing Gear Type:	Emergency float; Skid	Seats:	7
Date/Type of Last Inspection:	September 8, 2014 AAIP	Certified Max Gross Wt.:	4960 lbs
Time Since Last Inspection:		Engines:	1 Turbo shaft
Airframe Total Time:	21743 Hrs at time of accident	Engine Manufacturer:	Turbomeca
ELT:	C126 installed, not activated	Engine Model/Series:	1D1
Registered Owner:	NEVADA HELICOPTER LEASING LLC	Rated Power:	540 Horsepower
Operator:	HAWAII HELICOPTERS INC	Operating Certificate(s) Held:	On-demand air taxi (135)
Operator Does Business As:	Hawaii Helicopters Inc.	Operator Designator Code:	I2WA

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	PHOG,54 ft msl	Distance from Accident Site:	1 Nautical Miles
Observation Time:	13:54 Local	Direction from Accident Site:	198°
Lowest Cloud Condition:	Scattered / 3000 ft AGL	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	15 knots /	Turbulence Type Forecast/Actual:	/ None
Wind Direction:	30°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.9 inches Hg	Temperature/Dew Point:	30°C / 21°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Kahului, Maui, HI (OGG)	Type of Flight Plan Filed:	None
Destination:	Kahului, Maui, HI (OGG)	Type of Clearance:	None
Departure Time:	14:00 Local	Type of Airspace:	Class C

Airport Information

Airport:	KAHULUI OGG	Runway Surface Type:	Asphalt
Airport Elevation:	54 ft msl	Runway Surface Condition:	Dry
Runway Used:		IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	None

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	1 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 None	Latitude, Longitude:	20.888334,-156.433609(est)

Administrative Information

Investigator In Charge (IIC):	Nixon, Albert
Additional Participating Persons:	Gino D Rezzonico; Federal Aviation Administration; Honolulu, HI
Original Publish Date:	December 5, 2014
Last Revision Date:	
Investigation Class:	Class
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=90080

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