

THE COZY NEWSLETTER #14 • July 1986

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It is mandatory for all Cozy builders to subscribe to this newsletter, as this is the only formal system we have for communicating plans changes and/or corrections, builder hints, changes in suppliers, and other information required by or of interest to builders. Builders will require newsletters from #4 on.

When writing to us with questions, please send along a stamped, self-addressed envelope if you wish a personal reply. Allow space after each question for the answer.

If you call, you can reach us most of the time on (602) 981-6401, which is both our office and residence number. If we are away, please leave your message on our answering machine, and we will return the call at our first opportunity.

The following prices are in effect:

Information kit	\$9.00
Newsletter, per year	5.00

Plans & Constr. Manual	230.00
Owner's Manual	15.00
Cozy decals, ea.	5.00

We do not accept credit cards, because of the extra expense and record-keeping involved. We do accept personal checks on US banks and money orders In US dollars.

Overseas orders for plans will be shipped by surface mail at no additional cost, but it takes at least 8 weeks. Airmail postage overseas averages about \$35.00, because the plans weigh 6-1/2 lbs.

Our computer has a limited number of spaces for your address. If yours is an unusually long one, please supply us with the shortest acceptable abbreviation. Our computer is programmed to print on the label after your name, the newsletter expiration number, to remind you when it is time to renew. The number at the top is a file number important only to us.

ABOUT THE PLANS

When you receive your plans, please do the following:

1. Sign both copies of the license agreement (Chap. 1, p.4) and send both to us. We will assign a serial number (required for licensing), sign one of the copies and return it to you for your records.
2. Check the number of pages in each chapter against the number of pages listed under "Table of Contents". If any are missing, write to us for a copy.
3. Mark in all of the changes and/or corrections published in newsletters #4 to date.

There may be some things you don't understand on the first reading, particularly if you haven't started work yet. Don't immediately grab the phone. Usually when your construction reaches that point the instructions will become clear, if not on the first reading, at least on the second.

Some of you have cut up your large size A drawings and no longer can refer back to them. We have just had additional copies printed, and can supply additional copies at \$1 ea. plus .50 postage, or complete sets at \$15.00 plus \$1.00 postage.

Thank you for compliments we continue to get on the plans. It makes us feel that all of our efforts are worthwhile.

WHAT WE HAVE BEEN DOING

There have been so many things going on the past 3 months we have had little time to do much flying since returning from Sun and Fun. It probably hurts our plans sales, when we don't go to all the fly-ins, or gum shoe around the country more, but it has been a full time job for the two of us attending to our daily business, supporting our builders, working with suppliers, entertaining visitors, and trying to get a few other things done. It will help a lot when more of you finish your airplanes, if you do a good job and they look like Uli and Linda's, and start attending air shows near you. But your

airplanes have to look good!

Well, we finally finished our addition--my shop and Shirley's art studio, plus another bathroom we share between us. Now we each have 400 sq. ft. of work space, not counting our office which we converted from a 3rd bedroom.

It had been my intention to contract everything out, but I ended up being responsible for or having to do a large share of it. I handled the roof, did the floor (Mexican tile), did the heating and cooling (heat pump), and all the duct work, built the decorative wall out in front, did part of the plumbing, built work benches and cabinets, did part of the painting, installed all of the blinds, and other misc jobs. The landscaping around our addition is not yet done, but I am putting it off.

The shop (and Shirley's studio) looked so beautiful, it seemed a shame to get it all messed up with epoxy, sawdust, etc, but I could hardly wait. And I didn't have to wait long before a big semi pulled up out in front with 17 boxes of supplies from Wicks.

After building the better part of 4 airplanes in 1/2 a basement and single car garage back in St. Paul, my new shop is a dream come true. It is air conditioned and well lighted. I can listen to stereo or watch TV. I can make layups in comfort and then set them out on our 110° patio (now that summer is here) for a fast cure. After finishing jobs, I can take a quick dip in the pool. Arizona is great!

Shirley planned a trip back to Minnesota the end of May for a one week-painting trip and one week of visiting children and grandchildren. For various reasons, she ended up extending the trip to one whole month. Uli and Linda wanted to visit us one more time before leaving for Germany so they arrived a few days before Shirley left. While here, Uli and I rebuilt our nose gears, and I installed vortilons (mandatory). I still had the original lightduty nose gear fork, so I replaced it with the newer heavy duty fork which Brock has been supplying for the last several years. We both installed much more substantial bushings in NG 6 and a grease fitting, and installed a spacer between the roller bearings in the nose wheel so the axle could be tightened independently from the bearings. I noticed that my axle had been turning in the fork, rather than the wheel on the bearings. These modifications eliminated the side-to-side slop in the nose gear, and greatly improved the steering. We were both very pleased with the result.

We hosted a builders party while Uli and Linda were here, and greatly enjoyed their visit. A few tears were shed when we saw them off.

Uli and Linda's new address in Germany will be:

Uli and Linda Wolter
Ahorn Strasse 10A
D-8901 Ried West Germany

In the meantime, Shirley departed for up north and I was suddenly left alone. If it weren't for builder/dinner invitations (thank you Mouldens and Turks), and visitors (I thank you too) it would have been a lonely period indeed! There was plenty of work though, like 15,000 A size drawings to fold and

collate.

THE MARK IV

Aeromet is a small, high-tech company which has perfected the art of remote controlling small aircraft, and bringing them back safely to the ground. Pilot-less aircraft apparently are quite useful in some commercial, scientific, and military applications. Aeromet started with a Varieze, progressed to a Long EZ, and was looking for a larger fuselage to hold more gear. The Cozy was an improvement over the Long, but they wanted even more space over the c.g. for equipment. They asked how difficult it would be to widen the back seat. This was something I had been thinking about for some time, but needed something or someone to push me into it. I advised Aeromet that this could be done, but that there were other design changes which really ought to be done at the same time. A wider back seat would mean higher gross weights, so the wing span should be increased, the landing gear strengthened, and a better engine mounting system should be designed so the O-320 could be used with confidence. Also, the firewall should be moved forward to provide more room to work on the engine.

Aeromet liked what they heard, so we entered into an agreement. We would advise them how to do all of these things, and they would build a prototype (proof-of-concept) model right away. We would also build a prototype, but take a little more time to refine some of the changes and document them.

Aeromet's prototype won't look exactly like ours, because they have some special equipment requirements which we don't have, and they are more interested in function than builder appeal. However, their flight tests should prove feasibility, and the refinements can come later. Aeromet hopes to have their Cozy Mark IV flying in July, and bring it to Oshkosh. Let's hope they succeed!

Our design philosophy is to stick as close to the existing Cozy (and Long EZ) design as possible, and change only those things which are necessary, rather than to design a new airplane from the ground up. We consider this to be the safest course to follow, and the most likely to be successful. The new gear will be intermediate between the Long EZ and Defiant in strength track and weight. The new engine mounting system will have a much greater distance between upper and lower attach points, will be conventional in its attachment to the firewall, and will be strong enough for an O-320 with starter and alternator.

Don't start building your 4-place yet, or even bugging us for details. Even the modification of an existing design takes a lot of time to figure out, build, and prove. It would be a mistake for any of you to build something which hasn't been tested and proven.

So now you know why the new shop and the Wicks truck at our door. Please remember it takes 2000 hours to build an airplane, even for an experienced builder, and there will probably be many interruptions before we are done and ready to flight test. As of this writing, the fuselage sides are complete and the fuselage "tub" is being assembled. We will keep you posted on our progress.

OSHKOSH 86

We will be combining our annual trek to Oshkosh with visiting children, grandchildren and friends in Minnesota. We will be leaving Mesa around July 20th and be gone a month. While gone, my sister, Mrs. Lee Parlee, will be staying here, taking care of our dog, house, and some Cozy business. Any mail requiring special answers will have to await our return (likewise telephone calls). We will check back occasionally, in case you have any crises requiring immediate help.

JACK WILHELMSON FLIES! HE WRITES:

This story really starts in October, 1983, when the decision was made to take on the project of building and flying a very carefully selected experimental aircraft. However, this article is about the climax of the project only, and my personal impressions of a very important event in any experimental aircraft builder's life.

My aviation background spans over twenty some years. I have a multi-engine commercial instrument rating, and I have been a practicing instrument flight instructor, but I have never made my living from aviation. It has always been an avocation that I used mostly for personal purposes. My profession is electronic engineering.

N711CZ is a Lycoming O-320 powered Cozy. It was built as closely as possible to Nat Puffer's excellent plans, except for the larger engine and some minor modifications to the instrument panel design. Nat did not approve the modifications, and tried his best to talk me out of them, but when he could not, he then offered his help to make sure the modifications were safely done.

The FAA inspection of 711CZ occurred on June 4, 1986. The inspector conducted his inspection and gave his approval, along with his compliments on the workmanship.

The first low speed taxi runs were made the day of the inspection. The high speed taxi runs were made on Friday, June 6th. Nose wheel lift offs occurred precisely at 55 Kts, (as predicted by the Owners Manual). Everything reacted very normal and a call was made to Nat for a few last words of advice and assurance. The next morning dawned with clear skies and light winds, so there were no excuses left; today would be the day I had looked forward to during the long months of building.

Nat had advised me to hold it on until 80 Kts and then rotate instead of lifting the nose at 60 Kts and fly off at 70 Kts. After mag check and check list, there was a moment of careful consideration, my feelings being a mixture of pride, elation, and admittedly, a bit of apprehension. However, with the crash crew eagerly watching, there was no way to back out gracefully. I also realized at that moment that I never wanted to do anything as much as wanting to fly that airplane and I was suddenly rolling down the runway with high expectations.

The acceleration with full power was very rapid. At 80 Kts, Charlie Zulu lifted off like she was born to. The directional stability was adequate up to 60 Kts, but after that it was excellent. The climb was stabilized at 100 Kts showing 1500 fpm. The first turn in

pattern was on rails. I have flown quite a few aircraft and this airplane makes the most co-ordinate, effortless turns of any airplane I have ever flown. The complete absence of nose drop tendency and adverse yaw makes the Cozy a pleasure to fly. After a couple of times around the field at 120 Kts. while checking all engine instruments, a climb to 3,500 ft. was initiated. Slow flight at 60 Kts was checked and there was no tendency to drop a wing. At this point, the pressure began to ease off and euphoria began to set in. The realization that two years and eight months of work, not to mention the expense, was all worth the sacrifice and brings on a very satisfying feeling. This has been said in many ways, but it is truly an indescribable feeling.

After forty minutes of turns, climbs, descents, and in general checking engine instruments, the time for landing came. The landing check list was gone over three times. A fifty foot above the ground go around was executed to get the speeds and distance on approach in mind and then the first real landing attempt began. The wind was very light, so this was no problem. Everything went well until the flare. My old habit of putting both feet on the rudders came through and I touched down with the brakes slightly applied. This caused the nose to pitch down, which I over corrected with up elevator and the inevitable porpoising began. The nose wheel hung in there and the oscillations eventually subsided. Not a pretty landing, but given the circumstances, I was still overjoyed.

After congratulations from the spectators, the aircraft was inspected. No damage was found. I am now into my 15th hour of testing and everything is checking out even better than expected. I and my wife Donna are looking forward to a lot of happy flying.

Jack Wilhelmson

Congratulations, Jack!

OTHER BUILDERS

Ken Francis is finishing up painting, the last we heard, and approaching his first flight. We wish you much success, Ken, and expect to see you at the big O.

Vance Atkinson was close behind Ken, but, because of a job change (He has accepted a job with American Airlines), has all but given up making Oshkosh.

We have heard of other projects which were nearing completion, but don't know if any will make it to Oshkosh.

ENGINE MOUNTS

One of our builders called asking for help when he discovered, after installing his exhaust pipes, that the pipes exited the top, rather than the bottom cowling. The aft end of the pipes were 1.3 in. too high! The pipes were correctly built, so it had to be a problem with the engine mount. We were not

able to check out his mount, but we were able to obtain a mount from another builder made by the same company. When we checked the dimensions, we found that both the engine elevation and thrust line were off, and the errors were cumulative. Please be advised that the engine position and thrust line affect performance, as well as fit of cowlings and exhaust pipes, and should not be changed arbitrarily.

We contacted the manufacturer to inform him of the problem and are providing design assistance, even though he is not an authorized supplier, nor has he purchased plans from us. We normally don't provide design help to people who don't purchase plans from us, so we hope he will in the near future.

You should not install an engine mount without first checking its dimensions against the plans.

Once drilled into the extrusions, it would be very difficult for you to replace the mount without having to replace the extrusions as well. Engine elevation can be checked by standing the mount on a flat surface, firewall end down, marking the centerlines of the attach points, and then dropping a plumb line from the outermost edge of the dynafocal doughnuts and marking those points. Set the attach points at the Water Lines shown on the plans and measure up to the plumb line points. If the doughnuts are either larger or smaller than those used by Brock, you will know because it will affect the top and bottom dimensions equally, but oppositely. Engine thrust line and fuselage station can be checked by placing a breadboard or piece of plywood over the doughnuts and checking the distance from the firewall, and comparing it to the plans. At the same time you can determine whether all four doughnuts lie in the same plane. CAUTION: Engine position for the conical mount is slightly different than the dynafocal mount, because of greater engine sag in a conical mount.

LIABILITY

Many business and professional people these days are refusing to accept any risk, because the cost of insurance protection against possible liability is prohibitive, if available at all. This is the result of a tort system in this country which many people believe has gone awry. Many lawyers are willing to take on meritless cases in the hope that a sympathetic jury will award a large settlement, and they will get their cut. *Homebuilt Magazine* recently reported that this is the reason Quickie is in bankruptcy, John Monett sold out, and Burt Rutan simply gave up. Rumor has it that other designers are thinking about giving up as well.

We have been asked if we aren't worried about liability. The answer is yes. We do not carry liability insurance. The cost of defending ourselves against just one frivolous suit could wipe out our business. Maybe we are foolish to think that if we do a good job, we won't get sued.

Actually, the subject of liability doesn't arise until after someone is injured. What we are trying to do is to prevent injuries before they occur. Sometimes we get discouraged when inexperienced, low-time pilots who have never flown anything faster than a 152 want to build high-performance airplanes with big engines and fly faster than 200 mph on auto fuel.

We apologize if some of you are getting tired of our urging you to follow the plans, use only approved materials and parts, etc., but we know we have persuaded some builders, at least, and are

still trying to influence others. We want you to build safe airplanes and operate them safely. We want the Cozy to have a good safety record. Please don't let us down!

ACCIDENTS

Although accidents are not a pleasant subject, the purpose of studying them is to try to learn how to prevent them in the future.

It was reported to us that a couple of months ago in Texas an experienced Long EZ pilot volunteered to flight test a recently completed Long EZ for a friend -- after the engine had been overhauled. After take-off, the aircraft was observed to be trailing a cloud of smoke (presumed from a fuel leak), which shortly burst into flame. His wife was flying chase in a Varieze. The pilot was notified by radio, and he returned to the port for an emergency landing. The engine stopped on Final, and he came down short in a residential area, where the aircraft ran into one or more cars. The pilot did not survive the resulting fire.

Two items caught our attention. The engine was reported to be an O-320, and the fuel was reported to be auto fuel.

A wind-milling engine creates a lot more drag than one running at idle. Descent will be much steeper, so you have to allow more altitude. A wind-milling O-320 is much worse than a wind-milling O-235.

We have previously warned that auto fuels are rich in aromatics, which tend to dissolve epoxy and end up as gunk in the carburetor. We have recently learned a couple of more scary things about auto fuel (***Popular Science***, March 1986). It is becoming common practice to boost octane rating by dissolving the cheap and plentiful "light ends" from cat cracking, like butane, in auto fuel. This increases vapor pressure and volatility. Butane is normally a gas, so it evaporates very rapidly from gasoline, and it takes only 1.8% butane in air to reach a flammable mixture. What is worse, butane has a relatively low self-ignition temperature, 961°F, well within the temperature range of exhaust gases and exhaust pipes. In the event of a fuel leak, such fuels could easily ignite. By contrast, we have heard of massive leaks involving av gas, without resulting in a fire.

High vapor pressures of auto fuel can also cause vapor lock. One situation where this might happen, is if you run a tank dry, switch tanks, and the fuel pump has to exhaust air and vapors from the fuel line before fuel flow to the engine is re-established. If the fuel vapor pressure is high, the fuel pump may not have the capacity to handle it, and instead of a successful restart, you will be faced with an emergency landing.

Another concern is octane rating. If octane rating is achieved by adding butane, and it evaporates, octane goes down and you will run the risk of detonation at high power settings, like take-off. Detonation in aircraft engines can cause catastrophic failure.

Av gas is more expensive than auto fuel because more expensive ingredients are required to meet the more rigid requirements of aviation fuels. Like everything else, you get what you pay for. There are many other ways to save money which are not life threatening.

Use of auto fuels in Cozy aircraft is prohibited.

WEIGHT

We have noticed a disturbing tendency for people to add things to their airplanes which serve little useful purpose, and only add weight. Burt Rutan was very performance oriented. He designed and built light planes which had super performance. He used to say, "If you are considering adding something to your airplane, toss it up in the air. If it comes down, it is too heavy and doesn't belong in your airplane." One day at Oshkosh, Burt looked at a very pretty, but heavy Varieze, and remarked, "it would make a nice monument to set in concrete."

We followed Burt's advice when we built our Varieze. We installed the recommended 85 hp engine, and we had one of the lightest Variezes, weighing in at 605 lbs. We hosted a fly-in in Taos, NM in 1980 (airport el. 7,000 ft) in July, and found we could out-perform other Variezes with more horsepower, but heavier.

You're not convinced? I learned to fly in the Navy in WW II at the age of 17. I had this opportunity because we were losing so many pilots in combat in the Pacific. The reason; the Japanese Zero had absolute superiority over our fighters. The Zero could out climb, out maneuver, and out run the Navy's F4F, and had a higher service ceiling. Here are some statistics:

Aircraft Type	Empty weight (lbs)	Engine (HP)	Wing span (ft)	Max. speed (mph)	Service ceiling
Zero (A6M2)	4,107	925	39	332	38,520
F4F	5,785	1,200	38	320	34,000

The point we are trying to make is that lightness is the key to performance. It is extremely important to keep your airplane light. This may take much will power and discipline, but in the end you will be pleased with the result. If you must have all those goodies, wait to install them until after you have completed your flight tests.

BUILDER HINTS

1. The bushings supplied by Brock in NG-6 allow an undesirable amount of side play in the nose gear. We have asked RAF to authorize a design change. In the meantime we (as well as others) have made and installed longer bushings in NG-6 which span the full distance between the NG-8 plates, eliminating the spacer washers Brock supplies. We also installed a grease fitting in NG-6. This has eliminated the side play and makes steering smoother.
2. The nose wheel assembly supplied by Brock has no provision to tighten the axle without also tightening the wheel bearings. We noticed that the axle was turning in the fork rather than the wheel on the bearings. We installed a spacer between the bearings (dimensions may vary) so we could tighten the axle without tightening the bearings, and now the wheel turns on the bearings. This also improved steering.

3. If your nose wheel is off center in the fork it is probably due to the inside surfaces of the fork not being parallel, which throws the wheel to one side when the axle is tightened. We filed one of the surfaces straight, and now our nosewheel is centered.
4. Layups go faster if you cut out the glass cloth ahead of time to the approximate size. Best time to do this is after the part is vacuumed, but before applying any epoxy. Drape the cloth over the part, cut it to size, label it with a felt-tipped pen, roll it up, and set it aside. To prevent UND from unraveling when cutting it lengthwise, lay down a strip of masking tape, and cut down the center. Scissor trim the masking tape off after the cloth has been wet out in place.
5. The best way to store and dispense glass cloth is on a rack in a wall cabinet (a la paper towels). A mop handle slid through the core works well. Hinge the front of your cabinet so it opens down to form a table (you will need hinged legs as well) to lay out the cloth for cutting. Keep a clean pair of scissors there just for cutting clean cloth. This arrangement protects your cloth, keeps your shop neat, and is a great convenience.
6. Make your vortilons using 6 plies of BID.
7. Safe-T-Poxy requires shop temperatures of at least 80°F for good workability. Lower temperatures will take longer to wet out and cause heavy layups. The RAE resins are lower in viscosity and work better in cooler shops, although RAE slow works great at warmer temperatures. We use RAE resins almost exclusively.
8. The pre-fab fuel sump blisters made for the Long EZ bulge out too far and can't be completely faired in. It is easy to make your own just the right size and shape to fit your fairings. Tape the fuselage side and strake with duct tape, carve a block of urethane to fit in the corner, glue it in place, contour the outside, lay up 3 plies of BID over it, after cure remove it, trim it, clean the foam out of the inside and coat it with epoxy, and then flox it in place permanently. You will save money and have a better looking job.
9. When installing wheel pants, make sure you drill and tap the axle deep enough so the AN4 bolt screws in past all of the threads and the grip area of the bolt seats in the hole. Otherwise the bolt can fatigue at the thread and break off (this happened to Uli).
10. The heavier your airplane, the harder it will be on brakes. Cleveland makes a special 500 x 5 brake disc for the Caproni jet. It is 3/8" thick rather than 3/16", and can absorb and dissipate a lot more energy. If you also use calipers from 600 x 6 wheels, which have larger pistons, the combination can increase your braking by 70%. You should add a shim on the gear leg 3/16" thick, to maintain the same clearance between disc and gear leg, and you should remove a little metal from the calipers so they will fit the same cutout in the gear leg as the 500 x 5 calipers. Cleveland part numbers are, Disc 164-08500, and Caliper 30-133. These can be purchased at a discount from Varga Enterprises, Chandler Airport, AZ (602) 963-6936.
11. Never mount oil pressure or fuel pressure senders solidly attached to the engine. There have been numerous instances where engine vibration has fatigued and snapped them off. Always mount them remotely and at the end of a flexible hose. Always use the minimum of fittings to get from engine to flexible hose. Steel fittings (AN) are preferred over aluminum.
12. Wm Bainbridge markets an excellent line of light weight starters, alternators, and batteries.

PLANS CHANGES/CORRECTIONS

- Table of Contents - Delete Section II. Engine installation is covered in Section IA.
- Chap. 2, p.2. Material list shows 6 lb. Clark foam and Chap. 2, p.3 shows 4.5 lb. Clark foam. Either is acceptable.

- Chap. 5, p.3, Fig. 7 Control stick relief location is dimensioned correctly but picture is misleading.
- Chap. 5, p.5, Para. 4: Before flexing stringers and foam in place, check levelness of surface LMGA assembly will be mounted in Step 7 and adjust if necessary.
- Chap. 6, p.1, para. 2: change "forward face of firewall" to "aft face of firewall".
- Chap. 6, p.1, Fig. 3: 103" dimension is to aft face of firewall. Change 40" to 40-1/4".
- Chap. 11, p.6: Delete "Water line - level with longeron" The template on drawing A-2 is used to set canard incidence. Top of template on page 11-6, when correctly positioned on airfoil will not be level with longeron.
- Chap. 17, p.1, para. 2 and p.2, sec AA: One of our builders suggests an AN3-12A bolt is a better choice than an AN3-11A. He also suggests checking length of CS spring which may be .6" rather than .5" long as supplied.
- Chap. 17: Change page 4 to page 8, and page 8 to page 4.
- Chap. 21, p.3, Fig. 7: If you install the fuel vent on top of the fuselage, run vent line on forward face of firewall.
- Chap. 21, p. 8: DO NOT mount fuel pressure sender at carburetor as shown. Engine vibration might cause fatigue of fitting. Instead, mount sender on firewall or engine mount and connect to weatherhead tee at carburetor with Aeroquip flexible hose. You will need an AN816-4-4 nipple at tee, a length of 1/4" I.D. Aeroquip 601-4 hose with Aeroquip 816-4 fittings at each end, another AN816-4-4 nipple, an AN910-2D coupling, and an AN912-1 bushing to connect sender. THIS IS A MANDATORY CHANGE.

OWNERS MANUAL CHANGES/CORRECTIONS

- Two page references were left out in printing. We have inserted them in the first copies sent out. On p.31, the referenced page is 40, and on p.37, last para. the referenced page is 31.
- P. 31: Maximum elevator weight should be the same for both elevators, i.e., 3.6 lbs with mass balance installed.
- P. 34 and p. 49 Do not agree on 500 x 5 tire inflation pressure. 50 psi is recommended.

LETTERS

4/29/86

Dear Nat,

Enclosed is \$230 for Cozy plane plus \$5 to extend my newsletter subscription.

Thank you for making the Cozy plans available as I feel that this aircraft comes closest to meeting my needs. I am looking forward to getting started as soon as possible.

Stephen W. Haigh

5/28/86

Dear Nat,

Just a note to express my appreciation for the hard work you put into the plans for the Cozy. This is

evident from the clear and exact way they were written. I have been a Long EZ lover for a long time, but did not like the seating arrangement. But now thanks to your efforts, I can enjoy the sport of flying with my wife sitting with me in front. Again, thanks for a job well done.

John Ashe

4/10/86

Dear Nat,

Over the past couple of years I have been wanting to build an airplane. It was hard to find one in my price range that I liked, until I saw the Cozy. The Cozy is perfect, it has all the features that I could want. Through the past two years I have been buying every magazine that had an article on the Cozy, trying to decide when to build it. Well, now is that time. please send me the plans and also the newsletter. Enclosed is a money order for \$235. Thank you for making the plans available.

Doug Solinger

4/29/86

Dear Nat,

The plans arrived today. Every page is accounted for. I obtained the back issues of the newsletter a year ago so all the paperwork seems to be in place.

I must say the last two weeks have been mighty long ones, waiting for the plans. There's never been any question of wanting to build the Cozy. I saw it the first day it arrived at Oshkosh, but being the cautious type, (I almost got into the BD-5 mess) I waited until a plans built Cozy came along to verify the support and success of the Corp. We will send you photos and info of progress as we proceed.

Bob Heslop

4/27/86

Dear Nat,

You must have worked the bugs out of your computer system since I am now receiving my newsletter like clockwork. Although I am only part way through the bulkheads, please forward the Owners Manual. Incidentally, I have made a discovery concerning use of Safe-T-Poxy. I made my first practice layup at about 69° room temperature. The cured layup weighed 12 oz. I was unsatisfied and did a second one at 80°. In addition to a final layup 1 oz. lighter, the epoxy was much easier to work with. For me now, the hotter the room temp, the better I like it. Are you aware of anyone else building a 2-place (tandem) Cozy other than myself?

Ken Gosselin

3/1/86

Dear Nat,

Just a note to tell you that I have received the plans and was pleasantly surprised at the excellent quality. Will start construction soon and see you at Sun and Fun 87.

Adrian Stutler

Dear Nat,

Please send a copy of the Owners Manual. Enclosed is a check for \$15.00.

I have not yet started my Cozy as I am still setting up a shop, accumulating materials and studying the plans. I can say that the more I examine the plans, the more I am impressed with the design. As a practicing Aerospace Engineer with 17 years experience, I rarely say that about any aircraft.

Daniel Schaefer

4/21/86

Dear Nat,

I wish to thank you both for the time spent with me at Sun and Fun. I am very impressed with the Cozy. I think that it is a beautiful example of a fine plane made better. Please find enclosed a check for \$235 for plans and newsletter.

If you could find the time please send me a list of builders in Alabama, TN, CA, FL, NC and SC that would be interested in sharing experiences building a Cozy. Feel free to pass my name along to other builders.

Neal Palmquist
830 S. Commons, #7
Marietta, GA 30062

Dear Nat,

Enclosed is a check for renewal of my newsletter. Have received the plans in good shape and plan to begin construction soon. After a ride in the back seat of a Long EZ, I am sure your design is the way!

David Rogers

4/18/86

Hi Nat,

Good newsletter. I find the plans exclusive to Cozy (fuselage) easier to follow. I couldn't believe my eyes when that fuselage came together perfectly. I thought 3M only dealt with 2 dimensional objects. Could I dispense with the roll-over structure and instead beef up the canopy above my head?

Danny Davis

PHOTO GALLERY

Jack and Donna Wilhelmson's Beautiful Cozy N711CZ

Jack and Donna's interior. Genuine leather. Doesn't it look gorgeous?

And how about Jack's panel?

Chas Danilla's cockpit taking shape. Chas is an engineer at Boeing.

Chas Danilla's fuselage. Very good work, Chas!

Richard Blewett carved this beautiful model of the Cozy

Steve Russell's fuselage looking good.

This newsletter transcribed to HTML by [Gene Traas](#).