Aviation Investigation Final Report

Location:	Palo Alto, California	**Accident Number:**	LAX01LA095
Date & Time:	February 9, 2001, 14:12 Local	**Registration:**	N3191A
Aircraft:	Beech A36	**Aircraft Damage:**	Substantial
Defining Event:		**Injuries:**	1 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The airplane's right wing struck the ground and the airplane came to rest on the runway following a loss of control on an attempted go-around. The pilot had received 107.9 hours of dual instruction and was making his first solo flight in the airplane. The purpose of the flight was to practice takeoffs and landings. The pilot selected approach flaps on downwind but never checked their position. On short final, the pilot sensed his descent rate was too great and attempted a go-around. The airplane drifted towards the left and then rolled right continuing to descend until it struck the ground. Postcrash examination of the engine and propeller revealed impact damage that was consistent with the propeller having contacted the ground in a high airplane pitch attitude, and a propeller blade angle consistent with a "power on" condition.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot-in-command's delayed decision to go-around and his failure to maintain sufficient airspeed during the attempted go-around. His non-verification of the flap setting contributed to the accident.

Findings

Occurrence #1: LOSS OF CONTROL - IN FLIGHT
Phase of Operation: GO-AROUND (VFR)

Findings
1. WEATHER CONDITION - CROSSWIND
2. (F) FLAPS - NOT VERIFIED - PILOT IN COMMAND
3. (C) IN-FLIGHT PLANNING/DECISION - DELAYED - PILOT IN COMMAND
4. (C) AIRSPEED - LOW - PILOT IN COMMAND

Factual Information

On February 9, 2001, at 1412 hours Pacific standard time, a Beech A36, N3191A, sustained substantial damage when the it struck the ground during an attempted go-around at the Palo Alto, California, airport. The private pilot operated the airplane under the provisions of 14 CFR Part 91, and was not injured. The personal local flight departed approximately 1400. Visual meteorological conditions prevailed, and no flight plan had been filed.

When interviewed by National Transportation Safety Board investigators, the pilot stated that his intention was to practice takeoffs and landings. He extended downwind for spacing on a slower airplane, and recalls selecting approach flaps but does not recall checking the position of the flaps. The final approach was stable at 80 knots but when he was about 10 feet off the ground he sensed the airplane was sinking faster than normal and elected to go around. He added power but did not feel the engine respond. The airplane veered left and the left wing struck the ground, the left gear was sheared off, and the propeller was torn off the engine. The pilot said that after examining the airplane the flaps appeared to be up.

The airplane, equipped with a Rolls-Royce Model 250-B17F/2 Turboprop engine, had been purchased in August 2000. The pilot had received dual instruction in the airplane but his insurance carrier required he hold an instrument rating prior to acting as pilot-in-command. His instrument rating was received February 7, 2001. The pilot had received 107.9 hours of dual instruction in the airplane and the accident flight was his first solo flight in type.

A representative of Rolls-Royce Corporation participated in the investigation. No engine discrepancies were noted. However, the beta valve tie rod was displaced from the rod end connector. No signs of safety wire or damaged threads on the tie rod or rod end were noted. Upon removing the engine oil filter housing, no filter was found. It was noted that the compressor received leading edge damage to all first stage blades. Also, fuel control and fuel nozzle tests indicated no signs of malfunction.

A representative of Hartzell Propeller, Inc., the manufacturer of the propeller, participated in the investigation. The propeller blades were found in a high pitch/feather position. The piston had a clear impact mark, about 25 degrees blade angle. The representative explained that this is a realistic blade angle for a "power on" impact. The representative concluded that this mark indicated that the piston was at 25 degrees, or lower, blade angle prior to impact because the blades were driven to feather as a result of impact damage. He also found that the engine-mounted beta valve link arm was disconnected and the lockwire was missing from the jam nut.

A pilot taxiing on a taxiway parallel to the runway witnessed the accident. He stated that he saw the airplane flare approximately one wingspan's height above the runway and begin

drifting to the left. The airplane continued drifting to the left in a very nose-high attitude. It drifted over the taxiway about 40 feet agl. The drift stopped and the right wing dropped. The right wing hit the grass between the taxiway and the runway and the airplane spun around and stopped on the runway.

Pilot Information

Certificate:	Private	**Age:**	49,Male
Airplane Rating(s):	Single-engine land; Multi-engine land	**Seat Occupied:**	Left
Other Aircraft Rating(s):	None	**Restraint Used:**	
Instrument Rating(s):	Airplane	**Second Pilot Present:**	No
Instructor Rating(s):	None	**Toxicology Performed:**	No
Medical Certification:	Class 3 Valid Medical--w/ waivers/lim	**Last FAA Medical Exam:**	October 5, 1999
Occupational Pilot:	UNK	**Last Flight Review or Equivalent:**	February 7, 2000
Flight Time:	619 hours (Total, all aircraft), 108 hours (Total, this make and model), 499 hours (Pilot In Command, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Beech	**Registration:**	N3191A
Model/Series:	A36	**Aircraft Category:**	Airplane
Year of Manufacture:		**Amateur Built:**	
Airworthiness Certificate:	Normal	**Serial Number:**	E3291
Landing Gear Type:	Retractable - Tricycle	**Seats:**	6
Date/Type of Last Inspection:	August 21, 2000 Annual	**Certified Max Gross Wt.:**	3833 lbs
Time Since Last Inspection:	107 Hrs	**Engines:**	1 Turbo prop
Airframe Total Time:	119 Hrs at time of accident	**Engine Manufacturer:**	Rolls-Royce
ELT:	Installed, activated, did not aid in locating accident	**Engine Model/Series:**	250-B17F/2
Registered Owner:	Eliezer Pasternak	**Rated Power:**	450 Horsepower
Operator:		**Operating Certificate(s) Held:**	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	**Condition of Light:**	Day
Observation Facility, Elevation:	PAO,4 ft msl	**Distance from Accident Site:**	0 Nautical Miles
Observation Time:	14:15 Local	**Direction from Accident Site:**	
Lowest Cloud Condition:	Few / 2000 ft AGL	**Visibility**	7 miles
Lowest Ceiling:	Broken / 3000 ft AGL	**Visibility (RVR):**	
Wind Speed/Gusts:	6 knots /	**Turbulence Type Forecast/Actual:**	/
Wind Direction:	230°	**Turbulence Severity Forecast/Actual:**	/
Altimeter Setting:	29.89 inches Hg	**Temperature/Dew Point:**	10°C / 6°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Palo Alto, CA (PAO)	**Type of Flight Plan Filed:**	None
Destination:		**Type of Clearance:**	VFR
Departure Time:	14:00 Local	**Type of Airspace:**	Class D

Airport Information

Airport:	PALO ALTO ARPT OF SANTA CLARA PAO	**Runway Surface Type:**	Asphalt
Airport Elevation:	4 ft msl	**Runway Surface Condition:**	Dry
Runway Used:	31	**IFR Approach:**	None
Runway Length/Width:	2500 ft / 65 ft	**VFR Approach/Landing:**	Full stop;Go around;Traffic pattern

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:**	37.449291,-122.100608(est)

Administrative Information

Investigator In Charge (IIC):	Baily, Frank
Additional Participating Persons:	Jim Friel; AWP-SJC-FSDO Rege E Hall; Rolls-Royce Corporation; Indianapolis, IN Tom McCreary; Hartzell Propeller Inc.; Piqua, OH
Original Publish Date:	November 28, 2001
Last Revision Date:	
Investigation Class:	Class
Note:	The NTSB traveled to the scene of this accident.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=51721