



National Transportation Safety Board Aviation Accident Data Summary

Location:	WAUNAKEE, WI	Accident Number:	CHI99LA099
Date & Time:	03/01/1999, 1710 CST	Registration:	N394GL
Aircraft:	Calkins KITFOX 5	Injuries:	2 None
Flight Conducted Under:	Part 91: General Aviation - Personal		

Analysis

As the airplane was turning base to final the pilot, 'felt a bump and vibration in the control stick...' when he commanded a final nose-up trim adjustment. The pilot reported that the remainder of the approach to the runway was uneventful. The pilot stated that, 'When I went to flare for the landing I did not have any pitch control.' The pilot reported that the airplane landed very hard and bounced back into the air in a nose high orientation. The pilot reported that during the hard landing the seat broke from its mounts and fell onto the flaperon control tube, inhibiting flaperon actuation. The pilot stated that the airplane then 'Stalled', landed tail first on the runway, ground looped, and came to rest with the right wingtip and the tail touching the ground. Post accident examination of the aircraft showed that the trim actuator was fractured at its attachment point to the airframe.

Probable Cause

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

Findings

Occurrence #1: AIRFRAME/COMPONENT/SYSTEM FAILURE/MALFUNCTION
Phase of Operation: APPROACH

Findings

1. (C) FLT CONTROL SYST,ELEVATOR TRIM/TAB CONTROL - FRACTURED

Occurrence #2: LOSS OF CONTROL - IN FLIGHT
Phase of Operation: APPROACH

Occurrence #3: HARD LANDING
Phase of Operation: DESCENT - UNCONTROLLED

Pilot Information

Certificate:	Commercial	Age:	53
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Instrument Rating(s):	Airplane
Other Aircraft Rating(s):	None	Instructor Rating(s):	Airplane Single-engine
Flight Time:	1394 hours (Total, all aircraft), 105 hours (Total, this make and model), 1226 hours (Pilot In Command, all aircraft), 8 hours (Last 90 days, all aircraft), 3 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Calkins	Registration:	N394GL
Model/Series:	KITFOX 5 KITFOX 5	Engines:	1 Reciprocating
Operator:	GENE M. CALKINS	Engine Manufacturer:	Subaru
Operating Certificate(s) Held:	None	Engine Model/Series:	EA81 SHO
Flight Conducted Under:	Part 91: General Aviation - Personal		

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	MSN, 862 ft msl	Weather Information Source:	Weather Observation Facility
Lowest Ceiling:	Broken / 8000 ft agl	Wind Speed/Gusts, Direction:	4 knots / , 220°
Temperature:	5° C	Visibility	0 Miles
Precipitation and Obscuration:			
Departure Point:	(WI06)	Destination:	

Airport Information

Airport:	WAUNAKEE AIRPORT (WI06)	Runway Surface Type:	Asphalt
Runway Used:	27	Runway Surface Condition:	Dry
Runway Length/Width:	2230 ft / 30 ft		

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Destroyed
Passenger Injuries:	1 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Latitude, Longitude:			

Administrative Information

Investigator In Charge (IIC): ANDREW T FOX

Adopted Date: 05/12/2000

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/>.

The National Transportation Safety Board (NTSB), established in 1967, is an independent federal agency mandated by Congress through the Independent Safety Board Act of 1974 to investigate transportation accidents, determine the probable causes of the accidents, issue safety recommendations, study transportation safety issues, and evaluate the safety effectiveness of government agencies involved in transportation. The NTSB makes public its actions and decisions through accident reports, safety studies, special investigation reports, safety recommendations, and statistical reviews.

The Independent Safety Board Act, as codified at 49 U.S.C. Section 1154(b), precludes the admission into evidence or use of any part of an NTSB report related to an incident or accident in a civil action for damages resulting from a matter mentioned in the report.