



National Transportation Safety Board Aviation Accident Final Report

Location:	FAIRBANKS, AK	Accident Number:	ANC96LA074
Date & Time:	05/01/1996, 1800 AKD	Registration:	N3795L
Aircraft:	Cessna 172	Aircraft Damage:	Substantial
Defining Event:		Injuries:	2 None

Flight Conducted Under: Part 91: General Aviation - Instructional

Analysis

The flight instructor and student were practicing soft field landings. The instructor stated that the student flared the airplane too high during a landing. The airplane landed hard on all three wheels simultaneously. After the flight's termination, the student performed the post flight walk around inspection. The instructor did not perform the walk around with the student. The next flight instructor, during the taxi/run up, found that the flight controls would not move through their entire range of travel. Subsequent examination of the airplane showed that the firewall was bent and restricted the forward motion of the control yoke.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The student pilot's premature flare and the flight instructor's failure to perform remedial action prior to the hard landing.

Findings

Occurrence #1: HARD LANDING
Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings

1. (C) FLARE - MISJUDGED - DUAL STUDENT
2. (C) SUPERVISION - INADEQUATE - PILOT IN COMMAND(CFI)

Factual Information

On May 1, 1996, approximately 1800 Alaska daylight time, a wheel equipped Cessna 172 airplane, N3795L, registered to and operated by Smith Aero Services of Fairbanks, Alaska, experienced a hard landing causing damage to the firewall while performing touch and go landings at Fairbanks International Airport, Fairbanks, Alaska. The instructional flight, operating under 14 CFR Part 91, departed Fairbanks for a local flight. No flight plan was filed and visual meteorological conditions prevailed. The certificated flight instructor and the student were not injured and the airplane received substantial damage.

During a telephone conversation with the flight instructor on May 24, 1996, she stated that during one of the landings the student flared higher than normal and the airplane struck the ground in a three point attitude. She felt that the landing was not unusually hard so they continued to perform touch and go landings. After the flight, the student, who had ten hours of total flight time, performed the walk around inspection and did not see any damage. The flight instructor did not perform the walk around inspection with the student. Approximately three days later, another instructor noticed that the control yoke would not move through its entire forward range of travel. Later examination showed that the firewall was bent and the surrounding structure was impeding the control yoke's movement.

The flight instructor believes that they did not cause the damage because during the remainder of their flight they did not encounter restrictions during the control yoke's movements. However, the company records show that the airplane had not flown since their flight.

The operator was sent an NTSB Form 6120.1/2 on May 28, 1996 and June 11, 1996. The flight instructor stated she did not feel this was an accident and she did not complete and return the NTSB Form 6120.1/2.

Pilot Information

Certificate:	Flight Instructor; Commercial	Age:	48, Female
Airplane Rating(s):	Single-engine Land; Single-engine Sea	Seat Occupied:	Right
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	Airplane Single-engine	Toxicology Performed:	
Medical Certification:	Class 2 Valid Medical--w/ waivers/lim.	Last FAA Medical Exam:	05/30/1995
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:	810 hours (Total, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N3795L
Model/Series:	172 172	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	17253964
Landing Gear Type:	Tricycle	Seats:	2
Date/Type of Last Inspection:	Unknown	Certified Max Gross Wt.:	2220 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	Continental
ELT:		Engine Model/Series:	O-300-D
Registered Owner:	SMITH AERO SERVICES	Rated Power:	145 hp
Operator:	SMITH AERO SERVICES	Operating Certificate(s) Held:	None
Operator Does Business As:		Operator Designator Code:	SM9V

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	, 0 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	0000	Direction from Accident Site:	0°
Lowest Cloud Condition:	Clear / 0 ft agl	Visibility	90 Miles
Lowest Ceiling:	None / 0 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	/
Wind Direction:		Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	16° C
Precipitation and Obscuration:			
Departure Point:	(FAI)	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	VFR
Departure Time:	0000	Type of Airspace:	Class D

Airport Information

Airport:	FAIRBANKS INTERNATIONAL (FAI)	Runway Surface Type:	
Airport Elevation:	434 ft	Runway Surface Condition:	
Runway Used:	0	IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	Touch and Go

Wreckage and Impact Information

Crew Injuries:	2 None	Aircraft Damage:	Substantial
Passenger Injuries:	N/A	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 None	Latitude, Longitude:	

Administrative Information

Investigator In Charge (IIC):	GEORGE KOBELNYK	Report Date:	02/18/1997
Additional Participating Persons:	BOB HAXBY; FAIRBANKS, AK		
Publish Date:			
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. A factual report that may be admissible under 49 U.S.C. § 1154(b) is available [here](#).