



National Transportation Safety Board Aviation Accident Final Report

Location:	Oceano, CA	Accident Number:	WPR13FA083
Date & Time:	01/02/2013, 1605 PST	Registration:	N45923
Aircraft:	LUSCOMBE 8A	Aircraft Damage:	Substantial
Defining Event:	Aerodynamic stall/spin	Injuries:	1 Fatal
Flight Conducted Under:	Part 91: General Aviation - Personal		

Analysis

Witnesses reported that they observed the airplane flying low above the beach before it ascended abruptly. When the airplane was about 150 to 200 feet above the ground, the ascent stopped, and the airplane then descended in a nose low attitude to ground impact. Witnesses also reported that the engine sounded normal during the accident sequence. Postaccident examination of the airframe and engine revealed no preimpact mechanical malfunctions or failures that would have precluded normal operation.

The pilot had a reported history of marijuana abuse. Toxicology testing on the pilot was positive for tetrahydrocannabinol at levels that indicate he was likely impaired during the flight. This impairment likely affected the pilot's ability to maintain airplane control and his decision to begin a low-level flight maneuver at an altitude that was not sufficient for recovery before impact with the ground.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's failure to maintain airplane control and his improper decision to begin a low-level maneuver at an altitude that was not sufficient for recovery before ground impact. Contributing to the accident was the pilot's impairment from marijuana use.

Findings

Aircraft	Altitude - Not attained/maintained (Cause)
Personnel issues	Decision making/judgment - Pilot (Cause) Aircraft control - Pilot (Cause) Illicit drug - Pilot (Factor)

Factual Information

HISTORY OF FLIGHT

On January 2, 2013, about 1605 Pacific standard time, a Luscombe 8A, N45923, was substantially damaged when it impacted terrain about 2 miles south of the Oceano County Airport (L52), Oceano, California. The commercial pilot was fatally injured. The airplane was registered to, and operated by, the pilot as a 14 Code of Federal Regulations (CFR) Part 91 local personal flight. Visual meteorological conditions prevailed and no flight plan was filed. The flight originated from L52 at an unknown time.

Witnesses reported that they observed the airplane flying low above the beach when it ascended abruptly. When the airplane was approximately 150-200 feet above the ground, it appeared to stop and descended abruptly before it impacted the sand dunes below. The witnesses did not see the initial impact, but they observed the airplane bounce. Witnesses reported that the engine sounded normal during the accident sequence.

PERSONNEL INFORMATION

At the time of the accident, the pilot, age 56, held a commercial pilot certificate with airplane single- and multi-engine land privileges. The pilot also held an airframe and powerplant mechanics certificate. The pilot's most recent Federal Aviation Administration (FAA) second class medical was issued on October 1, 2012 with the restriction that he must possess glasses for near and intermediate vision. During his examination, the pilot reported he had a total of 7,000 flight hours, 185 of which were within the six months preceding the examination. The pilot's logbooks were not located.

AIRCRAFT INFORMATION

The two-seat, high-wing, fixed-gear airplane, serial number 2450, was manufactured in 1946. It was powered by a Continental Motors A-65-8, 65 horsepower engine and was equipped with a fixed-pitch propeller. The airplane's maintenance logbooks were not located.

METEOROLOGICAL INFORMATION

The nearest weather reporting station, San Luis Obispo Regional Airport (SBP), located approximately 10 miles north of the accident site reported at 1756, calm wind, 10 statute miles of visibility, clear skies, temperature 17 degrees C, dewpoint -6 degrees C, and an altimeter reading of 30.08 inches of mercury.

WRECKAGE AND IMPACT

The wreckage debris path was approximately 720 feet long with a heading of about 19 degrees. The first identified point of impact was a divot on the ridge of a sand dune that was consistent with a tire mark. Almost immediately following the initial point of impact was an about 8 foot by 3 foot section of heavily disrupted sand, with three foot wide sliding marks extending toward an approximate 2 foot by 6 inch impact point. After the impact point, there was about 7 feet of undisturbed sand followed by the main wreckage, which was a total of about 120 feet beyond the first point of impact. The final piece of debris was a wheel that was located about 600 feet beyond the main wreckage on the other side of a second sand dune.

Examination of the main wreckage revealed that the airplane came to rest in a nose low

attitude. The forward fuselage sustained extensive crush damage, and the cabin area came to rest on top of the engine. The aft fuselage and empennage were still attached by the airplane's belly skin; however, it was folded underneath the airplane's wings and came to rest inverted in the sand. The empennage sustained minimal damage. The left and right horizontal stabilizers had a different paint scheme from the rest of the yellow empennage and airframe. The wings were still attached to the cabin and mostly intact; both wings sustained leading edge crushing throughout. Evidence of corrosion was noted at the wing spar attachment points and scattered throughout the remainder of the airframe. Flight control continuity was established from the cockpit controls to their respective flight control surfaces.

MEDICAL AND PATHOLOGICAL INFORMATION

The autopsy was performed on the pilot by the San Luis Obispo County Sheriff – Coroner Office in San Luis Obispo, California. The cause of death was sharp force injury and the autopsy noted that the pilot had an enlarged heart. Toxicology testing detected tetrahydrocannabinol in lung (0.0485 ug/ml), liver (0.011 ug/ml), and blood (0.0062 ug/ml). Tetrahydrocannabinol carboxylic acid, was detected in urine (0.0965 ug/ml), liver (0.0369 ug/ml), blood (0.0067 ug/ml), and lung (0.0053 ug/ml).

The pilot had a history of cannabis abuse with a positive Department of Transportation required random test in 1999. The FAA had evaluated his history and determined him to be eligible for a second class medical certificate in 2003 and thereafter. Although additional random drug tests were recommended, they were not performed.

For more detailed information see the Medical Factual Report located in the accident docket.

TESTS AND RESEARCH

Engine Examination

The engine was removed from the firewall and slung from a hoist. Initial visual inspection of the recovered engine revealed no visual anomalies. The cylinder rocker covers and spark plugs were removed; the spark plug electrode areas were consistent with 'worn out - normal' when compared to the Champion AV-27 chart. The valves were undamaged and contained no abnormal thermal discoloration. When the propeller was rotated by hand, thumb compression was established on all cylinders, all valves moved in sequence and had similar amounts of lift, and the accessory gears rotated. The carburetor was fracture separated at the throttle plate neck; both pieces of the carburetor were removed from the engine. Sand was found inside of the carburetor and was consistent with the sand on scene. Both the throttle and mixture levers moved freely from stop to stop when manipulated by hand. The carburetor bowl was removed; there was no fuel in the carburetor bowl or the undamaged metal float. The oil screen was removed and contained some carbon flakes.

History of Flight

Maneuvering-low-alt flying	Aerodynamic stall/spin (Defining event)
Uncontrolled descent	Collision with terr/obj (non-CFIT)

Pilot Information

Certificate:	Commercial	Age:	56
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Seat Occupied:	Unknown
Other Aircraft Rating(s):	None	Restraint Used:	Seatbelt
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	Yes
Medical Certification:	Class 2 With Waivers/Limitations	Last Medical Exam:	10/01/2012
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	7000 hours (Total, all aircraft), 9999 hours (Total, this make and model)		

Aircraft and Owner/Operator Information

Aircraft Manufacturer:	LUSCOMBE	Registration:	N45923
Model/Series:	8A	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	2450
Landing Gear Type:	Tailwheel	Seats:	2
Date/Type of Last Inspection:	Unknown	Certified Max Gross Wt.:	
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	CONT MOTOR
ELT:	Installed, not activated	Engine Model/Series:	A&C65 SERIES
Registered Owner:	GLEN P RAY	Rated Power:	65 hp
Operator:	GLEN P RAY	Air Carrier Operating Certificate:	None

Meteorological Information and Flight Plan

Observation Facility, Elevation:	SBP, 212 ft msl	Observation Time:	1756 PST
Distance from Accident Site:	10 Nautical Miles	Condition of Light:	Day
Direction from Accident Site:	354°	Conditions at Accident Site:	Visual Conditions
Lowest Cloud Condition:	Clear	Temperature/Dew Point:	17° C / -6° C
Lowest Ceiling:	None	Visibility	10 Miles
Wind Speed/Gusts, Direction:	Calm	Visibility (RVR):	
Altimeter Setting:	30.08 inches Hg	Visibility (RVV):	
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Oceano, CA (L52)	Type of Flight Plan Filed:	None
Destination:	Oceano, CA (L52)	Type of Clearance:	None
Departure Time:	PST	Type of Airspace:	

Airport Information

Airport:	Oceano County Airport (L52)	Runway Surface Type:	N/A
Airport Elevation:	14 ft	Runway Surface Condition:	Unknown
Runway Used:	N/A	IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	None

Wreckage and Impact Information

Crew Injuries:	1 Fatal	Aircraft Damage:	Substantial
Passenger Injuries:	N/A	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Fatal		

Administrative Information

Investigator In Charge (IIC):	Samantha A Link	Adopted Date:	01/20/2015
Additional Participating Persons:	Dalton L Mountz; Federal Aviation Administration; San Jose, CA		
Publish Date:	01/20/2015		
Investigation Docket:	http://dms.nts.gov/pubdms/search/dockList.cfm?mKey=85940		

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