



Aviation Investigation Final Report

Location:	Greenfield, California	Accident Number:	LAX06CA241
Date & Time:	July 20, 2006, 16:35 Local	Registration:	N53SE
Aircraft:	American Champion Aircraft 7GCBC	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The tail wheel equipped airplane ground looped and nosed over when it encountered a gust of wind during the landing roll on unimproved terrain. The pilot conducted a touch-and-go on a ridgeline and said that after experiencing no problems he became "over confident" and elected to conduct a full stop landing. During the landing roll, when the airplane was below 5 miles per hour, a gust of wind lifted the left wing. The pilot applied power and attempted to correct for the gust of wind, but lacked the control authority due to the reduced speed. The right wing tip contacted the ground and the airplane rotated to the right. The airplane nosed down exposing the bottom of the fuselage to the wind, which blew the airplane over onto its topside. The pilot reported the wind at 20 knots with gusts.

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 wind conditions and failure to maintain directional control of the airplane during landing.

Findings

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

Findings

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

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

Factual Information

On July 20, 2006, at 1635 Pacific daylight time, an American Champion Aircraft 7GCBC, N53SE, ground looped while landing in an unimproved area near Greenfield, California. The airplane was registered to a private individual, and was operated by the pilot under the provisions of 14 CFR Part 91. The commercial pilot, who was the sole occupant, was not injured. The airplane was substantially damaged. The airplane was registered to a private individual and was operated by the pilot under the provisions of 14 CFR Part 91. The local flight originated from the Metz Airport (3CA7), Greenfield, at 1620. Visual meteorological conditions prevailed and a flight plan was not filed for the personal flight.

According to the pilot's written statement, the owner and the pilot used the tail wheel equipped airplane primarily for observing wildlife in the local area and utilized its short takeoff and landing characteristics to land in areas not accessible to most other aircraft. After having routine maintenance performed on the airplane, the pilot took it out for what was planned to be a short test flight. After departing Metz airport, the pilot elected to climb straight out to a nearby ridgeline. Once on top of the ridge the pilot decided to make an "exploratory" touch-and-go landing to determine the roughness of the terrain. The wind was from the west at approximately 20 knots with gusts. On this first pass the pilot allowed the plane to slow to about 20 miles/hour (mph) during the ground roll before adding power and going around for another landing.

According to the pilot, his original intent was to make three touch-and-goes before bringing the plane to a full stop, but because the first landing was uneventful, he became "over confident" and set up for a full stop landing on the second approach. After touchdown, during a ground roll of about 300 feet and with a speed below 5 mph, the airplane was "hit by a thermal or large gust of wind coming up from the left side of the ridge." The left wing rose at a rate that the pilot described as "alarmingly fast." He applied power, but he lacked the control authority to assist in the recovery. The right wing tip contacted the ground and the airplane rotated to the right on its right main tire and right wing tip through approximately 130 degrees. After 90 degrees of rotation the airplane nosed down exposing the underside of the airplane to the wind. The airplane was then blown over onto its topside.

The pilot reported that the airplane sustained structural damage to the wings, vertical stabilizer/rudder, and the fuselage.

Pilot Information

Certificate:	Commercial	Age:	67, Male
Airplane Rating(s):	Single-engine land; Single-engine sea; Multi-engine land	Seat Occupied:	Front
Other Aircraft Rating(s):	Helicopter	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):		Toxicology Performed:	No
Medical Certification:	Class 2 With waivers/limitations	Last FAA Medical Exam:	November 1, 2005
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	October 1, 2004
Flight Time:	27580 hours (Total, all aircraft), 340 hours (Total, this make and model), 27340 hours (Pilot In Command, all aircraft), 28 hours (Last 90 days, all aircraft), 9 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	American Champion Aircraft	Registration:	N53SE
Model/Series:	7GCBC	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Aerobatic; Normal	Serial Number:	1387-2005
Landing Gear Type:	Tailwheel	Seats:	2
Date/Type of Last Inspection:	Annual	Certified Max Gross Wt.:	1800 lbs
Time Since Last Inspection:	63.6 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	63.6 Hrs at time of accident	Engine Manufacturer:	Superior
ELT:	Installed, activated, did not aid in locating accident	Engine Model/Series:	O-360-A3A2
Registered Owner:	Sanjiva Thielamay	Rated Power:	180 Horsepower
Operator:	Wayne E. Handley	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:		Distance from Accident Site:	
Observation Time:		Direction from Accident Site:	
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	20 knots / 25 knots	Turbulence Type Forecast/Actual:	/
Wind Direction:	310°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	33°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Greenfield, CA (3CA7)	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	16:20 Local	Type of Airspace:	

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:	36.333332,-121.25

Administrative Information

Investigator In Charge (IIC):	Charnon, Nicole
Additional Participating Persons:	Joseph Abranski; Federal Aviation Administration; San Jose, CA
Original Publish Date:	October 31, 2006
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=64173

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