

Aviation Investigation Final Report

Injuries:

2 None

Location: Mocksville, North Carolina Accident Number: ERA14CA335

Date & Time: July 6, 2014, 13:00 Local Registration: N9156

Flight control sys malf/fail

Aircraft: ALEXANDER SCHLEICHER GMBH & CO K 7 Aircraft Damage: Substantial

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Flight Conducted Under: Part 91: General aviation - Personal

Analysis

Defining Event:

The pilot reported that just prior to departing on the glider flight, an unsecured seat cushion was provided to his passenger in order to elevate his seating position and improve his view. After releasing from the tow plane, performing a 30-degree bank turn, and leveling the glider, the pilot was unable to move the control stick fully aft in the pitch axis. He attempted to troubleshoot the blocked flight control, and asked the passenger if he noted any obstructions, which he did not. During the subsequent forced landing, the pilot was unable to safely maneuver to the departure gliderport, and landed in an adjacent field where the glider struck a fence, which resulted in substantial damage to the fuselage. The pilot reported that his examination of the aft cockpit following the accident revealed the seat cushion had shifted during flight, blocked the control stick, and that the cushion's internal metal frame and the aft control stick displayed witness marks consistent with contact during flight.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's decision to install an additional cushion to elevate his passenger and his failure to insure the cushion would not interfere with the control stick movement resulting in limited movement of the elevator in flight and collision with a fence during an emergency off field landing.

Findings

Personnel issues Decision making/judgment - Pilot

Aircraft Elevator tab control system - Not inspected

Personnel issues Lack of action - Pilot

Environmental issues Fence/fence post - Contributed to outcome

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Factual Information

History of Flight

Prior to flight Aircraft inspection event

Maneuvering Flight control sys malf/fail (Defining event)

Landing Off-field or emergency landing

Landing-landing roll Collision with terr/obj (non-CFIT)

Pilot Information

Certificate:	Private	Age:	46
Airplane Rating(s):	None	Seat Occupied:	Front
Other Aircraft Rating(s):	Glider	Restraint Used:	4-point
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	None	Last FAA Medical Exam:	
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	132 hours (Total, all aircraft), 12 hours (Total, this make and model), 93 hours (Pilot In Command, all aircraft), 5 hours (Last 90 days, all aircraft), 3 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

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Aircraft and Owner/Operator Information

Aircraft Make:	ALEXANDER SCHLEICHER GMBH & CO	Registration:	N9156
Model/Series:	K 7	Aircraft Category:	Glider
Year of Manufacture:	1962	Amateur Built:	
Airworthiness Certificate:	Utility	Serial Number:	7032
Landing Gear Type:	Ski/wheel	Seats:	2
Date/Type of Last Inspection:	September 27, 2013 Annual	Certified Max Gross Wt.:	1050 lbs
Time Since Last Inspection:		Engines:	0
Airframe Total Time:	3178 Hrs at time of accident	Engine Manufacturer:	
ELT:	Not installed	Engine Model/Series:	
Registered Owner:	PIEDMONT SOARING SOCIETY	Rated Power:	
Operator:	PIEDMONT SOARING SOCIETY	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	INT,969 ft msl	Distance from Accident Site:	16 Nautical Miles
Observation Time:	13:54 Local	Direction from Accident Site:	45°
Lowest Cloud Condition:	Scattered / 12000 ft AGL	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	4 knots /	Turbulence Type Forecast/Actual:	/ None
Wind Direction:	100°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.12 inches Hg	Temperature/Dew Point:	25°C / 19°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Mocksville, NC (43NC)	Type of Flight Plan Filed:	None
Destination:	Mocksville, NC (43NC)	Type of Clearance:	None
Departure Time:		Type of Airspace:	Class G

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Airport Information

Airport:	BAHNSON 43NC	Runway Surface Type:	Grass/turf
Airport Elevation:	810 ft msl	Runway Surface Condition:	
Runway Used:	01	IFR Approach:	None
Runway Length/Width:	3000 ft / 100 ft	VFR Approach/Landing:	Forced landing

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	1 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 None	Latitude, Longitude:	35.930538,-80.4001(est)

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Administrative Information

Investigator In Charge (IIC):	Rayner, Brian
Additional Participating Persons:	
Original Publish Date:	October 9, 2014
Last Revision Date:	
Investigation Class:	<u>Class</u>
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=89639

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