



Aviation Investigation Final Report

Location:	Ormond Beach, Florida	Accident Number:	ANC06LA102
Date & Time:	July 31, 2006, 09:10 Local	Registration:	N520XL
Aircraft:	Liberty XL2	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 Serious
Flight Conducted Under:	Part 91: General aviation - Instructional		

Analysis

The student pilot was conducting his second supervised solo flight within the airport traffic pattern under Title 14, CFR Part 91, and was being observed by his flight instructor. The instructor reported that the airplane bounced hard on landing, and that he heard the student apply power to abort the landing. He said the airplane pitched up sharply, rolled to the left, and impacted the ground. The instructor had flown with the student in the accident airplane prior to the solo accident flight, and reported that there were no known mechanical issues with the airplane prior to the accident.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's improper recovery from a bounced landing, and failure to maintain minimum airspeed during the subsequent aborted landing, which resulted in an inadvertent stall and impact with terrain. A factor associated with the accident was the inadvertent stall.

Findings

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

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

Findings

1. (C) RECOVERY FROM BOUNCED LANDING - IMPROPER - PILOT IN COMMAND
2. (C) AIRSPEED(VS) - NOT MAINTAINED - PILOT IN COMMAND
3. (F) STALL - INADVERTENT - PILOT IN COMMAND

Occurrence #3: IN FLIGHT COLLISION WITH TERRAIN/WATER
Phase of Operation: DESCENT - UNCONTROLLED

Findings

4. TERRAIN CONDITION - GROUND

Factual Information

On July 31, 2006, about 0910 Alaska daylight time, a Liberty XL2 airplane, N520XL, sustained substantial damage during an in-flight collision with terrain, following a hard landing, and loss of control at the Ormond Beach Airport, Ormond Beach, Florida. The airplane was being operated by the student pilot as a supervised solo instructional flight under Title 14, CFR Part 91, when the accident occurred. The solo student pilot received serious injuries. Visual meteorological conditions prevailed, and no flight plan was filed for the local flight.

During a telephone conversation with the National Transportation Safety Board (NTSB) investigator-in-charge (IIC) on August 2, the director of operations for the flight school said the flight instructor told him he completed a training flight with the student, and exited the airplane. He said the instructor told the student to take the airplane around the pattern solo. According to the director of operations, the instructor pilot said on the second supervised solo flight around the pattern, the student landed hard, and the airplane bounced twice. The instructor told him he heard the student apply full power in an attempt to abort the landing after the second bounce. He said the instructor reported that the airplane started a steep climb, rolled to the left, descended, and impacted the ground. The director of operations said the airplane sustained structural damage to both wings and the fuselage.

In a written report to the NTSB prepared by the head of training for the operator, dated August 3, the head of training reiterated the earlier statements made by the instructor.

Student pilot Information

Certificate:	Student	Age:	54, Male
Airplane Rating(s):	None	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 Without waivers/limitations	Last FAA Medical Exam:	July 1, 2006
Occupational Pilot:	No	Last Flight Review or Equivalent:	July 1, 2006
Flight Time:	26 hours (Total, all aircraft), 14 hours (Total, this make and model), 14 hours (Last 90 days, all aircraft), 14 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Liberty	Registration:	N520XL
Model/Series:	XL2	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	0015
Landing Gear Type:	Tricycle	Seats:	2
Date/Type of Last Inspection:	July 1, 2006 100 hour	Certified Max Gross Wt.:	1653 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	208 Hrs	Engine Manufacturer:	Continental
ELT:	Installed, activated, did not aid in locating accident	Engine Model/Series:	IOF 240 B4
Registered Owner:	Laft Asset Management, Inc.	Rated Power:	125 Horsepower
Operator:	Ormand Beach Aviation, Inc.	Operating Certificate(s) Held:	None
Operator Does Business As:	Ormand Beach Aviation, Inc.	Operator Designator Code:	

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	KOMN,19 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	09:10 Local	Direction from Accident Site:	
Lowest Cloud Condition:	Scattered	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	/
Wind Direction:		Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.05 inches Hg	Temperature/Dew Point:	25°C / 21°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Ormond Beach, FL (OMN)	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	09:00 Local	Type of Airspace:	

Airport Information

Airport:	Ormand Beach Municipal airport OMN	Runway Surface Type:	Asphalt
Airport Elevation:	29 ft msl	Runway Surface Condition:	Dry
Runway Used:	35	IFR Approach:	None
Runway Length/Width:	3701 ft / 100 ft	VFR Approach/Landing:	Full stop;Go around;Traffic pattern

Wreckage and Impact Information

Crew Injuries:	1 Serious	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Serious	Latitude, Longitude:	29.300277,-81.108055

Administrative Information

Investigator In Charge (IIC):	Lewis, Lawrence
Additional Participating Persons:	Mike Cichauowski; Orlando Florida FSDO; Orlando, FL
Original Publish Date:	January 31, 2007
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=64246

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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](#).