

DRAGONFLY BUILDERS AND FLYERS NEWSLETTER

THE OFFICIAL VOICE OF DRAGONFLY BUILDERS ALL OVER THE WORLD

Volume 87

September/October 2000



Reg Clarke at his home field Hana, Alberta, Canada

Hello Spud and Dragonflyer friends,

Here are some photo's of the canopy covers that I have been making for quite a few years now. There has been quite a few inquires lately so I thought it would be a good time to bring everyone up-to-date on them. They are constructed of TYVEK, which is a marine fabric with a soft inner lining made by DU PONT. It has superb UV protec-

tion, dirt & dust protection easily handling & storage. Straps are (4) behind and in front over wing & behind canard and around cowl. , They are \$195.00 U.S. with shipping to the US is \$15.00 / Overseas is \$25.00. Personal checks drawn on a Canadian or US bank OK.

We have the new 2.5 Subaru engine in and running. The engine and Dragonfly working great. It has a total time of 820

hours, which over 700 hours are on Direct Drive Subaru's.

We have done some official testing of our latest 2.5 Subaru/Dragonfly combination and have found it all very interesting as I am sure the builders will find also.

Fuel burn is 6.0 gallon per hour at 160 knots (184 mph) indicated air speed.. When I am just flying locally for fun, I fly between 20"

to 26" of M.P. When I fly cross-country , cruise setting are between 30" too 35" M.P.

The test was done in smooth air, holding 4000 foot pressure altitude and pitch control. Aircraft gross weight of 1200 lbs. One minute times for everything to equalize for an accurate test.

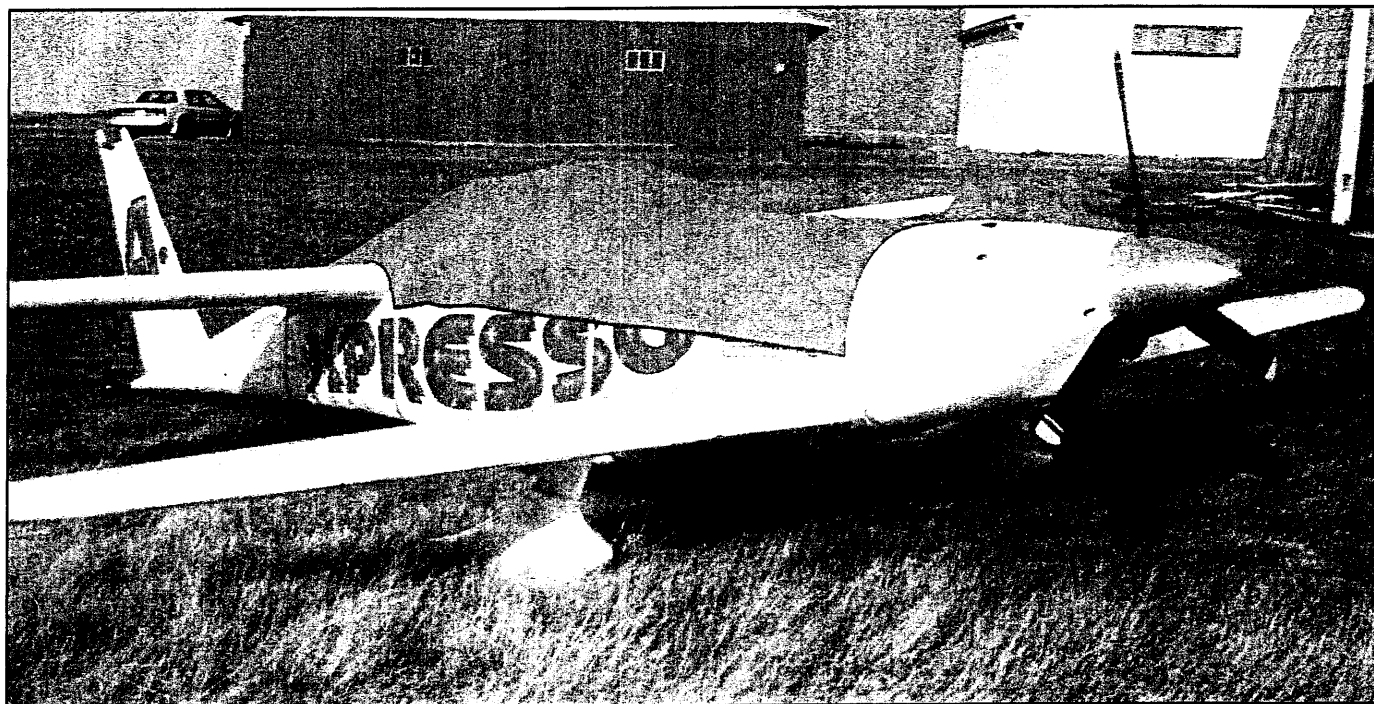
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HANNA, Alberta, CANADA.
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I.A.S. = Indicated air speed in knots.

M.P. = Manifold Pressure (Remember 1" is equal to .491 P.S.I)

INJ% = My computer controller, programmer tells the pilot what " "% of time that the fuel injectors are on or open.

I.A.S	M.P.	INJ%	R.P.M.
60	21"	19%	2300
70	20"	18%	2250
80	19"	17%	2300
90	18"	17%	2400
100	18"	18%	2550
110	20"	21%	2700
120	22"	24%	2850
130	24"	27%	3000
140	26"	30%	3150
150	28"	34%	3300
160	31"	40%	3500
170	35"	55%	3750
180	41"	75%	4000



A great cold weather construction tip!

Hello DF builders

Temperatures are getting cooler, up here in Canada, and it will soon be time to start considering workshop temperature and humidity for curing lay-ups properly.

Last winter, my project almost came to a stop because the temperature inside my un-insulated garage was getting down to the lower end of the curing temperature range for epoxy. To compound the problem, the humidity had not dropped much from the summer levels of over 75%. Needless to say, I had some real doubts about the quality of my epoxy lay-ups under those conditions. I posted the question on the Dragonlist and was given some excellent advice which I don't recall ever seeing before in DBFN, so I thought you might include it in the builders' tips section to help others who haven't heard of it before. (I wish I could remember who it was that suggested this method to me, so I could give cred-

it where it's due.)

The idea was to enclose the bench or table (with the freshly glassed part on it) in plastic made of garbage bags or polyethylene vapour barrier, and use a hair dryer to inflate it full of hot air. I tried this

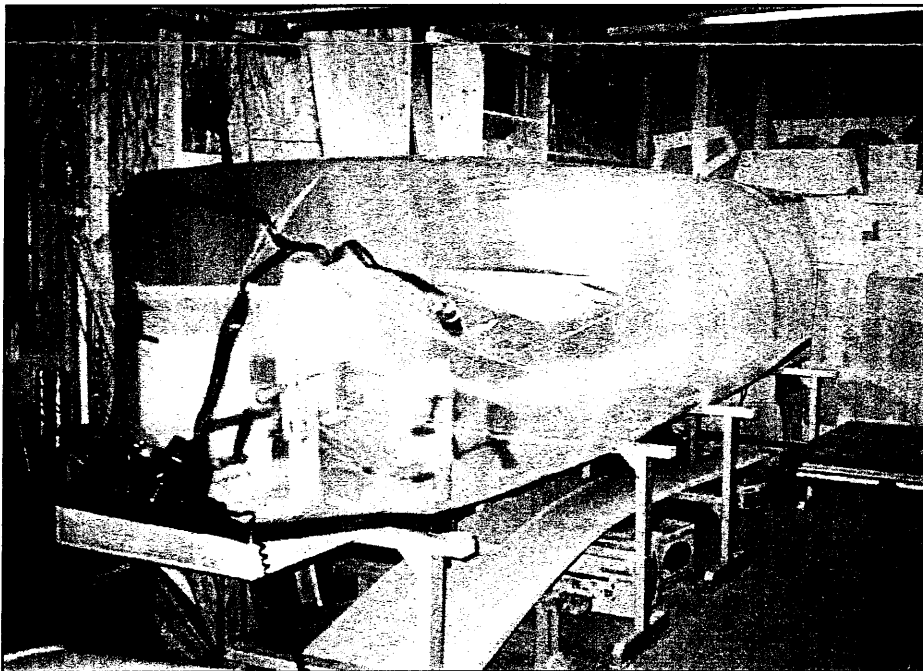
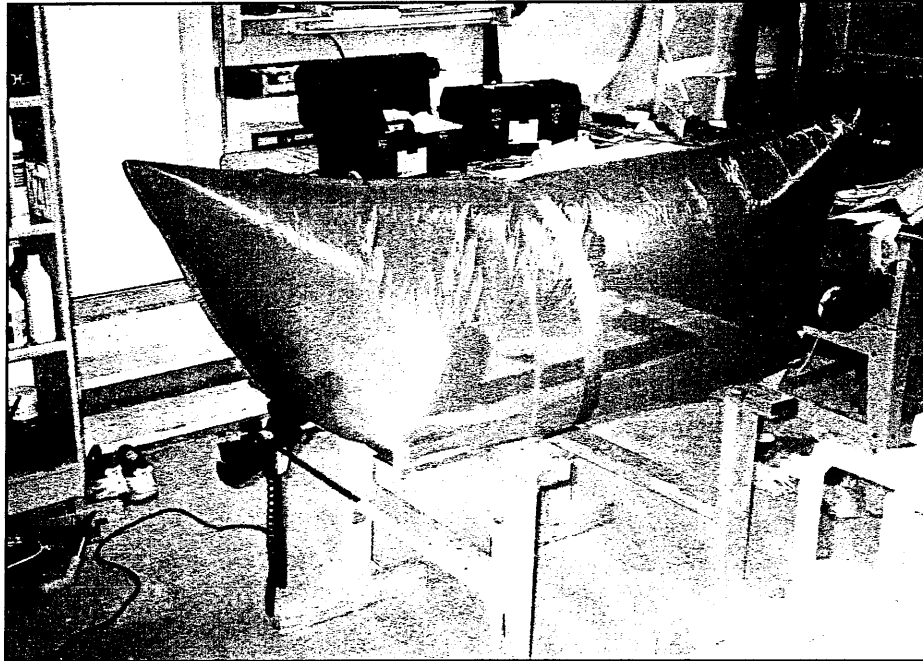
garbage bags duct taped together and to the bench. Later, I used the same method on the fuselage side, but this time I used a long piece of vapour barrier duct taped into the right shape. Also, because of the larger volume of air in the enclosure, two hair dryers were used,

one at each end. Again, despite a garage temperature of about 14deg.C (57deg.F), the air inside the enclosure rose to 40deg.C with about 50% RH, which made it ideal for curing epoxy.

There are a couple of draw-backs to the process, and things that should be expected. When the plastic bag is inflated, air pressure keeps it up, however, getting it in position prior to inflating it without dragging the plastic all over the wet epoxy takes some care. If you want to knife trim, you have to tear down the plastic enclosure to get at the part, and then rebuild it again. I didn't bother, but instead trimmed the part after it had cured, with the help of a Dremmel tool. If you do decide to knife trim the semi-cured lay-up, plan to do it earlier than normal. While previous lay-ups took about 5 hours of cure before

they were ready for trimming, the intercostal bulkhead I had in the enclosure was already rock solid when I checked up on it after 4 hours.

Joe Polenek
Guelph, Canada



with the intercostal bulkhead and saw the temperature inside the enclosure rise from 18deg.C (64deg.F) to 40deg.C (104deg.F) and the relative humidity drop from 73% to 35%! The attached photo shows the set-up using two

Editor's Corner

To follow is an e-mail letter to Don Stewart from Mike Puhl of Slipstream. Don Stewart of course had invited Mike down to this years fly-in. Mike wasn't able to attend as you'll read, but wanted to express his position with the scratch builders.

I also spent some time with Mike Puhl on the phone Wednesday prior the fly-in. I'll comment on that conversation after the letters.

Mike Puhl's E-mail,

Don, I sincerely wish it would be possible to attend the Dragonfly Forum, but we are currently preparing for two major shows that we will be attending in October and the first of those shows conflicts with the weekend of the 6th.

As you know Don, we have devoted most all of our time to the development of our high wing tube and fabric line of aircraft, and have not had the time or resources to do much with the Dragonfly. The new twin-engine "SkyBlaster" represents the last of the two-place models that we intend to introduce for this line, and beginning this winter we intend to gradually shift our focus to the Dragonfly. Bob Marso, our engineer, will begin to rewrite the construction manual to incorporate the numerous changes found in the Errata sheets. In addition, our goal is to improve the overall quality of the manual, to make it easier for first time builders to follow and to change the overall script to that of a more contemporary language and style.

It is also our intent to proceed with the initial development of a Jabiru powered quick build kit, which can hopefully reduce the build time to something much closer to 500 hours. By the middle of next summer we

hope to be underway with the construction of our first quick building demonstrator in the form of a Mark III, with an all-new nose gear. A Mark II kit would likely be available within a year of the introduction of the Mark III.

I am informing you of our plans to help you to better understand where our future focus is. While it is our intention to also serve the needs of those that choose to build from scratch, the market is changing dramatically. Whereas, just two years ago only 10% of the customers for our high wing line were interested in subcontracting out some, if not all, of the construction of their kit(s), today that percentage is much closer to 50%. People just simply don't have the available time to put 1,500 hours or more into construction of an aircraft. Perhaps this is still another sign of the new "instant gratification" society that we live in, but more and more each day I hear people saying they'd rather spend the time flying than building. As a business, we have to be realistic and listen to what the market is telling us. A \$30,000 Dragonfly quick-build kit would very likely sell-out beyond our production capabilities for the first few years. A portion of the profits generated from quick-build kit sales would be channeled back into R&D with the goal of making improvements to the overall design and performance of the Dragonfly. Present and future Dragonfly builders would benefit both from the resultant increase in the resale value of their aircraft brought about by a heightened market awareness of the design, as well as by the subtle improvements that would be made available to all resulting from the resources dedicated to Research and Development.

Our willingness to make the errata sheets available to all plans holders wasn't a singular attempt to

appease the current builders, but an honest gesture to demonstrate the simple fact that we are all ultimately on the same side. I have absolutely no problem with making any and all design improvements that we incorporate in the future available to all plans holders. I would be most appreciative if you would express these thoughts to the Dragonfly builders in attendance at your Forum.

I welcome the opportunity to further discuss any and all issues you deem of interest for presentation at the Dragonfly Forum and invite you to call me at your convenience at 1-800-464-3664.

Thank you for your kind invitation. It is my hope that there will be much to report on at this same time next year.

Very best regards,

Mike Puhl

I spent quite a bit of time with Mike Puhl the Wednesday evening prior the fly-in. This is my snapshot of that conversation, which I put rather bluntly in the DF forum Saturday morning.

Most all the builders have been waiting to see what Mike Puhl/Slipstream was going to do with the Dragonfly and for the current scratch builder/pre-fab DF group. Well the long and short of it "We are without any support! Mike feels that the market is going in another direction in regard to the 500hr \$30,000.00++ version of a Dragonfly. He has bought the rights of the Dragonfly from the Taylors - period. He wants to make clear that he is not responsible to supply any or all of us in regards to any construction support, nor is he going to make improvements to components

and such that would be for the scratch built version only. We are alone!

Now does Mike Puhl give a hoot about any or all of us! You bet he does. He wishes nothing but the very best for every last one of us! If there is a component or a design change that is applicable to the scratch built design he will gladly share it with us or sell us the item. If there is a technical question that he can briefly answer for you, he'll do it. What Mike is doing here is being straight up honest with us! He is a businessman, running a business to make a living, he is very sharp in the fact that he senses where the opportunity is for DF in the experimental category and he's going with his gut feeling. It is his choice. He owns the rights and the plane, the whole enchilada.

Now we can sit here and cry in our beer, or we can pick ourselves up, dust ourselves off and get back to building our Dragonfly's. There are plenty of planes out there that are being built with out any factory support. The fact that we are scratch is our biggest asset, I'll give you an example. When Glasair went belly up here awhile back. If any of those guys need a factory custom built item, they were out of luck. The DF is scratch built; there isn't anything you can not get supplies for from one of the many suppliers around the country. Now you may have to build something by hand, but you'll get by.

Let me give you another example: The Tailwind designed by Steve Wittman back in 1953. Steve hasn't been around for a long time. Aircraft Spruce sells the plans for \$180.00 for 20 11" X 17" with 6 pages of text. That's it. Don't call Aircraft Spruce with a question because there is no builder assistance. You get the plans and go knock yourself out an airplane. Sounds a little weak doesn't it... But these guys are still knocking them out. They take care of themselves; they have a hell of a

builders group, two in fact. One on www.Matronics.com list and one at www.chlassociates.com/tailwind. They put out an excellent builder's newsletter with 270 subscribers. They are a bigger group than we are! And they don't have any support on a plane that has been around since 1953.

To add fuel to the fire: DBFN #88 will be my last issue as your editor and publisher of the newsletters. I have anguished over this for 4 or 5 months. It is for a multitude of (I guess selfish) personal reasons. But I want the time back, I want to spend it with my wife, I want to work on my weight problem, I want to work on my airplanes. The older I get, the more precious my time becomes. A dear friend of mine in Dallas, Texas said it would hit you right between the eyes some day soon. He was right, AGAIN! Some of the others are that I feel that it is time for things to change in the way or format in the way we communicate within the Dragonfly group. What I am talking about here is that it is time to take the newsletter into an electronic format. This was one of the other reasons; I don't have knowledge in this category to take the newsletter to this next step or the time nor the desire. I feel a fresh face can be very positive. New ideas, different approach, etc. Don Stewart says that less than 3% of the group are not on the Internet. I feel good about this, as I was very concerned that there would be people that would not have access to the Internet. I will campaign very hard with the new newsletter people to make a hard copy version available to those that do not have access to the net.

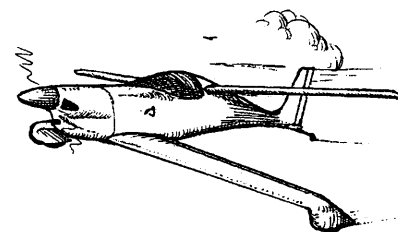
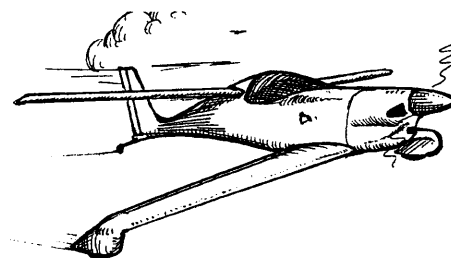
I feel damm good about what has been accomplished with newsletter over the last 10 years. I feel I've done my duty and now it is time for someone else to take the duties over and take it the next step. I am actively looking for an individual(s) with all the right talent to take to the

next step. If there is anyone in the group that feel they are qualified to take over these chores, I would like to talk to them soon.

Here are my recommendations to the group:

1. Form an association; Don Stewart has already has the structure in place, Dragonfly Owners and Builders Association.
2. Find a core person that assembles the newsletters into one item. But this core person has anywhere from 2 to 5 people that are responsible for a certain departments of the newsletter. Some of the RV people do this and it seems to work very well (Share the load).
3. Support your new editor - Its a two way street!

Very Best Regards,
Spud Spornitz



New Electronic List Administrator

Hello Dragonflyers,

My name is Jeff LeTempt and I am the proud owner of a Dragonfly project. I am also the new administrator of the Dragonfly email list. For those of you that are not participating on the Dragonlist, let me tell you a little about it. It is an email list server that allows members to communicate with over 200 Dragonfly builders and flyers. All you have to do is send out one email to the list and all 200+ members get your email. Imagine having so many experts who have "be there and done that" so readily available. People often get answers to their question within a few hours. Not only that, they often get multiple answers with different perspectives based on their experiences. It is a tremendous tool to help you build or fly your Dragonfly more efficiently and safely.

Kevin Hester created the Dragonlist in 1995 and has done a great job in helping Dragonfly builders and flyer share information on a daily basis via the internet. Kevin has decided to move on to bigger and better things and I volunteered to take over administrative duties of the Dragonlist. The Dragonlist was awesome, but there were limitations and it lacked features. With that in mind I set off in search of a new email list server. After a few weeks of research I decided that eGroups.com had a great program and the price was right - FREE. We now have a new list called the Dragonflylist on eGroups.com .

Not only do we have a great email list, we now also have tons of great features that anyone can access. We now have a files section where anyone can add files or pictures, a calendar where people can list their events, a web page links section where people can add links to their favorite web site, and even an chat

room (I would love to hear Pat and Drew have a conversation about aerodynamics). All of these great features plus a very easy to use searchable message archive.

There are a few ways to join the Dragonflylist. The best way to join the list is to go to <http://www.egroups.com/group/Dragonflylist> If you are already registered with eGroups.com, all you need to do is subscribe to the list. If you are not registered with eGroups.com, you will need to register with them. It is very quick and easy, I think they only need to know your name, email address and birthday. If you do not want to access all the great feature of list and only want to receive emails from the list, I can sign you up. Just send me an email (texasquadj@prodigy.net) and I will take care of the rest. I really do recommend that you go through eGroups.com and sign up to take advantage of all the great features. All 200+ members of the old Dragonlist have been converted over to the new list by eGroups.com and we are totally operational on the new Dragonflylist.

An added advantage of signing up on eGroups.com is access to lots of other great aviation related groups. There are 81 groups related to homebuilt aircraft alone, you may get a lot more than you bargained for. If you are wondering about the old Dragonlist archives, no need to worry. I have downloaded all 34.6 MB of email archives and have made them available to view or download from my web site at <http://members.nbci.com/texasquadj/dragonfl.htm> Happy building and safe flying to all!!

Regards to all,

Jeff LeTempt

The Classifieds

For Sale: Dragonfly Mk II N189SM, with 80-hp Continental A-80, 150-hrs. since complete overhaul by Skeezix Adkisson, with dual Savier electronic ignition and 3-blade WarpDrive prop, w/ Gary Hunter blades; cruises 145-150-mph on 4.9 gph, 21+ gal. capacity; dual throttles, hydr. brakes, ELT, cabin heat, oil cooler and filter, Garmin 195, vortex generators, electric pitch trim; \$25,000., or possibly trade for 2-place side-by-side tri-gear with turbo or bigger engine. See photo in latest Kitplane, with details on electronic ignition. E-mail: troneill@midwest.net tel: 618 594-2681

For Sale: Dragonfly MKII. Excellent workmanship. Complete plane except canard, gauges. Everything to complete canard except gear. Canard on table awaiting final layups. Spar laid up, gear leg boxes in and all cloth/carbon to complete. No gear. Always hangered, Hapi 1835 w/dual elec ign and latest mods. New Props Inc. 52/42 Prop incl spinner. Beautiful Red cloth seats. Fuselage complete w/new hatch cutout but not finished. Wing in excellent condition. Paint in excellent condition. Would entertain splitting up engine and airframe. Priced for quick sale \$4,800. Bill Brutsman 913-888-8942. Lenexa, KS Fax: 913-599-1290 Email: wdbtrsmn@aol.com

For Sale: Dragonfly firewall forward package. Hapi 60 2DM with 6 hrs test stand run time on the engine. Includes motor mount, Warneke prop, exhaust headers, Posa carb. Engine still on the test stand - can see & hear it run. Send your E-mail address and forward pictures of the engine. \$2,500 obo. Terry Bailey, 706-778-2462 (home), or 770-654-1663 (cellular). E-mail: baileyt@hemc.net.



"The Classifieds" continued

For Sale: Dragonfly covers constructed of TYVEK marine fabric made by DU PONT. Superb UV protection, dirt & dust protection easily handling & storage, soft inner lining. Straps are (4) behind and in front over wing & behind canard and around cowl. Very light and compact. \$195.00 U.S. with shipping to the US is \$15.00 / Overseas is \$25.00. Personal checks drawn on a US bank OK.

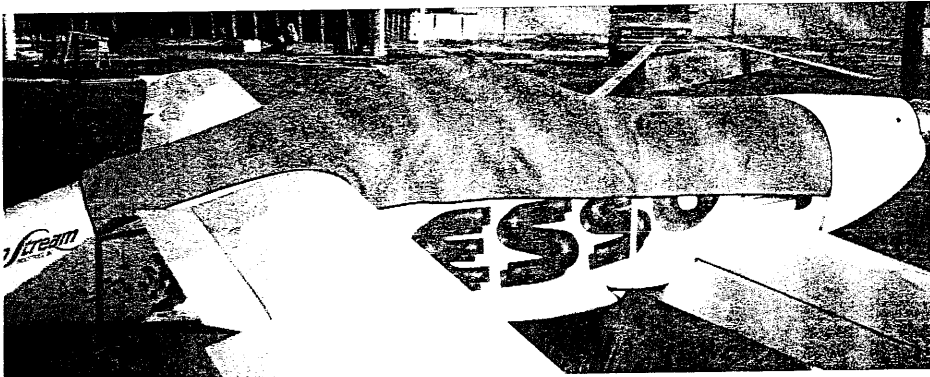
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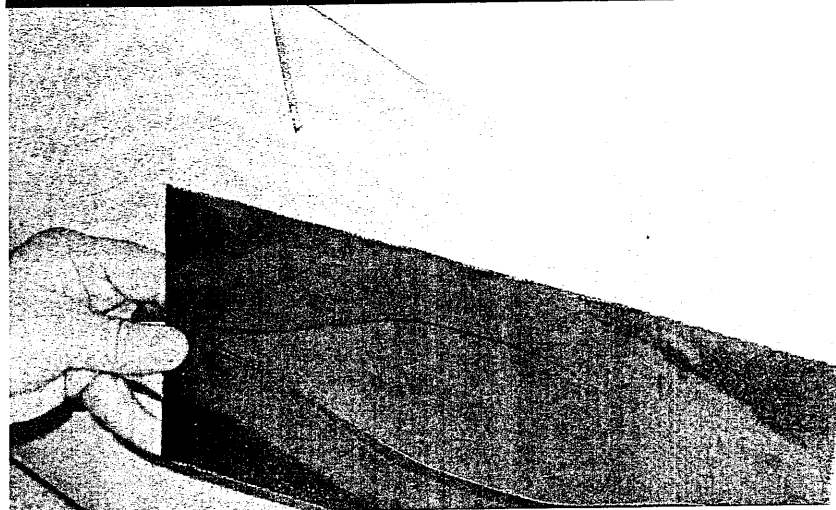
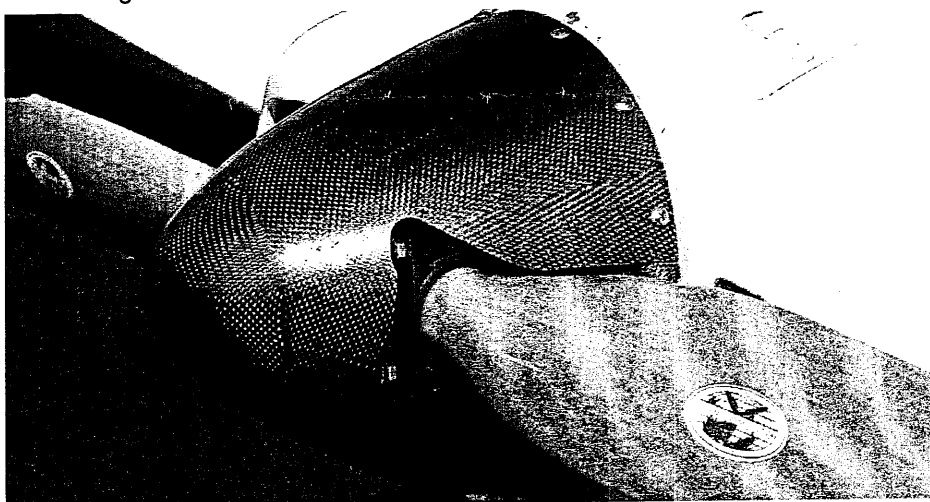
E-mail airryder@telusplanet.net



For Sale: Ducts are \$30.00 per set in glass. Carbon fiber spinners are \$250.00 including back-plate - no front bulkhead.

Charlie Johnson, 2228 East 7875 South, Ogden, Utah 84405

Answering machine 801-479-7446 E-mail: OneSkyDog@aol.com



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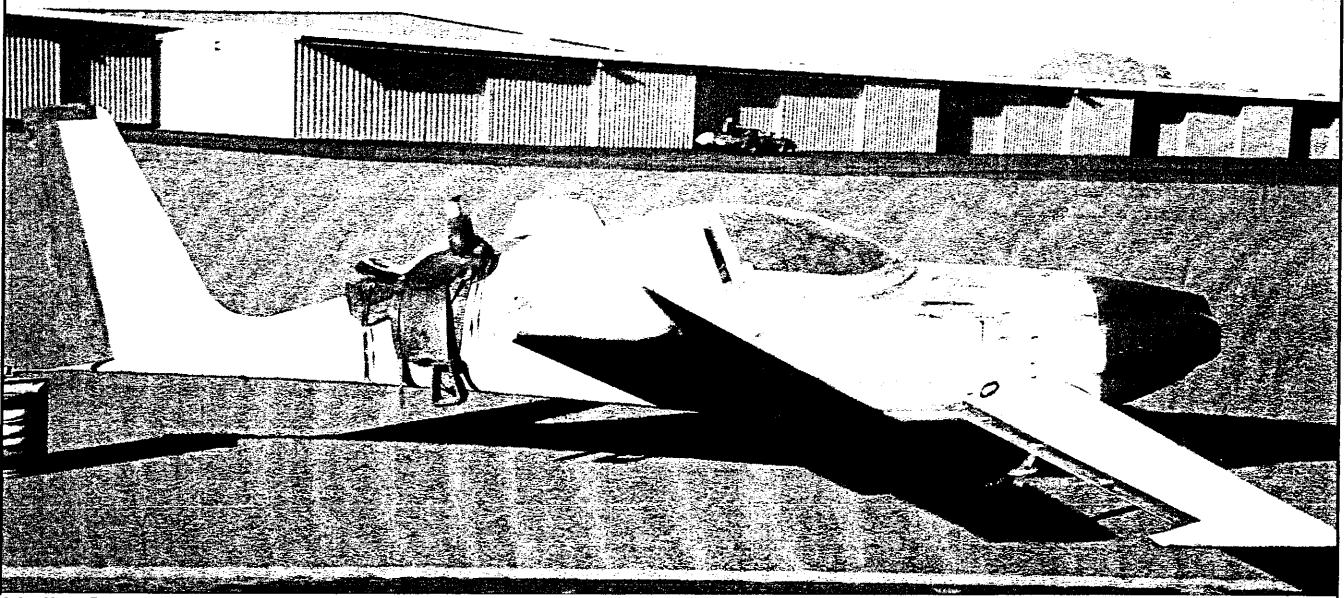
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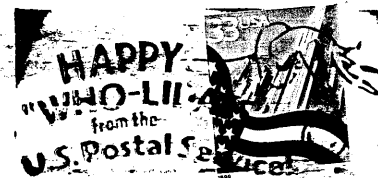
The Grin Department



Hello Spud and fellow DF builders,
I am finally getting back to work on my Dragonfly after about 3 years of doing nothing. I've enclosed a picture of my bird. We have added a nice option that some of the other builders may also like to add to theirs! I will take the honors for having the first three place Dragonfly!
Regards, Len Shockley - Murfreesboro, Tennessee



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First Class Mail

