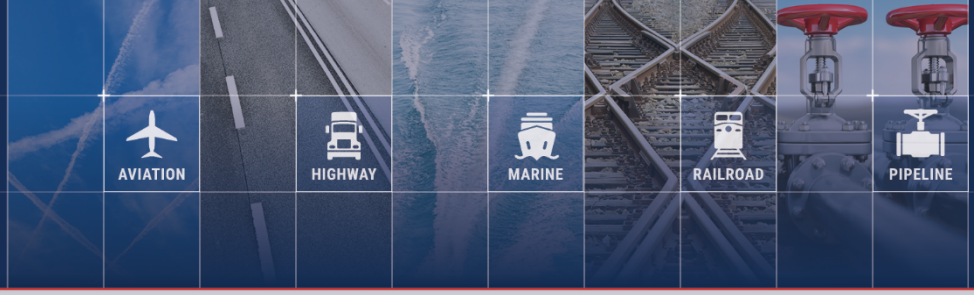

Aviation Investigation Final Report

Location:	SANTA PAULA, California	**Accident Number:**	LAX02FA200
Date & Time:	June 7, 2002, 10:10 Local	**Registration:**	N13GT
Aircraft:	Grumman American AA-5B	**Aircraft Damage:**	Destroyed
Defining Event:		**Injuries:**	2 Fatal
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The airplane collided with mountainous terrain during the climb to cruise. A witness stated that the airplane departed runway 22 and began a left crosswind turn at an estimated altitude of 300 feet. The airplane continued the left turn to downwind, and it was close to the mountains. The witness lost sight of the airplane due to low clouds. The witness reacquired the airplane for a few seconds when it was abeam the west end of the airport. He could see that the airplane was maintaining a high climb angle, but he became very concerned because the airplane was now even closer to the mountains. The airplane appeared to be angling towards the mountains. He could not see the mountaintops, but he could see a patch of blue sky ahead of the airplane over the mountains. The airplane collided with a 55-degree slope about 200 feet below the crest of a ridgeline that ran in a northeast-southwest direction. In a post accident examinatinon, control continuity was established and no engine anomalies were noted. A routine aviation weather report for an airport 9 miles west taken 15 minutes prior to the accident reported 800 feet overcast and a visibility of 2 1/2 miles in mist.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: the pilot's attempted VFR flight into instrument conditions and failure to maintain clearance with the terrain.

Findings

Occurrence #1: IN FLIGHT COLLISION WITH TERRAIN/WATER
Phase of Operation: CLIMB - TO CRUISE

Findings
1. TERRAIN CONDITION - MOUNTAINOUS/HILLY
2. WEATHER CONDITION - OBSCURATION
3. (C) VFR FLIGHT INTO IMC - ATTEMPTED - PILOT IN COMMAND
4. (C) ALTITUDE/CLEARANCE - NOT MAINTAINED - PILOT IN COMMAND

Factual Information

HISTORY OF FLIGHT

On June 7, 2002, about 1010 Pacific daylight time, a Grumman American AA-5B, N13GT, collided with terrain during the climb to cruise after departing from Santa Paula, California. The commercial pilot/owner was operating the airplane under the provisions of 14 CFR Part 91. The pilot and one passenger sustained fatal injuries; the airplane was destroyed. The personal cross-country flight departed Santa Paula about 1000, en route to Laughlin/Bullhead International Airport, Bullhead City, Arizona. Visual meteorological conditions prevailed, and no flight plan had been filed. The primary wreckage was at 34 degrees 19.9 minutes north latitude and 119 degrees 01.29 minutes west longitude.

A witness familiar with the pilot and the airplane observed the airplane during the takeoff roll. The airplane departed runway 22 and began a left crosswind turn at an estimated altitude of 300 feet. The airplane continued the left turn to downwind, but the witness became concerned because the airplane was close to the mountains. He had never seen this pilot fly this close to the mountains.

The witness lost sight of the airplane due to clouds. The witness reacquired the airplane for a few seconds when it was abeam the west end of the airport. He could see that the airplane was maintaining a high climb angle, but he became very concerned because the airplane was now even closer to the mountains. The airplane appeared to be angling towards the mountains. He could not see the mountaintops, but he could see a patch of blue sky ahead of the airplane over the mountains.

About 1100, an employee of the property owner observed the wreckage and reported it to the National Transportation Safety Board.

PERSONNEL INFORMATION

A review of Federal Aviation Administration (FAA) airman records revealed that the pilot held a commercial certificate with airplane single engine and multiengine land ratings. He also held an instrument airplane rating. The pilot held a third-class medical certificate issued on February 22, 2002. It had the limitations that the pilot must wear corrective lenses.

A family member submitted a Pilot/Operator Aircraft Accident Report (NTSB Form 6120.1/2). It indicated a total flight time of about 3,000 hours. The pilot logged 38 hours in the last 90 days, and 20 in the last 30 days. He had about 760 hours in this make and model.

AIRCRAFT INFORMATION

The airplane was a Grumman American AA-5B, serial number AA5B0457. The pilot/operator report listed a total airframe time of 3,055 hours. It listed an annual inspection dated May 25, 2002. It listed an airplane total time of 3,055 hours, and a tachometer time of 978.

The engine was a Textron Lycoming O-360-A4K engine, serial number L22846-36A. Total time on the engine at the annual inspection was 978 hours. The hour meter read 981.1 at the accident scene.

METEOROLOGICAL INFORMATION

The nearest official reporting station was Camarillo, California, which was 170 degrees at 9 miles from the accident site. An aviation routine weather report (METAR) for Camarillo was issued at 0955. It stated: skies 800 feet overcast; visibility 2 1/2 miles mist; winds from 230 degrees at 3 knots; temperature 62 degrees Fahrenheit; dew point 61 degrees Fahrenheit; and altimeter 29.84 inHg.

WRECKAGE AND IMPACT INFORMATION

The airplane collided with a 55-degree slope about 200 feet below the crest of a ridgeline that ran in a northeast-southwest direction. The principal impact crater (PIC) was the first identified point of contact. The PIC had a straight ground scar run through it that was approximately the length of the airplane's wingspan. The ground scar angled a few degrees down to the right from the horizontal The debris field went from the PIC toward the main wreckage, which was approximately 50 feet downhill from the PIC. The left flap and aileron separated from the left wing. They were in the debris field about 30 feet uphill from the left wing.

A rock outcropping and miscellaneous debris was between the PIC and the main wreckage. The main wreckage consisted of the fuselage, right wing, the inboard portion of the left wing, and the engine. The fuselage came to rest upright and pointing 170 degrees.

The engine and cowling bent back and to the left.

Both wings sustained aft leading edge crush damage. Both wings exhibited dirty scrapes and gouges on their lower surfaces. The right wing was in its relative position, but inverted. The right wing's flap and aileron remained attached. The outer portion of the left wing separated at a production spice. This piece of wing was inverted, and 6 feet from left wing.

The fuselage buckled along its entire length. The empennage sustained much less damage than the front of the airplane.

MEDICAL AND PATHOLOGICAL INFORMATION

The Ventura County Coroner completed an autopsy. The FAA Toxicology and Accident Research Laboratory, Oklahoma City, Oklahoma, performed toxicological testing of specimens of the pilot. The results of analysis of the specimens were negative for carbon monoxide, cyanide, volatiles, and tested drugs. An additional clinical report noted the following results: 11 (mg/dl) glucose detected in vitreous, 162 (mg/dl) glucose detected in urine, and 8.3% hemoglobin A1C detected in blood.

TESTS AND RESEARCH

The Safety Board investigator-in-charge (IIC), the FAA accident coordinator, and a representative from Textron Lycoming examined the wreckage at Aircraft Recovery Service, Little Rock, California, on June 18, 2002.

Control continuity was established for the elevator and rudder. The ailerons had multiple disconnects; however, investigators accounted for the control surfaces and their operating mechanisms.

Both propeller blades exhibited S-bends and leading edge gouges.

The engine was removed by the investigators and slung from a hoist. They removed and examined the top spark plugs. None of the plugs exhibited mechanical damage, and their condition corresponded to normal operation according to the Champion Aviation Check-A-Plug AV-27 Chart.

The crankshaft was bent, which prevented a full 360 degrees of rotation. Investigators removed the flange, and manually rotated the crankshaft. They obtained thumb compression on all cylinders in firing order. All valves moved in sequence and exhibited a similar amount of lift. Investigators manually rotated the magnetos, and both magnetos produced spark at all posts. The carburetor sustained mechanical damaged. The oil screens and fuel screens were clean.

The fuel selector valve was in the right main position.

ADDITIONAL INFORMATION

The IIC released the wreckage to the owner's representative.

Pilot Information

Certificate:	Commercial	**Age:**	74,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:**	February 22, 2002
Occupational Pilot:	UNK	**Last Flight Review or Equivalent:**	March 11, 2002
Flight Time:	2099 hours (Total, all aircraft), 764 hours (Total, this make and model), 1987 hours (Pilot In Command, all aircraft), 38 hours (Last 90 days, all aircraft), 20 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Grumman American	**Registration:**	N13GT
Model/Series:	AA-5B	**Aircraft Category:**	Airplane
Year of Manufacture:		**Amateur Built:**	
Airworthiness Certificate:	Normal	**Serial Number:**	AA5B-0457
Landing Gear Type:	Tricycle	**Seats:**	4
Date/Type of Last Inspection:	May 25, 2002 Annual	**Certified Max Gross Wt.:**	2400 lbs
Time Since Last Inspection:	0 Hrs	**Engines:**	1 Reciprocating
Airframe Total Time:	3055 Hrs	**Engine Manufacturer:**	Lycoming
ELT:	Installed, activated, did not aid in locating accident	**Engine Model/Series:**	O-360-A4K
Registered Owner:	Charles F. Curtix	**Rated Power:**	180 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:	CMA,75 ft msl	**Distance from Accident Site:**	9 Nautical Miles
Observation Time:	09:55 Local	**Direction from Accident Site:**	170°
Lowest Cloud Condition:		**Visibility**	2.5 miles
Lowest Ceiling:	Overcast / 800 ft AGL	**Visibility (RVR):**	
Wind Speed/Gusts:	3 knots / 0 knots	**Turbulence Type Forecast/Actual:**	/
Wind Direction:	230°	**Turbulence Severity Forecast/Actual:**	/
Altimeter Setting:	29.84 inches Hg	**Temperature/Dew Point:**	17°C / 16°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	SANTA PAULA, CA (SZP)	**Type of Flight Plan Filed:**	None
Destination:	BULLHEAD INTL, AZ (IFP)	**Type of Clearance:**	None
Departure Time:	10:00 Local	**Type of Airspace:**	Class G

Wreckage and Impact Information

Crew Injuries:	1 Fatal	**Aircraft Damage:**	Destroyed
Passenger Injuries:	1 Fatal	**Aircraft Fire:**	None
Ground Injuries:	N/A	**Aircraft Explosion:**	None
Total Injuries:	2 Fatal	**Latitude, Longitude:**	34.331665,-119.021385

Administrative Information

Investigator In Charge (IIC):	Plagens, H.
Additional Participating Persons:	Frank L Motter; Federal Aviation Administration; Van Nuys, CA Mark Platt; Textron Lycoming; Williamsport, PA
Original Publish Date:	September 29, 2004
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=54960