

FLYING LINES



NEWS OF NORTHWEST CONTROL-LINE MODEL AVIATION

FEB/MARCH 1995 ISSUE #120

In this springing of Spring, jam-packed issue:

Northwest club directory; Schamp on Stunt, 1995 NW contest calendar, .21 Speed Record Review, Round & Round by John Thompson, On Lines with Jim Cameron, Mailbag, Photos, and plenty of other good stuff.....

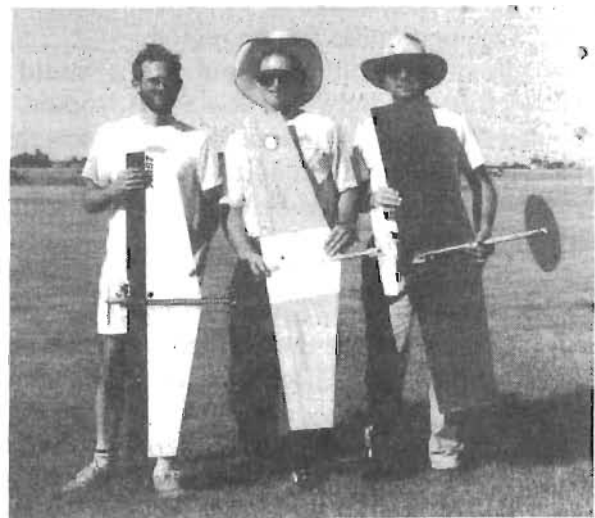
This issue heralds the return of the contest calendar. We do have one correction that came after the calendar was already put together on paper. It concerns the April 15th Carrier meet: Rich McConnell is the contest director. The site is Mount Tahoma High School, located at South 66th and Tyler just west of South Tacoma Way. (In Tacoma?) Profile, .15, and class I & II combined will be flown. Contact Rich at (206) 242-7372 for details.

Received a note from Pat Johnston in Boise, asking about NW Goodyear. It seems that they have discovered a couple of engines that might meet the intent of this class. The engines are the C.S. 15 Sport, and the Moki .15 Sport. Both can be had for about \$50 each. NW Goodyear is differentiated from the AMA class by requiring usage of only an engine from the list in the NW rules. In regard to making additions, comments, please.

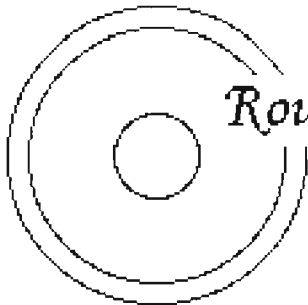
All for now. Keep those cards and letters (and photos) coming. See ya next month.



Northwest Fireball members Tina Pesenti and Jim Cameron getting ready for combat practice session. Site is Delta Park in Portland.



Top Guns at Richland, Washington Formula GX Combat meet last year: (l to r) Jeff Rein, Gary Harris, David Thompson. Site is Burbank School.



Round and Round

The Control-Line
modeler at large

By John Thompson

Lines of communication

Old-timers in Northwest model aviation remember how this newsletter got started.

1977 was a good year. Lots of contests, lots of entries. Then it was burnout, or whatever. In 1978, control-line activity dropped off sharply. By 1979, things were looking bad. Some of us looked at one another and said, "If we don't do something, in another year there'll be no CL flying at all."

We had two ideas. You have one in your hand. We said, "We need a communications network." People in Seattle need to know what's going on in Portland, and Portland needs to know about Eugene, and Eugene needs to know about Vancouver," etc.

Light bulb goes on: We need a newsletter. It was called *Flying Lines*. It was going to be independent, not subject to the climbs and dives of club membership or politics. One newsletter for the region.

A couple of us would put it out, but it would be a cooperative effort. A network. It was. It worked. CL flying bounced back, partly because of the newsletter, partly because of idea No. 2, and partly because of the hard work of several very dedicated CL fliers who also knew how to put in a good hard day's work on behalf of their hobby.

(What was Idea No. 2? It was something to keep the flying going on during the winter, a contest series. We called it the Drizzle Circuit. But that's another story.)

Since it began in 1979, the communications network has been published continuously for all but a year or so (that's still another story). **One hundred and nineteen** issues, and counting.

One thing has subtly changed in the past couple of

years. We here at FL's decentralized headquarters can't fix it, but there's somebody who can.

(Your line: "Who?")

You.

Like a lot of things on the Northwest CL scene, *FL* has been left up to a precious few volunteers. That wasn't the idea. The idea was that everybody would be involved somehow.

In the early days there were columnists for each type of activity: combat, racing, stunt, carrier, speed, engines, etc. People wrote letters, debating, arguing, suggesting, cajoling. People sent in technical tips, questions, club news, photos.

The editors just had to assemble all this good stuff, add a few things of their own, and publish. Lately, it's been left up to the editors. Listen: If you don't get involved, *FL* will perish again. And you remember what it was like for that year or so when it didn't exist.

We need it.

So, start thinking about what you can contribute to the communications network.

You could...

- Volunteer to write a regular column.
- Contribute a technical article.
- Write a letter to the editor.
- Send in a picture of your favorite airplane.
- Provide a contest report.
- Run a (free) classified ad.
- Or anything else — it's your newsletter.

CL fliers are control freaks. We wouldn't think of letting our plane fly without lines on it. So, let's not let our hobby fly without lines of communication.

By the way, communicating isn't the only way we contribute to this great hobby of ours. The contest season is getting started, and a dozen or so Northwest fliers are about to contribute hundreds of hours of their time to making sure that we all have fun by organizing and working at contests. They might not ask you for help. They might think that, if you really like this hobby, you might just volunteer to help without being asked! Nuff said.

Comments or contributions to the Round & Round column can be sent to John Thompson at 295 W. 38th Ave., Eugene, OR 97304. E-mail at JohnT4051@aol.com. Make sure to mention that your contribution is for Round & Round.

NW CONTROL LINE CLUB DIRECTORY 1995

EUGENE PROPSPINNERS: 2065 Providence Street, Eugene, Oregon 97401
President: Mel Marcum; Vice-Pres: Steve Kendall; Secretary: Hiram Gilbert
Treasurer: Morris Gilbert; Newsletter(Propspinner Chatter): Mel Marcum & John Thompson

WESTERN OREGON CONTROL LINE FLYERS: 1073 Windemere Drive NW, Salem, Oregon 97304
President: Mark Wahlster; Vice-Pres: Craig Bartlett; Secretary: Mike Hazel; Treasurer: Brent Hazel; Newsletter (the Wolf Call): Mike Hazel

NORTHWEST FIREBALLS: 2435 NE 84th Avenue, Portland, Oregon 97220
President: Dave Royer; Vice-Pres: Jack Pitcher; Secretary-Treasurer: Gary Harris; Newsletter: (Fireballs Newsletter) Alice Cotton-Royer

COLUMBIA BASIN Balsa BASHERS: Rt. 3, Box 8642, Richland, Washington 99352
President: Todd Ryan; Secretary: Paul Rice; Treasurer: Rick Magnuson; Newsletter (Basher Review): Charlie Edmonds

SEATTLE SKYRAIDERS: 11422 87th Avenue Ct E., Puyallup, Washington 98373
President: Paul Walker; Vice-Pres: John Leidle; Secretary-Treasurer: Steve Scott; Newsletter (the Skywriter): Steve Scott

VANCOUVER GAS MODEL CLUB: Po Box 58037, Station L, Vancouver, B.C. V6P 6C5
President: Bruce Duncan; Vice-Pres: Norm Beattie; Secretary-Treasurer: George Moul; Newsletter (the Hothead): George Moul

PACIFIC AEROMODELERS CLUB: 4791 Shepherd Street, Burnaby, B.C. V5H 1L6
President: Chris Cox; Vice-Pres: Henry Hajdik; Secretary-Treasurer: Frank Boden; Newsletter (Airwaves): Frank Boden

B.C. ACES: Box 82294, Burnaby, B.C. V5C 5P7 (other information not available at press time)

(left) Here's what the Northwest CL Champion perpetual trophy looks like---so big it won't fit in the picture! (Rice photo)

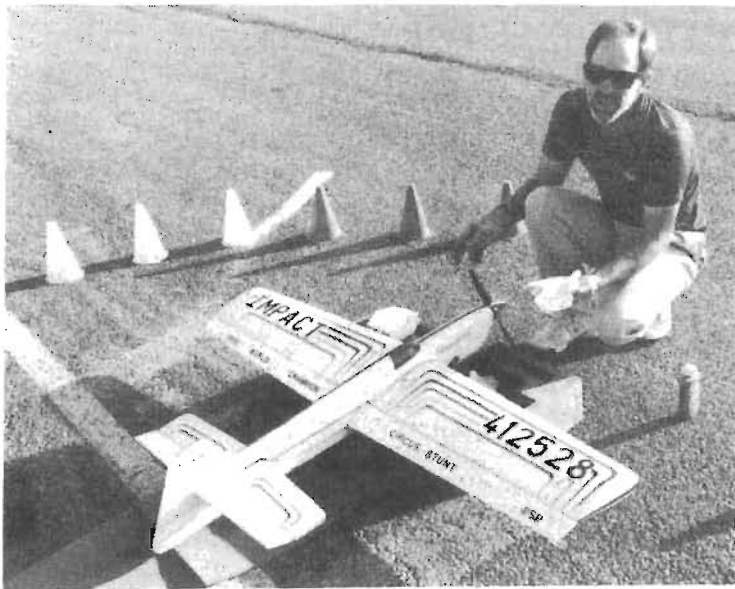


(center) Here's what the 1994 winner of the award looks like--Mr. Todd Ryan (on right) of Richland, Washington. On the left is Don Steward presenting the award, while a proud Mack Ryan looks on. (Rice photo)



(right) Winners of 1/2 A Combat at the 1994 Raider Roundup in Kent, Washington: (l to r & 1st to 3rd) Jeff Rein, Buzz Wilson, Bob Nelson. (Harris photo)





Advanced class Precision Aerobatics flyer John Leidle preps his "Impact" before a flight at the '94 Raider Roundup. John is Vice-Prez of the Seattle Skyraiders. Hey! Not a FLYING LINES subscriber---someone get him to sign up (Harris photo)



Serious about Combat: The Strom family preps a 1/2 A entry at the Raider Roundup. (Harris photo)

"HORSEPOWER IS HIP"

..... ZOOT ZOOMER



ZOOT'S MIXTURE

Greetings, Go Fast Fans! It's been a little while since our last column. The Zoomer has been hard at work in the racing lab. With winter behind us, it's time to hit the old practice circle. Yes, that's right, even the Zoomer must practice. How else do you think I make it look so easy?

Recently I gave warning about rubber fast fill plug supply drying up. Well, not to worry! It seems that Kenn Smith (of tank building fame) has them listed in his catalog. Also got a call from Doug Taffinder (also of tank building fame), and he sez that he has them in stock. I guess only Kustom Kraftsmanship quit supplying them.

Tip for the well-dressed pitman: kneepads are a must. The best ones I have used are carpet layers kneepads---made from neoprene. These give excellent comfort.

Hey racing pilots, here is a reminder on center circle etiquette: Don't forget to brush! Yeh, that's right, brush your teeth! I once had the misfortune of piloting in a race where the other guy not only had a dog on his wires, but dog on his breath. I mean he probably could have taken the shine off an epoxy finish with it. What does one do? Well, I didn't want to offend the poor guy. Had I mentioned it to him, he might have cupped his hand over his mouth to check it out, and subsequently crashed or something. Don't want that to happen, being the polite, sensitive type of guy that I am. Ah! I quickly thought of the solution. Noting the wind direction, I took a breath only when I was upwind from Mr. Dragon Mouth. Quick thinking in the center circle can overcome most any adversity.

Remember, going fast is cool. Doing it safely is even cooler! Later, dudes!

FINISHING YOUR STUNTER

I've been asked to write a short description of how I finish my airplanes. Today, you can pick up almost any of the up to date Stunt Newsletters and find at least half a dozen ways to finish your airplane. Everyone has a way that works for them. Some are more labor intensive than others, some use different materials and so on. I am very impressed with a clean, simple paint scheme. I even like the popular "Let the wood grain show through" look. Its not as striking as some, but very effective in my opinion. One of the members of the World Team has this type on his plane and to me it looks great. The nice thing is it shows off your building skills, and if you are careful with wood selection, the wood grain that shows through is very pretty. I like varnished wooden boats too, so you see where I'm coming from. That doesn't mean that this is the only way to finish an airplane, its just one way. The other side of this is the labor intensive hand rubbed dope or lacquer finish with ink lines and rivet detail. Its very pretty too. I've done both and I prefer the simpler finish or some variation in between. Okay, so enough of my soap boxing, and on with the show here.

To start with, you have to have a smooth surface to put paint on. For a nice finish to look good the basic wood part of the model has to be done right. I'm not going to go into how to build your model, you already know how to do that part-----right! What I'm talking about is the surface of the wood that you are getting ready to put paint on. It has to be sanded smooth. Some people like to compare this surface texture to a babies behind. That may be child abuse to some but for the sake of comparison, if you can match it you are ready to put paint on. Do take the time and effort to blend curves into nice flowing lines. Noses blended into spinners, rudders into fuse tops, wing tips and flaps are one curve, same for stabs and elevators. Cowls are already cut out for the parts of the motor that are going to be exposed, and make sure the cowl fits the fuselage. Allow a few thousands for paint at the seam. Fillets blended in nicely. (If you figure how to do this one, let me know.)

At this point, there are two different approaches to finishing that is up to the individual. I have tried both ways with equal results. One approach is to finish the wing and tail surfaces through tissue and clear dope before installing them in the fuse, and the other is to assemble the airplane as a unit then dope and tissue all at once. For sake of keeping it simple, I'll let you decide which way to do it. Both ways have advantages, as well as the other. If you do choose to assemble the airplane before putting on dope and tissue, be aware that the unit suddenly gets bigger with all that stuff on it. All that stuff is more susceptible to dings and dents, and this puts imperfections in that babies b__t.

Now we are ready to do the two most important steps of the whole operation. #1- mount your airplane on a finishing fixture. This item mounts to motor mounts right where the motor would go. If you have never used one, get one. If you have one then you know what I'm talking about. Where do you get one, Tom Lay sells them for about \$40.00 I believe. They aren't that hard to make either, just be sure if you make one that it can rotate 360 degrees so you can get to all the surfaces of the model. Make some sort of locking feature on it also, so it can hold the plane in one position if needed. This particularly handy when applying tissue. Make sure you can rotate the plane the full circle without banging into something, remember the babies b__t. #2- Get one of those waffle mattress pads and cover your work bench. Even if you have the plane firmly bolted to the finishing fixture over in your neighbor's garage away from your bench, your airplane is going to hit your bench. Trust me I know of these things.

Now, lets get ready to paint. I like to start with vacuuming the entire surface to be painted. You can blow the surface off but it seems that a little too much air in the wrong place will raise the grain, so I quit doing that before I paint. After you have vacuumed the surface its time to mix some paint. I personally like to use Nitrate clear for the base coats. It adheres better to all surfaces, glues of all types, it sticks better to fillets especially if you use Epox-O-Lite. It fills better quicker than Butyrate, (my opinion) and when putting tissue on, the tissue just seems to stick better initially and the bind is better all around. I use SIG Nitrate, with Dupont 3608 thinner. I start out with a quart of each in a container large enough for a gallon of liquid. I add another quart of thinner and mix good. This is getting pretty close to consistency for base coats. Pour about a quart of dope off into another container and try brushing a small area on the bottom of the plane. If the paint flows out real easy then its thin enough, if it wants to drag along after the brush then its too thick and needs more thinner. You want this first coat to really soak in Brush on one good coat. Use a fairly good and wide brush, 1" to 1 1/2" is good. You want to get coverage here and it need not take all day to do it. You don't have to worry about brush marks or anything like that so paint your heart out. After the first coat is on, go do something else for the rest of the day. Let that first coat dry thoroughly. Next day, lightly sand with 400 grit sand paper. Do not take any thing but the fuzz off. Vacuum the dust off again and apply the second coat. Same as the first coat, when you are done go do something else again and let the second coat dry. Next day, sand again lightly. The surface should have a light gloss to it. Not the kind you can rub out yet but you should be able to a slight gloss starting build. Third day, vacuum and apply a third coat, and let dry again. Fourth day, lightly sand, vacuum and you are ready for tissue. If you haven't covered the wings yet, do that now. Do not get any tissue on the fillets, its instant disaster and they will bubble up if you do. I like to cover with wet silk span. It goes over the surfaces easy, goes around corners easy, and is fairly durable. For solid surfaces I use 00, and for open bays I use GM, or medium grade silkspan. Its not necessary to get the silkspan soaking wet either. The excess water will just get into the wood and cause problems. I use a Windex type sprayer, don't use the Windex itself. Just use the sprayer with plain water in it. Lightly spray the silkspan just to dampen, lay the paper out over the surface and pull out the wrinkles. Try to get the paper as taught as you can without tearing it. Take the dope and brush over the hard surfaces. Stick the paper down around the edges only. You may have to use your fingers to work the dope into the paper and surface under neath. But this is good to help get a good bind. If you are working on the wing, do one side then as soon as possible do the other side. You don't want to get warps going here. Let the paper dry on its own. Don't use a hair dryer to hurry it. Once dry, trim the excess off and take some dope on your fingers and smooth the edges down. I like to put on at least three coats of dope before I ever sand anything. This way there is a good base of dope in the paper before I attack it with any kind of sandpaper. Use 280 - 320 sandpaper to sand with. Sand out the wrinkles lightly, but not through to the wood. Put on a couple more coats of dope and let the plane set for a couple of days. The dope will gas off and have a good chance to set up.

For covering the fuselage, take the side view of the fuselage, or lay the silkspan over the plan sideview and trace the outline on the silkspan. Leave about 2 inches extra. Cut out the openings for the wing and tail also. Dampen the paper, and lay it over the fuse side. This is where the Finishing Friend really comes in handy. Smooth the paper out as best you can and start putting dope on. Use your fingers to help spread out the paper and dope. Some corners and curves will have to be slit with a razor blade or xacto, but this shouldn't be too hard to do. Remember not to get any paper in the fillet areas. Trim out any that lays in there. On inside curves, I suggest you do these in strips: In one piece, the paper will pull up away from the surface and cause a bubble.

If you get a bubble, here is a method I have used with some degree of success. Slit the bubble first. Then poke it all full of holes with a pin or xacto blade. Take some dope on your finger and rub it into the bubble and the area around. You are trying to get a bind here between the paper and wood. Let the area dry before doing any more. If the bubble persists and sometimes they do, poke it full of holes again and use thin cya glue to hold the paper down. Just

saturate the area in cya and rub the glue in with a paper towel. You kind of have to be quick here and not let the paper towel stick to the area as the cya kicks off. Practice on a separate piece to get the hang of how long you can mess around with the stuff before the paper towel sticks to the area. After you have finished, sand the area with 400 paper and give it a good coat of dope. Its advisable to be still using nitrate dope here as it sticks better to cya glue than butyrate.

After you have applied about three or four good coats of dope over the paper its time to start sanding out the laps, the wrinkles and so on. Don't get to aggressive here. You don,t want to sand through the paper. If you do you have to patch the place you sanded through. 400 sandpaper here is the key. Put on one more coat of dope and that should be enough of the nitrate. If you have open bays in the wing, mix up some shrink dope and apply a couple coats of dope, letting them dry in between. Now mix up some Lite Coat (SIG). In fact these are all SIG products that I'm referring to here. The shrink dope is SIG SUPERCOAT. Okay! The Lite Coat is mixed about 60% thinner and 40% dope. You want the dope to flow out nicely, but not to soak in to the wood. By the way, we're still using Dupont 3608 thinner also.

Here is where you have to decide whether or not the finish is going to be transparent and let the wood grain show through or go the full route and block the wood grain out totally. My suggestion is to go ahead as if you were going to let the wood grain show through. I have a feeling that the people who are going to be using any of this information will be beginner, intermediate folks and from my experience that extra effort put into the killer finish would be better spent flying the pattern. You can put 20 point finishes on planes when you can fly 550 point patterns. Just a suggestion. After you have the paper filled in the open bays, the paper should be taking on a pretty good shine. Let the plane set about a week and gas off real good.

Now is the time to go over the entire plane with a fine eye for nicks, dings, bumps, brush hairs, seams that didn't get sanded completely smooth, and take the time to fix all of these. Any of these little imperfections that you leave will show through. I know its time consuming but the end result is worth it. Sand the entire airplane with 400 grit sandpaper. Do this lightly so you don't sand through into the wood. Should you happen to go through, fix it! Don't let go till later. Just bite the bullet and do it. Any place that is not sealed, **will** get dope in it, and soak fuel up like a sponge.

After you have gotten the airplane to stage that looks ready for colored paint, vacuum it off again. Then get some degreaser like Prep- Sol and wipe the plane down. 90% alcohol will work okay too. Now you have to decide what paint scheme you want. You probable already have the scheme in mind, and now all you have to do is get it to the plane. If you want the wood grain to show through the paint, mix one pint of color to one pint of clear. Thin this to spraying consistency and shoot this. If you don't have a spray outfit, you can brush the paint on. Just don't thin as much. There is always the trusty rattle can method of painting. Most all colors of dope can be purchased in spray cans. The only draw back to rattle can painting is you can't control how much paint is going on the plane, in other words how ever the manufacturer mixed the paint is how you get it. Some paint jobs can turn out real heavy. My recommendation is to brush the colored coats on, and spray can the clear on over the top. At least this way you aren't putting a bunch of unnecessary pigment on the plane.

From this point on you can rub, sand, polish, wax and what have you to what ever degree of smooth you desire. Its up to you. I didn't cover a lot of detail points in this because some of it is confusing if you are just learning. Its even confusing if you are a seasoned veteran. At times paint just screws up, no matter what you try, it just screws up. Right John!!!!!!!!!!!!!! I hope this is of some use to you. Its pretty much the way I finish my airplanes, and I have pretty good results. If you have any questions call Windy Urtnowski, just kidding. However, Windy is one the best finishers in the hobby. But for the more practical approach, you can call me, but be nice.

Keep Your' Lines Tight,

Gerald Schamp

NORTHWEST CL CONTEST CALENDAR

THE FOLLOWING LISTING IS A SUMMARY OF ALL KNOWN A.M.A. AND M.A.A.C. SANTIONED EVENTS AS OF 3-8-95. FOR FURTHER INFORMATION, PLEASE CONTACT THE INDIVIDUAL LISTED. CONTEST DIRECTORS AND CLUB LEADERS ARE ENCOURAGED TO CONTACT FLYING LINES AS SOON AS POSSIBLE WITH THEIR PLANS, INCLUDING ANY REVISIONS.

MARCH 18, RICHLAND, WASHINGTON

EVENTS: FLYING CLOWN RACE, NW SPORT RACE. SITE: HORN RAPIDS ATHLETIC COMPLEX. CONTACT: PAUL RICE (509) 627-3142 SPONSOR: COLUMBIA BASIN BALSAS BASHERS

APRIL 8, RICHLAND, WASHINGTON

EVENTS: NW SPORT RACE, NW SUPER SPORT RACE, CLASS I MOUSE RACE. SITE: HORN RAPIDS ATHLETIC COMPLEX. CONTACT: PAUL RICE (509) 627-3142 SPONSOR: COLUMBIA BASIN BALSAS BASHERS

APRIL 15, KENT, WASHINGTON

SPRING CARRIER CONTEST

DETAILS TENTATIVE, SPONSOR: SEATTLE SKYRAIDERS

MAY 6 & 7, RICHLAND, WASHINGTON

EVENTS: CLASS I MOUSE RACE, NW SUPER SPORT RACE, NW GOODYEAR, FLYING CLOWN RACE, PROFILE CARRIER, CLASS I & II CARRIER COMBINED, .15 CARRIER, NW RECORD RATIO SPEED, AMA RECORD RATIO SPEED. SITE: COLUMBIA POINT MARINA PARK CONTACT: PAUL RICE (509) 627-3142 SPONSOR: COLUMBIA BASIN BALSAS BASHERS

MAY 26,27,28, EUGENE, OREGON

NORTHWEST CONTROL-LINE REGIONALS

EVENTS: PRECISION AEROBATICS- FOUR PAMPA CLASSES, OLD TIME STUNT, CLASSIC STUNT, AMA FAST COMBAT, SLOW COMBAT, 1/2 A COMBAT, 80 MPH COMBAT, PROFILE CARRIER, CLASS I CARRIER, CLASS II CARRIER, .15 CARRIER, CLASS I

MOUSE RACE, CLASS II MOUSE RACE, RAT RACE, AMA SLOW RAT RACE, AMA SCALE RACING (GOODYEAR), NW GOODYEAR, NW SPORT RACE, NW SUPER SPORT RACE, AMA PRECISION SCALE, AMA SPORT SCALE, PROFILE SCALE, 1/2 A SPEED, A SPEED, B SPEED, D SPEED, FAI SPEED, JET SPEED, FORMULA 40 SPEED, .21 SPORT SPEED, .21 PROTO SPEED, 1/2 A PROTO. JUNIOR CATEGORIES FOR: NWSR, NW GY, MOUSE RACE I, 1/2 A PROTO.

SITE: EUGENE AIRPORT CONTACT: CRAIG BARTLETT, 2025 NE CEDAR LANE, CORVALLIS, OREGON 97330 (503) 745-2025 SPONSOR: EUGENE PROPSPINNERS

JUNE 17, RICHLAND, WASHINGTON

EVENTS: OLD TIME STUNT, GX COMBAT SITE: BURBANK SCHOOL CONTACT: DAVID THOMPSON (509) 663-3929 SPONSOR: COLUMBIA BASIN BALSAS BASHERS.

JUNE 24 & 25, KENT, WASHINGTON

JIM PARSONS MEMORIAL STUNTATHON CONTEST

EVENTS: PRECISION AEROBATICS- PAMPA CLASSES, OLD TIME STUNT, CLASSIC STUNT, MYSTERY EVENT. SITE: BOEING FIELD. CONTACT: BOB EMMETT SPONSOR: SEATTLE SKYRAIDERS

JULY 8-16, RICHLAND, WASHINGTON

A.M.A. NATIONALS FOR CL

SEPT 16 & 17, KENT, WASHINGTON

1995 RAIDER ROUNDUP

JULY 29 & 30, RICHMOND, B.C.

P.A.C. INVITATIONAL

EVENTS: FLYING CLOWN RACE, .15 SPORT RACE, NW SPORT RACE, OLD TIME STUNT, PRECISION AEROBATICS. SITE: RICE MILL ROAD CONTACT: ??????? SPONSOR: PACIFIC AEROMODELLERS CLUB

AUGUST 19, RICHLAND, WASH.

EVENTS: 1/2 A COMBAT, GX COMBAT
SITE: BURBANK SCHOOL CONTACT:
DAVID THOMPSON (509) 663-3929
SPONSOR: COLUMBIA BASIN BALSA
BASHERS

SEPT 2 & 3, COQUITLAM, BC

VGMC CAN-AM SPEED
CHAMPIONSHIPS

EVENTS: ALL CLASSES OF SPEED
SITE: UPPER COQUITLAM RIVER PARK
CONTACT: BRUCE DUNCAN, PO BOX 58037,
STN. L, VANCOUVER, BC V6P 6C5
(604)855-7295 FAX (604) 855-7285
SPONSOR: VANCOUVER GAS MODEL CLUB

EVENTS: AMA RECORD RATIO SPEED, NW RECORD RATIO SPEED, CLASS I MOUSE RACE, FLYING CLOWN RACE, NW SPORT RACE, NW SUPER SPORT RACE, NW GOODYEAR, BALLOON BUST, .15 CARRIER, PROFILE CARRIER, CLASS I & II CARRIER (COMB.), PROFILE SCALE, SPORT SCALE, OLD TIME STUNT, CLASSIC STUNT, PRECISION AEROBATICS (BEG/INT)(ADV)(EXP) SITE: BOEING SPACE CENTER FIELD CONTACT: DAVE GARDNER, 17210 109TH PLACE SE, RENTON, WASH 98055 (206) 226-9667 SPONSOR: SEATTLE SKYRAIDERS

OCT 7 & 8, RICHLAND, WASH.

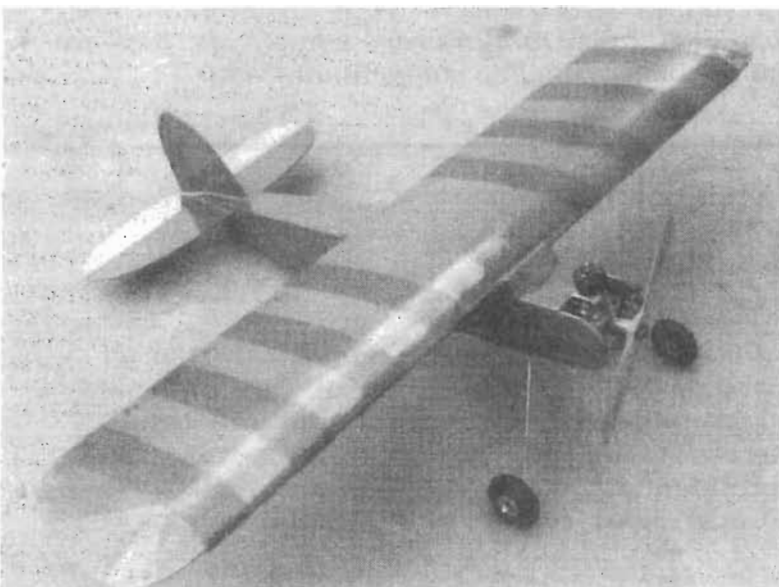
DESERT CARRIER BASH

EVENTS: PROFILE CARRIER, .15 CARRIER, CLASS I & II (COMB) CARRIER, OLD TIME STUNT, & TENTATIVE RACING EVENTS. SITE: HORN RAPIDS ATHLETIC COMPLEX. CONTACT: JOE JUST (509) 837-5983 SPONSOR: COLUMBIA BASIN BALSA BASHERS.

OCT 21 & 22, EUGENE, OREGON

REALLY RACING & FALL FOLLIES

EVENTS: PRECISION AEROBATICS, AND MOST ALL RACING EVENTS. DETAILS TENTATIVE. SITE: EUGENE AIRPORT SPONSOR: EUGENE PROPSPINNERS.



David Thompson built this BOXCAR CHIEF, old time stunt design, all duded up in a good ol' tissue and dope finish. Powerplant is McCoy redhead 35.

FLYING LINES MAILBAG
LETTERS FROM THE FLYING LINES READERS

Mike,
Thanks for a great newsletter. Here is a check to renew my subscription. Also, here are a few photos if you would like to use them.

.....Gary Harris, Forest Grove, Oregon

Thank for the great photos, they will be used!

Mike,
Thank for another good year of FL. Keep up the good work!

.....Rory Tennison, Eagle Point, Oregon

Hi Mike,
I've enclosed a couple of photos that could hopefully be used in your newsletter. The guy making the presentation is Don Stewart, one of our club's founding members. He recently returned from a 4 year stay in Michigan. Todd was elected President of our club for 1995. No one has applied for any NATS unofficial racing in our region yet, as far as I know. NCLRA is planning on Mouse II. What is everyone's thought about NW Sport or NW Super Sport? With people in Canada and back East taking an interest in Flying Clown, Joe Just has decided to stage a "postage stamp" Clown race on May 6th, which coincides with our annual "May Balsa Bash". Have you had experience with postage stamp contests before? See you later.

.....Paul Rice, Richland, Washington

As I recall, several years ago we had a postage stamp type contest with a group in Florida, probably flying NW Sport Race. All I remember beyond that is that we beat them! Details are no doubt interspersed within the pages of FLYING LINES archive issues.

Dear Mike,

Please find enclosed an article that I recently wrote promoting Line Control Modeling as a part of the science class I teach at Hoquiam High School. Also find enclosed a check for \$13 for a subscription to your publication.

I would appreciate your consideration in adding my article to one of your newsletters. I can send you as many copies as you request, so as to make the addition of this article in your newsletter as easy as possible.

Last week ended our first semester and 26 out of 28 students in my Aerospace class soloed with the line control model they individually built. This week my class is full with 30 students with many others having to wait till next year to get into this class. During this semester, twelve of the more advanced students will be building from Akromasters kits while the remainder of the class and I will be scratch building an improved "crash resistant" IC model. May and June should again see all of us boring holes in the sky.

.....Alan Olsen, Hoquiam, Washington

Alan, your article is being published in full in this issue. Your program is very impressive! Wouldn't it be great if there was such a program in every school. Perhaps we will see some of your graduates and yourself at some upcoming competition events?

EARLE MOORHEAD

(January 21, 1922 - February 27, 1995)

Lifelong modeler Earle Moorhead passed away last month, at the age of 73. Not all NW CL modelers knew Earle, but he was the main official who took care of Scale judging at the NW Regionals for a great many years. Earle was known as "Foggy", to his many modeling friends. Earle served as the Scale contest board member for AMA district XI. He also served as president for many years for the Willamette Modelers Club, a free flight group based in Western Oregon. A memorial service was held in Salem, Oregon on March 6th.

If it ain't a rainin' and it ain't a blowin' Hoquiam High is a Line Controllin'



Ted and Kevin could often be seen near Bowerman Field or on the Hoquiam High School Football Field flying little planes with some type of line device. Their activity always caught my eye, and I would stop to just watch from the safety of my car. I always wanted to go over to them and "invade" their flying circle because airplanes, in any shape or form, have always brought out the kid in me. But it was "their" sport and they probably would not appreciate me interrupting their fun.

Jill Finlayson and James Woodward perform pit crew duties

One day during the summer of '93 I found that I could no longer contain myself, and I was determined that the next time I saw them flying I would invade their air space. After all, I had a real reason beyond the kid in me. I teach an Aerospace class at Hoquiam High School, and flying those airplanes on lines seemed like the next logical challenge after years of model rocketry. Those little airplanes looked like more fun, and flight time lasted a lot longer than a 2 second rocket engine burst. The little kid in me wanted out, but hopefully I could mask the excitement through the professional teacher approach; you know, in the best interest of my class and my kids.

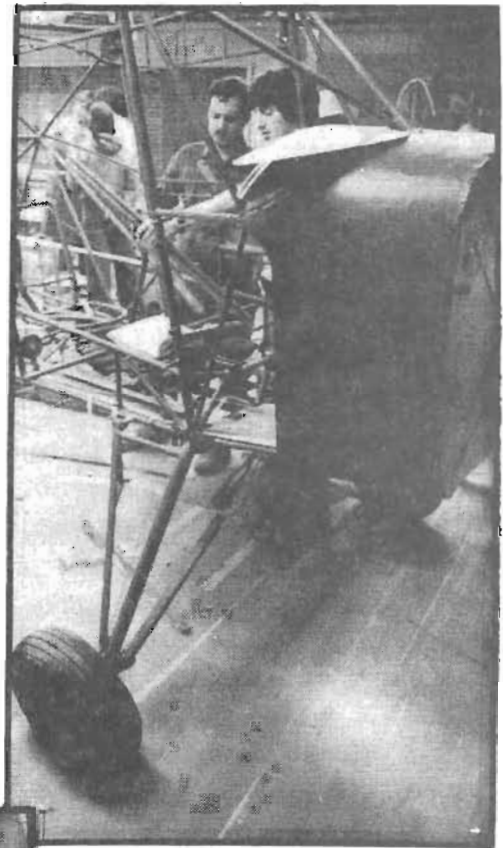
I remember that day during the summer of '93. From afar I watched. I listened to the high pitch hum of those little engines and was awed with the art they created in their flying circles. The little kid in me won, as it usually does. To my surprise, Ted and Kevin were elated that someone would take the time to come visit with them and show interest in their sport. *"Yes, of course we will help you design a small plane for your class - why don't you call COX? - I think they help classes like yours with used engine purchases (\$3.00 ea) - see this is all there is to it. Offset the engine a little to the right and these lines we use are 35' steel braided - yep, just a little CA glue and you're back in the air - oh, this engine is a TeeDee .051, and we fuel inject the engine with a bladder made from surgical tubing - there are a couple of fellas we know, Bill Darkow and John Hall, - I bet that they would be happy to help solve some of your-start up problems - get out there and grab the line; you won't be the first to try to solo with this plane."* Life was good, and I knew that the hook was well set. I joined their air space and met Bill Darkow and John Hall. These two fellows were as eager to help me as a modeler and educator as were Ted Dineen and Kevin White. To them I attribute my true addiction to the bigger models and to my first ever competition this '95 season as a carrier pilot. But what happened to the kids at Hoquiam High School?

Well, I am afraid that I have created a bunch of teenagers co-dependent on Friday morning modeling sessions just to get through the academic week. My class size has doubled in the past year and this next semester finds me overloaded with students. My ego wants to massage the great teacher trip, but I know it's the hands-on creation of a real airplane, the sound of a well-tuned engine and that first solo experience with the model still intact when the fuel runs out, that is the real motivator. I am just the guy they elbow out of the way near the tool box, or someone who provides a quick fix or

building solution. Two years of developing this modeling exercise in my class now finds me left in the shop helping fix the "hanger queens" from last week's "mission," while the newly trained pit crew, flight box and the young "Mavericks" and "Charlies" head for the flight line. I wish that I could take my own class!

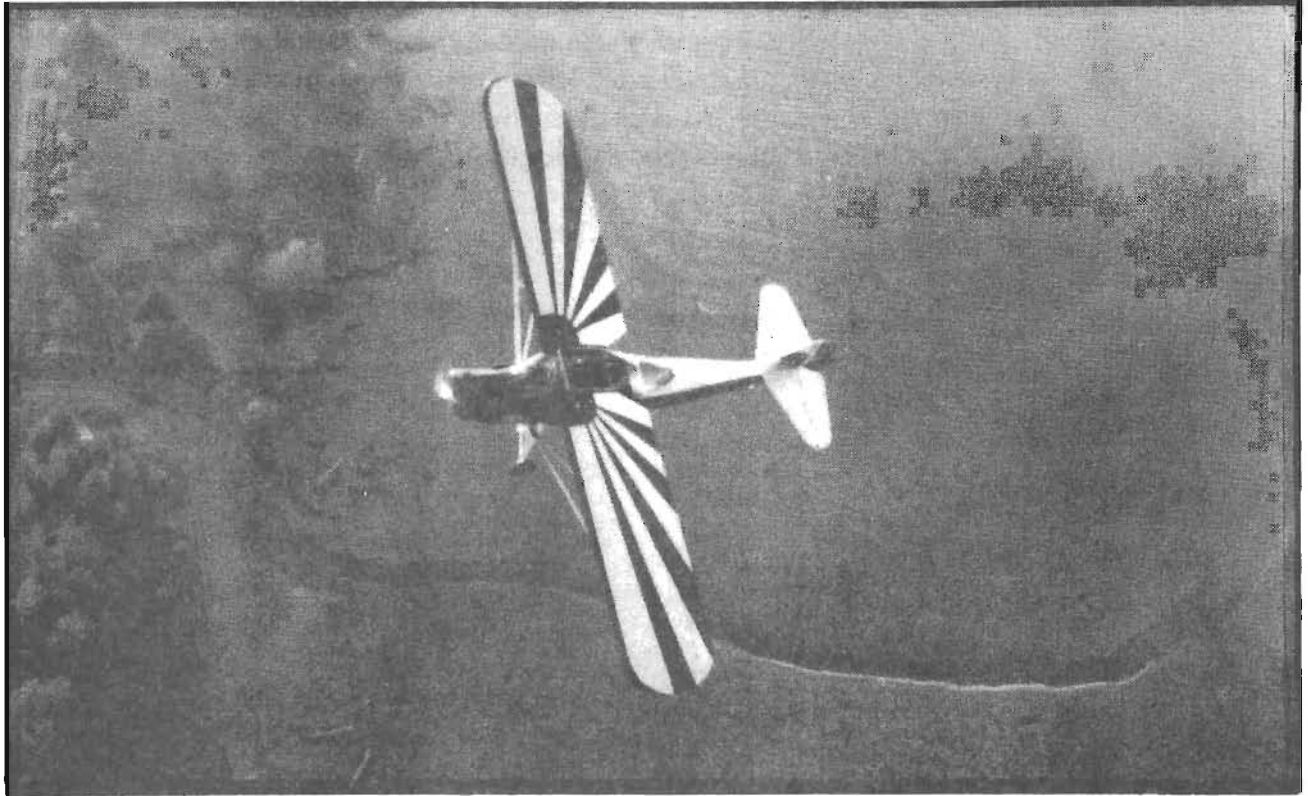
The Aerospace Aviation Class began at Hoquiam High School in 1976 when then Principal Don Spencer brought me in his office and notified me that he had just had a cup of coffee with some fellow that had an old L-3 Taylor Craft, and that he was willing to give the plane to our high school. Don knew of my interest in aviation and my military flying background. My heart skipped a beat until I heard "the rest of the story." The L-3 was all in pieces in his garage: "Do you still want the plane?" Don asked. I, of course replied, "Absolutely!" The L-3 lay suspended from the ceiling of the wood shop for the remainder of that school year while I planned the restoration program and how to involve young teenagers in such an endeavor. This project was well beyond my expertise, but what I lacked in expertise I made up for in determination and the ability to tap local community resources.

I enlisted the help of Bob McElhose, the local A & P mechanic at Bowerman Field to be our mentor. We worked two nights a week and 5 class periods per week for two and a half years rebuilding that plane. It was an intense effort on the part of 40 high school students, a local A & P mechanic and a local high school teacher. All of the students got to fly in the airplane they helped rebuild. I wanted so to convince the school district to keep the plane. I was a commercial pilot and dreamed about the high school aviation program that I could build around that plane. But a deal is a deal. We had to sell the plane to repay the debts incurred during the restoration. A gentleman from the Mid-West plunked down \$8000.00 and bought the plane sight unseen. Several days later two obscure pilots showed up and our L-3 vanished forever towards the Southeast. The irony of the story is that the airplane was given to some other gentleman and his sons, with the understanding that it would be their responsibility to fly and maintain that old airplane. The last I heard is that our old L-3 Taylorcraft was flying with the Confederate Airforce somewhere in Texas. I still get a lump in my throat just thinking about that old gal and the time we spent together.



Aerospace Education at Hoquiam High School, 1977/78. Above: Bob McElhose (L) instructs Ryan Walden on Fuselage repair. Left: Kenny Wayman repairs one of the Taylor Crafts ailerons.

As a result of the efforts of 40 high school students and community support, this beautifully rebuilt L-3 Taylorcraft took to the skies during the summer of 1979. This airplane was last reported to be flying with the Confederate Airforce somewhere in Texas.



Today the students are being exposed to a general aviation/aerospace curriculum coupled with a hands-on modeling project that demonstrates some basic aerodynamic principles. They learn to follow directions to create a product new to them. Their learning curve continues as they experience "hands-on" flying with the airplane they built. Also, local pilots offer their planes and services to provide the students with their first orientation flight around our local area. Hopefully, the students will leave this class with a better understanding of general aviation, the aerospace industry and have the fun of taking part in the sport of model aviation.



Hoquiam High Aerospace Students, James Mills, Don Oliver and Shannon Rainey proudly display their completed models. Jesse Gooby fine tunes his engine prior to his first solo attempt.



On a cold winter morning, with control lines in hand, Jill's smile tells it all.

The Hoquiam High School Aerospace Education Class proudly displays their line control models.

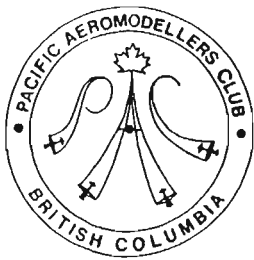
Student demand is now pushing the "outside of the envelope" for purchase of materials and engines for the next school year. During the 95/96 school year we will build in excess of 60 models and power them with .049, Tee Dee .049, .09 and .15 engines. Already undergraduates are inquiring about an advanced modeling experience with the bigger models and possibly some type of competition. Any donations to our program in the way of materials, kits or engines will be greatly appreciated.

Alan Olsen: Instructor, Hoquiam High School
501 W Emerson, Hoquiam, WA 98550
Phone: 360-532-3760 FAX 360 532-3958.



From model builder to mission specialist at the Challenger Learning Center at the Museum of Flight, Carrie Wertanen tackles the Aerospace Class at H.H.S. with enthusiasm.





CLUB NOTES



The VANCOUVER GAS MODEL CLUB will celebrate their 60th anniversary this year. A special observance will take place later in the year, plans are underway.....Several members participated in the annual "Polar Bear Fun Fly", held on January 1st. The promo flyer sez "no awards, only pain". However, the weather did cooperate with very little wind, and temperatures above freezing.

The COLUMBIA BASIN Balsa BASHERS do the sensible thing in that desert winter climate--they fly indoors. On Feb. 12th they held their annual club indoor meet at a local school gym, flying gliders and rubber powered jobs.....the CBBB will be very busy this year. They have their usual full schedule of monthly meets planned, and on top of that playing the role of a host club for the AMA Nationals!

Efforts of the NORTHWEST FIREBALLS to teach kids to fly at Pearson Air Park events in Vancouver may have an extra payoff. It seems that the air park has an expansion of their museum planned, and an educational model building facility may be part of that plan.....the rumblings and rumors that have persisted for many years about the flying field at Delta Park continue. We hear that the city recently had a meeting about other possible plans for the area-----more on that if we can get some news.

The BC ACES which hails from the Vancouver, B.C. area, has the distinction of owning a club name that needs no abbreviation! Their members now number 16, and are split between control line and free flight competition activity.....Their annual NW Speed Champs may be put on hold for this year, due to the proximity of the U.S. Nationals in Tri-Cities.

After a couple of years of flying the Novaclone concept events, the PACIFIC AEROMODELERS CLUB look like they might try something new. The word is that many members are building Flying Clown racers. Might be a lot of activity in that event this year, knowing the PAC!

The EUGENE PROPSPINNERS held the first installment of their monthly fun fly contests in January. About 7 flyers showed up to participate in NW Sport Race, and at least an equal number also showed to watch or help. John Thompson took first place in the race activity. The 3 x 1 event (three fun fly tasks with one plane) scheduled for February had to be postponed, due to terrible weather.....Plans are coming along for the NW Regionals, latest word is that we might have Mike Pratt of the Sig company speak at the Saturday nite banquet.

It's now official for the WESTERN OREGON CONTROL LINE FLYERS, they finally have their flying field that they've been working for. It is located at the Salem airport on a plot of land that WOLF has a low cost lease agreement with the city. The field will have two large circles, with generous margin around them. The club is now working on plans for field improvements. They are planning on having a field "grand opening", open to the public and all NW modelers sometime later this year.

The SEATTLE SKYRAIDERS did their annual gig at the NW Model Expo in Puyallup. Steve Scott reported that the weather was quite nice this year. Scheduled in early February, they never know what to expect for flying conditions. SS club members took advantage and did plenty of demonstration flying for the crowds. They also had a club booth where they handed out promo material and answered a lot of questions.



The Flying Flea Market

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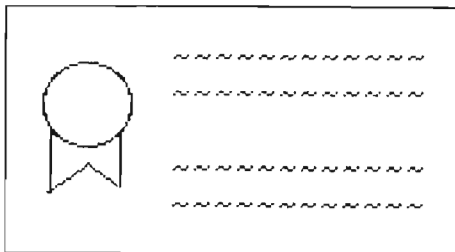
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FOR SALE: MANY BACK ISSUES OF FLYING LINES ARE AVAILABLE, CONTAINING A WEALTH OF TECHNICAL MATERIAL, ALONG WITH SOME NOSTALGIA OF PREVIOUS CONTEST SEASONS. SEND FOR LIST. FLYING LINES, 1073 WINDEMERE DRIVE NW, SALEM, OREGON 97304.

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RECORD REVIEW

DETAILS OF NW RECORD PERFORMANCES

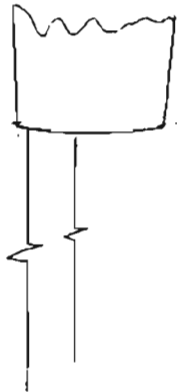
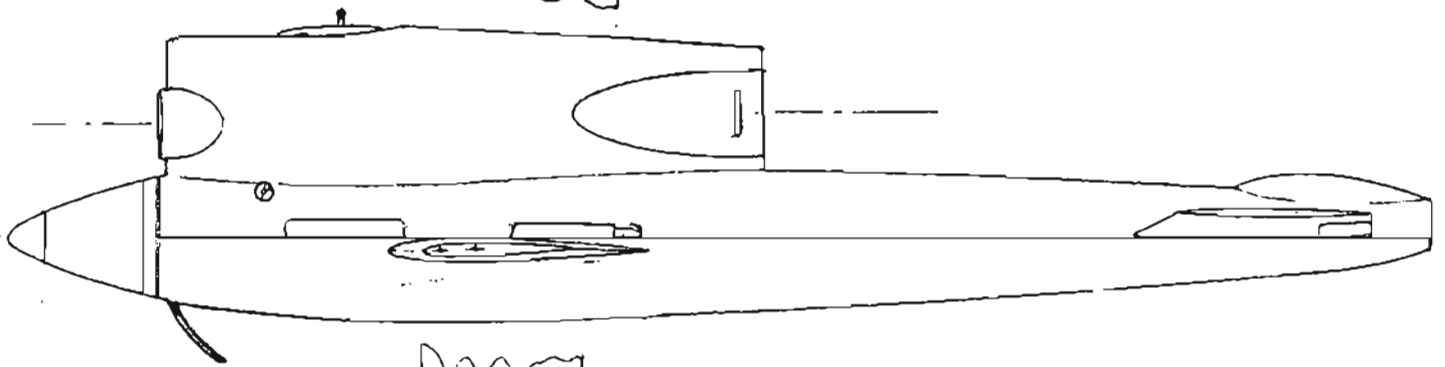
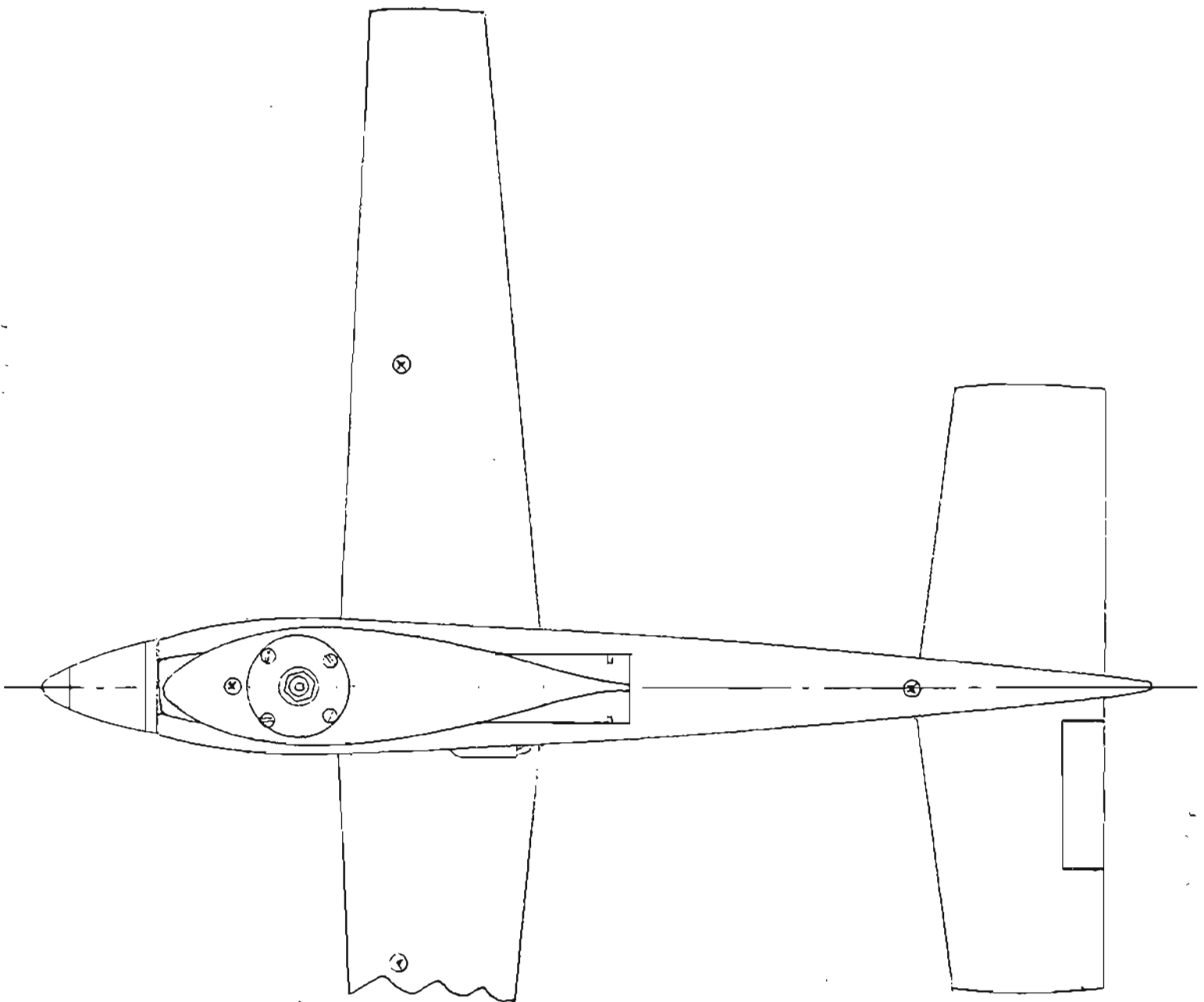
.21 SPORT SPEED, 147.97 MPH, RECORD HELD BY CHUCK SCHUETTE

THIS RECORD WAS SET ON SEPTEMBER 12TH, 1993, IN KENT, WASHINGTON. CHUCK HAS JUST ABOUT DOMINATED THIS EVENT SINCE WE STARTED FLYING IT IN THE NORTHWEST. HIS NW MARK IS NOT TOO FAR OFF FROM THE NATIONAL RECORD, AND YOU CAN BE SURE THAT HE HAS HIS EYE ON THAT. HERE ARE THE DETAILS ON HIS RECORD-SETTING PLANE:

THE DESIGN IS AN ORIGINAL ONE, CHUCK NOTES THAT IT IS VERY CLOSE TO A PLANE THAT HE USED WITH A McCOY 29.....IN 1948! THE SPEED PAN USED IS A DARP "B" UNIT. THE WING SPANS 18 INCHES AND HAS 38.25 SQUARE INCHES OF AREA, AND IS CONSTRUCTED OF .010 ALUMINUM. THE TAIL IS CONSTRUCTED OF Balsa, SPANS 8 INCHES WITH 18 INCHES OF AREA. THE FUSELAGE TOP IS FABRICATED FROM BASSWOOD. ALL UP WEIGHT IS 19 OUNCES.

IN THE ENGINE DEPARTMENT, CHUCK USED THE MODEL 2000 VERSION OF A NOVA ROSSI 21, WHICH HE REWORKED. ENGINE IS FED BY A BLADDER-REGULATOR FUEL SYSTEM. FUEL WAS OF COURSE, REGULATION SUPPLIED 10% NITRO BLEND. A GLO-BEE GLOW PLUG IS USED, IN A TWO-PIECE CLAMPING CONFIGURATION. PROP USED IS HIS OWN "SCHUETTE 21" DESIGN IN FIBERGLASS, AND MEASURES 6-1/4 X 6-1/4.

A LIFT-OUT TYPE TAKE-OFF DOLLY IS USED, AND CHUCK FLIES HIS OWN ENTRY.



"21 SPORT SPEED"
1991 SCHUETTE
1/2 SIZE

A quick introduction: Mike thought that I might be able to fill some gaps with information the sport flier or the competition oriented person would be interested in. My background: First I am an avid sport flier. For many years racing was my primary competition focus. I flew a little 1/2 A combat and now stunt is the event of my choice. Much of my time and energy in the past few years has gone into teaching people to fly.

If anyone has a question or a topic idea, please call me at (503) 287-9620; or write: Jim Cameron, 4023 NE Bryce, Portland, Oregon 97212.

SOLDERING

The proper heating source is determined by choosing a tip size and element wattage appropriate to the mass being soldered. I have two soldering irons; the first is a pencil iron 30 watts, the second a 75 watt iron with a 3/8" wedge tip. With the two irons I can solder anything from electronic components to gas tanks for our airplanes.

A good flux is the next needed item. (Not acid type!) The purpose of flux is to remove surface oxides from the metals to be soldered. All metals oxidize when exposed to air, and this causes a thin film of oxide, which is nonmetallic, to form on the surface of the metal. Good metal to metal contact must be made before soldering action can take place, and the oxide film prevents this. This brings me to my next thought, cleaning.

The metals must be clean! The cleaner the better. Thinner or alcohol can be used, or if something stronger is needed try some 400 grit sandpaper, but get the metal clean. Fit is the next important topic when talking about soldering. Very little solder is needed for most jobs. You should not have gaps in a gas tank, then try to fill them in with solder. The fit should be as tight as you can get it! If you have a good fit and everything is clean you will be shocked to see how the solder will flow.

Solder: Some people might not go along with this, but this is my opinion. I like a 50/50 or 60/40 tin-lead solder with external flux. For the type of work we do,

this gives a good strong bond. Now for the act of soldering: Apply your flux to the joint first, then let the iron do the work. Place the tip in such a way as to heat both metal surfaces, then form a solder bridge. This is done by melting a small amount of solder at the junction of the tip and the joint. This forms a large area where maximum possible heat transfer takes place, and it is this area you should work from. Now in the area of the solder bridge, add solder to the joint, not the tip of the iron. Indications of a good high reliability soldering job are: concave fillets, bright, gleaming finish, no pits or holes, smooth feathering of all solder edges. Remember, think clean, tight, and let the iron do the heating while you put the solder on the project.

Now let's talk about control of what you are soldering. The metals must stay stable or clamped until the solder cools. If something should move before it cools you might have an unreliable joint. How do you hold metal that is getting hot (very hot!) in one place? First do not use your fingers! In some cases you might need to design a fixture to hold the metal in place. For example, you want to solder a washer to a piece of music wire. Find an old piece of hardwood and drill a hole vertically through or to a depth equal to the washer location. The hole should be the same size as the wire. Now just put the washer on the wire and the wire into the hole. The wood will hold the washer in place while you solder but it will not dissipate the heat of the iron. You may need to hold the wood in a vise.

Many tools can be used to clamp metal together; a vise, hemostats, visegrips. The thing to remember is that the tool you use may dissipate the heat of the iron. Often you can clamp one end of a piece of metal while you solder the other end. You may need to be creative.

What about silver solder? Use silver solder the same way you use any other solder, except when it comes to the flux. Warning, silver solder flux contains hydrochloric acid. This is a corrosive! Use safety glasses and clean all parts with alcohol after soldering.

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