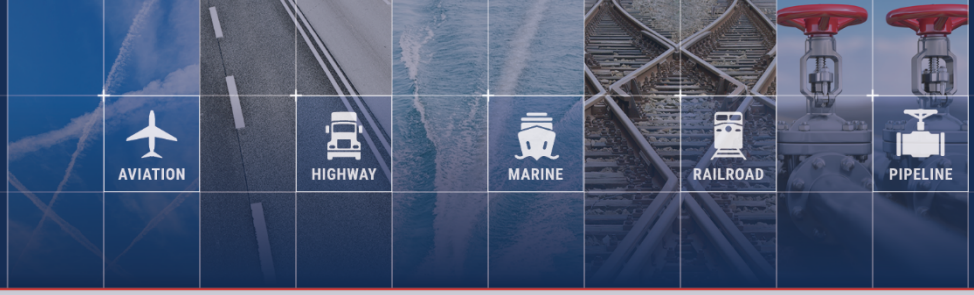

Aviation Investigation Final Report

Location:	GOLETA, California	**Accident Number:**	LAX97FA046
Date & Time:	November 20, 1996, 11:08 Local	**Registration:**	N210WW
Aircraft:	Beech 95-B55	**Aircraft Damage:**	Destroyed
Defining Event:		**Injuries:**	1 Fatal
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

During IFR arrival, the pilot was cleared for an ILS runway 7 approach after being vectored to intercept the localizer from the south side. Last assigned altitude was 2000' msl. Radar data showed the aircraft (acft) continued across the localizer toward rising terrain. Air traffic controllers (ATC) issued instructions to turn back to the localizer, but the pilot did not follow. ATC then issued urgent instructions to turn & climb. (Later, they said he calmly acknowledged their transmissions, but continued toward rising terrain.) Radar contact was lost, but the airplane finally turned south. However, it hit avacado trees on the west side of sloping terrain at about 440' msl, while in a steep bank. No preimpact mechanical anomaly was found that would have resulted in the accident. The pilot's former wife recalled instances when he had miss-set the autopilot OBS; on those occasions, he had similarly deviated from the localizer at intercept & resisted her suggestion to take over manually & fly the approach, but persisted in trying to make the autopilot fly the approach. A flight instructor, who administered a biennial flight review 1 month earlier, found the pilot's instrument flight skills weak & refused to certify his instrument competency. Toxicology tests of tissue from the pilot indicated the presence of a narcotic pain reliever and its metabolite. Tests of kidney tissue showed 0.337 mcg/ml Propoxyphene & 2.7 mcg/ml Norpropoxyphene; tests of muscle tissue showed 0.385 mcg/ml Propoxyphene and 1.9 mcg/ml Norpropoxyphene.

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 control of the aircraft during an instrument approach, due to spatial disorientation, and/or his failure to maintain proper altitude. Factors relating to the accident were: the pilot's delay (or failure) to initiate a missed approach, and his lack of instrument competency.

Findings

Occurrence #1: LOSS OF CONTROL - IN FLIGHT
Phase of Operation: APPROACH

Findings
1. WEATHER CONDITION - CLOUDS
2. WEATHER CONDITION - LOW CEILING
3. (F) MISSED APPROACH - DELAYED - PILOT IN COMMAND
4. (C) AIRCRAFT CONTROL - NOT MAINTAINED - PILOT IN COMMAND
5. (C) PROPER ALTITUDE - NOT MAINTAINED - PILOT IN COMMAND
6. (C) SPATIAL DISORIENTATION - PILOT IN COMMAND
7. (F) LACK OF RECENT INSTRUMENT TIME - PILOT IN COMMAND

Occurrence #2: IN FLIGHT COLLISION WITH TERRAIN/WATER
Phase of Operation: APPROACH

Factual Information

HISTORY OF FLIGHT

On November 20, 1996, at 1108 hours Pacific standard time, a Beech 95-B55, N210WW, impacted mountainous terrain at Goleta, California, while being radar vectored for an instrument approach to Santa Barbara, California. The aircraft was destroyed and the private pilot was fatally injured. Instrument meteorological conditions prevailed and the aircraft was operating on an instrument flight plan. The aircraft departed Long Beach, California, at 1024.

The pilot contacted the Hawthorne (California) Automated Flight Service Station at 0806 on the morning of the accident and requested a briefing for a flight from Long Beach to Santa Barbara. The pilot then filed two IFR flight plans: one for the flight to Santa Barbara and the second for the return flight to Long Beach later in the day.

The aircraft departed Long Beach at 1024 and the pilot proceeded via a series of radar vectors until checking in with Santa Barbara TRACON, east radar, at 1052 in the vicinity of KWANG intersection, 22 miles east of Santa Barbara at 4,000 feet. After passing KWANG, the pilot was given radar vectors to the ILS runway 7 final approach course at Santa Barbara. The aircraft first flew a downwind leg on a westbound heading south of the airport, during which the aircraft was instructed to maintain an airspeed of at least 160 knots. At 1100, when the aircraft was approximately 5 miles south of the airport still on a westbound heading, the pilot was given a frequency change to the Santa Barbara TRACON west radar frequency. After checking in with the west radar controller, the aircraft was issued a descent to 2,000 feet at 1102, and then, at 1104, was issued a right turn to a heading of 350 degrees, which placed the aircraft on base leg.

At 1106, when the aircraft was 3 miles from NAPPS intersection, the pilot was instructed to turn right to heading 060 and maintain 2,000 feet until established on the localizer and was cleared for the ILS Runway 7 approach. Eleven seconds later, the pilot asked "zero six zero or three six zero." Five seconds later, the controller radioed that the pilot was flying through the localizer and issued instructions to continue the right turn to a 100 degree heading for the localizer intercept. The pilot acknowledged the clearance 8 seconds later.

At 1107:12, the controller instructed the pilot to turn left to heading 180 degrees, but on learning he was in a right turn, affirmed that he wanted the pilot to turn to heading 180. At 1107:35, the controller transmitted "I don't know what he's doing, Baron zero whiskey whiskey cancel approach clearance fly heading one eight zero" and at 1107:41, the controller's training supervisor transmitted "climb, climb." At 1107:42, the controller transmitted "appear to be northbound, climb and maintain four thousand, turn right now heading one eight zero." At 1107:48, the pilot replied "right now at one eight zero." This was the last communication from

the pilot. At 1107:56, the controller transmitted "Baron zero whiskey whiskey, you're heading toward the hillside, you need to crank that aircraft around now heading one eight zero please" and at 1108:10, the controller transmitted "Baron zero whiskey whiskey, climb and maintain four thousand." There were no further communications from the pilot.

The controllers told the Safety Board that the pilot's voice remained calm and unhurried despite the urgency of their calls. It appeared to the controllers that the target on their radar initially turned toward the localizer and then veered off to the north. The Santa Barbara TRACON utilizes ARTS II radar equipment and there was no recorded radar data. The wreckage was distributed on a southerly course.

Witnesses living nearby reported that low overcast clouds obscured the mountains at the time of the accident. A pilot, who was inside his house, reported that it sounded to him like the aircraft was about 200 feet above his house (at 50 -75 feet msl), and yet his wife, who was outside, could not see the aircraft in the clouds. The witnesses reported that the engines sounded normal, perhaps at greater than approach power. One witness thought the aircraft may have been trying to climb and another reported that the engines sounded abnormal briefly before the accident.

According to the pilot's former wife, the pilot was under a great deal of stress from their recently completed divorce. She described the pilot as a very strong-willed person who aggressively fought the divorce. She described the divorce as "brutal" and believed that he was very distraught, so much so that his children had discouraged him from flying.

The pilot's former wife is also an instrument and multiengine rated private pilot, and has often flown with the pilot in the accident aircraft since they were both licensed in 1976. They last flew together in late 1995. Regarding the pilot not intercepting the localizer after the vector to final approach prior to the accident, she recalled four or five instances when she had been with him and he miss-set the OBS on the HSI causing the autopilot to turn the aircraft away from the final approach course instead of intercepting it. It was his practice, when being radar vectored for approach, to use the autopilot in heading mode by slewing the heading bug on the HSI. On the four or five instances in question, he had not set the OBS to the final approach course heading, and, using the heading bug, he turned to intercept the localizer and engaged approach mode on the autopilot. The autopilot then flew the heading on the heading bug until the localizer was intercepted, at which point the autopilot switched to localizer track mode and turned to whatever heading was set on the OBS. She emphasized that the turn was surprisingly steep. She added that in some of these instances she had suggested to him that he disconnect the autopilot and hand fly the approach until he got the aircraft back on course, but that he resisted and persisted in trying to make the autopilot fly the approach.

She speculated that, in the accident, he may have had the OBS set to a northerly course which turned the aircraft back to the north after the localizer intercept and by the time he took control of the aircraft from the autopilot, together with the urgency of the controllers instructions, the aircraft was out of control.

The pilot's son spoke with his father by telephone the night before the accident. His son felt that although his father was upset by the divorce, he was coping adequately and was emotionally fit to fly.

PERSONNEL INFORMATION

The pilot's most recent logbook was not located after the accident. His family was able to produce a logbook in which the last entry was dated 12/9/94. At that time the logbook showed the pilot's total flying time to be 1,959 hours, of which 447 hours were in multiengine aircraft. Totals for instrument flight time had not been carried forward; however, there were entries showing that the pilot had flown 1.6 hours of actual instrument time and 1 hour of simulated instrument time in the previous 6 months. On his medical certificate application dated July 29, 1996, the pilot reported 3,500 hours total pilot time with 10 hours in the last 6 months. On his previous medical certificate application, dated July 25, 1994, he reported 3,700 hours total pilot time with 70 hours in the last 6 months. On an insurance application dated October 12, 1996, the pilot reported total flying time of 2,000 hours, 692 hours in the accident aircraft type, 40 hours in the last 12 months, and 20 hours in the last 6 months.

A pilot logbook found in the wreckage contained only one entry for a biennial flight review on October 11, 1996. The flight instructor who performed the BFR told the Safety Board that the pilot had contacted him and was very hurried to obtain a BFR and an instrument competency check. The flight instructor reported that the pilot's instrument skills were very weak, he was "behind the aircraft" and that he "certainly could not have passed an instrument flight check - before any malfunctions were introduced." They flew three instrument approaches during the check; however, the pilot's performance on instruments was so poor that the flight instructor refused to sign him off for instrument competency. At one point during the flight check, while the pilot was flying by reference to the instruments under a hood, the flight instructor had to take control of the aircraft to prevent loss of control. The instructor subsequently endorsed the pilot's logbook for a BFR with "Instrument qualifications limited to visual meteorological conditions."

AIRCRAFT INFORMATION

The recording hour meter was not recovered after the accident; however, the pilot's former wife told the Safety Board that her former husband was the only pilot who flew the aircraft. The only entry in the pilot's logbook since the annual inspection on September 11, 1996, was for 1.5 hours during the biennial flight review on October 11, 1996. At the annual, the aircraft total time was 2,568 hours.

METEOROLOGICAL INFORMATION

The area forecast for the coastal sections of Southern California at the time of the accident called for scattered clouds at 700 feet msl, with overcast clouds at 1,500 feet msl, and tops of

the clouds at 3,000 feet msl. Visibility was forecast to be 3 to 5 miles in fog with occasional light drizzle. The Santa Barbara terminal forecast valid from 1018 to 1200 hours called for indefinite ceiling 200 feet, visibility 3 miles in fog. There was an AIRMET in effect for the coastal mountains of Southern California to be obscured in clouds and fog. At 1050 hours PST, the reported Santa Barbara weather was 800 foot (agl) overcast, visibility 5 miles in mist (fog) and, in a special observation taken at 1128, was 800 foot overcast, visibility 6 miles in mist. At 1031 PST, a pilot reported that, at his position 10 miles east of Santa Barbara, the tops of the overcast cloud layer were at 6,500 feet.

WRECKAGE AND IMPACT INFORMATION

The aircraft impacted on an west facing mountain slope at approximately 440 feet msl at latitude 34 degrees 28.05 minutes north, and longitude 119 degree 59.36 minutes west (GPS). The location is inside a gated community often acre home sites; however, there was only minor property damage to an avocado orchard.

The mountain side slopes downward to the west and southwest about 30 degrees and is planted with avocado trees to 15 feet tall. The wreckage was scattered along a 150-foot-long path oriented 180 degrees along the side of the mountain slope. The entire aircraft was present in the proximity of the area and there was no fire.

At the northern end of the area the tops of the trees were cut off sloping approximately 45 degrees down to the west (relative to horizontal) and components of the right wing tip assembly were found in this area. A large hole approximately 10 feet wide, 34 feet long and 6 feet deep, was noted about 30 feet further along the wreckage path. A mature avocado tree was uprooted from the area of the hole and foliage on adjacent trees was withered and discolored. The propeller blades and hubs were located near the hole. In the next 100 feet of the wreckage path were scattered small parts of the aircraft, primarily pieces of wing skins, engine nacelles, and landing gear. The engines were located approximately 75 feet beyond the large hole and 50 feet down the hillside to the southwest. At 150 feet along the wreckage path was the fuselage and empennage. The fuselage was destroyed except for the empennage control surfaces.

The airframe was examined at National Aircraft Salvage, Long Beach, on December 10, 1996. Among the debris was a Jeppesen Airway Manual Express chart kit dated October 10, 1996, and effective until December 5, 1996. The landing gear and flap actuators were in the "up" position. The left and right elevator trim tab actuators were extended 1 1/4 and 1 1/8 inches respectively, which corresponds to approximately 12 and 7 degree nose up trim. The rudder trim tab actuator extension was 4 1/8 inches, which corresponds to about 7 degrees nose left trim. The aileron trim actuator was extended 2 1/4 inches, which equates to approximately full right wing down trim. The instrument panel was destroyed. The fuel selector handles transferred marks to the adjacent placard corresponding to the "on" position; disassembly of the valves confirmed them to be in the "on" position and containing a small amount of clean fuel. The fuel filters were clear. Both propellers exhibited torsional twisting to one blade and

aft bending to the other. An air (vacuum) driven gyro, found separated from the instrument, was opened and exhibited circumferential scraping on the rotor and case.

The engines were examined and disassembled at Lynn's Aircraft Engines, El Monte, California, on December 11, 1996. Both engines exhibited similar external damage. The oil coolers and propeller governors were missing from the engines and number 5 and 6 cylinders exhibited impact damage. The oil pan was torn from each engine and the intake and exhaust systems were destroyed. The magnetos were broken from the engines and destroyed, as were the fuel distribution manifold valves and lines. The alternators were missing and the oil filters were crushed. The fuel pump drive couplings were intact, although the pumps were damaged. The vacuum pumps remained attached to the engines and the drive couplings were intact. The left pump pumped air when rotated by hand. The case of the right-hand pump was damaged and the pump was seized. The fuel control servos were damaged; however, both filter screens were clear. The upper spark plugs in both engines were clear and exhibited a uniform gray appearance. The lower spark plug electrodes were damaged and contaminated with mud and water, however, the electrodes did not exhibit wear.

About 50 percent of the propeller flange remained on the left engine crank shaft while the right engine crank shaft was broken off approximately even with the engine nose case. The starter motor remained attached to the right-hand engine but was absent from the left-hand engine.

Internally, both engines were clean except for mud and accident debris and mechanically exhibited no evidence of an unusual operating condition. The pistons and rings were undamaged and the cylinder walls were shiny and unscored. The camshafts, lifter bodies, and valve assemblies were undamaged. Several push rod assemblies were impact damaged. The crankshaft, crankshaft bearings, and accessory gear case were nominal in appearance.

MEDICAL AND PATHOLOGICAL INFORMATION

According to the report of the Santa Barbara County Sheriff-Coroner Department (case C-96-416), there were three prescription drugs found in the wreckage; one being Darvocet-N, another Zantac, and the third being Clinoril.

The coroner contacted the office of the doctor prescribing the Darvocet-N and was told that the pilot had undergone two operations involving a lumbar laminectomy and a micro dissection in July and August of 1996. On October 22, 1996, the pilot reported to his physician that he was still experiencing pain despite taking Vicodin at that time. The doctor then prescribed the Darvocet-N for the pain. The pilot's former wife told the Safety Board that he had bad arthritis, had had back surgery, and in the last few years was frequently in severe pain. He took pain medication but she didn't believe that he took it when he intended to fly.

According to the Sheriff-Coroner's report, the Zantac and Clinoril were prescribed by another physician. Zantac is used to control production and release of acid in the stomach. Clinoril is an anti-inflammatory drug used for osteoarthritis and similar conditions. On the pilot's

application for Airman's Medical Certificate, dated July 29, 1996, the pilot acknowledged having been hospitalized for sciatica and currently using the drugs Clinoril and Zantac. The Aviation Medical Examiner's comment is "Takes Clinoril and Zantac only as needed - 3X per month. No side effects."

No autopsy was performed on the pilot, however, tissue samples were submitted to the FAA's Civil Aeromedical Institute for toxicological testing. Two analgesic drugs, Propoxyphene and Norpropoxyphene were detected in the tissue samples.

ADDITIONAL INFORMATION

The wreckage was released to Mr. Jerry Wallace, Inflite Aviation Adjustment Group, Inc, on February 18, 1997.

Pilot Information

Certificate:	Private	**Age:**	66,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:**	Yes
Medical Certification:	Class 3 Valid Medical--w/ waivers/lim	**Last FAA Medical Exam:**	July 29, 1996
Occupational Pilot:	No	**Last Flight Review or Equivalent:**	
Flight Time:	2000 hours (Total, all aircraft), 692 hours (Total, this make and model)		

Aircraft and Owner/Operator Information

Aircraft Make:	Beech	**Registration:**	N210WW
Model/Series:	95-B55 95-B55	**Aircraft Category:**	Airplane
Year of Manufacture:		**Amateur Built:**	
Airworthiness Certificate:	Normal	**Serial Number:**	TC-1774
Landing Gear Type:	Retractable - Tricycle	**Seats:**	6
Date/Type of Last Inspection:	September 11, 1996 Annual	**Certified Max Gross Wt.:**	5100 lbs
Time Since Last Inspection:	2 Hrs	**Engines:**	2 Reciprocating
Airframe Total Time:	2570 Hrs	**Engine Manufacturer:**	Continental
ELT:	Installed, not activated	**Engine Model/Series:**	IO-470-L
Registered Owner:	MONIB ALI HOHANDISS	**Rated Power:**	285 Horsepower
Operator:		**Operating Certificate(s) Held:**	None
Operator Does Business As:		**Operator Designator Code:**	

Meteorological Information and Flight Plan

Conditions at Accident Site:	Instrument (IMC)	**Condition of Light:**	Day
Observation Facility, Elevation:	SBA ,10 ft msl	**Distance from Accident Site:**	8 Nautical Miles
Observation Time:	11:25 Local	**Direction from Accident Site:**	93°
Lowest Cloud Condition:	Unknown	**Visibility**	6 miles
Lowest Ceiling:	Overcast	**Visibility (RVR):**	
Wind Speed/Gusts:	8 knots /	**Turbulence Type Forecast/Actual:**	/
Wind Direction:	120°	**Turbulence Severity Forecast/Actual:**	/
Altimeter Setting:	29 inches Hg	**Temperature/Dew Point:**	16°C / 15°C
Precipitation and Obscuration:	N/A - None - Fog		
Departure Point:	LONG BEACH , CA (LGB)	**Type of Flight Plan Filed:**	IFR
Destination:	SANTA BARBARA , CA (SBA)	**Type of Clearance:**	IFR
Departure Time:	10:24 Local	**Type of Airspace:**	Class C

Airport Information

Airport:	SANTA BARBARA MUNICIPAL SBA	**Runway Surface Type:**	Asphalt
Airport Elevation:	10 ft msl	**Runway Surface Condition:**	Dry
Runway Used:	7	**IFR Approach:**	ILS
Runway Length/Width:	6052 ft / 150 ft	**VFR Approach/Landing:**	

Wreckage and Impact Information

Crew Injuries:	1 Fatal	**Aircraft Damage:**	Destroyed
Passenger Injuries:		**Aircraft Fire:**	None
Ground Injuries:	N/A	**Aircraft Explosion:**	None
Total Injuries:	1 Fatal	**Latitude, Longitude:**	34.499423,-120.119682(est)

Administrative Information

Investigator In Charge (IIC):	Parker, Richard
Additional Participating Persons:	THOMAS MANGUM; VAN NUYS , CA CHARLES R MOTE; SAN DIEGO , CA DON F KNUTSON; WICHITA , KS R. S BOYLE; MOBILE , AL
Original Publish Date:	January 30, 1998
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=29590