



# Aviation Investigation Final Report

<b>Location:</b>	Long Beach, California	<b>Accident Number:</b>	LAX02LA037
<b>Date &amp; Time:</b>	December 2, 2001, 11:21 Local	<b>Registration:</b>	N50554
<b>Aircraft:</b>	Bellanca 8KCAB	<b>Aircraft Damage:</b>	Destroyed
<b>Defining Event:</b>		<b>Injuries:</b>	1 Serious, 1 None
<b>Flight Conducted Under:</b>	Part 91: General aviation - Instructional		

## Analysis

The airplane impacted the ocean in an uncontrolled descent after experiencing a loss of control while maneuvering. The certified flight instructor (CFI) demonstrated a 4-point roll and transferred control of the airplane to the pilot under instruction (PUI) so that he could demonstrate the maneuver. Shortly after transferring control, the airplane's nose pitched down 20-30 degrees. The PUI asked the CFI if he was causing the nose to pitch down, to which the CFI responded in the negative. The CFI attempted to correct the nose down pitch but the control stick had no effect and the trim would not budge. Both the CFI and the PUI bailed out of the airplane before it impacted the ocean. The airplane was not recovered, and the reason for the loss of control was not determined.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: the loss of aircraft control while maneuvering for undetermined reasons.

### Findings

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

#### Findings

1. (C) REASON FOR OCCURRENCE UNDETERMINED
2. BAIL-OUT/EMERGENCY EJECTION - PERFORMED - FLIGHTCREW

-----

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

Findings

3. TERRAIN CONDITION - WATER

## Factual Information

On December 2, 2001, at 1121 Pacific standard time, a Bellanca 8KCAB, N50554, was destroyed during an uncontrolled descent into the Pacific Ocean near Long Beach, California. The certified flight instructor (CFI) received serious injuries and the commercial pilot under instruction (PUI) received minor injuries. Hart Air was operating the airplane, registered to a private individual, under the provisions of 14 CFR Part 91. Visual meteorological conditions prevailed for the instructional flight and a company flight plan had been filed. The local flight originated from Long Beach about 1035.

According to the CFI who was in the rear seat, he was observing the commercial pilot in the front seat as part of a 30-day recurrency checkout. At 4,500 feet msl, the flight instructor demonstrated a 4-point roll and then asked the PUI to conduct one. The CFI transferred control to the PUI and shortly thereafter, the nose dropped 20-30 degrees below the horizon. The PUI asked the CFI if he was doing that intentionally, to which the CFI replied no. The CFI then pulled the control stick aft to no avail. He told the PUI to try the trim, but it would not budge. The CFI then told the PUI to bail out twice. The PUI jettisoned the door and bailed out. The CFI struggled over the seat before reaching the door. He pulled himself out and pulled his parachute ripcord just prior to impacting the water. The CFI estimated that the time between the loss of airplane control and impact with the water was 30-45 seconds.

An eyewitness, located approximately 3 miles from the accident site, reported seeing several single engine airplanes conducting flight maneuvers offshore. All of the airplanes were flying above what the witness estimated to be 4,000 feet above ground level (agl). His attention was drawn to one of the airplanes, which had descended to approximately 2,000 feet agl. According to the witness, the airplane was making steep turns, climbs, and descents, and he believed the airplane was "too low for those types of maneuvers." The witness observed a parachute open in the sky adjacent to the airplane, while the airplane continued to fly in the aforementioned manner. Once the airplane reached approximately 500 feet, the airplane dove "nearly straight down towards the ocean." The witness then observed the airplane pull up within 6 feet of the ocean surface. The airplane "climbed nearly vertical to approximately 300 feet, rolled over into a dive and impacted the water at a high rate of speed."

The airplane accumulated a total of 1,786 hours, and underwent its last annual inspection 40 hours prior to the accident. The airplane was not recovered.

## Flight instructor Information

<b>Certificate:</b>	Airline transport; Flight instructor	<b>Age:</b>	54, Male
<b>Airplane Rating(s):</b>	Single-engine land; Single-engine sea; Multi-engine land	<b>Seat Occupied:</b>	Rear
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	
<b>Instrument Rating(s):</b>	Airplane	<b>Second Pilot Present:</b>	Yes
<b>Instructor Rating(s):</b>	Airplane single-engine	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 2 Valid Medical-w/ waivers/lim	<b>Last FAA Medical Exam:</b>	August 1, 2001
<b>Occupational Pilot:</b>	Yes	<b>Last Flight Review or Equivalent:</b>	June 1, 2001
<b>Flight Time:</b>	10000 hours (Total, all aircraft), 800 hours (Total, this make and model), 180 hours (Last 90 days, all aircraft), 50 hours (Last 30 days, all aircraft), 5 hours (Last 24 hours, all aircraft)		

## Student pilot Information

<b>Certificate:</b>	Commercial	<b>Age:</b>	Male
<b>Airplane Rating(s):</b>	Single-engine land	<b>Seat Occupied:</b>	Front
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	
<b>Instrument Rating(s):</b>	Airplane	<b>Second Pilot Present:</b>	Yes
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 2 Valid Medical-no waivers/lim.	<b>Last FAA Medical Exam:</b>	August 16, 2000
<b>Occupational Pilot:</b>	UNK	<b>Last Flight Review or Equivalent:</b>	July 11, 2000
<b>Flight Time:</b>	908 hours (Total, all aircraft), 150 hours (Total, this make and model), 881 hours (Pilot In Command, all aircraft), 7 hours (Last 90 days, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Bellanca	<b>Registration:</b>	N50554
<b>Model/Series:</b>	8KCAB	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	542-79
<b>Landing Gear Type:</b>	Tailwheel	<b>Seats:</b>	2
<b>Date/Type of Last Inspection:</b>	September 4, 2001 Annual	<b>Certified Max Gross Wt.:</b>	1800 lbs
<b>Time Since Last Inspection:</b>	40 Hrs	<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	1786 Hrs at time of accident	<b>Engine Manufacturer:</b>	Lycoming
<b>ELT:</b>	Installed	<b>Engine Model/Series:</b>	AEIO-360-HIA
<b>Registered Owner:</b>	Jacques C. Naviaux	<b>Rated Power:</b>	180 Horsepower
<b>Operator:</b>	Hart Air	<b>Operating Certificate(s) Held:</b>	None

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Visual (VMC)	<b>Condition of Light:</b>	Day
<b>Observation Facility, Elevation:</b>	LGB,60 ft msl	<b>Distance from Accident Site:</b>	
<b>Observation Time:</b>	11:45 Local	<b>Direction from Accident Site:</b>	
<b>Lowest Cloud Condition:</b>	Scattered / 4000 ft AGL	<b>Visibility</b>	10 miles
<b>Lowest Ceiling:</b>	None	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	5 knots /	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	180°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>	30.1 inches Hg	<b>Temperature/Dew Point:</b>	16°C / 10°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	Long Beach, CA (LGB )	<b>Type of Flight Plan Filed:</b>	Company VFR
<b>Destination:</b>		<b>Type of Clearance:</b>	None
<b>Departure Time:</b>	10:35 Local	<b>Type of Airspace:</b>	Class G

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 Serious, 1 None	<b>Aircraft Damage:</b>	Destroyed
<b>Passenger Injuries:</b>		<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	1 Serious, 1 None	<b>Latitude, Longitude:</b>	33.817779,-118.151664

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Petterson, G.
<b>Additional Participating Persons:</b>	Bob Franklyn; Federal Aviation Administration; Long Beach, CA
<b>Original Publish Date:</b>	September 29, 2004
<b>Last Revision Date:</b>	
<b>Investigation Class:</b>	<a href="#">Class</a>
<b>Note:</b>	
<b>Investigation Docket:</b>	<a href="https://data.ntsb.gov/Docket?ProjectID=53854">https://data.ntsb.gov/Docket?ProjectID=53854</a>

The National Transportation Safety Board (NTSB) is an independent federal agency charged by Congress with investigating every civil aviation accident in the United States and significant events in other modes of transportation—railroad, transit, highway, marine, pipeline, and commercial space. We determine the probable causes of the accidents and events we investigate, and issue safety recommendations aimed at preventing future occurrences. In addition, we conduct transportation safety research studies and offer information and other assistance to family members and survivors for each accident or event we investigate. We also serve as the appellate authority for enforcement actions involving aviation and mariner certificates issued by the Federal Aviation Administration (FAA) and US Coast Guard, and we adjudicate appeals of civil penalty actions taken by the FAA.

The NTSB does not assign fault or blame for an accident or incident; rather, as specified by NTSB regulation, “accident/incident investigations are fact-finding proceedings with no formal issues and no adverse parties ... and are not conducted for the purpose of determining the rights or liabilities of any person” (Title 49 *Code of Federal Regulations* section 831.4). Assignment of fault or legal liability is not relevant to the NTSB’s statutory mission to improve transportation safety by investigating accidents and incidents and issuing safety recommendations. In addition, statutory language prohibits the admission into evidence or use of any part of an NTSB report related to an accident in a civil action for damages resulting from a matter mentioned in the report (Title 49 *United States Code* section 1154(b)). A factual report that may be admissible under 49 *United States Code* section 1154(b) is available [here](#).