From: To: Subject:

Date:

Statement from Kenneth Howes Friday, March 29, 2019 10:24:33 PM

Hello Mister Rayner,

As I said in the first text to you, I don't have any idea what changes were made since I saw the plane last three weeks ago. I know there was at least one change that was planned.

I first flew the aircraft a few weeks ago and only one time. It was an almost 11 minute very wide pattern due to a couple issues on that flight. As soon as I came off the ground the plane went into a wild oscillation of both pitch and roll. I ran out of elevator up trim within the first few seconds of that flight and then had a lot of control pressure involved to keep it flying around the pattern. At that point I realized I needed altitude to sort out the control-ability of the aircraft. I learned during that flight that I was mechanically locked out of the rudder controls. I didn't know until I landed that they were locked in the neutral or streamlines positions. This was due to a nose gear that locked once it was at full droop and a mechanical linkage between that and the rudders.

During the flight I actually bumped off the elevator stop at least three times. I don't know how many times during that flight the aircraft departed straight and level flight, all uncommanded, however I would guess it to be around a dozen times. At one point I considered bailing out of the plane but realized I had enough control to try to line up with the airport runway and attempt a controlled landing, or at least get it back to the airport where help could be given if the landing didn't go well. As it turned out once I reduced the throttle for the final approach I was able to let off some of my control pressure for the elevator and make a very nice controlled decent. Leading me to believe that it was a thrust angle issue. This was checked and found to be about 3 degrees out of where it should have been and corrected. The rest after that went untested by me.

The landing itself was uneventful after one more roll oscillation about 5 feet off the ground in the transition to flare. Once that subsided I landed smoothly and rolled out to a stop after securing the engine to idle cutoff in the flare. Thus preventing a running engine if I were to depart the runway uncontrolled.

In my opinion: the aircraft demonstrated a static stability that was divergent and unstable. While dynamic stability was just barely on the stable side of neutral. These two factors obviously fought each other in the stability of the aircraft.

There is not much more that I can tell you about anything beyond this.

I sincerely hope this helps. I am very big on safety and aviation is a major passion of mine. Richard was a very good man and I am still in shock that this happened. If it is in your scope of work, I would very much appreciate knowing what your findings are in this accident. I lost a good friend and am saddened at this situation.

V/R

Kenneth Howes

To whom it may concern:

My name is Sandra Bunch, I am the Executive Assistant at Commuter Craft. I have been employed with Commuter Craft, A Hogan Air Company since November 2017.

Richard Hogan was the owner, CEO, and President of Commuter Craft as well at the designer and builder of the Innovator plane that he was flying on Saturday March 23, 2019 at Tom B. David Airport – CZL in Calhoun, Georgia.

Richard Hogan designed and built the Innovator also known as Ship2 with the Registration marks of N257AR. Richard received the air worthiness Certificate of N257AR on November 20, 2018. He has a "Builders Manual" for this aircraft that he created during the building process. The manual was in the aircraft along with the registration on the day of the crash. They were placed in the rear back pouch of the co-pilot seat prior to any taxi testing on Saturday, March 23, 2019.

Richard was under an extreme amount of pressure from the investor to have the plane flying before the Sun n Fun Expo that will be held April 2-7, 2019. The investor sent a text to Richard on Sunday February 3, 2019 with the following: "As of March 30, you will receive not another dime from me. Better get on the phone now and get Alpha builders to make their deposits. Figure out who you will fire. I initially anticipated spending 1-1.5 M to get the plane flying, NOT \$4M. It seemed like a good bet given the orders you have in hand, if they are real. Your order book has been stagnant due to NO RESULTS. I have little hope of ever seeing my money again."

Richard had previously discussed flying the plane if he had to, in order to please the investor. I as well as others expressed our concerns and opinions asking him to never do that.

The pressure continued with the investor and the weather had not been fly worthy which created more stress to Richard. Richard became so stressed that he wasn't sleeping and became sick with a severe cough, head and chest congestion and fever on or around Wednesday, March 20, 2019. On Thursday March 21st, I asked Richard if he was taking any type of medication for his cough and congestion. He replied, "I have been taking this stuff" (showing me a box of Advil Sinus Congestion and pain) pointing out it was the "Non-Drowsy" type of medicine. I told him he should take something for his cough at night and the Advil Sinus & Congestion during the day. He asked me to go pick up him some cough medication. I returned with cough drops and a bottle of Mucinex Severe Cough medicine and read him the dosage information indicating the line on the cup for the proper dosage. I do not know if he took any of it. When I returned to work on Friday morning March 22, 2019 Richard went to the airport in Calhoun to do some taxi testing, I asked how he was feeling, and he stated that he "felt worse" and I could see he was not his normal self. Richard returned to the office around 11:15am and told me he was going to lay down and take a nap to wake him in an hour. I waited until 12 noon to wake him and he asked me to "give him about 10 more minutes that he thought his fever was going down." I chose to let him sleep and wake up on his own. Richard woke up around 2:15, went to his office and closed the doors. I walked into his office around 4pm and he was laying back in the chair. I told him that "he looked like shit and needed to get some rest and not stress about anything or he was going to end up with pneumonia or have a heart attack." His response was "I do need to get better because I can't clearly think and am not accomplishing anything." I asked him if I needed to run everyone off and leave myself so he could rest,

he asked me to wait until after 5pm. Richard then told me that the test pilot had texted him to let him know that he was having to stay with his current job and would not be available until after Sun n Fun. Richard aske me to keep that info to myself because he didn't want to discourage the others.

On Saturday March 23, 2019 I text Richard asking him how he was feeling, he stated he was still not feeling good, but thought he was getting better. He called me to ask if I could come to the Calhoun airport to take photos of the plane. When I arrived, I could see that Richard was still sick, and asked him what was his plan. Richard said

From: To: Subject:

Commuter Craft info

Date: Monday, March 25, 2019 12:04:54 PM

Login:

Password: treetop

Here is the data we collected from the previous taxi's the last data set on there from 2/26/19 10 min long was the first and only flight. All other data sets were high speed taxi's

3/23/19 was the second attempt to fly which I was not present for so I cannot really comment on. I'm told that Richard Hogan was the pilot during this flight and crash.

The first and only other attempt to fly was on 2/26/19 which I was present for. The flight was flown by Kenneth (don't know his last name). The flight was after quite a number of high speed taxi tests that day. There was about 10 gal of fuel in the plane during the flight.

The plane lifted off and seemed to be struggling to accelerate or climb and maintain level flight. Pilot announced that he was struggling with the plane and was returning to the airport. He made very slow and gentle turns back to the runway he took off from (runway 17?) and landed on 17 without incident. Richard Hogan was present for this flight. Pilot reported that the stick had to be very far aft for him to maintain level flight and come back in and land.

After the flight and the next day there was a debrief meeting with Richard Hogan, Pilot, Richard Kasmeric, Rich Wier to try and determine why the plane was struggling to get in the air and maintain level flight. Richard concluded that there were two things that seemed to be wrong. 1) the thrust angle of the engine/prop was at the wrong angle and was pushing he nose down, 2) the canards were to small and there wasn't enough lift being generated. To this the motor was remounted lowering by 1" and changing the angle by adding a 5/8" machined spacer to the lower motor mount. New temporary canard extensions (6-8"?) were added.

The plane as then taken back out to Calhoun Airport on 3/7/19 to test these changes by the Pilot Kenneth who reported that the plane seemed to be responding to the changes in that we was able to get the nose wheel off the ground at lower speeds. But since these were temporary fixes for the Canard extensions he didn't want to fly with these.

The plane was then brought back to the shop on 3/8/19 and the entire canard was rebuilt to a new design by Richard Hogan (the new canard extensions were longer than the test ones above) who also carved out the new Canard Tips. The changes included a new larger canard, new canard tips that drooped down, new canard flap actuator that included a single linear actuator for control.of the canard flaps. This was then wired to a three way momentary switch (ray allen) in the dash with a 5.5A circuit breaker. Feedback for the canard to display on the dynon was wired into the dynon / ACM system

Since I was out for surgery starting 3/15 to present I was not there for returning the plane to Calhoun airport. I was feeling better on Thursday 3/21/19 and stopped in to talk to Richard Hogan who old me that he wasn't feeling well, had a bad cold and wasn't sleeping well at all.

On 3/21/19 the plane was returned to Calhoun Airport and reassembled. I was absent

On 3/22/19 I was told that Richard Hogan taxi'ed the plane at high speeds. He sent me a text at my inquiry that he had lifted the plane off the runway briefly at 60-65 kts and put it back down. I asked if Keneth the pilot was scheduled to come back up but Richard didn't have any schedule yet. I was absent.

3/23/19 I contact Richard early in the morning to see if he was going to the airport but he said no he doubted it.

--//Terry// From:
To:
Subject: Statement

Date: Monday, March 25, 2019 2:01:49 PM

• Feb 26- First flight. Pilot indicated that the rudder pedals felt locked, and was having trouble gaining altitude and that the ailerons were very senstive. Pilot immediately returned to airport and landed.

- Feb 27- Plane was disassembled and brought back to shop.
- Feb 28 Mar 5- Richard determined that the canard width needed to be extended, the locking mechanism to be removed from nose gear, the engine thrust angle changed and the ailerons needed to be dampened. Richard built temporary canard extensions for testing. The motor angle was raised 3 degrees and the lock mechanism was removed from the nose gear. Richard also changed the design of the aileron mechanism to dampen the sensitivity.
- Mar 6 plane was returned to airport and reassembled.
- Mar 7 test pilot performed taxi tests and felt that he had more control with the modifications that were made.
- Mar 8- Mar 20 plane was disassembled and brought back to shop. Richard increased the width of the canard and canard trim and built new tips. Cosmetic modification was made to the upper cowl.
- Mar 21- plane was returned to airport and reassesmbled.
- Mar 22- Richard performed 2 high speed taxi tests and said the plane felt good. Plane was returned to hangar. Richard said that the test pilot would be coming in that night or the next morning. I spoke with Richard the afternoon of the 22nd and he said the pilot would not be available until Sunday morning (mar 24) and that no further taxi tests would be performed until then.

Rich Weyer Commuter Craft



1 April, 2019

Dear Mr. Rayner,

My name is John Slemp, and I am a commercial photographer in Atlanta, with a specialization in Aviation. As such, Commuter Craft (and thereby Mr. Richard Hogan, company President and designer of the Innovator) had hired me to photograph the high speed taxi test on 23 March, 2019. I had been creating images for the company since 2013, so Mr. Hogan and his employees were quite familiar with me, and I with them.

When I arrived, it quickly became apparent that the plan for the day was to conduct a few high speed taxi runs, and then to fly the aircraft. I had heard from one of the other employees that he had done high speed taxi tests the day before, and that the aircraft had lifted off the runway, flown a few moments, and then landed again safely on the runway. I mention this only in that it might have given Mr. Hogan the impression that it was safe to fly the aircraft the next day.

The "warm-up" taxi tests were conducted, uneventfully, and the decision was made to go. A GoPro Hero 7 camera was mounted via suction cup to the inside passenger window, to record the flight. These cameras not only record 4k video, but also capture speed, direction, and altitude, using GPS data. This data can be graphically overlaid upon the resulting images, using the free GoPro processing software.

As a backup, my personal Icom hand-held aviation radio was also placed inside the cockpit, secured to the passenger seat belt harness using the radio's back clip. It had been fully charged, was tuned to the airport frequency, and was turned on and tested prior to the flight.

There were two employees present, Ms. Sandra Bunch, and Mr. Keith Burton, and another pilot with a Grumman Cheetah, Mr. Ben Rees. Ms. Bunch was to fly with Mr. Rees as a chase plane, in order to attempt to capture some air to air images, and perhaps video, even though she is an amateur photographer. Mr. Burton had a handheld aviation radio to communicate with Mr. Hogan, and he was positioned by the airport FBO building. I was positioned on the West side of the essentially north/south runway, so that I could photograph the take off and landing of the aircraft. Behind me was a large stand of trees that runs the length of the runway.

Mr. Hogan was third in line for departure, behind another aircraft and the chase plane.

The plan was for the chase plane to link up in the air, once Mr. Hogan was in the air and had achieved an altitude of 3000 feet, if memory serves.

As he took off, it became apparent to me that he was having difficulty controlling the aircraft, in that it didn't really gain altitude. My estimation was that he only attained an altitude of about 100 feet all the way down the runway. For a moment, I thought he might actually crash into the trees at the end of the runway. However, the aircraft

cleared the trees and appeared to gently climb, under control, and began a left turn away from the field. What seemed odd to me was that the aircraft's engine sounded like it was developing full power, and at no time did I hear any abnormal engine sounds.

That was the last I saw of the aircraft. I heard it turn left again, and head south paralleling the runway. It seemed to me that the aircraft got about half way down the runway, when I heard the crash. I immediately knew that it was N257AR, and judging by the sound of the impact, I had the sickening impression that it was catastrophic. I did not see any smoke.

I quickly walked back across the runway (after checking first that it was clear...it's not a busy airport), and after conferring with Mr. Burton, I heard the emergency call on the radio from the chase plane, through the airport's outside speaker system.

There was not a lot to be done at that point, and after commiserating with the group for a few quiet moments, I departed the airfield for the silent ride home.

Hopefully this statement sheds some light on the events of the day. Please feel free to contact me at any time in the future, should you need further clarification or information.

I should add that Mr. Hogan was a dear friend, and even if the company doesn't survive this tragedy, perhaps some good, however small, may come from this event.

Respectfully Submitted,



John Slemp

Aviation Photographer

Home Address:

Tucker, Ga. 30084

Cell:

Email:

CALHOUN Tom B. David Field (CZL CTAF / UNICOM 122.8 ATL CTR/APP/DEP 124.5 LOC RWY 35 110.7 AWOS - 3 119.975 My approximate position **APRON** upon takeoff of N257AR. **TAXIWAY** FUEL AWOS TÉRMINAL AUTO PRKG U.S. 41 **PÁRKING** NOT TO SCALE LAT: 34° 27' 19.40" N LONG: 84° 56' 21.00" W **ELEVATION:** 656' LIGHTING: CALHOUN RWY: Dusk - 2200. After 2200 - CTAF PAPI: Rwy 17/35 **BEACON**: Yes TOM B. DAVID OTHER: No FIELD FUEL: 100LL, Jet A; Self-Service w/Credit Card RESTROOM: Yes - 75 FBO: (706) 602-8000 PHONE: ATTENDED: Mon. - Sat. 0800-2000 REMARKS: WX Information (706) 602-5906 AWOS **RNAV**: 115.8 **GQO** 160 / 32.4 Explore Georgia Region: Historic High 115.4 RMG 026 / 19.7 Country

Temperature at the time of the accident was about 65 degrees, the windsock was virtually limp, and skies were mostly clear.





Mr Rayner

This is my account of the events I witnessed on 23 MAR 2019 in reference to the Commuter Craft "Innovator" aircraft accident.

23 MAR 2019 at approximately 1530 hours my wife and I were travelling north on highway 41 in the vicinity of the Calhoun Airport. While passing the airport I saw an aircraft in flight just above runway 35 "presumably had just taken off" and immediately noticed that it was pitching and rolling and appeared to be unstable. I recognized the aircraft at this point to be the "Commuter Craft". Pitch attitude was varying between approximately 20 degrees nose up and 20 degrees nose down. Roll axis was also approximately 20 degrees left to 20 degrees right roll. It was approximately 20 feet above the runway and did not appear to be climbing but rather flying somewhat level but erratic down the length of the runway. At this point I lost sight of the aircraft because the hangars were between the road and the runway. I turned into the airport drive and as I approached the terminal building I again saw the aircraft just off the approach end of runway 17 turning a steep crosswind turn approximately 45 degrees left bank angle. The aircraft was still very low approximately 150 feet AGL. At this point the aircraft went behind trees due to distance and low altitude. I never heard the engine as I was inside my vehicle. A few seconds after exiting my vehicle I heard the sound of the impact. The "chase" plane flying overhead at approximately 2000 feet declared an emergency on the radio and stated "the experimental just went down".

I had seen the accident aircraft at the airport on many occasions performing taxi tests and even looked inside and underneath it on one occasion. On this occasion two local pilots who are friends of mine were considering performing the initial test flight of the aircraft. I went to look at the aircraft while they were talking and preparing to perform taxi tests. I noticed a significant amount of improperly installed hardware (nuts that did not have the required exposed thread beyond the locking feature of the fastener and some fasteners with more than three washers to take up the extra shank on the bolts). The employees involved stated that they knew about some of the hardware issues and that the DAR had pointed out those issues as well. I do not know if these items were repaired prior to the accident flight. I warned the two men who were considering flying it that I did not believe it was a safe aircraft for many reasons among them were the items noted above. During taxi tests on one occasion the rudder pedals on the copilot side broke off. On another occasion the copilot control stick broke off while attempting to lift the nose. After these events the two men decided not to fly the aircraft or participate in further taxi tests.

If you have any further questions or concerns please contact me.

Mitchell Todd Bone

A&P Mechanic IA

Private pilot

Cell: