

NATIONAL TRANSPORTATION SAFETY BOARD

DEPARTMENT OF TRANSPORTATION

WASHINGTON, D.C. 20591

STATEMENT OF WITNESS

The purpose of this statement is intended solely for use in determining the facts, conditions and circumstances, and the probable cause of the subject accident.

Date 10-31-94I. Place of accident Ranoma, CA Date Sept 24 94 Hour 1030aII. Aircraft N6RC FAA Certificate No. _____III. What is your name PAUL KORTOPATES Age 40IV. Address [REDACTED] SAN DIEGO CA 92131V. Occupation Manager of Database Administration By whom employed SAICVI. Where were you at the time of the accident Out of town but had recent flight experience with the pilot and aircraft

VII. Tell in your own words what you saw or heard before and at the time the accident occurred.

See Attached



(Signature)

NTSB Statement of Witness

I was not a witness of the accident involving Ron Corley and Yoko Woodfill in N6RC on September 24. However, I flew with Ron to Redmond Oregon over Labor Day weekend (September 3 - 5). The experiences Ron and I had that weekend bore some resemblance to witnesses' reports of their accident. I am a Lancair builder, (about half completed), and a current SEA/IFR pilot with about 300 hours experience. I only have a couple of hours in the Lancair.

To my knowledge, our flight to Redmond was the most recent flight Ron made prior to accident. It was also his first flight at maximum gross weight and first significant cross-country flight after N6RC's certification. That flight increased the Lancair 290's total time to approximately 64 hours. I believe the 64 hours over the last 4 to 6 months was also very close to Ron's current flight experience, since Ron didn't fly during the 6 to 8 years he was building the airplane.

Our flight to Redmond departed about 9 am on September 3 at an estimated 1740 lbs. We had full or nearly full fuel tanks as well as luggage in the rear. I took a 20 lb. duffel bag. Ron had a lighter bag of clothes, in addition to maps, and a small electric ice chest with a 6 pack of Snapple's inside it. This totaled about 50 lbs. in the rear luggage area. My weight is 175 lbs.

Our taxi turned up a discrepancy with the right brake. Ron had just previously replaced a tire and the puck was binding in the piston. Ron was able to correct the problem so we resumed our taxi for takeoff. The puck binding problem revealed that the brake pad was worn thin and would need to be replaced as soon as we got back from Redmond. After our trip he told me he had replaced the brake pads.

During takeoff, Ron rotated somewhat early. Later he indicated he used the speed he had commonly used when the aircraft was lightly loaded and had forgotten to account for the faster airspeed required by the heavier gross weight. The effect of the early rotation was mushy controls and a very noticeable drop of the left wing. Ron's corrective action was immediate and precise. Ron immediately held down the nose and worked on holding the left wing level. It took a second or two for airspeed to build and then Ron immediately brought the gear up as we continued to accelerate straight and level just a few feet off the runway. I would estimate that we rotated about two-thirds of the way down the runway, then stayed within, or nearly within, ground effect as we continued to accelerate. Near the end of the runway, Ron started a climb but could only achieve a rate of a few hundred feet a minute. (The anemic climb performance of Ron's Lancair was previously determined to be his fixed pitch prop. Ron had experimented with at least one other prop that had greatly improved his climb performance, but made his cruise performance worse. Craig and Kirk Wheeler have built the same model Lancair. On our Redmond return flight of three planes including them, they demonstrated much improved climb and cruise performance with their fixed pitch prop, even though Ron ran as high as 2900 RPM. I believe Ron intended to get a constant speed prop as soon as funds would allow.)

On our return flight we departed two more times. The first was from Redmond Oregon and the second from Columbia, CA. Each time, Ron rotated as quickly as he could, even though there was plenty of runway ahead. These subsequent rotations were not as premature as the first causing the left wing to drop. Given the poor climb performance, I would have expected Ron to use up more of the available runway before rotating.

On the day of the accident, Ron was observed to have lifted off very early, at mid-field or sooner. Given our experience a couple of weeks prior, Ron would have certainly wanted to avoid a repeat performance. Consequently, I think the early liftoff was more likely caused by improperly set pitch trim rather than an intentional attempt by Ron to

NTSB Statement of Witness

rotate so early. Ron had not used a checklist on our previous flight so perhaps the trim was forgotten and left in the landing configuration, causing him to rotate early. After the early rotation, the Lancair was observed to fly level a short distance then enter a steep climb until a departure stall. Holding the steep climb attitude until a stall was contrary to the proper corrective action he took on our earlier flight.

I understand there was speculation as to a possible auto-pilot malfunction. I do know Ron had a Navaid wing-leveler and altitude hold device of his own design that he built with a Navaid servo. Ron tested both the wing-leveler and the altitude hold aspects of the autopilot on our previous flight and they both worked fine.

A handwritten signature in black ink, which appears to be "Paul Kortopates", is written over a thick black horizontal redaction bar.

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STATEMENT OF WITNESS

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Date September 25, 1994I. Place of accident Ramona Airport 639 Date September 24, 1994 Hour 10:20 AMII. Aircraft Lanceair FAA Certificate No. N6RCIII. What is your name Jacqueline Herendeen Age 59IV. Address [REDACTED] Ramona CA 92065V. Occupation Unicom Radio Operator By whom employed Chuck Hall, Controller Ramona AirportVI. Where were you at the time of the accident Operating the radio, looking at the runway 90° to the direction of take off

VII. Tell in your own words what you saw or heard before and at the time the accident occurred.

I saw N6RC about 20-25 feet in the air, very nose high, left wing slightly low and the wings bobbling slightly. The aircraft was very slow and in my opinion was on the stall. The engine was running.

(Signature)

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STATEMENT OF WITNESS

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Date SEPT 27 1994I. Place of accident RAMONA Date SEPT 24 Hour 10:00AM

II. Aircraft _____ FAA Certificate No. _____

III. What is your name MIKE McLANE Age 37

IV. Address _____

V. Occupation ENGINEER By whom employed SAICVI. Where were you at the time of the accident DEPARTURE END OF RUNWAY

VII. Tell in your own words what you saw or heard before and at the time the accident occurred.

1. WITNESSED PILOT DO WARM-UP. WHEN CONTROL SURFACES WERE CHECKED, ELEVATOR REMAINED IN ABOUT 5° UP POSITION.
2. DURING TAKE-OFF ENGINE SEEMED TO RUN NORMALLY.
3. AT ABOUT HALF WAY DOWN THE RUNWAY THE PLANE SEEMED TO JUMP UP PREMATURELY.
4. THE PLANE THEN SETTLED BACK DOWN WITHOUT TOUCHING RUNWAY.
5. THE PLANE IMMEDIATELY LIFTED OFF WITH A NOSE HIGH ATTITUDE WHILE DRIFTING TO THE LEFT.
6. PLANE REMAINED IN A NOSE HIGH ATTITUDE WHILE ~~DRIFTING~~ DRIFTING LEFT UNTILL IT REACH ABOUT 50 FEET. AT 50 FEET PLANE ~~TURNED LEFT~~ TURNED LEFT AND CRASHED NOSE FIRST INTO GROUND.

(Signature)

5 CONT. THE ATTITUDE OF THE PLANE
WAS BETWEEN $30-35^{\circ}$ WHEN PITCHED
UP THE SECOND TIME.

7. ~~I DID NOT SEE~~ THE FLAPS ~~DID NOT~~
WERE NOT USED ON TAKE-OFF.

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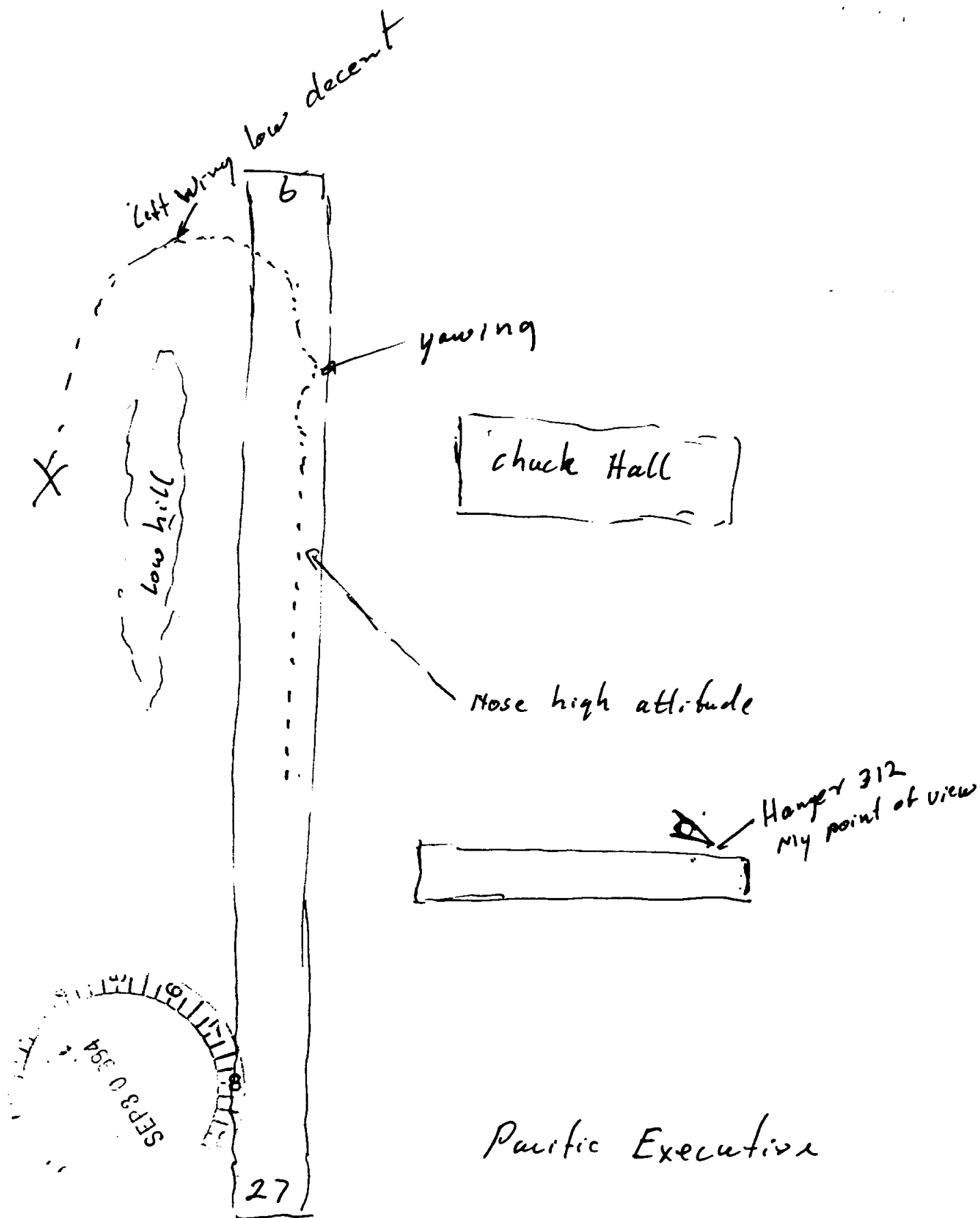
STATEMENT OF WITNESS

The purpose of this statement is intended solely for use in determining the facts, conditions and circumstances, and the probable cause of the subject accident.

- Date 9/25/94
- I. Place of accident Ramona Airport Date 9/24/94 Hour ~ 10 Am
- II. Aircraft Lancair FAA Certificate No. ?
- III. What is your name Wayne M. Spani Age 61
- IV. Address [REDACTED] San Diego CA 92127
- V. Occupation Electronic Engr. By whom employed Triton Technology, Inc.
- VI. Where were you at the time of the accident Hanger 313, Ramona Apt
- VII. Tell in your own words what you saw or heard before and at the time the accident occurred.

I happened to be watching the runway when the Lancair lifted off. I had the feeling that the plane was relatively slow and climbing with a very nose high attitude. At, what I estimate, about 100 ft AGL the plane started yawing left and right while still in the nose high attitude. Within a few seconds the plane started a left turn and started descending with the left wing low and nose down. The point of impact is not visible from where I was standing, but I heard the plane hit and saw dust rise. The engine was running during this time.

[REDACTED]
(Signature)



Pacific Executive

NATIONAL TRANSPORTATION SAFETY BOARD

DEPARTMENT OF TRANSPORTATION

WASHINGTON, D.C. 20591

STATEMENT OF WITNESS

The purpose of this statement is intended solely for use in determining the facts, conditions and circumstances, and the probable cause of the subject accident.

Date 9-28-94I. Place of accident RAMONA, CA. AIRPORT Date 9-24-94 Hour 9:50 AMII. Aircraft LANCAIR FAA Certificate No. 257394 NGRCIII. What is your name HARRY E. ABBOTT Age 45IV. Address [REDACTED] POWAY, CA. 92064V. Occupation MACHINIST By whom employed PALOMAR SYSTEMSVI. Where were you at the time of the accident ON THE NUMBERS OF RUNWAY 27

VII. Tell in your own words what you saw or heard before and at the time the accident occurred.

I HAD MADE ARRANGEMENTS TO FLY OVER TO SEDONA AZ. WITH JOHN LAMBERT AS MY PASSENGER, IN THE COMPANY OF RON CORLEY AND YOKO WOODFILL IN HIS PLANE LANCAIR NGRC,

WHEN I WAS READY I WAVED NGRC TO GO FIRST. HE CALLED OUR DEPARTURE AS A FLIGHT AND MOVED ON TO THE RUNWAY AND STARTED HIS TAKEOFF ROLL WHILE I TAXIED INTO TAKEOFF POSITION ON THE RUNWAY. WHERE I STOPPED TO WATCH HIS TAKEOFF.

NGRC TRACKED DOWN THE RUNWAY IN A STRAIGHT LINE STAYING WITHIN THE WINGSPAN OF THE RUNWAY CENTERLINE. FROM MY PERSPECTIVE I COULD NOT TELL HOW FAR DOWN THE RUNWAY HE WAS WHEN HE ROTATED ABRUPTLY AND LIFTED OFF THERE MAY HAVE BEEN A MOMENTARY PAUSE IN THIS ATTITUDE, THEN THE AIRCRAFT STARTED TO CLIMB SMOOTHLY AND WITH WINGS LEVEL. I COULD SEE OVER 3-5 SECONDS, MORE AND MORE OF A PLAN VIEW OF THE TOP OF THE PLANE AS HIS ATTITUDE INCREASED

[REDACTED]
(Signature)

TO WHAT APPEARED TO BE ALMOST VERTICAL WITH VERY LITTLE FORWARD SPEED. AT THIS POINT THE AIRCRAFT STARTED TO ROTATE SLOWLY TO THE LEFT AROUND THE VERTICAL AXIS (YAW) AND SLOWLY MOVE LEFT AND START TO DESCEND FROM A MAXIMUM ALTITUDE OF APPROXIMATELY 100-150 FEET. AS THE AIRCRAFT DISAPPEARED FROM MY VIEW BEHIND A SMALL KNOLL IT WAS IN AN ATTITUDE WITH THE NOSE OF THE AIRCRAFT WAS DOWN 10°-20° NOSE LOW, THE WINGS WERE VERTICAL WITH THE LEFT WING LOW AND NO APPARENT ROLL, THE SPEED OF THE AIRCRAFT WAS ABOUT 40-50 MPH ON A VECTOR APPROXIMATELY 45° TO THE LEFT OF THE NOSE, AND THE DESCENT PROFILE WAS ABOUT 70° FROM THE HORIZONTAL, AND THE NOSE OF THE AIRCRAFT WAS POINTED DUE SOUTH (180°)

I HAD WITNESSED THE PILOT RON CORLEY ON A PREVIOUS FLIGHT IN APPROXIMATELY THE SAME WEIGHT CONDITION TAKEOFF USING THE SAME ABRUPT ROTATION TECHNIQUE AT WHAT I WOULD SAY WAS A LOWER THAN CORRECT AIRSPEED.

THROUGH PRIOR CONVERSATION WITH RON CORLEY I KNEW THAT HE HAD FUELED THE AIRCRAFT (NGRC) WITH AUTO FUEL BUT I DO NOT KNOW WHAT BRAND OR GRADE.

AFTER THE AIRCRAFT DISAPPEARED FROM VIEW I SAW A PLUME OF DUST AND I IMMEDIATELY HIGH SPEED TAXIED TO THE 2ND RUNWAY EXIT DURING THAT TAXI I SAW THE START OF A PLUME OF BLACK SMOKE THIS OCCURRED AT NO MORE THAN 15 SECONDS AFTER IMPACT

RICHARD FOWLER

ESCONDIDO CA
92025

I TOOK OFF IN FRONT OF THE
AIRCRAFT THAT CRASHED, I WAS
ON RIGHT DEPARTURE ABOUT
500 FT. ALT WHEN I HEARD
A MALE VOICE SAY GET THE
NOSE DOWN IN AN EXCITED
VOICE

~~Richard Fowler~~

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STATEMENT OF WITNESS

The purpose of this statement is intended solely for use in determining the facts, conditions and circumstances, and the probable cause of the subject accident.

Date 10/10/94

I. Place of accident RAMONA Date 24 SEPT 94 Hour 9:30-10:00 A

II. Aircraft LANCAIR FAA Certificate No. N6RC

III. What is your name JOHN G. LANGERT Age 49

IV. Address [REDACTED] OCEANSIDE, CA 92057

V. Occupation SALES-MFGGR'S REP. By whom employed CERCO

VI. Where were you at the time of the accident RUNWAY 27 CENTERLINE HOLDING
ON THE NUMBERS

VII. Tell in your own words what you saw or heard before and at the time the accident occurred.

SEE 3 PAGES ATTACHED



[REDACTED SIGNATURE]
 (Signature)

Accident Report

By: John G. Lambert
[REDACTED]
Oceanside, Ca. 92057

Aircraft: Lancair N6RC
Occupants : Ron Corley - Pilot (Left Seat) & Yoko Woodfill - Passenger (Right Seat)
Date: 24 September 1994
Location: Ramona Airport

Background: I am a pilot (Commercial SEL & Sailplane) with approx. 1100 hours powered and 20 hours sailplane. I have known Ron for approx. 12 to 13 years. I head up a composite builders group known as the San Diego Eze Squadron. Ron was our Treasurer. I have from time to time, stopped by to view the project during the 7 to 8 years of its construction. Ron's attitude and workmanship were good. It was his second homebuilt.

The Lancair had minor teething problems during the early hours in its test period .
Landing gear extension (Gear door hardware problem - screw length - corrected)
Intermittent fuel starvation (Thought to be caused by a gascolator - changed)
Ron, upon recognizing these problems, dealt with them well (in the air).

I flew with Ron as a passenger, approx. 3 weeks prior to the accident, in a short flight (Ramona local area). It was my first flight in a Lancair. The aircraft was very sensitive in pitch and heavy in roll. (I make the pitch sensitivity observation based on over 700 hours in my Varieze). The control system seemed to be solid and feel good after a moment to get acclimated. The climb performance was weak (but typical compared with another Lancair I have flown with).

The Accident: On the day of the accident we were going to Sedona, Arizona in two aircraft. My perspective of the accident was as a passenger in the rear seat of Long-Ez N661ST. We were to have met at the airport at 9:00 A.M. , Ron and Yoko arrived a little late. We chatted briefly as they were loading baggage. I did not notice anything unusual about Ron, his baggage nor the aircraft. Both aircraft were rolled out of the hangers and we taxied to runup. Both aircraft had been previously fueled.

My observations were at first distracted as I was settling in and getting comfortable with the normal getting ready for takeoff things diverting more than casual attention on the Lancair.

Ron and Harry Abbott (Pilot of the Long-Ez) performed engine run-up's and cockpit preflight checks. Both signaled they were ready, and Ron rolled onto runway 27 and started accelerating down the runway. The entire ground^{run} and transition to flight was directionally, arrow straight. During the entire takeoff roll, all seemed smooth and under control. Harry, as the Lancair proceeded down the runway, taxied into position and held . Our prospective was now with the Lancair at 12:00 in our canopy, rolling down the runway, with nothing appearing to be wrong. (

JGL

Note from our vantage point it is very difficult to judge speed , and a Lancair gets small very quick as it progresses down the runway .)

I noticed the Lancair begin its climb and soon started to see more and more of the top of the aircraft, beginning to realize he appeared to slow, with too much nose up pitch attitude. From my vantage point the increase in pitch attitude seemed smooth and it did not at that point sink in that they were in trouble. The aircraft started to slowly drop its left wing and begin to alter its flight path toward the south as it crossed over to the left in what I best describe as a smooth wingover and left wing low / nose low decent. Harry twice verbally made the comment " Ron lower your nose" (voice actuated headsets - he later said he didn't realize he keyed the mike but it was reported as being picked up by an aircraft that had departed prior to us). The Lancair disappeared from our view, behind a small rise on the south side of the runway. Harry rapidly began to taxi at a high rate of speed down the runway in an attempt to get to them as soon as possible. Harry transmitted to unicom that an aircraft was down on the airport. We stopped in the dirt, clear of the runway, at the turnoff for Chuck Hall Aviation. Half way down the runway, during the high speed taxi I noted a thin column of black smoke beginning to ascend from behind the rise marking what we knew must be the wreckage. This was about 15 seconds after impact. The smoke column was thin, straight, and vertical, indicating little or no wind.

We ran toward the aircraft and as it came into view the entire cockpit area was engulfed in dense orange flame. We arrived at about 3 minutes from moment of impact. The halon fire bottle I took from Harry as I left his airplane was useless against a fully developed fire of that magnitude. The burnt trail leading from the wreckage toward the impact point was caused by fuel lost from the aircraft as it traversed from impact point to it's final resting place. The line of fuel later ignited while we were waiting for the Ramona Fire Department to arrive, and ignition point was from the burning wreckage toward the impact point. The Fire department trucks were stopped by the old barb wire fence next to the runway and did not have enough hose. We walked away, with the aircraft and our friends still burning, with the fire department trying to figure out how to get there hoses to it. I complement them for responding fast, if not effective.

No one could have responded fast enough to have saved my friends. But there are positive things to be learned about how they were delayed at the scene. That may prevent such a delay and save a life next time.

I would like to thank Mr. David B. Lodge, County of San Diego Medical Examiner Investigator for his sensitivity, assistance and understanding.

I would like to also thank Robert W. Rae - FAA Aviation Safety Inspector.

Final comment: The Forestry Service Air Attack group at the airport were useless, later said to have made excuses about not having Nomex. Nomex Like hell - We pilots were there in our tee shirts trying to help our fellow pilot in trouble.

Additional sources that may provide helpful insight:

Paul Kortopates - [REDACTED]

JLR

PAGE 3 of 4

Paul flew as a passenger with Ron to Oregon the first weekend in September. Worthy of discussion are the takeoffs.

Roger Flower - [REDACTED]

Roger flew and evaluated the aircraft during its early hours after construction.

Safety Suggestion:

Enlist the active assistance of G.A.M.A., EAA, NASA, to compile a published report on suggested methods of making fuel systems component design, location, and installation in General Aviation aircraft more impact resistant. An easy to read document showing good and bad practices, as an aid to both the designer and the builder.

[REDACTED]

g2
Page 4 of 4