



|   |             |                                    |                                  |                                      |        |
|---|-------------|------------------------------------|----------------------------------|--------------------------------------|--------|
|   |             | NTSB ID: LAX96FA042                |                                  | Aircraft Registration Number: N8920M |        |
|   |             | Occurrence Date: 11/08/1995        |                                  | Most Critical Injury: Fatal          |        |
|   |             | Occurrence Type: Accident          |                                  | Investigated By: NTSB                |        |
| Location/Time   |             |                                    |                                  |                                      |        |
| Nearest City/Place<br>KNEELAND  | State<br>CA | Zip Code<br>95549                  | Local Time<br>1748               | Time Zone<br>PST                     |        |
| Airport Proximity: Off Airport/Airstrip   |             | Distance From Landing Facility: 25 |                                  |                                      |        |
| Aircraft Information Summary  |             |                                    |                                  |                                      |        |
| Aircraft Manufacturer<br>Beech  |             | Model/Series<br>S35 /S35           |                                  | Type of Aircraft<br>Airplane         |        |
| Revenue Sightseeing Flight: No  |             |                                    | Air Medical Transport Flight: No |                                      |        |
| Narrative   |             |                                    |                                  |                                      |        |
| Brief narrative statement of facts, conditions and circumstances pertinent to the accident/incident:  |             |                                    |                                  |                                      |        |
| <p>HISTORY OF FLIGHT</p> <p>On November 8, 1995, at 1748 hours Pacific standard time, a Beech Bonanza S-35, N8920M, collided with terrain after being cleared for the ILS RWY 32 approach to the Arcata, California, airport. The aircraft was destroyed and the instrument rated private pilot and his three passengers received fatal injuries. The aircraft was being operated as a personal flight by a private owner when the accident occurred. The flight originated in Oakland, California, about 1620 on the same day. Instrument meteorological conditions prevailed at the time and an IFR flight plan was filed but not activated.</p> <p>Prior to departure, the pilot received an in-person weather briefing and filed an IFR flight plan for a flight from Oakland to Arcata. Before takeoff the pilot requested a VFR departure in lieu of an IFR release. While en route to his destination, however, the pilot contacted Seattle air route traffic control center (ARTCC) and requested an en route IFR clearance to his destination. The pilot was vectored to intercept the approach course and had been cleared for the ILS runway 32 approach at Arcata when radar and radio communications were lost at 1748.</p> <p>A witness standing approximately 300 yards from the accident site reported hearing the aircraft engine accelerate just before hearing the sound of what he thought could have been a crash. Another witness driving in his truck about 250 yards from the site reported seeing aircraft lights through a break in the tree line. He stated that because of darkness he was unable to see the aircraft itself. (A record of these interviews is appended to this report.)</p> <p>Both witnesses described the weather conditions at the time of the accident as foggy with misting precipitation. They also said they could not see any stellar illumination through the existing cloud cover. According to a sun and moon illumination table, the accident occurred during nautical twilight. (A sun and moon illumination computation is appended to this report.)</p> <p>ARTCC radar data revealed that the aircraft had been tracking about 0.5 miles left of course for about 1 minute paralleling the Arcata localizer on a magnetic course of 315 degrees. The aircraft position was southeast of Knees and northwest of Yeager intersections. While descending from 8,000 feet msl, the aircraft turned left about 30 degrees which was followed immediately by a right turn of approximately 270 degrees. During the latter portion of the right turn the radius of turn began to decrease until approximately 12 seconds later the aircraft disappeared from radar. The aircraft wreckage was found in proximity to the final radar return. The final radar return reported an encoded altitude of 5,700 feet msl at north latitude 40 degrees 38 minutes 32 seconds and west longitude 123 degrees 51 minutes 52 seconds. The ILS approach specifies crossing the Knees intersection inbound at no lower than 5,200 feet msl. (Radar data and ILS RWY 32 approach plate are appended to this report.)</p> |             |                                    |                                  |                                      |        |
| FACTUAL REPORT - AVIATION   |             |                                    |                                  |                                      |        |
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## Narrative (Continued)

## PERSONNEL INFORMATION

According to FAA Airman Records, the pilot was certificated and rated to conduct a not-for-hire instrument flight in this category and class of aircraft.

A review of the pilot's logbook revealed four series of instrument approaches flown during May, 1995. Although the complete entries were difficult to read, the legible portions indicate at least six instrument approaches had been performed. On July 18, 1995, the pilot made an entry indicating that he had performed a VOR check and had met his night currency requirement with six full stop landings. In addition, the pilot logged approximately 99 hours of actual instrument time, 148 hours of simulated instrument time, and 41 hours of simulator time. The pilot also had logged approximately 11 hours of actual instrument time since May 4, 1995.

The flight instructor who administered the pilot's last biennial flight review was interviewed by telephone. He described the pilot's performance as being very meticulous. He said the pilot satisfactorily performed steep turns, slow flight, stalls, and simulated emergencies with only one engine operative including Vmc demonstrations with the critical engine inoperative. (A record of this telephone conversation is appended to this report.)

According to the pilot's logbook, on May 4, 1995, he flew 2.5 hours with a safety pilot. During that flight he logged 2.5 hours (hooded). The safety pilot was interviewed by telephone and noted the following discrepancies which occurred during the flight. He stated that while under the hood the pilot did not verify identifiers when tuning navigational aids and that he sometimes turned in the wrong direction. He also reported that although the pilot had undergone what he described as comprehensive instrument training, at times he felt the pilot was only marginally in control of the aircraft. Overall he reported that he believed the pilot had control problems when flying in IFR conditions but that he was conscientious and worked very hard on developing and maintaining his piloting skills. (A record of this telephone conversation is appended to this report.)

One of the passengers was a non-instrument rated, certificated private pilot who, according to a letter found in the aircraft wreckage, was onboard for familiarization purposes. Although all four seats were found and identified, it was not determined where the pilot-rated passenger had been seated at the time of the accident. All four occupants had been ejected from the aircraft and the physical evidence established the two left side occupants. (A copy of this letter is appended to this report.)


## AIRCRAFT INFORMATION

According to current FARs, the aircraft delivery documents, subsequent aircraft, engine and propeller logbook entries, and from the FAA inspectors who inspected these documents, the aircraft was equipped for flight under instrument conditions. A static system check was last completed on March 15, 1995.

The aircraft maintenance records which were reviewed by FAA airworthiness inspectors showed that all applicable airworthiness directives (AD's) had been recorded as having been completed. (A statement from an FAA FSDO airworthiness inspector is appended to this report.)

According to the aircraft logbook, FAA form 337 and STC SA5209SW-D, the aircraft was equipped with an S-Tec System 50 model ST-186-50 with an S-Tec 6406 directional gyro. (S-Tec supplement to POH, FAA Form 337, STC and equipment list with revised weight and balance are appended to this report.)

Because of the uncertainty of the occupants location on the right side of the aircraft, the manufacturer's representative computed several weight and balance scenarios. All the scenarios were found to be within the prescribed limits for weight and balance although the center of gravity was near the aft limit. (Weight and balance computation worksheets are appended to this report.)

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## Narrative (Continued)

## METEOROLOGICAL CONDITIONS

Prior to issuing the pilot a clearance to fly radar vectors to join the Arcata runway 32 localizer, Seattle Center advised the pilot that the 1659 weather at Arcata was: Sky partially obscured, measured 500 feet broken, 1500 feet broken; 0.75 miles visibility with light rain and fog; temperature 59 degrees Fahrenheit, dew point 58 degrees; winds from 160 degrees at 10 knots; altimeter setting 30.04 inches of mercury; runway 32 runway visual range (RVR) 6000 feet plus with fog obscuring 0.3 of the sky.

## AIDS TO NAVIGATION

The Arcata airport has an established ILS approach. The approach in use at the time of the accident was the Arcata ILS runway 32 approach. The Arcata ILS approach localizer is aligned on a 316-degree magnetic course to the approach end of runway 32 with a decision height (DH) of 418 feet msl on a descent angle of 3 degrees. There are two fan markers associated with the approach: a middle marker at .04 nautical miles from the approach end of the runway; and an outer marker is also located 4.6 nautical miles from the runway. The field elevation and touchdown zone for runway 32 are both reported as 218 feet. The Fortuna VOR is located 13.6 miles DME south of the inbound course. The junction of the 050 degree radial of the Fortuna VOR and the Arcata localizer radial define initial approach fix (IAF) at Knees intersection. The minimum localizer intercept altitude is 5,200 feet prior to reaching Knees intersection which is 15.8 DME miles from the approach end of runway 32. The minimum required minimum weather to initiate the approach is a 200-foot ceiling with 3/8 mile visibility. No procedure turn is required for straight-in approaches, or for aircraft flying the 20 DME arc to Yager intersection with an altitude at or above 6,000 feet. Yager intersection is located 28.9 DME miles from the approach end of runway 32.

The Safety Board requested a flight inspection of the approach aids be flown after the accident. The FAA reported finding no discrepancies associated with the approach.

## COMMUNICATIONS


Investigators reviewed a certified true copy of a Seattle ARTCC audio tape. The recorded copy was for November 8, 1995, between 1728 and 1803. The recording included the Seattle Center R-30 and D-30 positions. There were no specific time hacks for individual radio transmissions, but the tape was recorded in real time. The following is a summary of the radio communications between the Seattle Center and the pilot during that time.

The first contact during this period occurred when the pilot initiated a call and was asked to report his altitude by Seattle. He replied that he was level at 8,000 feet. Seattle requested that he make a position report when he was 30 miles south of the Fortuna VOR. He repeated the instructions in reply.

The pilot then reported his position as 30 miles south of the Fortuna VOR. Seattle acknowledged his report and instructed him to squawk 6306. He repeated the transponder code in reply. Seattle asked if he wanted radar vectors to the ILS runway 32 approach, he replied affirmatively. Seattle told him to fly heading 350 degrees to the Arcata 32 localizer, again he repeated the heading.

Seattle advised the pilot that the 0059 UTC was the latest weather available for Arcata and they would provide him with the weather if he needed it. He replied that he wanted the weather. In response Seattle reported the weather and he acknowledged. (For the full weather briefing see Meteorological Conditions in the Narrative section of this report.)

Seattle told the pilot to turn left to heading 345 degrees to join the runway 32 localizer and he repeated the instructions. Seattle then told him to join the Arcata localizer at or above 6,000

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feet and cleared him for the approach. He asked center to repeat the first part of the instructions and after so doing he repeated the instructions.

Seattle told the pilot that radar contact had been lost and to contact Arcata radio. When he did not acknowledge, Seattle made several more unsuccessful attempts to reestablish contact.

## WRECKAGE AND IMPACT INFORMATION

The accident site was located at latitude 40 degrees 38 minutes 25 seconds north, and longitude 123 degrees 52 minutes 40 seconds west at an elevation of about 2,200 msl, approximately 22 nautical miles from the approach end of runway 32. Emergency response personnel reported smelling fuel odors when they reached the crash site at 0945 on November 9, 1995. An examination of the accident site revealed impact depressions that corresponded to the right wing and aircraft nose. The ground scars and wreckage distribution were located along a 330-degree magnetic axis. The terrain sloped upward about 13 degrees from the initial impact point toward the center of the wreckage debris field.

All the flight control surfaces were located at the accident site. The flap drive cables were attached to the carrythrough, but the flap motor and drive assembly had separated from its mount. The left flap was attached to the wing and the flap jackscrew was extended 1.625 inches. The manufacturer's representative stated that this corresponded to a fully retracted flap position. The right flap actuator was also found in the fully retracted position. Not all flight control cables and pulleys were located, however. The cables that were found exhibited evidence of overload separation. The pulleys were examined and exhibited damage consistent with supporting a cable in tension. The pitch trim actuator was extended .75 inches corresponding to 6 degrees tab down or 6 degrees nose up. The pitch trim cable was found wrapped around the trim actuator capstan. The trim cable had separated along the forward span it had become entangled in the fuselage wreckage. The manufacturer's representative stated that due to breaks in the trim control cable the final position of the trim actuator should be considered unreliable.


The autopilot roll servo was found attached to the fuselage bottom. The bridle cable was wrapped around the capstan and each end was attached to an aileron flight control cable. The autopilot pitch servo was found attached to the fuselage bottom aft of the baggage compartment. The bridle cable was wrapped around the capstan and the ends were connected to a longitudinal control cable.

The control arm was a single, throw-over yoke assembly. A locking pin witness mark placed the yoke on the left side of the cockpit at impact. The optional autopilot disconnect and optional altitude hold interrupt buttons were installed in the yoke.

The four cabin seats were laid out and examined at the salvage facility. The damage to the seat adjustment cleats appeared to be uniform in that all the adjustment cleats' right sides were pulled out. The left front seat was missing its seatbelt and rear track attachment fittings. The seatbelt was found connected to the rear attachment fittings. The right front seat was found separated into four pieces, the seat base, seat back, seatbelt and rear attachment fittings. The right front seatbelt was fastened. The right rear seat was collapsed, but the seat components were still connected to each other. The seatbelt was not fastened and the seatbelt tongue was not located. The seatbelt itself was torn and exhibited shredded individual fibers. The left rear seat base was separated from the seat back. The seat bottom and belt were connected and the seatbelt was fastened.

The green position light and parts of the right tip tank were located in the initial impact area. The right ruddervator counterweight, nose gear, instrument panel, and the engine were located at the main wreckage site.

The left landing gear was attached to the forward carrythrough and the gear actuator was found in

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the up position. The left aileron was separated from the left wing. The wing section exhibited longitudinal crushing across the leading edge. According to the manufacturer's representative, the lateral control cable were traced from the fuselage out to the aileron bell crank and were properly connected and routed.

The right wing skin was separated from the wing spar, along with the aileron and flap control surfaces which had separated from their attachment points.

The instrument panel and the fuselage section of the forward carrythrough were found collapsed. The rear carrythrough had separated from both wings. The rear fuselage in the rear seat area was collapsed over itself.

The stabilizers were still attached to the empennage and both ruddervators were still attached. Both ruddervator counterweights were located at the accident site. The flight control cables to the ruddervators were traced from the rear carrythrough to the control surface attachment point. According to the manufacturer's representative, the cables were properly connected and routed.

The engine was visually inspected but not disassembled. The case exhibited impact damage. The right half of the case was cracked and the alternator was found to have been crushed into the number five cylinder. A section of the right case was separated, exposing the alternator drive gear. The number six, five, and three cylinders exhibited evidence of crushing in the area of the cylinder heads. All rocker box covers, except for the number two cylinder were found crushed or cracked. Cylinder cooling fins for all cylinders exhibited varying degrees of impact damage. The exhaust and intake push rods were not found with the number five cylinder.

The exposed portions of the top right spark plugs had been broken. The plugs were removed and visually inspected. There was little evidence of visible wear, however, the electrodes exhibited varying degrees of oil and water contamination. The top plug in the number one cylinder did have visible contamination.

Both magnetos had separated from their mounts and exhibited crushing. The fuel manifold valve had separated and the chamber above the screen was contaminated with foreign material. After removing the material, the screen appeared to be intact. The injector's ports and injector lines were damaged.

The accessory section case exhibited cracks. The starter was separated from its mount and the fuel pump mounting area was cracked. The oil cooler had separated at its mount. The vacuum pump adapter mount was also cracked.

The vacuum pump was removed for inspection and the drive cylinder was found intact. The top of the pump was removed and the inner core was found to exhibit multiple fractures. The vanes remained intact and some evidence of scoring was noted on the chamber walls. The splined drive coupler had separated, but neither fracture surface exhibited any rotational scarring.

The throttle body had separated from the fuel control unit. Both the mixture and throttle levers were broken. The fuel screen was removed and was found to be free of foreign material. The throttle body was crushed and the butterfly valve was trapped in the open position.

The air induction box and exhaust manifolds were crushed. The hot section of the exhaust exhibited evidence of ductile bending. At the site, grass that was found touching an exhaust hot section after the aircraft came to rest exhibited evidence of scorching and charring.

The top of the propeller governor had separated and the governor base was fractured. The bottom of the engine nose section had also fractured exposing the propeller governor drive gear. More than half of the engine oil sump was missing and the oil pick up assembly was found crushed against the

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engine case. The bottom of the aft engine case had fractured and separated, exposing the cam drive gear.

The engine manufacturer stated that in his opinion there was no evidence found that indicated any discrepancies which would have precluded normal engine operation prior to impact.

The propeller hub was found separated from the flange. A section of the crankshaft flange had also been fractured and separated. The crankshaft exhibited a 45-degree fracture surface at the junction of the crankshaft and flange. The first blade of the two-bladed propeller system had visible 'S' bending, with a forward 45-degree bend immediately prior to a tip separation. There were visible leading edge gouges and chordwise scoring near the broken tip. The face of the blade exhibited longitudinal scratches.

The second blade was bent back a few degrees from its original position with the bend originating just outside the hub. Outboard of the backward bend, a similar forward bend of a few degrees was also visible. There were visible leading edge gouges and chordwise scoring on and near the tip. The face of the blade exhibited longitudinal scratches.

## MEDICAL AND PATHOLOGICAL INFORMATION

The County of Humboldt Corner-Public Administrator's report dated November 22, 1995, was reviewed. No autopsy or toxicological screening had been performed on the pilot or any of the other occupants. Tissue samples were submitted to the FAA Civil Aeromedical Institute (CAMI) for toxicological screening.

The pilot was flying with a third-class medical certificate which required two annual medical panel reviews prior to each renewal. The additional reviews were a requirement resulting from quadruple coronary artery bypass surgery he had undergone on September 6, 1991. The surgery had had the effect of invalidating the third-class medical certificate the pilot held at that time.

After reviewing a series of postoperative tests and evaluations, the FAA Aeromedical Certification Division reissued the pilot a third-class flight physical on March 10, 1993. The pilot was advised that, in the future, his medical would be renewed provided that he continued to satisfactorily meet the medical standards established by the additional protocol.

In accordance with this requirement, the pilot held a third-class medical certificate with an issue date of February 25, 1994, stating "not valid after February 29, 1996." His previous medical certificate was issued on February 25, 1994, and stated "not valid after March 31, 1995." (The latest version of the pilot's eligibility letter is appended to this report.)

According to medical records on file with the Certification Division, the pilot had been symptom free since beginning his rehabilitation program. A drug regimen had been included in his rehabilitation, which now consisted of 60 mg of Mevacor and 325 mg of aspirin daily.

The pilot had undergone radial keratotomy on his right eye on July 17, 1984. After a postoperative medical evaluation and flight test, the pilot was granted a statement of demonstrated ability on October 16, 1985. (The statement of demonstrated ability is appended to this report.)

## TESTS AND RESEARCH

The aircraft was equipped with an S-Tec-50 two-axis autopilot model ST-186-50 installed in accordance with STC SA5209SW-D. The System 50 is a pure rate autopilot which obtains primary roll and turn rate input from an inclined rate gyro in the turn coordinator. An accelerometer and absolute pressure transducer provide primary pitch and pitch rate input.



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When the altitude hold mode is engaged an elevator trim sensor in the pitch servo will detect the elevator trim condition. The trim indicator lights on the autopilot head will then illuminate indicating the need for either up or down trim in order to restore a balanced condition. Once the aircraft is properly trimmed the lights will automatically extinguish.

The autopilot was equipped with an off/on/test master toggle switch. The test feature is normally operated during pre-flight. Once airborne, and the "on" position is selected, the autopilot will remain powered until electrical power is removed.

The throw over yoke control wheel was also equipped with an altitude hold engage/disengage press to activate control switch, as well as a similar autopilot disconnect switch. Both switches are placed on the top left side of the wheel where they are both most easily operated by the pilot's left thumb. Pressing the disconnect switch will remove electrical power to the unit until power is restored and the autopilot is reprogrammed by the pilot.

The altitude engage/disengage switch will temporarily disable the altitude function and extinguish the altitude light until the switch is depressed a second time. This restores the altitude light and function. The altitude function will then attempt to return the aircraft to the previously programmed altitude at re-engagement.

The autopilot did not have a direct mechanical connection to the flight controls, controlling movement of the ailerons and ruddervators through slip clutches that are built into the capstans. These clutches can be overpowered at the control wheel whenever the autopilot encounters 5- to 15-pounds of opposing force. The servos also contain an solenoid which can be used to completely disconnect the servos from the flight control system. An accelerometer in the pitch servo senses whenever a positive or negative G-load of 0.6 is encountered. Excessive G-forces do not disconnect, but rather interrupt its function only during the time the forces exceed that threshold. The roll function is not effected by G-forces.

Once the G-force drops below the threshold value the autopilot will then attempt to return to the aircraft to its last programmed altitude. For example, if the autopilot had been holding altitude and the opposing forces dropped below 0.6 G's, the autopilot would then attempt to return to its previously programmed altitude at a maximum rate of 750 fpm climb or descent. The autopilot will continue to make the correction until the aircraft is back on altitude providing the process does not generate excessive control loads or G-forces.

A manufacturer's representative stated that a loss of suction would result in precession of the vacuum powered gyro instruments. He was unable to say, however, in which direction the directional gyro might precess if, in fact, the direction could be reliably predicted. (The S-Tec POH supplement is appended to this report.)

The autopilot head was removed from the aircraft and inspected. The extent of damage to the autopilot precluded any functional or continuity testing. The head contained a series of light bulbs which were examined under a 7X power microscope.

The heading and altitude hold bulbs filaments in the annunciator panel exhibited evidence stretching. The remaining enunciator bulb filaments did not exhibit similar characteristics. The manufacturer's representative stated that the illumination of the enunciator lights will occur when the autopilot is in the "on" position and the related function has been programmed by the pilot.

The "up" and "down" trim light bulbs were intact and the bulbs were unbroken. The filaments were fractured but did not exhibit any stretch or discoloration. The "ready" light bulb was broken and the filament was missing.

All three center light bulb filaments, on/off, altitude, and navigation also exhibited evidence of

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stretching, as did the two approach and reverse lights in the lower section of the control head. The autopilot manufacturer states that these lights are automatically illuminated with the instrument panel lights as a result of being on the same electrical circuit.

The radar NTAP data used in this report was provided by FAA Air Traffic Control Quality Assurance. The data was displayed by Radar ViewPoint (tm) by Airways Technology, Inc.


The single-track NTAP data (10 second sweeps) was selected and presented sequentially using time, latitude, longitude, knots, and bearing. Calculations were performed to identify the starting point, ending point, distance covered, and heading. An overall plot was generated on a scale of 1:281,800 (3.86nm per inch) depicting the total radar coverage along with the accident location. A final plot was generated on a scale of 1:17,974 (0.25nm per inch) depicting the last five radar returns, again, also depicting the accident location.


## ADDITIONAL INFORMATION

The aircraft was recovered to a storage facility operated by Plain Parts in Pleasant Grove, California. The aircraft wreckage was released to a representative of the registered owner on February 8, 1996.

The emergency locator transmitter was destroyed in the crash.



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| <b>Landing Facility/Approach Information</b>   |                                     |  |                                   |                        |                     |
| Airport Name<br>ARCATA   | Airport ID:<br>ACV                  | Airport Elevation<br>218 Ft. MSL       | Runway Used<br>32                 | Runway Length<br>5998  | Runway Width<br>150 |
| Runway Surface Type: Asphalt   |                                     |  |                                   |                        |                     |
| Runway Surface Condition:  |                                     |  |                                   |                        |                     |
| Approach/Arrival Flown: ILS  |                                     |  |                                   |                        |                     |
| VFR Approach/Landing: None   |                                     |  |                                   |                        |                     |
| <b>Aircraft Information</b>  |                                     |  |                                   |                        |                     |
| Aircraft Manufacturer<br>Beech   |                                     | Model/Series<br>S35 /S35               |                                   | Serial Number<br>D7323 |                     |
| Airworthiness Certificate(s): Normal   |                                     |  |                                   |                        |                     |
| Landing Gear Type: Retractable - Tricycle  |                                     |  |                                   |                        |                     |
| Amateur Built Acft? No   | Number of Seats: 4                  | Certified Max Gross Wt.<br>3500 LBS    | Number of Engines: 1              |                        |                     |
| Engine Type:<br>Reciprocating  | Engine Manufacturer:<br>Continental | Model/Series:<br>IO-520-BA-2B          | Rated Power:<br>285 HP            |                        |                     |
| - Aircraft Inspection Information  |                                     |  |                                   |                        |                     |
| Type of Last Inspection<br>Annual  | Date of Last Inspection<br>05/1995  | Time Since Last Inspection<br>54 Hours | Airframe Total Time<br>3331 Hours |                        |                     |
| - Emergency Locator Transmitter (ELT) Information  |                                     |  |                                   |                        |                     |
| ELT Installed?/Type Yes /  | ELT Operated?                       | ELT Aided in Locating Accident Site?   |                                   |                        |                     |
| <b>Owner/Operator Information</b>  |                                     |  |                                   |                        |                     |
| Registered Aircraft Owner<br>ELMER G. HASKIN, JR.  |                                     | Street Address<br>201 SWAZEY COURT     |                                   |                        |                     |
|  |                                     | City<br>ROSEVILLE                      | State<br>CA                       | Zip Code<br>95747      |                     |
| Operator of Aircraft<br>ELMER G. HASKIN, JR.   |                                     | Street Address<br>201 SWAZEY COURT     |                                   |                        |                     |
|  |                                     | City<br>ROSEVILLE                      | State<br>CA                       | Zip Code<br>95747      |                     |
| Operator Does Business As:   |                                     |  | Operator Designator Code:         |                        |                     |
| - Type of U.S. Certificate(s) Held: None   |                                     |  |                                   |                        |                     |
| Air Carrier Operating Certificate(s):  |                                     |  |                                   |                        |                     |
| Operating Certificate:   |                                     |  | Operator Certificate:             |                        |                     |
| Regulation Flight Conducted Under: Part 91: General Aviation   |                                     |  |                                   |                        |                     |
| Type of Flight Operation Conducted: Personal   |                                     |  |                                   |                        |                     |

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**First Pilot Information**

|                 |                 |                  |                          |           |
|-----------------|-----------------|------------------|--------------------------|-----------|
| Name<br>On File | City<br>On File | State<br>On File | Date of Birth<br>On File | Age<br>63 |
|-----------------|-----------------|------------------|--------------------------|-----------|

|        |                     |                              |                             |
|--------|---------------------|------------------------------|-----------------------------|
| Sex: M | Seat Occupied: Left | Occupational Pilot? Business | Certificate Number: On File |
|--------|---------------------|------------------------------|-----------------------------|

Certificate(s): Private

Airplane Rating(s): Multi-engine Land; Single-engine Land

Rotorcraft/Glider/LTA: None

Instrument Rating(s): Airplane

Instructor Rating(s): None

Current Biennial Flight Review?

|                        |  |                                    |
|------------------------|--|------------------------------------|
| Medical Cert.: Class 3 | Medical Cert. Status: Valid Medical--w/ waivers/lim. | Date of Last Medical Exam: 02/1995 |
|------------------------|--|------------------------------------|

| - Flight Time Matrix  | All A/C | This Make and Model | Airplane Single Engine | Airplane Multi-Engine | Night | Instrument |           | Rotorcraft | Glider | Lighter Than Air |
|-----------------------|---------|---------------------|------------------------|-----------------------|-------|------------|-----------|------------|--------|------------------|
|                       |         |                     |                        |                       |       | Actual     | Simulated |            |        |                  |
| Total Time            | 1436    |                     | 932                    | 433                   | 146   | 99         | 148       |            |        |                  |
| Pilot In Command(PIC) | 1097    |                     |                        |                       |       |            |           |            |        |                  |
| Instructor            |         |                     |                        |                       |       |            |           |            |        |                  |
| Instruction Received  |         |                     |                        |                       |       |            |           |            |        |                  |
| Last 90 Days          |         |                     |                        |                       |       |            |           |            |        |                  |
| Last 30 Days          |         |                     |                        |                       |       |            |           |            |        |                  |
| Last 24 Hours         |         |                     |                        |                       |       |            |           |            |        |                  |

|                    |                                |                           |                  |
|--------------------|--------------------------------|---------------------------|------------------|
| Seatbelt Used? Yes | Shoulder Harness Used? Unknown | Toxicology Performed? Yes | Second Pilot? No |
|--------------------|--------------------------------|---------------------------|------------------|

**Flight Plan/Itinerary**

Type of Flight Plan Filed: IFR

|                            |             |                           |                        |                  |
|----------------------------|-------------|---------------------------|------------------------|------------------|
| Departure Point<br>OAKLAND | State<br>CA | Airport Identifier<br>OAK | Departure Time<br>1630 | Time Zone<br>PST |
|----------------------------|-------------|---------------------------|------------------------|------------------|


|                       |             |                           |  |
|-----------------------|-------------|---------------------------|--|
| Destination<br>ARCATA | State<br>CA | Airport Identifier<br>ACV |  |
|-----------------------|-------------|---------------------------|--|

Type of Clearance: IFR

Type of Airspace: Class E

**Weather Information**

Source of Wx Information:  
  
Flight Service Station

|  |                             |
|--|-----------------------------|
|  <p><b>National Transportation Safety Board</b><br/><b>FACTUAL REPORT</b><br/><b>AVIATION</b></p> | NTSB ID: LAX96FA042         |
|  | Occurrence Date: 11/08/1995 |
|  | Occurrence Type: Accident   |

|                                       |                       |  |                  |                                 |                              |
|---------------------------------------|-----------------------|--|------------------|---------------------------------|------------------------------|
| <b>Weather Information</b>            |                       |  |                  |                                 |                              |
| WOF ID                                | Observation Time      | Time Zone  | WOF Elevation    | WOF Distance From Accident Site | Direction From Accident Site |
| ACV                                   | 1750                  | PST  | 218 Ft. MSL      | 25 NM                           | 316 Deg. Mag.                |
| Sky/Lowest Cloud Condition: Scattered |                       |  | 500 Ft. AGL      | Condition of Light: Night/Dark  |                              |
| Lowest Ceiling: Overcast              |                       | 1500 Ft. AGL   | Visibility: 2 SM | Altimeter: 30.00                | "Hg                          |
| Temperature: 15 °C                    | Dew Point: 15 °C      | Weather Conditions at Accident Site: Instrument Conditions |                  |                                 |                              |
| Wind Direction: 150                   | Wind Speed: 6         | Wind Gusts:  |                  |                                 |                              |
| Visibility (RVR): 0 Ft.               | Visibility (RVV) 0 SM |  |                  |                                 |                              |
| Precip and/or Obscuration:            |                       |  |                  |                                 |                              |

|                             |                     |                          |
|-----------------------------|---------------------|--------------------------|
| <b>Accident Information</b> |                     |                          |
| Aircraft Damage: Destroyed  | Aircraft Fire: None | Aircraft Explosion: None |

| - Injury Summary Matrix | Fatal | Serious | Minor | None | TOTAL |
|-------------------------|-------|---------|-------|------|-------|
| First Pilot             | 1     |         |       |      | 1     |
| Second Pilot            |       |         |       |      |       |
| Student Pilot           |       |         |       |      |       |
| Flight Instructor       |       |         |       |      |       |
| Check Pilot             |       |         |       |      |       |
| Flight Engineer         |       |         |       |      |       |
| Cabin Attendants        |       |         |       |      |       |
| Other Crew              |       |         |       |      |       |
| Passengers              | 3     |         |       |      | 3     |
| - TOTAL ABOARD -        | 4     |         |       |      | 4     |
| Other Ground            | 0     | 0       | 0     |      | 0     |
| - GRAND TOTAL -         | 4     | 0       | 0     |      | 4     |

National Transportation Safety Board

**FACTUAL REPORT**

**AVIATION**



NTSB ID: LAX96FA042

Occurrence Date: 11/08/1995

Occurrence Type: Accident

Administrative Information

Investigator-In-Charge (IIC)

ROBERT R. CRISPIN

Additional Persons Participating in This Accident/Incident Investigation:

BRUCE E ALLEN  
SAN JOSE, CA

PAUL E YOOS  
WICHITA, KS

MICHAEL J GRIMES  
LANCASTER, CA

R S BOYLE  
ARVADA, CO