

# COZY NEWSLETTER #91 Oct. 2005

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## FIRST FLIGHTS

There were probably more, but I heard of 5 first flights this last quarter:

- 1) Chris Esselstyn, Waukesha, WI
- 2) Matthew Bunch, Lexington, KY
- 3) Chris Van Hoof, Johannesburg, S. Africa
- 4) Khalid Shuwayhat, Guildford NSW, Australia
- 5) Ron Brooks, Farmington, NM

Matthew Bunch writes:

6/27/05

My Cozy has taken to the sky at the Georgetown airport on Saturday, June 25, at 2 p.m., flown by Sam Chambers. He is an expert with many hours of canard time (1,100 hrs.), and I felt more comfortable with him doing the first flight. Bruce Layne took numerous photos, some of which have been posted on the web. Many thanks to both of them. On Sunday, June 26, at 10:15 a.m., I flew the Cozy for my first time with Caryn and the kids, Evan and McKensey, watching. After some minor tweaking to lower the oil temperature, I expect to get around 200 mph on 8 gallons/hr. If you look up and see an airplane that looks like it is flying backwards, it is me. Many thanks to all those who have helped me along the way over the past 10 years. Matt Bunch

Lexington, KY

Khalid Shuwayhat writes:

8/27/05

I have good news to share with you. Today I did the first flight for my Cozy MKIV. It was a thrill!

My airplane is at Hoxton Park aerodrome (only 3000 ft. long). I did 5 high speed taxis, three of which I managed to lift the nose for a very short time due to runway length. Alan Aaron came from Vocluse to be with me, a very supporting guy, and Craig and his wife came from Newcastle, about 150 km to the north of Sydney. They flew down in their Gruman Tiger. They are also building a Cozy MKIV and progressing very well. After 5 runs, we removed the top cowl and checked around. The engine looked clean and good. The wind was about 5 kt cross at 45 deg and varying during the taxiing. Then later on it became about 180 deg at 5 kts. This was good for runway 160, so I decided to go.

The aircraft takeoff is not like any other airplane. Completely different. One thing worried me during the w & b. I had 35 lbs of ballast in the nose, but when I lifted the nose to remove the scale, the nose became weightless. On takeoff, I applied full elevator, and it rotated, and it pitched up. I had one reaction to push the nose down and then maintain a slight nose up, it came as a surprise, the aircraft cleared up from the ground into the air very fast. This was my first flight and first time in type!! Even though the take off was very different, once in the air, it was ok. During the climb the aircraft was turning right and the right wing was down slightly. I was too excited to think for a moment, but soon I realized I had my right foot pressing on the right pedal, a legacy carried over from flying conventional aircraft. On the climb, we

push more right rudder. I actually moved the pedal step all the way to the front to rest my feet like in a Piper Warrior, but I am going to move them back to where I can apply them only when needed.

I stayed over the airport up to 1800 ft, we had a partly cloudy day and I started to feel the turbulence at the edge of a passing front. I stayed up for 15 minutes, did some checking, but no stalls. I slowed down to 75 kts and tested the airbrake and the rate of descent for a short while. Then I set up my approach at 90 kts, and did one missed approach. On the go around down wind I slowed the airspeed to 80 kts, trimmed the aircraft and maintained the 80 kts for base leg and final. I flew it down to the threshold at 80 kts, level and cut the power and did a very smooth soft touch in the half of the runway. The air cushion does soften the touch down much more than the Piper Warrior. What a great smooth happy landing. It made up for the takeoff kangarooing.

I have spoken with Tony Rothwell in Canberra a few times on the phone and he talked me through the first flight and what to be aware of. I called him today and told him the good news. He congratulated me and said that now we have the first Cozy MKIV in Australia. The other guys are working well at it.

Very very nice design, people on the ground who saw the missed approach low level flying and go around said the aircraft looked like very different, eye catching like something from outer space. It made me feel taller.

You were very supportive and I appreciated and respect your firm decisions that is the product of your great experience. Thank you Very Very much for your great design, best ever written plans and instructions, and a fantastic aircraft. Nat, you are a great man.

My best wishes to you and your lovely wife.

Khalid Shuwayhat  
Guildford, Australia

Chris Van Hoof writes:

9/9/2005

It is with great pride that I announce that Cozy MK IV, serial no. 219, had its first flight today at about 16:15 local time. Just for information, after a thorough pre-flight, the plane was pushed out of the hangar with a minimum of 60 liters of fuel and normal oil. The c.g. was slightly forward of ideal for testing, but very well within the limits of the plane. Temp was about 29 deg C., while there was no wind to speak of.

Dave King, the test pilot flew in with his RV (don't ask why he did not come with the Varieze or Long EZ that he owns), and did his walk around and preflight. Questions and answers that confirmed data and construction stuff—the man really knows!!

At BaraG we (Dave King and I) taxied to holding 31, where everything checked out fine (50 drop each side on the mags and no one in the traffic). In total focus, we pushed the plane out, started and found the place desolate, would be a good description, and we taxied to 31. After checks, we entered and trundled down the runway. We reached 70 kts at about 400 m and the plane was about to fly, and just after that was airborne, all straight and level. At 3,000 ft, we were doing 100 kts and climbing in a level attitude at about 1000 fpm – gear still down.

Since the going was good, we kept this attitude till we reached 6500 ft. So we turned crosswind and then downwind, keeping the speed below 115 kts. This was an early decision and action, since this plane really wants to move! Having established that, the plane tracks true on straight and level in the climb, we noticed insufficient trim authority on the straight and level. Once

established on downwind, we did some turns to the left and right to feel the stability. Then on the opposite to downwind we did (there really was no wind) the test to see how slow, and the indicated stall of the canard was close to 55 kts. Then we turned downwind and started on an extended leg for base and final.

Somewhere we had lost my #02 cylinder again...it was showing a low EGT, but everything was running smooth, so we landed normally and taxied to the hangar, where we exchanged notes and pleasantries. So after what seemed like a half hour of flying, I am able to log .09 hours – who says time does not fly!!

Notes 01:

The radio stopped working, so we went onto the handheld. Trim needs more “up”. #02 fuel block – clear & install filter!! Picked up an oil leak, look for it and correct.

Notes 02:

To the designer – Nat Puffer – A big thank you for the design, plans and encouragement over the years!!

To the webmaster – Marc Zeitlin – A big thank you for your web, forum and quiet support!!

To all you others – flying, building and opinionated bodies, thanks for all your inputs and encouraging comments!!

The test pilot did not want refunding of costs, so I presented him with a Cozy lapel pin, best I can do for folks that don't want money. But again – to you all – thanks, without your support and advice over the years I would not have managed this!!

PS: In my eagerness I forgot to mention that the canard stalls on about 55 kts during the first test. It all handled EXACTLY as per plans and data! Those of you building – get going, this is better than the specs!! The # 02 cyl injector blocked in the last few moments, but was not noticeable...how's that for performance!!

Folks, keep at it with renewed vigor, this is one awesome plane!!!

Chris Van Hoof  
Johannesburg, S. Africa

## LETTERS

*We have received many letters from builders similar to the following, too numerous to reply to individually, but we have appreciated every one of them:*

Nat, 6/11/05

Your e-mail announcement made me very sad for a whole lot of reasons. There has been so much nonsense put out on the two e-mail groups, and you added the final authority (which sometimes caused a lot of grumbling, but the respect was there). I wonder how many planes and even lives you may have saved. You will be truly missed. You always showed such enormous patience; something I truly lack.

I have been thinking lately about when I should “hang it up” and have come to the conclusion that as soon as Janie just can't take the trips anymore will be the point. The St. Thomas trip was too long for her so the really long trips are now out (we never made it to Alaska). We may still make it out to AZ next year but that will probably be the last. She has been going to exercise classes and there has been a noticeable improvement in her joint movement. We have a trip planned up to Halifax later this summer and we will see.

Again, I would like to say that we will truly miss you as will all of those who finished their planes. I have always said that those that talk about their redesigned planes all the time

never really finish. It has to be one of the Lord's blessings. The next time I fly in and out of the cumulus clouds I will think of you and say a little prayer for our association. Janie joins me in saying, “have a happy 2<sup>nd</sup> retirement.” Give our love to Shirley and we will be sure and contact you when we get to Mesa next year.

Ken Brimmer

Stefan Siegel writes:

6/28/05

I am the guy whom you helped out of a real bind about two weeks ago – we are just back from our trip to Tampico, Acapulco, Ixtapa and back via San Antonio to Pueblo, CO, where we live. It was a great trip, and N42CZ performed great with what used to be your spare prop. I could not detect any change in climb or cruise compared to the original prop, and the Cozy MK IV designed by you performed great from VFR at sea level all the way to solid IFR conditions cruising in the monsoon rain showers at 14k ft. over Mexico City. What a well designed airplane!! I greatly admire all the improvements you added to the original Long EZ. When I upgraded from the Long EZ I used to own (before kids) to the Cozy, I thought I would trade in some of the fun flying qualities for two more seats. Turns out, this was far from the truth. The Cozy is even more fun to fly than the Long EZ. My kudos to a great design. You can be rightly proud of it!!

I also admire how long you patiently put up with nontechnical people asking (often) incompetent questions on the “unofficial” Cozy list. I would not have had the patience to sustain it that long. I love technical discussions, being an aerospace engineer working on basic research, but it is only fun with competent people.

Thanks again for helping us out when we were grounded with a busted propeller in San Antonio, your quick dash to FedEx really made all the difference. I hope you got the check we sent to you, and we would really like to say thanks to you beyond the money, by sending you a case of our favorite beer – do you drink beer? Let me know. (*Editor, yes!*)

Stefan Siegel, Ph.D  
Pueblo, CO

## PERSONAL COMMENTS

Several years ago, Shirley and I set the goal of retiring (the second time) when we were both in our 80s. We, and many others, think that the Cozy Mark IV is a wonderful design, is unique in many ways, and should continue to be available to prospective builders. Rather than just stop selling plans, like Burt Rutan did in 1985, we were looking for someone who could continue on. Both Wicks and Aircraft Spruce have an interest, because building from plans provides a market for their parts and materials. Wicks does not sell plans, but Aircraft Spruce does, so we entered into an agreement with Jim Irwin in 2003 for him to buy our copyrights and supplies. We agreed to continue to provide builder support and to exhibit our airplane at major airshows for another 2 years, if able. After Airventure (Oshkosh) 2005 and this newsletter, we will have completed our obligation.

Oshkosh this year was a big success. We renewed many acquaintances, and our builder friend from Brazil, Fernando Miranda, camped with us in Paul's Woods. Many Cozy IIIs and Cozy IVs flew in (we lost count), and it was standing room only at our Forum, “Cozy Mark IV Aerodynamics”. We had many requests for copies of this talk, so we have made reprints and one is attached to this newsletter.

Almost 100 people attended the Cozy banquet at Robbins. Their buffet was fabulous (thank you Kim and Darryl). The MGS representative supplied dinner wine at all the tables, and donated door prizes along with Aircraft Spruce and Wicks. All in all, it was one of the best Oshkoshes. Of course Space Ship One and the Global Flyer were big attractions, and we got to see them perform. A straight line microburst blew away our tent at our exhibit, and also Marc Zeitlin's on the flight line. Ours ended up in a restaurant by the flight line, and Marc's ended up wrapped around Curt Smith's Mark IV winglet.

We decided to offer our Mark IV for sale at Oshkosh (our kids want us to downsize and simplify our lives), and it didn't take long before we accepted a firm offer and earnest money down from a couple of Long EZ guys from CO who had out-grown their two-seater.

We departed Oshkosh early Monday, August 1. Bad weather in the mid-west caused us to detour south (these long-distance airplanes are really nice), so we stopped in Liberal Kansas for fuel and then overnighted in Albuquerque. Flying in the mountains is always better in the morning, so we arrived back home on Tuesday morning. Again, our Mark IV and Lycoming 0-360 performed flawlessly.

Our kids have been bugging us to spend more time with them and our grandchildren (we have 13) in Minnesota, so prior to Oshkosh, we purchased a condo in Oakdale, MN, where we expect to spend our summers from now on.

We would like to keep active in aviation, and may or may not build or buy a LSA (light sport aircraft). We have gotten very disgusted dealing with the FAA, and all the red tape required annually for a special issuance medical, good for one year. In March, I passed all the physical tests they insisted I take with "flying colors", and submitted them. At this writing, 5 months later, I still have not heard back from them.

This will be our last newsletter. Marc Zeitlin promised to scan the attached forum reprint and post it on his web page for the benefit of those builder who no longer subscribe to the newsletter. Perhaps Aircraft Spruce will provide copies to new builders.

Some builders have subscribed to newsletters well in advance and we would like to send them refunds. We ask them to send us a stamped, self-addressed envelope, so we can do that.

It has been a real pleasure and source of personal satisfaction working with and helping builders all these 25 years. Shirley and I give you our heart-felt thanks. We wish all of you many safe and enjoyable years of flying. Take care!

We will continue to answer builder questions addressed to us at our Mesa address, our Mesa phone, and/or our email account (see our newsletter heading). We encourage builders to refer to past newsletters or Marc Zeitlin's archives for construction or design questions, and to join Marc's chat group and Terry Schubert's Central States Newsletter for builder news. Good building!

## **GOODBYE 14CZ!!!**

On August 27<sup>th</sup>, Shirley and I watched, standing on the tarmac at Falcon Field, while our Cozy Mark IV taxied out, took off, and disappeared in the distance. It was the first time in 800 hours it had ever left the ground without me at the controls. There were tears in Shirley's eyes. How many times had it safely taken us to and back from Sun n Fun, Arlington,

Oshkosh, and other flyins in both good and bad weather. What a wonderful airplane that has given us such precious memories. It was a very sad experience for us, but we can take heart that it is in good hands and will provide others with the wonderful experiences we have had these last 13 years.

Burrall Sanders wrote to builders:

9/8/05

As some of you on this list know, Aaron Hollingsworth, along with a partner, recently purchased Nat's personal Mark IV (serial #0001). I was tapped to go to Mesa AZ to fly the Cozy back to Colorado Springs and then for insurance purposes, check out Aaron and company to fly it. Even though I have been building a Cozy for several years and expect first flight to be next year, I had never flown in or piloted a Cozy. Wow, what an amazing aircraft. It offers everything a Long-EZ has to offer and more + 2 more seats. I have flown several Long Ezs as PIC and several Variezes, including the one I built and then put almost 900 hrs. flying time on. I also have around 150 hrs. on Velocitys. They are all marvelous machines. Now, my favorite is the Cozy. It has all the sportiness, performance, comfort and efficiency I have come to expect from a canard aircraft, but with some refinements and features that have evolved from a very good line of airplanes. The Cozy rules! No disrespect to the many Long EZ, Varieze and Velocity drivers out there intended.

BTW, Aaron and I spent the night with Nat and Shirley Puffer at their home in Mesa. They are extremely gracious and engaging. My observation is that they are very reluctant to leave the canard community, but have acknowledged that it is time to move on. I have nothing but respect and admiration for those two people. My hat is off to them.

Burrall Sanders

Tech Counselor, Flight Advisor

### **High Flight**

Oh, I have slipped the surly bonds of earth  
And danced the skies on laughter – silvered wings;  
Sunward I've climbed and joined the tumbling mirth –  
Of sun – split clouds – and done a hundred things  
You have not dreamed of – wheeled and soared and swung  
High in the sunlit silence. Hovering there,  
I've chased the shouting wind along and flung  
My eager craft through footless halls of air.  
Up, up the long delirious, burning blue –  
I've topped the wind – swept heights with easy grace –  
Where never lark, or even eagle, flew;  
And, while with silent, lifting mind I've trod  
The high untrespassed sanctity of space,  
Put out my hand, and touched the face of God.

John Gillespie Mager