



Aviation Investigation Final Report

Location:	KEY WEST, Florida	Accident Number:	MIA01LA019
Date & Time:	October 27, 2000, 15:34 Local	Registration:	N32049
Aircraft:	Waco UPF-7	Aircraft Damage:	Substantial
Defining Event:		Injuries:	2 Minor, 1 None
Flight Conducted Under:	Part 91: General aviation		

Analysis

The pilot stated that during landing roll, the aircraft turned hard to the left. He applied right rudder and brake and left aileron. The left wing of the aircraft lifted and the aircraft started going straight. When the left wing set back down, the aircraft nosed over and came to rest. He stated he believes the left front passenger inadvertently applied the left brake. The left front passenger stated he was briefed on the controls prior to the flight and at no time did he touch the left brake pedal. The operator reported the wheels turned freely after the accident and that there was no evidence of failure or malfunction of the brakes.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The failure of the pilot to maintain directional control during landing with a quartering tail wind, resulting in the aircraft nosing over and coming to rest inverted.

Findings

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

Findings

1. WEATHER CONDITION - CROSSWIND
2. (C) DIRECTIONAL CONTROL - NOT MAINTAINED - PILOT IN COMMAND

Occurrence #2: NOSE OVER
Phase of Operation: LANDING - ROLL

Factual Information

On October 27, 2000, about 1534 eastern daylight time, a Waco UPF-7, N32049, registered to and operated by Island Aero Tours, turned over inverted when control was lost during landing roll at Key West International Airport, Key West, Florida, while on a Title 14 CFR Part 91 sightseeing flight. Visual meteorological conditions prevailed at the time and no flight plan was filed. The aircraft received substantial damage and the commercial-rated pilot was not injured. The two passengers reported receiving minor injuries. The flight originated from Key West, the same day, about 1500.

The pilot stated that during landing rollout on runway 9, the aircraft was rolling straight on the center when it turned hard to the left. He applied full right rudder and full left aileron, but the aircraft continued turning. He then applied full right brake, but the aircraft continued to turn to the left. The left main wheel then lifted off the runway and the aircraft started going straight. When the left wheel touched back down on the runway, the aircraft nosed down and the propeller and engine contacted the runway. The aircraft then nosed over and came to rest inverted on the runway. He stated he did not use any left brake during the landing and that he believes the passenger in the front seat applied the left brake during the landing roll.

The aircraft operator stated that the main landing gear wheels could be turned freely after the accident and that there was no evidence of failure or malfunction of the main landing gear brakes. The runway had faint tire marks from the left main tire and heavier tire marks from the right main landing gear. The pilot had made eight or nine prior flights that day in similar wind conditions. The two passengers were seated in the front cockpit and each had access to a brake pedal. The passengers were briefed by the office secretary and the pilot before the flight to avoid the brake pedals.

The passenger seated in the left front seat stated he and his wife were in the front. His wife was on the right. They were briefed about the controls in the front cockpit and told not to touch them. This included the pedals on the floor. At no time during the flight did he touch the flight controls or pedals on the floor and his wife could not reach the pedals. When they landed, the aircraft went to the right first and then back to the left. It then nosed over and came to rest upside down.

Pilot Information

Certificate:	Commercial	Age:	39, Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Rear
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 Medical--no waivers/lim.	Last FAA Medical Exam:	August 11, 2000
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	1991 hours (Total, all aircraft), 192 hours (Total, this make and model), 1750 hours (Pilot In Command, all aircraft), 165 hours (Last 90 days, all aircraft), 81 hours (Last 30 days, all aircraft), 5 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Waco	Registration:	N32049
Model/Series:	UPF-7 UPF-7	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	5680
Landing Gear Type:	Tailwheel	Seats:	3
Date/Type of Last Inspection:	October 19, 2000 100 hour	Certified Max Gross Wt.:	2650 lbs
Time Since Last Inspection:	15 Hrs	Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	Continental
ELT:	Installed, not activated	Engine Model/Series:	W670-6N
Registered Owner:	ISLAND AERO TOURS	Rated Power:	220 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:	Day
Observation Facility, Elevation:	EYW ,4 ft msl	Distance from Accident Site:	1 Nautical Miles
Observation Time:	15:53 Local	Direction from Accident Site:	360°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	11 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	350°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	26°C / 17°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	(EYW)	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	VFR
Departure Time:	15:00 Local	Type of Airspace:	Class D

Airport Information

Airport:	KEY WEST INTERNATIONAL EYW	Runway Surface Type:	Asphalt
Airport Elevation:	4 ft msl	Runway Surface Condition:	Dry
Runway Used:	9	IFR Approach:	
Runway Length/Width:	4800 ft / 100 ft	VFR Approach/Landing:	Traffic pattern

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	2 Minor	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 Minor, 1 None	Latitude, Longitude:	24.550622,-81.779335(est)

Administrative Information

Investigator In Charge (IIC):	Kennedy, Jeffrey
Additional Participating Persons:	TOM ENGLIMA; MIAMI , FL
Original Publish Date:	May 17, 2001
Last Revision Date:	
Investigation Class:	Class
Note:	The NTSB traveled to the scene of this accident.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=50550

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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](#).