



National Transportation Safety Board Aviation Accident Data Summary

Location:	Hilo, HI	Accident Number:	LAX07LA002
Date & Time:	10/02/2006, 0930 HST	Registration:	N142MK
Aircraft:	McDonnell Douglas 369E	Injuries:	2 Minor, 3 None
Flight Conducted Under:	Part 135: Air Taxi & Commuter - Non-scheduled - Sightseeing		

Analysis

The lateral cyclic friction was on prior to departure, and the helicopter landed hard shortly after takeoff. After the pilot's first flight, the helicopter underwent a hot refueling and the passengers were loaded onboard for the pilot's second flight. The pilot performed her pretakeoff checklist items, which included releasing the control frictions and performing a freedom of control check. The pilot then demonstrated to the front seat passengers where to position their feet by bringing her right foot aft. She then obtained tower clearance and began the takeoff. During the takeoff, the cyclic was locked and she could not move it. She attempted to control the helicopter using trim but shortly thereafter, the helicopter impacted the ground. Upon impact, the pilot reached down and released the lateral cyclic friction. The Federal Aviation Administration (FAA) inspector examined the lateral cyclic friction system installation and operation and noted no mechanical anomalies. The FAA inspector did note that if he brought one foot farther aft than is done in normal operation, an inadvertent application of the lateral cyclic friction might result.

Probable Cause

The National Transportation Safety Board determines the probable cause(s) of this accident to be: Inadvertent application of the lateral cyclic friction, which resulted in a loss of control and subsequent hard landing.

Findings

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

Findings

1. (C) CONTROL FRICTION - INADVERTENT - PILOT IN COMMAND
2. AIRCRAFT CONTROL - NOT POSSIBLE - PILOT IN COMMAND

Occurrence #2: HARD LANDING
Phase of Operation: EMERGENCY LANDING AFTER TAKEOFF

Findings

3. TERRAIN CONDITION - GROUND

Pilot Information

Certificate:	Flight Instructor; Commercial	Age:	33
Airplane Rating(s):	Single-engine Land	Instrument Rating(s):	Helicopter
Other Aircraft Rating(s):	Helicopter	Instructor Rating(s):	Helicopter; Instrument Helicopter
Flight Time:	1439 hours (Total, all aircraft), 7 hours (Total, this make and model), 1257 hours (Pilot In Command, all aircraft), 155 hours (Last 90 days, all aircraft), 7 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Manufacturer:	McDonnell Douglas	Registration:	N142MK
Model/Series:	369E	Engines:	1 Turbo Shaft
Operator:	K and S Helicopters, Inc.	Engine Manufacturer:	Rolls Royce
Air Carrier Operating Certificate:	On-demand Air Taxi (135)	Engine Model/Series:	C206
Flight Conducted Under:	Part 135: Air Taxi & Commuter - Non-scheduled - Sightseeing		

Meteorological Information and Flight Plan

Observation Facility, Elevation:	ITO, 38 ft msl	Weather Information Source:	Weather Observation Facility
Conditions at Accident Site:	Visual Conditions	Lowest Ceiling:	None
Condition of Light:	Day	Wind Speed/Gusts, Direction:	3 knots, Variable
Temperature:	28°C / 20°C	Visibility	10 Miles
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Hilo, HI (ITO)	Destination:	(ITO)

Airport Information

Airport:	Hilo International Airport (ITO)	Runway Surface Type:	
Runway Used:	NA	Runway Surface Condition:	
Runway Length/Width:			

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	2 Minor, 2 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None

Administrative Information

Investigator In Charge (IIC): Kristi Dunks

Adopted Date: 04/25/2007

Investigation Docket: NTSB accident and incident dockets serve as permanent archival information for the NTSB's investigations. Dockets released prior to June 1, 2009 are publicly available from the NTSB's Record Management Division at pubinq@ntsb.gov, or at 800-877-6799. Dockets released after this date are available at <http://dms.nts.gov/pubdms/>.

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