



# **Aviation Investigation Final Report**

**Location**: Mokuleia, Hawaii **Accident Number**: WPR14LA045

Date & Time: November 7, 2013, 13:20 Local Registration: N65070

Aircraft: CESSNA ECTOR 305A Aircraft Damage: Substantial

**Defining Event:** Sys/Comp malf/fail (non-power) **Injuries:** 1 Minor

Flight Conducted Under: Part 91: General aviation - Glider tow

#### **Analysis**

The pilot reported that, during the landing after a glider tow operation, the airplane came to an abrupt stop and nosed over. The airplane sustained substantial damage to the rudder, both wings, and lift struts. A postaccident examination of the airplane at the accident site revealed that the right brake was locked up and that the tire would not rotate normally. During a followup examination, the right brake was disassembled, and no anomalies were found. After reassembly, the brake operated normally.

### **Probable Cause and Findings**

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

A landing gear brake malfunction during the landing for reasons that could not be determined because postaccident examination did not reveal any anomalies that would have precluded normal operation.

#### **Findings**

**Not determined** (general) - Unknown/Not determined

#### **Factual Information**

#### **History of Flight**

Landing-landing roll	Sys/Comp malf/fail (non-power) (Defining event)	
Landing-landing roll	Nose over/nose down	

On November 7, 2013, about 1320 Hawaii standard time, a Cessna 305 airplane, N65070, sustained substantial damage when it nosed over during landing at Dillingham Airfield (HDH), Mokuleia, Hawaii. The airplane was registered to, and being operated by the Honolulu Soaring Club, as a visual flight rules (VFR), glider tow flight, under the provisions of 14 Code of Federal Regulations Part 91. The solo airline transport pilot received minor injuries. Visual meteorological conditions prevailed, and no flight plan was filed.

During a telephone conversation with the National Transportation Safety Board investigator-in-charge on November 18, the pilot stated that during the landing roll, the airplane came to an abrupt stop, and nosed over. The airplane received substantial damage to the rudder, both wings, and lift struts.

On November 7, a Federal Aviation Administration (FAA) aviation safety inspector, who examined the airplane at the accident site, said that the right brake was locked up, and the tire would not rotate normally. The airplane was recovered to a hangar for further examination.

During a follow-up examination, the FAA inspector reported that he observed the disassembly of the right brake, and no anomalies were found. After re-assembly he said the brake operated normally.

Page 2 of 5 WPR14LA045

#### **Pilot Information**

Certificate:	Airline transport; Commercial; Flight instructor	Age:	60
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Front
Other Aircraft Rating(s):	Glider	Restraint Used:	Lap only
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	Airplane multi-engine; Airplane single-engine; Glider; Instrument airplane	Toxicology Performed:	No
Medical Certification:	Class 1 With waivers/limitations	Last FAA Medical Exam:	November 12, 2012
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	August 13, 2012
Flight Time:	20500 hours (Total, all aircraft), 300 hours (Total, this make and model), 15000 hours (Pilot In Command, all aircraft), 30 hours (Last 90 days, all aircraft), 10 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

## Aircraft and Owner/Operator Information

Aircraft Make:	CESSNA ECTOR	Registration:	N65070
Model/Series:	305A A	Aircraft Category:	Airplane
Year of Manufacture:	1979	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	2035
Landing Gear Type:	Tailwheel	Seats:	2
Date/Type of Last Inspection:	Unknown	Certified Max Gross Wt.:	2400 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	CONT MOTOR
ELT:	Not installed	Engine Model/Series:	0-470 SERIES
Registered Owner:	HONOLULU SOARING CLUB	Rated Power:	213 Horsepower
Operator:	HONOLULU SOARING CLUB INC	Operating Certificate(s) Held:	None

Page 3 of 5 WPR14LA045

### Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	PHHI,13 ft msl	Distance from Accident Site:	11 Nautical Miles
Observation Time:	12:58 Local	Direction from Accident Site:	290°
<b>Lowest Cloud Condition:</b>	Unknown	Visibility	10 miles
Lowest Ceiling:	Broken	Visibility (RVR):	
Wind Speed/Gusts:	9 knots /	Turbulence Type Forecast/Actual:	/ None
Wind Direction:	120°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.92 inches Hg	Temperature/Dew Point:	28°C / 66°C
Precipitation and Obscuration:	Light - Showers - Rain		
Departure Point:	Mokuleia, HI (HDH )	Type of Flight Plan Filed:	None
Destination:	Mokuleia, HI (HDH )	Type of Clearance:	None
Departure Time:		Type of Airspace:	Class G

### **Airport Information**

Airport:	DILLINGHAM AIRFIELD HDH	Runway Surface Type:	Asphalt
Airport Elevation:	14 ft msl	<b>Runway Surface Condition:</b>	Dry
Runway Used:	08	IFR Approach:	None
Runway Length/Width:	9007 ft / 75 ft	VFR Approach/Landing:	Full stop;Traffic pattern

### Wreckage and Impact Information

Crew Injuries:	1 Minor	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Minor	Latitude, Longitude:	21.572778,-158.197219(est)

Page 4 of 5 WPR14LA045

#### **Administrative Information**

Investigator In Charge (IIC):

Additional Participating Persons:

Original Publish Date:

September 29, 2014

Last Revision Date:

Investigation Class:

Class

Note:

Investigation Docket:

https://data.ntsb.gov/Docket?ProjectID=88405

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.

Page 5 of 5 WPR14LA045