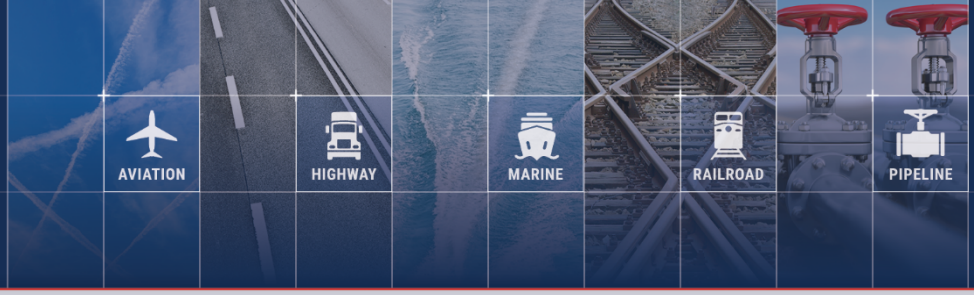

Aviation Investigation Final Report

Location:	GORMAN, California	**Accident Number:**	LAX98LA156
Date & Time:	May 13, 1998, 11:35 Local	**Registration:**	N11867
Aircraft:	Bellanca 7GCBC	**Aircraft Damage:**	Destroyed
Defining Event:		**Injuries:**	1 Fatal
Flight Conducted Under:	Part 91: General aviation - Aerial observation		

Analysis

Ground witnesses observed the aircraft flying uphill in mountainous terrain below the clouds at an estimated 100 to 200 feet above the ground in a northerly direction. The aircraft impacted an upsloping hill heading in a westerly direction. The wreckage was confined in one area with little or no forward movement. The examination of the engine found the right magneto to be inoperative.

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 airspeed and an inadvertent stall while attempting to reverse direction in low cloud conditions in mountainous terrain

Findings

Occurrence #1: IN FLIGHT COLLISION WITH TERRAIN/WATER
Phase of Operation: MANEUVERING - TURN TO REVERSE DIRECTION

Findings
1. (F) WEATHER CONDITION - LOW CEILING
2. (C) IN-FLIGHT PLANNING/DECISION - IMPROPER - PILOT IN COMMAND
3. (C) AIRSPEED(VS) - NOT MAINTAINED - PILOT IN COMMAND
4. STALL

Occurrence #2: IN FLIGHT COLLISION WITH TERRAIN/WATER
Phase of Operation: DESCENT - UNCONTROLLED

Findings
5. TERRAIN CONDITION - MOUNTAINOUS/HILLY

Factual Information

HISTORY OF FLIGHT

On May 13, 1998, at 1135 hours Pacific daylight time, a Bellanca 7GCBC, N11867, was destroyed when it impacted the side of a mountain 2 miles south of Gorman, California. The commercial pilot sustained fatal injuries and no property damage was incurred. The flight departed Santa Paula, California, approximately 1045 on a pipeline inspection flight. Instrument meteorological conditions prevailed along portions of the route of flight and no flight plan was filed.

Two witnesses stated that, about 2 minutes prior to impact, they observed the aircraft flying in a northerly direction at an estimated altitude of 100 to 200 feet agl, but did not observe the aircraft at the time of impact. They also stated that there was a solid overcast above the observed route of flight at an estimated altitude of 500 feet agl. The aircraft was flying upslope in a shallow canyon that terminated in a ridgeline approximately 5 miles ahead of the point of impact. The general orientation of this canyon is 350 degrees magnetic.

PERSONNEL INFORMATION

The pilot held a commercial pilot certificate with single engine land and instrument airplane ratings. His logbook indicated that he had 14,300 hours total flight time with 12,000 in the Bellanca 7GCBC. His last medical examination was on February 25, 1998, at which time he was issued a second-class medical certificate with a requirement to possess reading glasses while piloting an airplane. His last biennial flight review (BFR) was completed on April 10, 1997, in a Bellanca 7GCBC aircraft.

AIRCRAFT INFORMATION

Federal Aviation Administration (FAA) records indicated that the aircraft was a 1972 Bellanca 7GCBC powered by a Lycoming O-320-A2D, 4 cylinder, reciprocating engine rated at 150 horsepower. Aircraft records indicated a total airframe time of 23,563 hours. The aircraft was being maintained on a 100-hour inspection program and had flown 60 hours since the last inspection. The engine, S/N L-48022-27A, had a total time of 2,200 hours since the last overhaul. There were no outstanding Airworthiness Directives (AD's) or recent maintenance activity evident in the aircraft records.

METEOROLOGICAL INFORMATION

On site witnesses reported that, at the time of the accident, the weather was overcast, approximately 500 feet agl, with visibility in excess of 10 statute miles and a light surface wind

from the north. They also estimated the free air temperature to be between 65 and 70 degrees Fahrenheit. They also observed scattered light rain showers in the local area.

WRECKAGE AND IMPACT INFORMATION

The aircraft wreckage was found intact on the side of a slope. The wings had collapsed downward but were still connected to the fuselage at their normal attach points. The left wing was bent rearward approximately 15-20 degrees. The aircraft had impacted the ground in a left wing low and slightly nose down attitude on a heading that was approximately 90 degrees to the left of the original flight path. There was no indication of any significant forward movement following the initial impact.

There were no shoulder harnesses installed in the aircraft, although the normal attach points were present.

The engine was connected to the airframe through the engine mount and had sustained minor damage. All flight and engine control systems were intact, as was the engine ignition system. The propeller was attached to the engine flange and exhibited a slight rearward bend to one blade (3-5 degrees) just outboard of the quarter span. Neither blade exhibited the abrasions or deformations. There was fuel in both outboard wing tanks and the carburetor float bowl and accelerator pump-well both contained fuel. The ELT was found armed and activated.

MEDICAL AND PATHOLOGICAL INFORMATION

The Kern County Coroner gave a negative report for carbon monoxide, ethanol, debilitating drugs, and cyanide.

TEST AND RESEARCH INFORMATION

During a teardown examination, the engine rotated freely when turned by hand with no apparent internal malfunctions. Normal valve tappet motion and thumb compression were verified for all cylinders. The engine contained an amount of oil and all spark plugs had a normal point gap. When compared to the Lycoming color chart, the sparkplugs did not show evidence of either excessively lean or rich mixture conditions. During the engine ignition check, the left magneto was observed to operate normally and fired the proper plugs at 25 degrees BTDC. The right magneto did not provide ignition spark to any of the plugs connected to it.

The right magneto was subsequently dismantled for internal inspection and it was found that the point gap had closed to zero. The cam follower that opens the points was not excessively worn and showed no evidence of overheating. There was no indication on the cam wiper or in the point cavity of excessive heat. In addition, the sparkplugs that were fired by the right magneto were about the same in color and condition as the plugs that were fired by the left magneto. Also, both magnetos were advanced to the limit of their mechanical stops. The

noise suppressor on the P-lead was found free floating and not attached to the magneto housing due to a missing screw. It was not grounding the P-lead due to external insulation.

ADDITIONAL INFORMATION

On May 18, 1998, the aircraft wreckage and all documentation found inside the aircraft at the crash site were released to the custody of Aircraft Recovery Services, Compton, California.

Pilot Information

Certificate:	Commercial	**Age:**	52,Male
Airplane Rating(s):	Single-engine land	**Seat Occupied:**	Front
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 2 Valid Medical--w/ waivers/lim	**Last FAA Medical Exam:**	February 25, 1998
Occupational Pilot:	Yes	**Last Flight Review or Equivalent:**	
Flight Time:	14300 hours (Total, all aircraft), 12000 hours (Total, this make and model), 13300 hours (Pilot In Command, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Bellanca	**Registration:**	N11867
Model/Series:	7GCBC 7GCBC	**Aircraft Category:**	Airplane
Year of Manufacture:		**Amateur Built:**	
Airworthiness Certificate:	Normal	**Serial Number:**	336-72
Landing Gear Type:	Tailwheel	**Seats:**	2
Date/Type of Last Inspection:	April 28, 1998 100 hour	**Certified Max Gross Wt.:**	2080 lbs
Time Since Last Inspection:	60 Hrs	**Engines:**	1 Reciprocating
Airframe Total Time:	23563 Hrs	**Engine Manufacturer:**	Lycoming
ELT:	Installed, activated, aided in locating accident	**Engine Model/Series:**	O-320-A2D
Registered Owner:	TEQ CORPORATION	**Rated Power:**	150 Horsepower
Operator:		**Operating Certificate(s) Held:**	None
Operator Does Business As:	PIPELINE PATROL	**Operator Designator Code:**	

Meteorological Information and Flight Plan

Conditions at Accident Site:	Instrument (IMC)	**Condition of Light:**	Day
Observation Facility, Elevation:		**Distance from Accident Site:**	
Observation Time:		**Direction from Accident Site:**	
Lowest Cloud Condition:	Scattered / 200 ft AGL	**Visibility**	10 miles
Lowest Ceiling:	Overcast / 500 ft AGL	**Visibility (RVR):**	
Wind Speed/Gusts:	10 knots /	**Turbulence Type Forecast/Actual:**	/
Wind Direction:	360°	**Turbulence Severity Forecast/Actual:**	/
Altimeter Setting:		**Temperature/Dew Point:**	
Precipitation and Obscuration:	Light - Showers - Rain		
Departure Point:	SANTA PAULA , CA (SZP)	**Type of Flight Plan Filed:**	None
Destination:	BAKERSFIELD , CA (L-45)	**Type of Clearance:**	None
Departure Time:	10:45 Local	**Type of Airspace:**	Class G

Airport Information

Airport:		**Runway Surface Type:**	
Airport Elevation:		**Runway Surface Condition:**	
Runway Used:	0	**IFR Approach:**	None
Runway Length/Width:		**VFR Approach/Landing:**	Forced landing;Valley/terrain following

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:**	34.860069,-118.870033(est)

Administrative Information

Investigator In Charge (IIC):	Armstrong, Weldon
Additional Participating Persons:	ROB GATES; VAN NUYS , CA MARK W PLATT; VAN NUYS , CA
Original Publish Date:	February 11, 2000
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=30083