



Aviation Investigation Final Report

Location:	LAKEPORT, California	Accident Number:	LAX94FA266
Date & Time:	June 27, 1994, 18:19 Local	Registration:	N2132W
Aircraft:	BEECH C23	Aircraft Damage:	Destroyed
Defining Event:		Injuries:	3 Fatal
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

AT THE CONCLUSION OF THE FLIGHT, THE PILOT MADE AN APPROACH TO LAND ON RUNWAY 28, A 3600' RUNWAY, WITH THE WIND FROM 120 DEGREES AT 4 KNOTS. A WITNESS REPORTED THAT THE AIRPLANE PASSED OVER THE LANDING THRESHOLD ABOUT 100' AGL. IT FIRST TOUCHED DOWN AT MIDFIELD, THEN IT PORPOISED TWO ADDITIONAL TIMES AND YAWED TO THE LEFT. THE WITNESS SAID THAT ENGINE POWER WAS APPLIED AND THE AIRPLANE GAINED 50' TO 60', THEN THE NOSE DROPPED AND THE AIRPLANE IMPACTED IN AN OPEN FIELD ADJACENT TO THE DEPARTURE END OF THE RUNWAY. DURING IMPACT, THE AIRPLANE'S FUEL TANKS RUPTURED AND A FIRE ERUPTED. THE AIRPLANE WAS DESTROYED BY FIRE. DURING THE PILOT'S TRAINING, HE HAD RECEIVED TWO FLIGHT TEST DISAPPROVALS BEFORE HE WAS ISSUED A PRIVATE PILOT CERTIFICATE ON 6/14/93. AT THAT TIME, HIS FLIGHT EXPERIENCE CONSISTED OF 41 HOURS SOLO AND 130 HOURS DUAL INSTRUCTIONAL TIME. ON 2/8/94, THE PILOT RECEIVED A 1-HOUR-LONG CHECKOUT IN THE ACCIDENT AIRPLANE. THE ACCIDENT FLIGHT WAS THE PILOT'S FIRST FLIGHT IN THE AIRPLANE WITHOUT HIS FLIGHT INSTRUCTOR ON BOARD.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: FAILURE OF THE PILOT TO MAINTAIN ADEQUATE AIRSPEED DURING GO-AROUND FROM AN ABORTED LANDING, WHICH RESULTED IN AN INADVERTENT STALL. FACTORS RELATED TO THE ACCIDENT WERE: THE PILOT'S MISJUDGMENT OF SPEED AND DISTANCE TO THE RUNWAY WHILE ON FINAL APPROACH, FAILURE TO ATTAIN THE PROPER TOUCHDOWN POINT DURING THE LANDING, INADVERTENT PORPOISE, AND IMPROPER RECOVERY FROM A BOUNCED LANDING.

Findings

Occurrence #1: LOSS OF CONTROL - IN FLIGHT

Phase of Operation: LANDING - ABORTED

Findings

1. (F) DISTANCE/SPEED - MISJUDGED - PILOT IN COMMAND
2. (F) PROPER TOUCHDOWN POINT - NOT ATTAINED - PILOT IN COMMAND
3. (F) PORPOISE/PILOT-INDUCED OSCILLATION - INADVERTENT - PILOT IN COMMAND
4. (F) RECOVERY FROM BOUNCED LANDING - IMPROPER - PILOT IN COMMAND
5. GO-AROUND - INITIATED - PILOT IN COMMAND
6. (C) AIRSPEED - NOT MAINTAINED - PILOT IN COMMAND
7. (C) STALL/MUSH - INADVERTENT - PILOT IN COMMAND
8. LACK OF TOTAL EXPERIENCE IN TYPE OPERATION - PILOT IN COMMAND

Occurrence #2: IN FLIGHT COLLISION WITH TERRAIN/WATER

Phase of Operation: LANDING - ABORTED

Factual Information

HISTORY OF FLIGHT

On June 27, 1994, at 1819 Pacific daylight time, a Beech C23, N2132W, operated by Pacific Flight Services, crashed into an open field adjacent to the departure end of runway 28 at the Lampson Field, Lakeport, California. The airplane was substantially damaged during the impact sequence, and it was destroyed by a postimpact ground fire. The private pilot and two passengers were fatally injured. Visual meteorological conditions prevailed at the time of the personal flight, and no flight plan was filed. The flight originated from Vacaville, California, on June 27, 1994, at an undetermined time.

The National Transportation Safety Board interviewed a witness who reported that he possessed a certified flight instructor certificate. The witness stated that he was standing near the approach end of runway 28 when he observed the accident airplane right after it crossed over the approach end of the runway and was about 100 feet above the ground. The airplane was in a descent, and it first touched down on the runway at midfield. The touchdown was followed by a 5-foot-high bounce, and a second touchdown. The second touchdown was followed by another 5-foot-high bounce and a third touchdown. During these porpoise-like maneuvers, the airplane was yawed to the left of the runway's centerline. After the third touchdown, the airplane climbed 50 to 60 feet above the runway.

The flight instructor/witness made a written statement in which he described the airplane's flight path as it departed the runway as follows: ". . . he [the pilot] gunned the engine and attempted to take off. He attempted to pull up and did not have enough airspeed" and he stalled. The flight instructor reported that he lost sight of the airplane when its pitch attitude decreased. At the time, the airplane was located near the end of the runway. Seconds later, the witness observed a column of rising smoke from the west end of the airport.

PERSONNEL INFORMATION

The Safety Board examined the pilot's partially burned flight record logbook, and airman records maintained by the Federal Aviation Administration (FAA). The logbook indicated that the pilot commenced primary flight training in January of 1991, and his training was in the Cessna 152 airplane. The pilot first soloed in April, 1991, after having received about 28 hours of dual instruction. In September, 1991, when the pilot's student certificate was endorsed for cross-country flying, the pilot had received about 86 hours of dual flight instruction. During the next couple of months, the pilot's flight training continued. In November, a flight instructor entered into the pilot's logbook the remark that the November 22, 1991, flight lesson consisted, in part, of a "review for recommendation." At the time, the pilot had logged about 113 flight hours.

The pilot continued taking flying lessons. According to the FAA, on April 9 and 13, 1993, the pilot failed Private Pilot flight test examinations. On April 25 and on July 12 of 1992, additional entries were noted in the pilot's flight logbook in which instructors remarked that the flight lessons consisted of, in part, a "review for recommendation" and a "review for [check] ride."

The pilot continued taking flying lessons in the Cessna 152. On June 11, 1993, the pilot's flight instructor recommended his student for the Private Pilot flight test. On June 14, 1993, the pilot was issued a Private Pilot Certificate. The flight test was performed in a Cessna 152 airplane. The logged duration of the flight was 0.4 hours. At the time of the examination, the pilot's flying experience included 41 hours of solo flying and 130 hours of dual instruction.

Four days later, on June 18, the pilot flew a Cessna 172 for the first time. After flying the airplane for 0.8 hours, the pilot completed the check out flight and his instructor authorized him to rent the airplane from the operator, Pacific Flight Services. On July 30, 1993, the pilot first flew a Piper PA-28 airplane. The flight consisted of a 1.0-hour-long dual lesson. At the flight's completion, the instructor authorized the pilot to rent the Piper from the aforementioned operator.

On February 8, 1994, the pilot first flew a Beech C23 airplane. The flight consisted of a 1.0-hour-long dual lesson. At the flight's completion, the instructor authorized the pilot to rent the Beech from the aforementioned operator.

The Safety Board's review of the accident pilot's logbook and pertinent Pacific Flight Service's records which were associated with the pilot certification check ride, and records of his subsequent check out flights, revealed that the flights had been performed while using the same flight instructor at Pacific Flight Service. The Pacific Flight Service flight instructor (CFI) reported to the Safety Board that after he checked out the pilot in the Beech C23, he continued to give the pilot dual flying lessons in the airplane. The lessons were principally oriented toward basic instrument flying. By June 13, 1994, the CFI had given the pilot approximately 15 hours of dual instruction, all of which were in the Beech C23 accident airplane.

The CFI further reported that he believed the accident flight was the pilot's first flight in the accident airplane without a flight instructor being on board.

Based upon the Safety Board's review of the pilot's flight logbook, by the accident date the pilot had logged a total of approximately 225 flight hours. Of this flight time, about 161 hours had been flown with a flight instructor on board (dual instruction). About 66 hours were flown in solo flight or as the pilot-in-command.

AIRCRAFT INFORMATION

The airplane's total time and time since last inspection, as listed in this report, are based upon Safety Board estimates. The airplane's logbooks indicated that the airframe and engine were

last inspected on June 20, 1994. On that date, the logs indicated the airplane and engine total times were approximately 3,196.0 and 920.1 hours, respectively.

On June 27, when the pilot took off on the accident flight, the operator's rental record indicated that the engine's tachometer was at 934.0 hours. The Safety Board estimated that, when the accident occurred, the airplane had been operated for about 15 hours since last receiving a 100-hour inspection.

METEOROLOGICAL INFORMATION

According to the flight instructor/witness the sky was clear, the surface wind was from 120 degrees at 4 to 5 knots, and the temperature was between 80 and 85 degrees F. A witness who held a private pilot certificate, and who was located in a restaurant at the airport, reported that when he observed the accident airplane over the runway the surface wind was from the southeast at 4 to 6 miles per hour, and the temperature was between 98 and 100 degrees F.

AIRPORT FACILITIES

The landing threshold for runway 28 at Lampson Field is displaced 85 feet. The runway's total length was 3,600 feet. The airport is equipped with at least one visible windsock located near midfield.

WRECKAGE AND IMPACT INFORMATION

From an examination of the accident site and airplane wreckage, and from witness statements, the airplane was found to have descended into an open field adjacent to and north of the departure end of runway 28. The initial ground contact point was evidenced by formation of three nearly symmetrically shaped 4- to 6-inch deep main and nose wheel-size depressions at the initial point of impact (IPI).

Evidence of fire was first observed at the IPI. The burn area extended along a 305-degree magnetic course for 96 feet where the main wreckage of the airplane was located. The airplane's nose gear and right main wheel assemblies were located between the IPI and the main wreckage. The airplane came to rest on a magnetic heading of 052 degrees. (See the wreckage diagram for additional information.)

The airplane structure and ground vegetation adjacent to the airplane was observed partially consumed by fire. The cockpit and cabin area, and the inboard halves of both wings were heavily fire damaged. The empennage was found intact. Both of the wing fuel tanks were found ruptured.

The leading edges of the left and right wings were found crushed in an aft direction. Diagonal buckles were observed on the cambered surface of the outboard portion of the right wing. The right and left wing tips remained attached to the wings.

All of the flight control surfaces were found with the airplane. The continuity of the flight control system was confirmed from all of the flight control surfaces (or control surface attachment points) to the center section of the fuselage which was found burned, crushed and/or melted.

MEDICAL AND PATHOLOGICAL INFORMATION

The two passengers were found deceased inside the airplane wreckage. The pilot was transported to a hospital, and he died on June 29, 1994, from thermal and inhalation injuries. An autopsy was performed by the Contra Costa County Coroner's Office.

TESTS AND RESEARCH

On June 29, 1994, the engine was examined at the facilities of Steve's Aircraft, Lakeport, California. In conjunction with the Lycoming Engine factory participant, the following observations were made:

Chordwise scratches were noted on both blades of the propeller. Leading edge gouges were also noted on both blade tips.

The engine was found impact and fire damaged. The bottom of the engine was observed crushed in an upward direction.

Both magnetos were observed destroyed by fire. The impulse coupler on the left magneto was found intact. The spark plugs were visually examined, and the participant opined that the plugs appeared normal, dry, and in serviceable (low time) condition. The carburetor was destroyed by fire. No contamination was observed in the oil suction screen. The oil filter canister was cut open and the element was found destroyed by fire.

The valve and gear train continuity were established during 720- degree hand crankshaft rotation. Thumb compression was felt in all four cylinders during the rotation.

At the conclusion of the examination, the participant indicated that no evidence of any preimpact mechanical failure was found in any examined rotating or reciprocating component.

ADDITIONAL INFORMATION

The entire airplane wreckage was released to the owner's assigned insurance adjuster on June 29, 1994. No parts were retained.

Pilot Information

Certificate:	Private	Age:	43, Male
Airplane Rating(s):	Single-engine land	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 Valid Medical—no waivers/lim.	Last FAA Medical Exam:	February 4, 1993
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	
Flight Time:	225 hours (Total, all aircraft), 15 hours (Total, this make and model), 67 hours (Pilot In Command, all aircraft), 14 hours (Last 90 days, all aircraft), 7 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	BEECH	Registration:	N2132W
Model/Series:	C23 C23	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal; Restricted (Special)	Serial Number:	M-1507
Landing Gear Type:	Tricycle	Seats:	4
Date/Type of Last Inspection:	June 20, 1994 100 hour	Certified Max Gross Wt.:	2450 lbs
Time Since Last Inspection:	15 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	3211 Hrs	Engine Manufacturer:	LYCOMING
ELT:		Engine Model/Series:	O-360-A4J
Registered Owner:	PRIORITY TRADING COMPANY	Rated Power:	180 Horsepower
Operator:	PACIFIC FLIGHT SERVICES	Operating Certificate(s) Held:	None
Operator Does Business As:		Operator Designator Code:	

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:		Distance from Accident Site:	
Observation Time:		Direction from Accident Site:	
Lowest Cloud Condition:	Clear	Visibility	20 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	4 knots / 5 knots	Turbulence Type Forecast/Actual:	/
Wind Direction:	120°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	32°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	VACAVILLE , CA (O45)	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	00:00 Local	Type of Airspace:	Class G

Airport Information

Airport:	LAMPSON FIELD 102	Runway Surface Type:	Asphalt
Airport Elevation:	1378 ft msl	Runway Surface Condition:	Dry
Runway Used:	28	IFR Approach:	None
Runway Length/Width:	3600 ft / 60 ft	VFR Approach/Landing:	Go around;Traffic pattern

Wreckage and Impact Information

Crew Injuries:	1 Fatal	Aircraft Damage:	Destroyed
Passenger Injuries:	2 Fatal	Aircraft Fire:	On-ground
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	3 Fatal	Latitude, Longitude:	39.039958,-122.929283(est)

Administrative Information

Investigator In Charge (IIC):	Pollack, Wayne
Additional Participating Persons:	RAY C STEINKRAUS; SACRAMENTO , CA PETER WILHELMSON; SACRAMENTO , CA DON F KNUTSON; WICHITA , KS CHARLES R LITTLE; CHINO , CA
Original Publish Date:	August 1, 1995
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=28537

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