



NEWS OF NORTHWEST CONTROL-LINE MODEL AVIATION

1073 Windemere Dr. NW, Salem, OR 97304

Editor: Mike Hazel

DECEMBER 1991

ISSUE #94

In this issue.....

- * Dope Finishing, by Windy Urtnowski
- * Record Review: $\frac{1}{2}$ A Speed
- * Contest Report: Skyriaders 3 x 1
- * Scale, by Orin Humphries
- * Round & Round, by John Thompson
- * More Good Stuff

Cockpit Chatter



Notes from the
editor's desk
By Mike Hazel

Greetings, welcome to this issue. Guess we should make that holiday greetings, as well.

I had opportunity to attend the swap meet in Vancouver on December 7th. It was very well attended, considering this was the first year for this planned annual event. Lots of good stuff to be seen, however I missed out on the "deal of the century", that I am always looking for. Dcn't know what it will be, but I'm sure I'll know it when it is found. Some of the proceeds of the swap meet are going to help fund the A-J Aircraft Historical Society's effort to open a museum. As you know, Oregon is rich with control line history, so it is only proper that there should be something like this. There was also an announcement regarding the Pearson air park facility in Vancouver, WA. Nothing concrete yet, but it sounds as if there will be a model flying facility there, thru the efforts of the local clubs. Will keep ya'll posted on that.

While the swap meet was well attended, unfortunately the Carrier contest in Eugene on the same date was not. Perhaps the timing, weather, date, or whatever was just too much to bring contestants. Only the locals showed up, and there was no official flying.

In an effort to get this issue out almost on time, the year-end competition standings were left out. Look for these next issue, and see who "Mr. NW Competition" will be.

It may be kind of early to be thinking about next years contest flying, but it is not too early to start organizing the schedule. Ccontest Directors, club leaders, PLEASE let us know your plans well in advance. With the contest season so far off, it is unthinkable not to be considering other activities in the region before sending those sanction applications in. FL can act as a central point for tentative schedules. Let's everybody get together on this. That includes you guys North of the border, as well. Our numbers participating in this hobby are not so great that we can afford to dilute participation by doubling up events on the same date.

A bombshell showed up in my mailbox a few days ago, in the form of a ridiculous so-called emergency safety rules proposal. The AMA safety committee railroaded a package of crazy changes for the speed events, across the board. They include longer and/or larger wire sizes, new line construction requirements, and greatly increased pull tests. To the uninitiated ignorant masses, that might sound good on the surface, need to keep events safe, right? However, this package is a real case of overkill, and unfortunately would instantly obselete most all speed aircraft. The ultimate evil was the manner in which some so-called safety experts determined there was a problem, and did not pass this proposal in front of either the AMA safety advisory committee for speed, or the AMA recognized special interest group for speed. Many of you may not care anything about the speed events, but you should care about how this thing came about. It sets a dangerous precedent, and casts some doubt as to how the rules process may work for CL, emergency or not. There is too much to go into detail regarding this, feel free to contact me if interested. More on it next month.

On a more positive note, received something good in the mailbox a few days ago. This was in the form of a racing newsletter originating out of Southern California. It is heavily oriented towards FAI team race, but it is indicated that other racing events will be reported on as well. Those of you who have been racing for a long time will remember that we once had a national organization and newsletter for CL racing. This may fill that gap, at least for the newsletter end of it. The editor is Kenn Smith. A one year subscription is only \$6.00, well worth it methinx. Send your check to: Kenn Smith, 521 Jansen Ave., San Dimas, CA 91773

If you are a Fox engine fan, then you should receive the Fox Newsletter. It comes out every so often, and gives updates on products/prices. The last issue reported that all Fox fuels, including Missile Mist, are in good supply. To get on their mailing list, send request to: Fox Manufacturing Co, 5305 Towson Ave., Ft Smith, ARK 72901
Be sure to tell them you fly control line!

CONTROL LINE

SCALE

by orin humphries



Flying in the Wind

Last time I told you it appears to me that we need about one-tenth of a cubic inch displacement, 2-stroke, for every pound of all-up aircraft weight. This should allow us to make the strong acceleration when proceeding from the headwind point, defined as the 12:00 position, to the tailwind, or 9:00. This is to moderate the wing's tendency to stall with a tailwind. This month we shall get into specific

PILOT TECHNIQUES

A steady wind of 12 mph is where our trouble begins. The problems are worse for tailwheel airplanes. We normally spot them for takeoff with a tail wind, and what happens is that upon release the wind gets under the tail, picks it up and shortens your prop. You will have rolled about ten feet. The first thing you have to do is SPOT THE PLANE 90° farther around, AT THE WIND-AT-YOUR-BACK SPOT to prevent this. As you can well imagine, the plane is going to want to climb like a homesick angel upon lift off because you will be at the headwind position, then. You can't takeoff if you don't put it at 6:00 but that puts you in a touchy situation, climbing with low line tension. This moves us to the next natural point.

You normally would throttle back to grab Engine Control points, right here. **DON'T THROTTLE BACK.** Assuming you have a model with a conventionally sized (under powered) engine, you will have to keep the throttle wide open for the entire flight. Lets pause and talk "stragety".

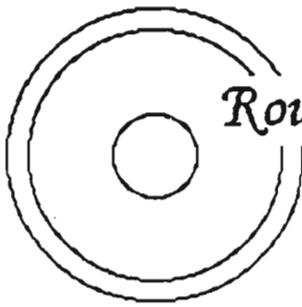
Half the guys will refuse to fly in the wind. They are out of the trophies. Half the remainder will not have read or not have heeded my words here and will use bad technique, taking themselves out in the process. With Scale turnouts rather low to begin with, that leaves only two to four guys to divide the trophies. Bottom line is, you don't have to do risky things to get a trophy. All you have to do is put the barest minimum flight, which is the safest, and get down in one piece. You will take home your airplane and a trophy. Let the other guy try to push for more points to get around you, and he will take himself out. No touch and go, no bomb drop, no taxi, no throttle control, nothing. Takeoff, fly the qualifying laps, and land to a full stop.

Okay, the throttle is open wall to wall. **DO NOT LET THE BIRD CLIMB ABOVE HEAD HEIGHT.** You will note a strong tendency for the plane to stall between 11:00 and 8:00, tailwind. As it settles, you raise the nose to make more lift, only to find that not much happens. It settles some. Your first guess as to what you should do for the next pass is dead wrong. You might want to let it climb a little for extra ground clearance when it is in the stall region. Big mistake! You see, as it comes into the 11:00 region where stall begins, and if is high, it will pick up momentum in the downward direction. You must arrest this component of motion by making extra lift with the nose raised. But you are stalled, remember? There is no more lift to be made. The higher you start from, the lower the recovery altitude as a result. If you started the stall induced descent from twice your height at the 3:00, you will strike the third planet from the Sun at the 9:00. It lurks out there, waiting for unwary and inexperienced pilots to collide with it. I say again, **DO NOT CLIMB ABOVE HEAD HEIGHT.**

You must have the right frame of mind, not only for flying in the wind, but for all of your flying. **YOU ARE THE PILOT; NOT A SPECTATOR.** Be in command.

Plan your **LANDING** to be on the ground **AT THE 9:00 TO 7:00** positions where the stall will help you settle. **LAND HOT** and slow it down afterwards.

Orin Humphries, 19805 48th Ave. W., #A101, Lynnwood, WA 98036, 206-776-5517



Round and Round

The Control-Line
modeler at large

By John Thompson

I T WAS 1 P.M. on a November Sunday and we had been at the flying field for three hours. We were soaked. Our equipment was soaked. There were puddles all over the field.

But we had finished our fun-fly: Time target, consecutive loops, limbo. Somebody passing on their way to the airport to get into a full-scale airplane where they'd be warm, dry, and waited on by attendants might have had one of two thoughts upon observing us out there in the puddles: Either we were totally nuts or we really enjoyed our hobby!

Chances are both answers would be at least partly right.

Anybody who spends as much time and money as we do on what the uninitiated might call "toy airplanes" must be a little nuts. On the other hand, we do enjoy it enough to risk a little rain. After all, we're Northwesterners and we know that, no matter what the forecast, there's at least a 50 percent chance that there's be a few hours of flyable weather in any day.

If we want to, we can fly all winter long. In 11 years of the Drizzle Circuit, probably 80 percent of the contests were more or less dry, right?

As if to prove the point that Northwest fliers are macho dudes, the Northwest Aeroliners in Portland are working for their all-weather patches. Prove to AMA that you flew in every month of the year and you can sew one of those patches on to your jacket.

Since nobody stepped forward to organize a DC this year, it appears that winter contest activity will be on a one-contest-at-a-time basis. Will there be that big two-day meet that has been rumored in the Portland area? Once again, nothing is firm yet but if it's going to happen, we should be hearing about it soon.

In the meantime, there is the Dec. 7 Pearl Harbor Day carrier contest in Eugene. For fair weather fliers, there's the American Junior Modelers Swap Meet in Vancouver, Wash. Now, for a little admonition that you've heard before from this source:

Come on, guys, let's get together! Take a look at the schedule before we select a date for a contest or activity!!! Two activities on the same day is counterproductive for both!

That goes for you guys north of the border, too. If we want participation in our activities, we need to keep the dates separate.

Anyway, let it not be said that there's no flying activity this winter. Check the contest calendar in this issue to see if something else has appeared on the schedule after this writing.

Rambling back to the aforementioned fun fly: The champion of that day's activities was a young fellow named Bobby Graff of Eugene, a new junior flier who is going to be a very good flier very soon. As a matter of fact, this young fellow already is outflying some of the experienced Prop Spinners. Watch for Bobby on the contest circuit pretty soon, helped by dad Ron.

Bobby showed the way in the limbo event. If you haven't tried it, it's another one of those harder-than-it looks events. Bobby flew under the lowest stick, about 1 foot off the ground, on his first attempt. Your RR columnist took five passes to get that low!

Everybody who entered the Prop Spinners fun fly on Nov. 24 took home a prize. The purpose of such an event, of course, is to get people out flying, not to win trophies. Those few who braved the rain had a good enough time that they're eager to try it on a nice day. We'll try some different events one day later this winter. I've volunteered to put on an event fashioned after the old *Flying Lines* Turkey Tournament.

Old-timers will recall that the events were Hi-Low, 2-minute Time Target and Spot Landing. We'll get the word out through the Prop Spinners Newsletter and *FL*.

This column is subtitled "The Control-Line Modeler at Large. What that has meant so far is that one guy rambles around and remarks on what strikes him as interesting. A better approach would be to get some additional voices involved.

Let's get an exchange of ideas going. How about a little mail on topics of general CL interest. If I've said something provocative in the column, let's debate on that. Is there an issue not yet covered that should be?

Here's a topic for starters: How do we build up a reliable stable of contest workers, and keep the work force up as old-timers retire? Most *FL* readers are people who want to fly in organized events, but some of us don't want to do all the work all the time. Is there a way to get more people involved — and enough people?

Here are some other topics: What are your favorite fun-fly events? How do we revitalize AMA racing events?

Send your ideas, comments, questions, etc., to John Thompson, 1145 Birch Ave., Cottage Grove, OR 97424. Make sure to specify that the material is for the Round & Round column.

The following informational piece is out of Tom Dixon's catalog.....

ENGINE CARE AND FEEDING

I have put this page into the catalog as a "public service" because of the trouble and frustration I see people having with their engines----- whether supplied by me, in stock form, or from others. If you hit problems, re-consulting these notes may prove helpful.

FUEL: As far as C/L Stunt flying goes, there is a lot of inadequate fuel on the market. Re-read that sentence. If you have erratic runs, especially speeding up, or "sagging", chances are your fuel has inadequate lubrication. All stunt engines run better on at least 25% oil volume in the fuel. Plain bearing, lapped piston engines, such as Fox, Magnum GP, Merco 40, can use as much as 30% oil, and all-castor oil is far more protective than any synthetic oil. If the fuel is blue, green, or red, it has some synthetic oil in it. Avoid it in the above engines. Ball-bearing engines can usually get by with $\frac{1}{2}$ the oil volume as quality synthetic, but ALL CASTOR NEVER HURTS. There are only a very few fuels on the market which will work properly "out of the jug" in C/L Stunt engines. These are:

FOX SUPERFUEL

Fox Mfg Co., Inc.
5305 Towson Ave.
Fort Smith, Ark 72901

TAFF'S P.A., P.A.C., and FOXFIRE

Carolina-Taffinder
8345 Delhi Road
No. Charleston, SC 29418

Other fuels, such as K&B 100, can be made to work with the addition of 4 to 8 ounces of castor oil added per gallon. If your engine runs erratically, check fuel before anything else.

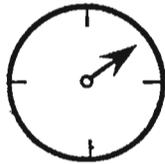
PLUGS: "R/C" idle bar plugs work better than standard types, as they are "hotter" and allows less sensitive needle setting. I've had good results in most engines with Fox 1- $\frac{1}{2}$ volt SHORT R/C plugs. All plugs are not the same! In cold weather, a four-cycle plug, such as Fox Miracle, may give you better results and smoother runs.

TANKS: Uniflow venting always. Works better, but avoid muffler pressure. Why? Because it can cause air bubbles to be sucked into the fuel feed line causing lean runs. If your engine begins to go lean at the Round Eights in the AMA pattern, but otherwise runs OK, pull the pressure line off and try it on suction. (You'll have to open the needle some for equal setting). This will often cure it. If it doesn't, check your fuel!

PROPS:are what pulls the airplane. If the engine runs OK, and you have insufficient thrust, it may just be the wrong, or inefficient, propellor. Bolly props are the most efficient size-for-size. Graupner, then APC props follow in that order. Most wooden props are best used to stir paint.

FUELING TECHNIQUE: Keep your fuel can sealed. Use a Du-Bro fuel can cap fitting set so you won't have to open the can (and thus let in air and moisture). I prefer to use a slightly too large tank and inject fuel using a Sig 5 ounce syringe in the exact amount I need. This way there is no fuel wasted or spilled from the overflow/vent. (That's money saved, and it protects the grass). Filter fuel going into the tank and also run a filter between tank and engine.

Hope you find these tips helpful.



Northwest Competition Records

Record performances established between Northwest CL modelers in sanctioned competition

½A SPEED	112.17	Bruce Duncan	7-7-91	Richmond, B.C.
A SPEED	181.56	Chris Sackett	6-29-85	Richmond, B.C.
B SPEED	187.66	Chris Sackett	6-22-86	Richmond, B.C.
D SPEED	203.71	Loren Howard	5-27-90	Eugene, OR
JET SPEED	205.40	Jerry Thomas	10-12-91	El Monte, CA
FORMULA 40	156.19	Marty Higgs	9-22-91	Coquitlam, BC
21 SPORT SPEED	136.83	Chuck Schuette	7-7-91	Richmond, BC
FAI SPEED	179.75	Chris Sackett	9-22-91	Coquitlam, BC
½A PROFILE PROTO	83.63	Paul Wallace	3-29-81	Eugene, OR
MOUSE RACE I -50 lap	2:51	Hazel/Thompson	9-7-91	Richland, WA
MOUSE RACE I -100 lap	6:26	Joe Campbell	10-5-91	Richland, WA
MOUSE RACE II -75 lap	3:40	Dave Green	5-24-86	Eugene, OR
MOUSE RACE II -200 lap	10:04	Hazel/Thompson	9-19-87	Kent, WA
AMA SCALE RACE -70 lap	4:22	Clarence Bull	5-24-86	Eugene, OR
AMA SCALE RACE -140 lap	9:02	Clarence Bull	5-24-86	Eugene, OR
SLOW RAT RACE -70 lap	3:56	Dave Green	4-14-85	Portland, OR
SLOW RAT RACE -140 lap	7:14	Dave Green	4-13-86	Portland, OR
RAT RACE -70 lap	2:40	Dick Salter	7-22-86	Richmond, BC
RAT RACE -140 lap	5:46	Dick Salter	7-22-86	Richmond, BC
FAI TEAM RACE -100 lap	3:48	Knoppi/McCollum	1986	Pecs, Hungary
FAI TEAM RACE -200 lap	7:49	Knoppi/McCollum	?	?
NW SPORT RACE -70 lap	4:00	Bruce Duncan	5-12-87	Richmond, BC
NW SPORT RACE -140 lap				
NW SUPER SPORT -70 lap	3:14	Dave Green	4-13-86	Portland, OR
NW SUPER SPORT -140 lap	7:03	Dave Green	3-8-87	Portland, OR
CLOWN RACE -15 minute	239	Joe Rice	10-5-91	Richland, WA
CLASS I CARRIER	318.3	Roy Beers	9-13-86	Kent, WA
CLASS II CARRIER	330.25	Orin Humphries	9-19-87	Kent, WA
PROFILE CARRIER	238.44	Bob Parker	9-19-87	Kent, WA
.15 CARRIER	193.75	John Hall	9-15-91	Kent, WA
AMA ENDURANCE	18:37	Wesley Mullens	8-15-87	Kent, WA

DOPE FINISHING
by Windy Urtnowski

You'll hear many snake oil salesman tell you that they have magic finishes that jump out of the can, don't need to be buffed out, weigh less than dope, or whatever you're willing to believe, but dope is still the finish of choice for most CONCOURS contenders.

Dope finishing is a labor of love. Once you get the basic skills, the sky's the limit on how far you want to go with your creation. Nobody said this was easy or fast; if it was, every ship at the NATS would sparkle. Basically, how well a dope finish turns out is determined by your patience sanding and simple low-tech materials like talc, thinner, and Litecoat.

Step 1 is to sand all the wood smooth with 320-400 paper, vacuum up the dust or blow off the surface with an air hose.

Step 2 is to mix up 50% Litecoat clear and 50% Dupont 3608-S thinner and brush on two or three coats. After it dries for a few days, remove the fuzz with 320-400 paper; don't sand through the clear.

Step 3: Using 00 silkspan wet, cover everything. All open bays should get two coats of Supercoat to shrink the covering. All wood should get 3-5 coats of the 50-50 Litecoat mix.

Step 4: Mix talc, 3608-S thinner, and Litecoat to make a nice filler. Brush on two coats, sand between coats with 320-400 paper.

Step 5: Spray on one to two coats of Litecoat clear to seal the model.

Step 6: Spray Sig Silver over the whole model. This will show up all the flaws. You'll be sick right now because the model looked great before the silver was sprayed and it looks awful in silver. Fix all the flaws with more sanding; sand off all the silver and repeat this step until the model looks like it was milled from an aluminum billet. Finally, sand all the silver off and spray a very light mist coat to use for a color base.

Step 7: Color paint any way you choose. I do the trim first. The Nobler and Sidewinder Video Sets show every step of good finishing; check them out if you want a course in the fine points of winning the CONCOURS.

Step 8: After all inklines, letrasetts, trim, etc., mix up a batch of clear as follows: 50% Litecoat (2 quarts), 50% 3608-S thinner (2 quarts), 4 drops of fish eye killer, 4 teaspoons of Flex-All. Spray this material as follows at 25 p.s.i.: Split the gallon of clear mix into 3 equal parts. Orange juice gallon jars will make this easy. Spray 1/3 of the gallon over edges, letrasetts, inklines, canopies, fillets, etc. In other words, spray all the places you're likely to buff through.

Step 9: Put the two thirds of a gallon that's left back and split it into three equal parts. Spray one third on the ship's bottom, two thirds on the top.

Step 10: Let the ship dry out for a month to make sanding easier. Sand the ship flat 600-1200 paper and buff out with Gorham's silver polish.

There are so many tricks and shortcuts that I suggest you check out the videos for lots of tips. Just a few obvious ones:

*Never use last year's paint!

*Put Flex-All and fish eye killer in all dope batches!

*NEVER USE ANYTHING BUT FRESH SIG PAINT. DO NOT MIX WITH OTHER BRANDS!

*NEVER use excessive thinner; use only the amount you need to spray a flat, smooth coat.

*ALWAYS wear a good mask and have ventilation when painting.

- *If you run into a problem, don't be afraid to ask for help.
- *Add extra pigment to any white or yellow on your ship to avoid unnecessary coats to cover.
- *Spray dope on a DRY DAY ONLY to avoid humidity problems, milky finish, etc.
- *Let every coat of dope dry out and gas off a minimum of 24 hours.
- *Install tank vents so raw fuel doesn't leave streaks on fuselage.
- *Obviously, many other techniques for CONCOURS winning finishes exist. This is meant only as a guideline for developing the skills necessary to turn out fine finishes. Best of luck; see you up in the front row. I hope we both make it this year.

P.S. Any newsletters that wish to reprint part of this or all of this, feel free to do so. Sharing information freely is what makes this hobby special and a lifelong endeavor.



The Flying Flea Market

Classified advertisements — FREE for FL subscribers

FOR SALE: Many back issues of FLYING LINES are available for nominal cost. Send your request for list to FL.

FOR SALE: Plans for FLYING CLOWN, as used in Clown Race. \$4.00
John Hall, 227 Mt. Circle Drive,
Sumner, WA 98390

WANTED: Sterling Navion kit.
Contact John Thompson, 1145 Birch,
Cottage Grove, OR 97424

WANTED: Fox 40 BB Deluxe CL, Fox 35
Stunt- old 4 bolt head.
Contact David Thompson, Po Box 1652,
Wenatchee, WA 98807 or (509) 664-1542

FOR SALE: High quality fiberglass props
for high performance flying. Send for
list. Mike Hazel, 1073 Windemere Dr NW,
Salem, OR 97304

FLYING LINES subscribers: This space is
available for you. Your ad will normally
run two consecutive issues, unless other-
wise requested. Renewals OK.

FROM THE FLYING LINES MAILBOX

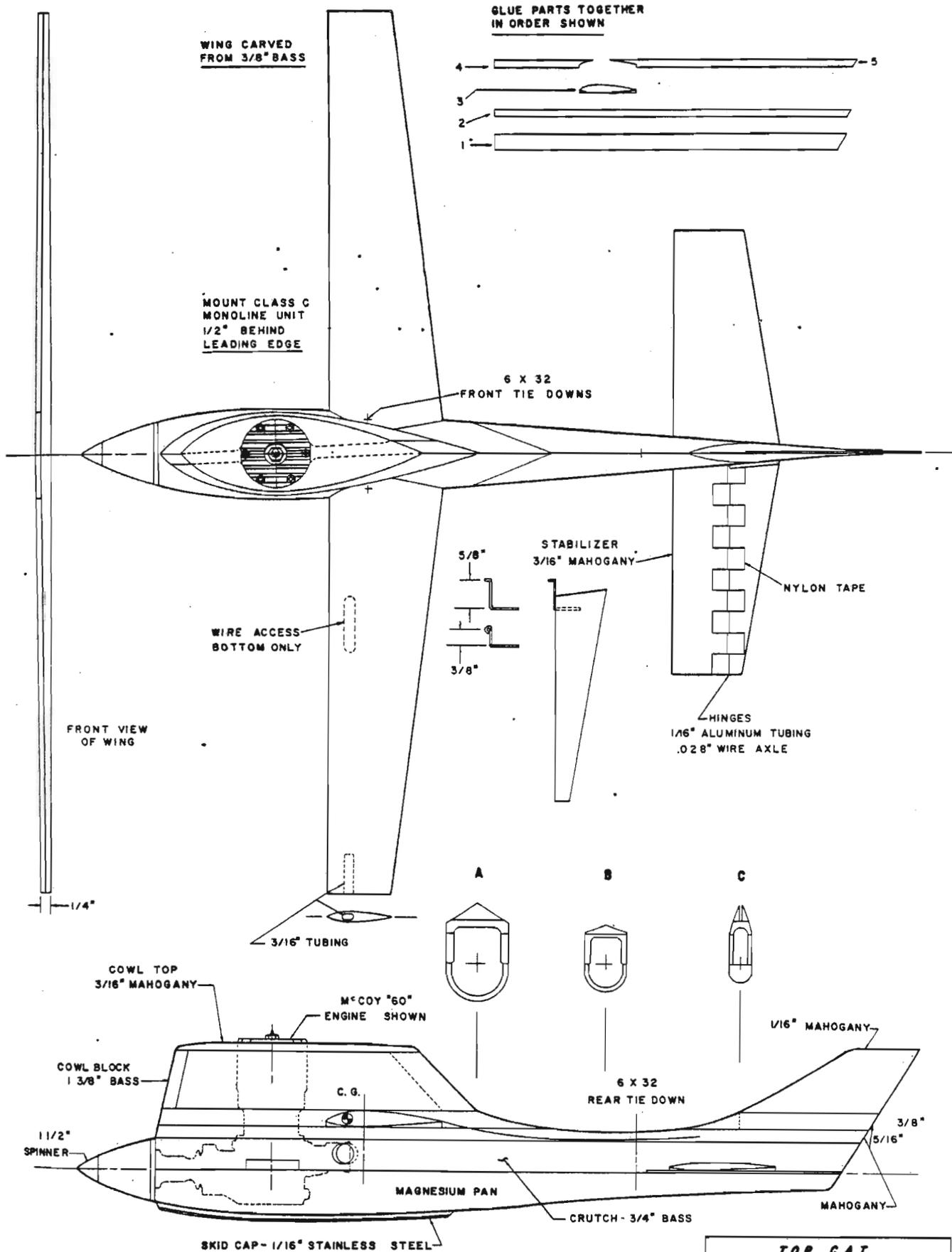
Mike,

Just received my first issue of FLYING LINES. Great Newsletter! I've been missing out on all this info! I hope to enter beginning Stunt this spring with my Fox 40 powered Sig Banshee (If it survives this winters practice on squares). My full stunter is almost ready, but the Banshee gets the action now.

Haven't seen any other CL flyers in Wenatchee for many years. Maybe a few will surface (or turn off their radios for a day). I read where balsa dust is bad for you. Maybe you could run an article on this along with CA and epoxy fumes.

..... David Thompson, Po Box 1652, Wenatchee, WA 98807

ED: Thanks for the kind words. You are our only subscriber in that area. If anyone knows of other CL fliers in that area, get them in touch with Dave.



This is the 60 size speed National record holder in 1962. 171.20 mph

TOP C.A.T.
 DESIGNED BY CLIFFORD TELFORD
 DRAWN BY ROBERT HALE

SEATTLE SKYRAIDERS 3 X 1

On Sunday, November 3rd the Skyraiders held their annual 3 X 1. Now this is not when this event is usually held, but back in March the weather was extremely ugly and only 4½ hardy fliers showed up. Roy Nakano was the ½ since he stated that it was raining too hard for him, but we could fly if we wanted to and he would judge from the cab of his truck. Needless to say the meet was canceled and rescheduled for November.

Despite what the weatherman said the weather couldn't have been better. High overcast, no wind, not too cold, and just a slight drizzle in the late afternoon.

This was one of the better 3 x 1's as the last couple have run just too smooth. During the NWSS heats two pilots were forced to make full power landings to keep from overrunning. One at 63 laps and one at 69½ laps. Rich Brannon would have had the fastest heat time had his fuselage not broken in two places when he landed at 69½ laps. This smooth maneuver earned him the coveted "Gilded Glitch Award". During Bob Parker's heat, after struggling to get the engine started, the lines went slack after take off causing a wingover and the completion of the first and only lap. The engine refused to cough up all the dirt it had ingested and couldn't be restarted. During the final, things went pretty well and some good times were turned in (for the 3X1).

The only major mishap during the stunt event was when Dave Mullen's engine quit in a very awkward position after completion of the pattern. Dave gave it a valiant effort but wasn't quite fast enough to pull out a smooth landing. After Bob's frustrations with NWSS he decided to call it a day and ended up judging stunt for us. Thanks Bob!

Balloon bust had the usual amount of crash landings but no airplanes were destroyed. Thanks to all of you who showed up, I think a great time was had by all.

It has been suggested that the 3 X 1 should be run during the summer so as to attract more contestants. If you have any comments on this give me a call. Below find a list of the placings.

Randy Schultz

NAME	NWSS	STUNT	B. B.	OVERALL
Dick Mc Connell	1	4	1	1st
Randy Schultz	3	1	3	2nd
Rich Brannon	4	3	4	3rd
Dave Mullens	6	5	2	4th
Wes Mullens	2	6	Top Junior	5th
Jason Huntress	8	2	5	6th
Shawn Parker	5	DNF	DNF	7th
Bob Parker	7	DNF	DNF	8th

RECORD REVIEW

The subject of this months record review, is Bruce Duncan's ½A Speed record holder. Bruce set a mark of 112.17 mph on 7-7-91, at the NW Speed Champs. He is planning on moving that mark much higher next year, with an all new plane. The engine should be quite capable of it, as it was used quite conservatively during his record flight. In fact, the Shuriken probably didn't even break a sweat. (Can engines sweat?)

This record will be retired at the end of 1991, as there is a line size change in effect for 1992. ½A Speed will be flown on a longer 47+ foot (odd metric size) wire, as opposed to the current 42½ feet. With the top ½A pilots turning 140+mph, it is difficult to keep up with them. The longer wire will alleviate that situation.

CONTEST WINNER SURVEY

Event 1/2 A SPEED Contest Northwest Speed Championships

Entrant Bruce Duncan City, State Vancouver, B.C.

AIRCRAFT: Design Name Northstar B.V. Built From Original

Construction Materials; Fuselage and Stabilizer Bass wood
Wing leading edge Bass balance balsa, all fibreglassed.

Finish; Endura Epoxy

Wingspan/Area 15 1/4 inches, 24.78 sq. inches

Tailsplan/Area 7 inches, 10.5 sq. inches

Length 12 inches, shortened Cox pan.

Control System Monoline Weight 6 1/2 Oz.

TANK, Manufacturer Bruce Duncan Capacity 9 C.C. Uniflow

Other aircraft features of interest: The whole concept is for the easiest possible construction, therefore the model is a conventional upright engined model. It incorporates a straight leading edge wing.

ENGINE Manufacturer B.V. Competition Engines Size/model .050FIRE
Shuriken

Reworked yes By Whom Fred Baldwin B.V. Comp. Engines

Rework Details Experimental Ceramic Coated Piston

Glow Plug Glow Bee GB 5 RX Fuel Omega 10% castor

added

Propeller C.S. 5 X 4 reworked to a 4 X 5

Line .014 solid X 42 ft. Handle Higgs/Stanzel

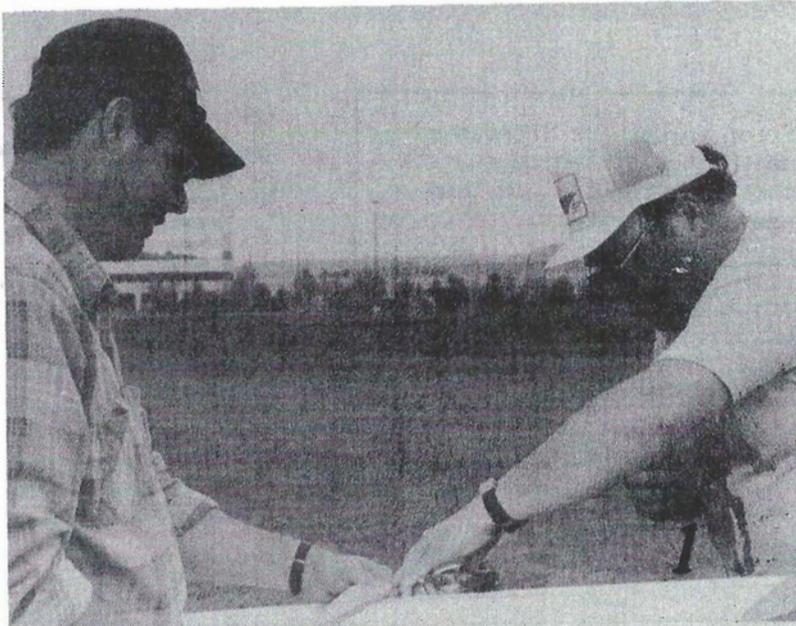
Pilot Ron Salo

Other notes of interest; the record was set the first day either the engine or model had every been in the air. The combinations were very conservative, and although this was a piped timed engine, it was flown open face.

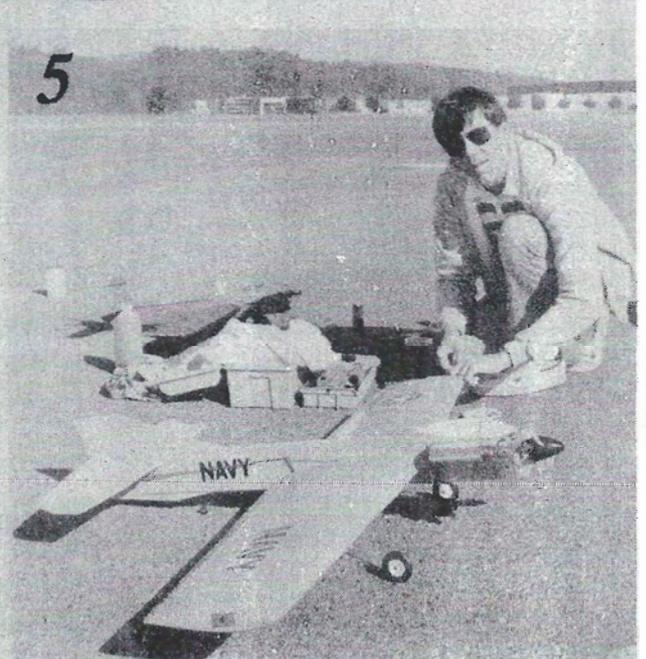
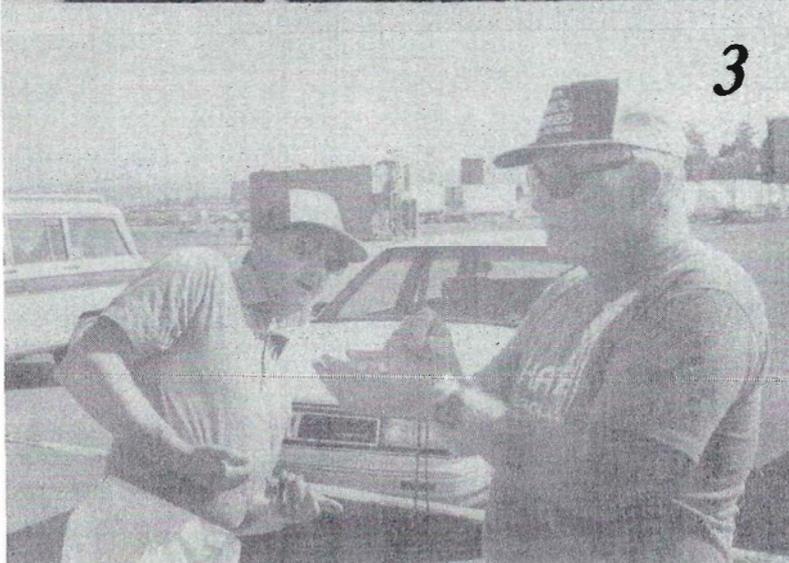
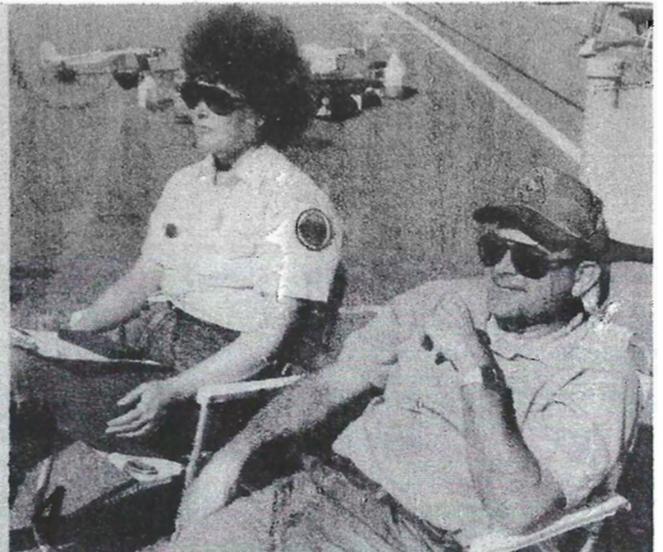
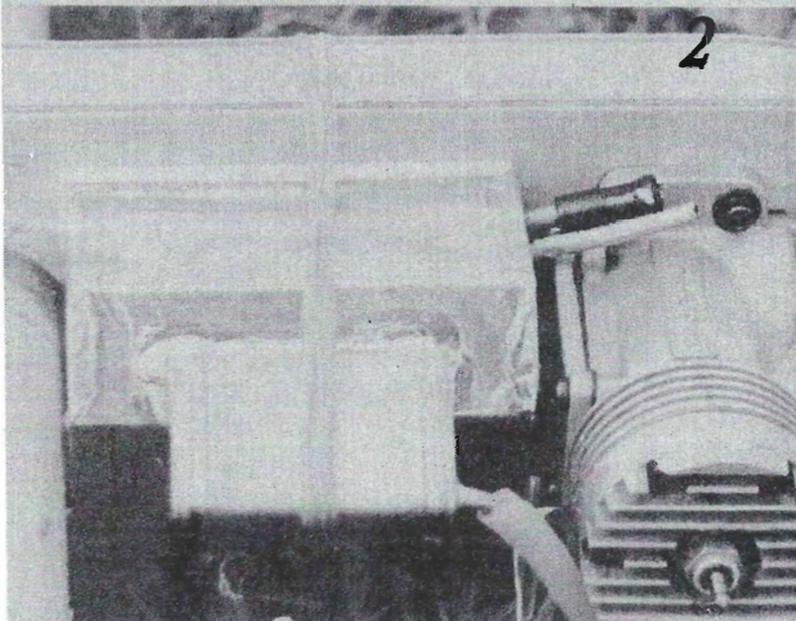
I expect that the change from 42 ft. to 47 ft. lines will slow most models by about 1 to 2 M.P.H. I do expect this model to do into the 120 M.P.H. on the 47 ft. lines as I am just now starting to get the engine/fuel/pipe/prop combinations working.

Bruce Duncan
Vancouver Gas Model Club.

MORE RAIDER ROUND-UP PHOTOS



- 1) Dick Salter flips prop on Fox powered Slow Combat. Tom Strom holding.
- 2) Dick's Slow Combat front end. Chicken hopper tank held on with wrap around strap, against balsa pads. Note vent and fill tube positioned out of harms way.
- 3) Bob Parker is telling an unbelievable tale to Bob Emmett, who appears to be untying himself from a handle safety thong.
- 4) Alice Gardner and Jack Pitcher watch the action at the Precision Aerobatics circle.
- 5) Dave Royer hooks up lines on his stunt plane. Dave is the editor for the Portland club's N/L.



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