

# **Aviation Investigation Final Report**

Location:	MOKULEIA, Hawaii		Accident Number:	LAX01LA046
Date & Time:	November 29, 2000,	11:00 Local	Registration:	N65071
Aircraft:	Cessna	305A	Aircraft Damage:	Substantial
Defining Event:			Injuries:	1 None
Flight Conducted Under:	Part 91: General aviation - Positioning			

#### Analysis

The airplane landed with a quartering tailwind and ground looped. The active runway was runway 8, and reported winds were from the southwest at 4 knots. The pilot stated that as the airplane began a turn to the right he added full left rudder and brake. The airplane continued in a right turn, and the left main landing gear broke. The airplane was examined and no evidence of mechanical failure was observed on the landing gear or the brake system.

#### **Probable Cause and Findings**

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's inadequate compensation for the existing crosswind condition, which resulted in a loss of directional control and subsequent ground loop.

**Findings** 

Occurrence #1: LOSS OF CONTROL - ON GROUND/WATER Phase of Operation: LANDING - ROLL

Findings

- 1. WEATHER CONDITION CROSSWIND
- 2. (C) COMPENSATION FOR WIND CONDITIONS INADEQUATE PILOT IN COMMAND
- 3. (C) DIRECTIONAL CONTROL NOT MAINTAINED PILOT IN COMMAND
- 4. GROUND LOOP/SWERVE INADVERTENT PILOT IN COMMAND

#### **Factual Information**

On November 29, 2000, at 1100 hours Hawaiian standard time, a Cessna 305A, N65071, ground looped on the landing rollout out from runway 8 at the Dillingham Airfield Airport, Mokuleia, Hawaii. The airplane, operated by Honolulu Soaring Club, Inc., under the provisions of 14 CFR Part 91 as a glider towing operation, sustained substantial damage. The airline transport pilot, the sole occupant, was not injured. Visual meteorological conditions prevailed for the positioning flight. No flight plan had been filed.

The Automated Surface Observing System (ASOS) at Dillingham Airfield reported winds at the time of the accident to be from 200 degrees at 4 knots. The operator reported winds from 300 degrees at 3 knots. The pilot reported that the winds were from 280 degrees at 3 knots.

In the pilot's written statement to the Safety Board, he stated that he made a normal landing. Approximately 50 mph, he lowered the tail wheel while maintaining runway heading. On the rollout the airplane made a "moderate" right turn, and the airplane was now heading about 120 degrees. He stated that he applied full left rudder and brake. The airplane stabilized on that heading until his airspeed read about 15 mph. The pilot reported that as the airplane was beginning to ground loop the left main gear broke at the attachment point.

In an interview with a Federal Aviation Administration (FAA) inspector, the pilot stated that he was returning to the airport after towing a glider aloft and landed with a 5-knot right quartering tailwind. On the landing rollout he felt the airplane begin to nose to the right and applied full left rudder; however, he could not stop the turn to the right. The airplane veered off to the right and ground looped. He further stated that there were no mechanical discrepancies noted with the airplane.

The FAA inspector, who conducted the on-scene inspection, reported that no preexisting mechanical anomalies were noted with the landing gear or brakes. He indicated that the pilot might have unknowingly activated the right brake during the accident sequence, which resulted in the skid mark on the runway. The inspector stated that corrosion was not evident, and that the fracture surfaces of the landing gear contained sharp edges and "shear lips." The inspector reported that as the airplane passed through 90 degrees of turn, the rate of turn increased, skipped sideways, and the left main gear failed. The propeller blades contacted the pavement and the airplane fell on it's left side. The inspector also stated that when they arrived on-scene the winds were from the northwest about 5 knots.

#### **Pilot Information**

Certificate:	Airline transport	Age:	55,Male
Airplane Rating(s):	Single-engine land; Single-engine sea; Multi-engine land	Seat Occupied:	Front
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medicalw/ waivers/lim	Last FAA Medical Exam:	November 1, 2000
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	25000 hours (Total, all aircraft), 40 hours (Total, this make and model), 19700 hours (Pilot In Command, all aircraft)		

#### Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N65071
Model/Series:	305A 305A	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	2036
Landing Gear Type:	Tailwheel	Seats:	2
Date/Type of Last Inspection:	June 14, 2000 Annual	Certified Max Gross Wt.:	2100 lbs
Time Since Last Inspection:	150 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	3997 Hrs	Engine Manufacturer:	Continental
ELT:		Engine Model/Series:	0-470-11
Registered Owner:	HONOLULU SOARING CLUB INC.	Rated Power:	213 Horsepower
Operator:		Operating Certificate(s) Held:	None
Operator Does Business As:		<b>Operator Designator Code:</b>	

#### Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
<b>Observation Facility, Elevation:</b>	HNL ,14 ft msl	Distance from Accident Site:	25 Nautical Miles
Observation Time:	11:53 Local	Direction from Accident Site:	120°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	Broken / 3500 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	6 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	180°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	79°C / 70°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	(HDH)	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	VFR
Departure Time:	11:00 Local	Type of Airspace:	Class G

## **Airport Information**

Airport:	DILLINGHAM AIRFIELD HDH	Runway Surface Type:	Asphalt
Airport Elevation:	14 ft msl	Runway Surface Condition:	Dry
Runway Used:	8	IFR Approach:	None
Runway Length/Width:	9007 ft / 75 ft	VFR Approach/Landing:	Full stop;Traffic pattern

## Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 None	Latitude, Longitude:	21.570623,-158.120895(est)

#### **Administrative Information**

Investigator In Charge (IIC):	Cornejo, Tealeye	
Additional Participating Persons:	DAVE RYON; HONOLULU , HI	
Original Publish Date:	January 2, 2002	
Last Revision Date:		
Investigation Class:	<u>Class</u>	
Note:	The NTSB traveled to the scene of this accident.	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=50709	

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.