FLYING ______LINES



NEWS OF NORTHWEST CONTROL LINE MODEL AVIATION

1073 WINDEMERE DRIVE NW SALEM, OREGON 97304

EDITOR: MIKE HAZEL

March 1986

#71

INSIDE

Drizzle Circuit #3 Results

"SUNDAY FLIER"

"HOOK NOOK"

"SPEED SCOOP"

Plus....Airmail, Contest Calendar, and all the other usual features, and more.

Subscribers: Please note the issue numbers listed on your mailing sticker. If the last number is circled, then this is your last issue! Please send in renewal promptly to ensure continuous service.

COCKPIT CHATTER 2



NOTES FROM THE EDITORS' DESK

So far ye olde editor has not received a lot of input on the new FL format. What has been received so far, has been 100% positive. Last month I stated that the cost to have the print shop fully assemble the newsletter was very nominal. Well, guess what.... that was based upon a quote before I had actually received the bill. I will be meeting with the print shop boss and find out if the charges were a mistake, or whether I need to do some negociating. If the assembly charge is going to be higher than originally anticipated, we may have to look at a subscription price increase. I don't like the idea, but I dislike the idea of paying for it myself even more. If the rates get moved, it will probably be no more than a dollar more. (per 10 issue subscription). This will all be resolved by the next issue, hopefully. Some input would be appreciated, as usual.

The all new FL advertising policy and specification sheet has been completed, and has been mailed out to several prospective commercial advertisers. Previous FL advertisers will be receiving the revised specs soon, if they haven't already. If you have not advertised in FL before, but are interested in doing so, please write to request this information. Basically, the pricing has been revised (nice discounts for consecutive insertions), and the ad sizing is adjusted to fit our new size pages. There are half, quarter, and eighth size ads available.

It would be appropriate to remind all FL readers that insertions in the classified ad section are of no charge to paid subscribers. (no charge to FL staffers, also) The only stipulation is that classified advertising is for personal use, no business type ads, please.

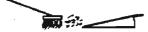
You may have noticed that the out of area listing for contests has been discontinued. Since most of this information was simply pulled from the Model Aviation magazine calendar, it was not any news. Do any of you out of NW area readers miss that feature? We do have a very heavy readership in California. Would you Cal folks like to see a separate listing for your area? If nothing else, we can certainly put in individual blurbs as has been done in this issue. (under "more contest calendar notes")

In the "Ironic, isn't it Dept", we have noticed that Great Planes Distributing <u>are</u> advertising their product line of CL engines. That feature is reasonably prominent. I wonder how much good that will do, considering their stinky sales policy regarding so-called garage businesses. (many of which specialize in CL equipment). A lot of exclusive RC shops may not want to bother special ordering CL engines, even though they are available.

Could ye olde editor ask an easy favor of some of the readership? As many of you know, besides handling the FL duties, I also write the CL column for Model Builder magazine. Occasionaly I will receive a card or letter, the content of which I am not sure for which publication it was directed. When writing to me, please indicate either "Flying Lines" or "Model Builder" on the address, then I will know which basket it goes into. Thanks!

Please notice in the classified section, an updated list of available FL back issues for sale. There is a wealth of information there, and all subscribers are encouraged to fill the gaps in their library.

FLYAWAYS



ASH & TRASH, TIPS & RIBS from the FL WORKSHOP FLOOR

NIFTY FIFTY The Vancouver Gas Model Club (VGMC) had a super fiftieth anniversary celebration last December. We finally got some details about it. Look elsewhere in this issue for an article reprint.

A CONTROLINE MAGAZINE?.... A letter published in the MACA newsletter from the publisher of Model Airplane News indicates that they are considering a separate controline publication. What a turnabout that would be! If you feel positive about this, then it may be appropriate to write: Dr. Louis DeFrancesco, Air Age Publishing, 837 Post Road, Darien, CT 06820

<u>SUITABLE FOR FRAMING....</u> Here is a reminder that anyone setting a Northwest competition record receives a certificate from FL documenting their performance.

LONG DISTANCE DIRECTOR.... John Salvin of Orinda, California, will be the contest director for the upcoming Bladder Grabber. The fact that he is putting his combat handle down for this one, will probably spell relief for a few competitors. John has really cleaned up in the combat events at the last couple of Regionals.

WANT A FREE PHOTO?.... If you see a picture on the FL photo page that you would like to have, it could be yours for the asking. Just send a self addressed stamped envelope to FL with your request. Then you will have the original. Obviously this will be first come, first served.

FL STAFFER HITS THE BIG TIME.... Check out the April issue of Model Builder magazine. Our own Jim LaBarge has a construction article for his original ship, the "Centauri I". a profile twin sport job.

THE DRIZZLE CIRCUIT

ROUND and ROUND in the RAIN?



SUPER SPORT DONNYBROOK CONTINUES ON SUNSHINE CIRCUIT

PORTLAND, Ore. _ The Northwest Sport Race Sunshine Circuit's Northwest Super Sport Race dogfight continued to build in suspense Feb. 9.

Only three points separated the top three places after three contests, leaving the race for season the championship a tossup. Nothing was settled in Northwest Sport Race either, through Dave Green squirted out to a seven-point lead after three contests.

Oh, by the way, the name of the series hasn't changed. It's still officially the Northwest Sport Race Drizzle Circuit, but with that balmy sunshine and still air, it seemed like summer. In spite of the bad weather on all sides, the second Sunday of the month this winter in the Northwest has been fine flying weather.

Green drove away to first place in Northwest Sport Race with a modest 9:03 time in the feature race.

The Northwest Super Sport Race feature was marred by a serious mishap at the start, and ended with only one plane finishing. A mischevious battery clip snagged Dick Peterson's plane on launch, and the plane launched itself vertically through the circle. Before pilots could react and hit the shutoffs, Dave Green's speedy new Minotaur and its K&B .35 engine were destroyed.

Pilots for Peterson and John Hall managed to fly out of the snarl, but Peterson retired in disgust at 35 laps, giving the win to John Hall. Green was awarded the right to a re-flight but declined to bring out the backup equipment.

Hall's 9:01 finish in the feature was his first-ever Super Sport Race victory.

Secondary event of the day, 1/2-A Combat, was dominated by the Salter clan of Seattle, Wash. It was a good day for Combat, with most matches ending in clean kills and virtually no few collisions or crashes.

Dick Salter took first place in a final match by scoring a kill on son Richie Salter. Bill Varner took third place by killing Glenn Salter. The Pupfighter, built from Gene Pape kits or Flying Lines plans, was the most popular plane, used by three competitors. A Chet Hales Fantail was the winning plane, a Pape/Thompson Cheap Imitation was third and Pupfighters were all other places.

The Drizzle Circuit continues with Contest No. 4, featuring NWSR, NWSS and Northwest Sport Combat, March 9, at Delta Park in Portland.

Here are the complete results of Contest 3:

NORTHWEST SPORT RACE (10 entries)

- Dave Green, Astoria, Ore. -- 9:03. Fox .35, Sterling Yak-9. Other airplane data unavailable.
- 2. S&S Racing Team, Seattle, Wash. -- 9:35.
- 3. Glenn Salter, Seattle, Wash. -- 10:07.
- 4. Dick Peterson, Renton, Wash. -- 11:52.

NW SUPER SPORT RACE (8 entries)

- 1. John Hall, Puyallup, Wash. -- 9:01. Moover, original design, 36" span, 25 oz., 345 square-inch wing area, balsa/plywood construction, dope/Monokote finish, 2-wheel landing gear. K&B .35, Hall rework, Rev-Up, 8x9 wood prop, K&B standard plug, Cool Power 10% nitro contest-supplied fuel, .320 venturi bore, fastfill, shutoff, Fox 2-oz. uniflow tank. Pilot John Hall, pit crew Glenn Salter.
- 2. Dick Peterson -- 35 laps.
- 3. Dave Green -- 2 laps.
- 4. John Thompson, Cottage Grove, Ore. -- 3:31 heat.

HEAT WINNERS

NORTHWEST SPORT RACE

ROUND 1: S&S Racing Team (4:35), Beers-Cole Racing Team (4:27), Dick Peterson (4:24).

ROUND 2: S&S (4:42), Peterson (4:33), Dave Green (4:24).

NW SUPER SPORT RACE

ROUND 1: Dick Peterson (6:13), Dave Green (3:26), John Hall (4:14). ROUND 2: John Thompson (3:31), Green (3:26), Hall (4:00).

1/2-A COMBAT (5 entries)

- Dick Salter, Seattle, Wash. -- Fantail 2X, Chet Hales design, 27" span,
 oz., balsa/spruce, Monokote. Cox TeeDee .049, Dick Salter rework,
 Top Flite 5.25x3 nylon prop, Cox plug, home brew fuel, bladder tank.
- 2. Rich Salter, Seattle, Wash.
- 3. Bill Varner, Astoria, Ore.
- 4. Glenn Salter, Seattle, Wash.

COMBAT PYRAMID

ROUND 1: Glenn Salter d. John Thompson, kill. Byes for Dick Salter, Bill Varner, and Rich Salter.

SEMIFINAL: Dick Salter d. Bill Varner, kill. Rich Salter d. Glenn Salter, 1 cut.

CONSOLATION: Bill Varner d. Glenn Salter, 1 cut. CHAMPIONSHIP: Dick Salter d. Rich Salter, kill.

DRIZZLE CIRCUIT STANDINGS AND STATISTICS AFTER THREE CONTESTS

NORTHWEST SPORT RACE NW SUPER SPORT RACE FAST TIMES 1. Dave Green . . . 30 1. John Hall 16 2. Beers-Cole Team. 23 2. Dick Peterson . . 15 HEAT 3. S&S Racing Team. 19 3. Dave Green. . . . 14 NWSR: 4:24 (Green, Petrson) 4. Glenn Salter . . 17 4. S&S Racing Team . 10 NWSS: 3:26 (Dave Green) 5. Dick Peterson. . 16 5. John Thompson . . 6. Beers-Cole Team . 6. Gene Pape. . . . 10 FEATURE 7. John Hall. . . . 6 7. Dick McConnell. . 6 NWSR: 8:53 (Beers-Cole) Dick McConnell . 6 8. Glenn Salter. . . 5 NWSS: 7:48 (Dave Green) 9. John Thompson. . 10. Wayne Drake . . 11. Bob Hoffman . . 12. D. Phillips . . 13. Jeff Hinrichs .

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THE FLYING FLEA MARKET

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WANTED: Austin-Kraft needle valve and assembly to fit Fox .35., DAE# 7614 voltage reduction modification kit for MK II power panel, 2 inch wedge type racing wheels Robert Hoffman, 24 Eastern Dr., Watsonville, CA 95076 (408) 724-9472

FOR SALE: (Mike's clearance sale) Model plans: M.A.N. "Pink Fink", Tercel, Li'l Rebel Goodyear, \$2 ea. Props: 7 ea TF 9x121. 4 ea TF 9x131 \$1 ea, Tornado 8x6, 9x7 either \$5 doz. Fox 1½ inch conv spinner \$6. Fox # 50203 motor mount (15 to 23) \$5 Large 32 oz (by $\frac{1}{4}$ oz) scale \$10 McCoy 29 redhead stunt \$15 Engines: Testor's .049 (new in box) \$10 \$31 OS Max 20 FP-S 16 K&B 3.5 UC/FF K&B 40 RC Perry carb/pump (new in box.) \$58

3 ea Cox TD 049 Carb Assemblies \$2.50 2 ea K&B 6.5 minipipes \$2.50 1 EA Cox Thermal Mopper reeds \$2 Large nickel cadnium battery- never used \$6

Top Flite Jr. Nobler kit \$15 Sterling Corsair kit \$29 Jetco Dolphin (stunt) \$31

Tatone "pocket booster" charger \$4 ED 29-40 tuned pipe with long header \$17. German made Miebach .15 size tuned pipe with ST 15 manifold-one of the early ones-sold by Aldricha collector's item \$25

Super heavy duty stainless steel 4 oz. syringe- needs 0-ring \$10 Add \$1.50 for shipping. Mike Hazel. 1073 Windemere NW, Salem. Oregon 97304 (503) 364-8593

WANTED: Volunteers to help out with the publication of FLYING LINES. Positions open: advertising director, photo editor, contest reporter/points statistician, speed columnist. Payment is a free subscription. Contact the editor.

FOR SALE: Flying Lines back issues. Fill in the gaps in your FL library. Single issues \$1 each. Four or more at 50¢ each. Issues available: 14 16 17 18 6 12 13 4 11 35 36 33 26 29 30 32 23 22 44 45 46 47 43 38 39 41 37 57 59 54 48 49 51 52 53 50

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SPORT SPEED by Chris Sackett YOU SAY C/L SPEED IS A 'PRO' EVENT? NO WAY WITH THIS NEW SPORT EVENT!

How many time have you heard the old phrase "aw speed is too technical and expensive", often right. Well now there is a new provisional class of C/L speed being proposed by a group of experienced speed hands from the Chicago area. This is what they are proposing. An easily flown class of speed using equipment that is readily available over the hobby shop counter and an event where anybody of reasonable physical ability and talent can fly . Here are the basic rules.

1/ -.21ci engine (Over 15 brands available at around \$50-\$70 ea.)

2/ -10% Nitro fuel only (Standard hobby shop item)

3/ -Two line control system only with external hook up. (Simple)

-Open face exhaust or mini pipe only (No full wave tuned pipes)

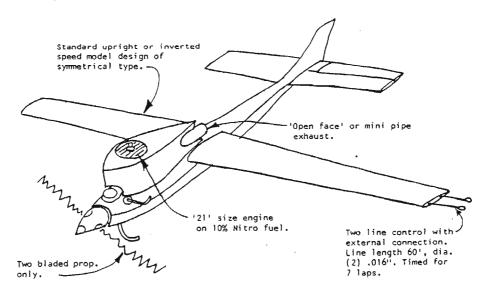
5/ -Standard two bladed props only (No trick single bladers)

/ -Standard symmetrical airplane design, upright or inverted. (No Asymmetrics)

/ -Model timed for 7 laps on .01 $b^{\prime\prime}$ x 60' lines ($\frac{1}{2}$ mile)

Hey guys, remember all the fun we had flying the NW Sport Racers in a Proto speed event.well how would you like to fly something a bit faster...say at around 125 MPH to 140 MPH. This is the kind of fun you can have with a new Sport Speed model. The designs are basically like a class A speed model of some some thirty years ago or much like an early two winged FAI speed ship. All we have to do is use any Class A speed pan like a TATONE, HARTERS, NIGHTINGALE or whatever you can find because its not critical. All the rest is readily available Hobby shop stuff...including prop and engines.

This event is the latest craze Nationally and everyone young, old or inexperienced is starting out at the same point. YOU DONT HAVE TO HAVE ANY C/L SPEED EXPERIENCE TO TRY THIS EVENT! We will stage this event this year at the NW C/L Speed Championships and at the Internats. I would like to see all of you try it out. Give me a call any time for more specifics. I have many plans available for this class. 299-4500 or 291-9006.



'SPORT SPEED' MODEL

New 'FUN SPEED' class

SUNDAY FLIER

FLY'N for FUN

by: LARRY MILES

THIS & THAT.....

After reinventing the wheel numerous times, forgetting more than I had learned about modeling, misplacing mentally one useful article after another I started keeping a notebook. I did not keep track of the original sources so I can (for the following ideas) not give proper credit, and in some cases I have not actually tried the suggestion. Use them at your own risk.

SUNDAY

1) For home brewed fuels. Delta Mfg., 27 Race CarCourt, Lorimar, CA 50149 makes a lubricant. 5 - 10% lubricant versus the usual 15 - 25%

is sufficient.

2) For cutting foam wings use either music wire or preferably nichrome wire. For nichrome wire approximately 14 volts are needed. For music wire from 24 to 30 volts normally are required. The preferred source is a variable transformer. Rib pattern template material preferred is Formica, and model aircraft plywood.

3) For grease, oil and lube removal use Texize's K2r or Fuller's

Earth.

4) Castor oil based lubes inhibit rust, synthetics contribute to rusting. Castor oil is best at overheat protection but leaves a varnish build up. Synthetics are cleaner but lack overheat protection. Best of both worlds is realized using 15% pure Klotz, 5% castor and 2% Lubricin N-a. (note, some Klotz already contains castor oil) Castor oil and methanol are usually available in larger cities. Check yellow pages under chemicals. Check drag shops, motorcycle shops, go karts, etc. for nitro and Klotz (note, nitro is frequently cut with methanol) Lubricin is available from Sig Manufacturing.

5) For any and all race or speed planes best performance is achieved when airfoil of wing is asymetrical enough (and that amount of

asymetry only) to allow minimum elevator deflection.

6) For fillets made of silicone using ones fingers, wet fingers with soap to prevent sticking.

7) Monokote stripes- fold back plastic backing. Lay Monokote

(adhesive down) on glass- use straight edge, cut.

- 8) To clean carbon-varnish from piston, sleeves, heads, use SOS pad and water.
- 9) Sunbeam metal cleaner serves well to clean engine exterior. Silicone spray makes easier cleaning next time.

to the spray makes easier creating hear time.

10) Good all purpose strong sandable cement is DUCO.

11) The measure "fluid ounce" is one of capacity, not weight, and is equivalent to 1.804 cubic inches, or 29.57 cc. The weight of one fluid ounce of water is 1.04 ounces.

12) For filling dents, dings, cracks, use Duralite plastic wood,

or vinyl spackle.

13) For thinning Aerogloss Butyrate dope use Ditzler Duracryl DTA-105 Extra High Gloss Acrylic laquer thinner, DuPont or Nasson products of same genre.

14) For excellent masking results use Scotch 3M Fine Line Tape #DC 021200 of widths rangine from 1/16" to 1" from auto paint stores.

If you can verify or refute any of the above, share it with the rest of us.----Larry Miles, 2112 Scott Ave. Independence, MO 64052

ROUND AND ROUND By John Thompson

What did you do last Sunday at your flying field? Yes, I know you flew model airplanes.

But I'd like to hear from some modelers about their Sunday flying, non-contest activities. What do you do just for the sport of it?

Do you practice for competition? If so, how about some practice tips. We're always hearing that practice is the key to competitive success, so tell us how you do it.

Do you think up goofy things to do with model airplanes? Fly from a lawn chair? Launch your own plane and run to the handle? Do you haul out old beaters and do daredevel dives at the ground? Or do you unveil some special prized plane that can't be risked when there are lots of people around?

Send in some letters to Round & Round with your flying stories. Also, keep sending in those cards and letters with questions I can answer in the column -- technical matters, rules, opinions, whatever.

I'll start the Sunday flying stories with some of our own.

This has been an all-time low winter for me as a Sunday flier due to other commitments. I have been out a couple of times, though. The last time, it was me, Mike Hazel and Gene Pape. Things started out the usual way with a couple of hours of racing plane practice.

Before we left, Mike hauled out a "toy" he had made for his son, Brent (sure, uh-huh). Funny, Brent didn't play with it much but us three grown men had a blast.

It was a little wooden car with an .049 mounted on the middle. It was supposed to be a pusher but we ran it whichever way the engine would start. It was just unstable enough that it would keep changing directions and chase us around the Mahlon Sweet asphalt circle until the inevitable flip. It also was rigged with the tether, which Brent declined to hold, so there was Gene Pape, one of the nation's foremost combat experts, holding the one line to a wooden car. A picture, if we had been able to stop laughing about it, would have been worth a thousand words.

It brought back memories of old Eugene Prop Spinners tether-plane flying sessions. You make a small plane, power it with an .020 or .049, and rig it with one line. The pilot end goes on pole. The trick is to make a plane that will fly itself. It's great sport in a big garage (wear ear protectors) or a driveway.

Some of the great Sunday flying events in recent years have involved Mike Hazel's five-engine bomber (five .049 Black Widows make a terrifying sound) and his 100-foot-line Ringmaster with its Rat Race .40.

In the older days of the Prop Spinners, the club one Sunday did a "Blind-man's Balloon Sust," with the pilot blindfolded. The often-told story is old-timer expert Clarence Bull flawlessly popping balloons blindfolded -- then crashing when the blindfold was removed.

Let's have your "non-war" stories.

FINE-TUNING: A few minor errors slipped into the 1986-87 rule book. On Page 30 in the Carrier section, the Carrier I line chart should read 60'0"-60'6". On Carrier's page 32 is a harmless but puzzling typographical error. AMA says artwork in the Aerobatics section will be improved in a second printing. Also in the second-printing, the conversion in the CL section of cubic inches to cubic centimeters will be changed to .1525 instead of .1526, the proper number.

NEW MAKER: Though LR Products is no more, that company's Instant Replay sport and Slow Combat kits and its Avenger series of AMA, FAI and 1/2-A Combat planes are available now from Liebig Sales Co., 3714 Stonegate Road, Quincy, IL 62301. Write for prices and tell them FL sent you.

PROP NUTS: Al Kelly is back in business with his Kelly Products, Inc., making epoxy-glass and carbon fiber speed and racing propellors in a wide range of sizes. Kelly Products, Inc., P.O. Box 38, Western Springs, IL 60558. Tell him FL sent you.

ROUND & ROUND- continued

NOT-SO-GREAT: Great Planes Model Distributing has slammed the door on George Hubschmidt, long-time competition parts supplier, with regard to Supertigre and OS engines. It's the same story that drove Tom Dixon's Controline Sales out of business. George is still in business, though. Great Planes -- Phbhht!

PINK LADIES: Chris Sackett has discontinued manufacturing speed kits but still sells plans for the following planes: Pink Lady 1/2-A, A, B, D, Formula 40, Wildfire FAI, Sidewinder FAI and The Move Formula 40. Sackett Products, P.O. Box 82294, Burnaby, B.C. V5C-5P7.

FINDERS KEEPERS: The "Parts Finder" listing in the latest SPEED TIMES is worth the subscription price. It lists every speed-related supplier known, and it's a long list. If you thought competition products are unavailable, you just haven't known where to look. Contact North American Speed Society, Box 82294, North Burnaby, B.C., Canada, V5C 5P7.

TRIVIAL PURSUIT: Herewith starts a new feature of "Round & Round" -- a monthly trivia question. Since it's winter, the sport race season, here's a sport race question: Paul Walker, ex-national stunt champ, raced one season in the Drizzle Circuit's Northwest Sport Race. Something was wrong with the decoration of his Shoestring Stunter. Can you remember what it was? First person to answer correctly gets his name mentioned in this space next month.

EUGENE'S TOY & HOBBY

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HOOK NOOK

CARRIER NOTES

by: ORIN HUMPHRIES

My son and I were flying our Profile birds during a hot spell, or should I say, trying to fly them. Engine problems bedeviled us that day. We had the good old

HOT WEATHER, HIGH NITRO BLUES.

His bird would get airborne and do its high speed all right, but as he throttled back for the next part, his engine would simply die suddenly before reaching idle. On the ground, it would idle fine if we went to idle right after start. My bird never left the ground that day, because I couldn't get the engine to run evenly at any setting. After a minute's running I had to shut it down for overheating. A thorough check of the fuel system revealed nothing wrong.

I was using 26% nitro and the air temp was over 90 degrees. Back when I was starting out in flying models my friends and I learned to raise the nitro content in cold weather and lower it in warm weather. It has been so long since I ran into a problem with it I have simply forgotten about that basic fact.

A talk with Jim Rhoades of Utah, a fine speed man of no small reputation, at contests in the not too distant past helped understand this high nitro thing. I might suggest you spend some time with Jim at any chance as he is a great guy and one of the most knowledgeable people around. Nitro produces more heat. Period. Curiously, speed engines on high nitro are said to run cooler than others. The most commonly heard reason for this is as follows. It takes heat to make a liquid turn to a gas. One runs a prop that gives much higher rpm when the nitro is high, and a lot more fuel is being delivered to the engine. More fuel means more cooling as heat vaporizes the incoming fuel.

This sounds fine, but there is a serious problem with this. More fuel means more heat will be produced in the engine. In fact, the cooling for vaporization will be in step, amount wise, with heat production, so there had to be another reason. I believe I have figured it out this way. At the much higher rpm, the hot combustion gases are in contact with the cylinder surface a much shorter time. There is less time, then, for the heat to be conducted to the engine from these gases. My car, when climbing a long hill will tend to overheat until I go to low gear. Beside the easier load, the gases are in the engine a shorter time at the higher rpm.

One other thing hurts the engine heat problem these days, making our engines more sensitive to high nitro. We have less castor oil in our fuel, whose principle job was to cool the engine. I am told only 2% castor is needed for lubrication and the rest is for cooling through vaporization. Once figuring out that the nitro was the cause of our problem I tried 15% on my next outing at around 80 degrees. I was surprised to find the trouble still there although lesser so. My engine ran evenly but died as I tried to throttle back. In days of old the 15% would have solved it, but it occurred to me as I was writing this that we have less oil in the fuel these days.

Why did the engines die as we tried to throttle back? Heat was being conducted from the crankcase to the carburetor, and apparently enough fuel was being delivered to cool the spray bar. As we slowed down, the fuel delivery wasn't enough to cool the spraybar and the fuel boiled there, vapor locking the plumbing.

We next tried K&B's FAI fuel, which, as most know has 0% nitro. To our surprise this did not solve the problem as it would have in the old days. And matters were worse with it as well. Now, our engines wouldn't start with this mild-mannered fuel. It took a prime of either 15% nitro fuel or lighter fluid to get them to fire. (Use extreme caution when priming with lighter fluid. It has no oil in it for the engine's protection and is extremely flamable.)

The final solution proved to be the addition of 10% castor oil, available from Sig. The cooling problem disappeared and we were able to return to the use of 5% and 15% nitro. It was as if there never had been a problem for us.

All of the advertising on the fuels sings the praises of how much the manufacturer knows about fuels. I am rather underwhelmed, SHELDON, and K&B.

I have talked with several other modelers and Sheldon's fuel enjoys a very low reputation in the Northwest already because of others having the same experiences. Bob Parker says he lost an O.S. engine to poor lubrication with Sheldon's.

ENGINE ALIGNMENT

Someone told me many years ago to put some downthrust into my first Carrier bird's engine mount. WRONG! A model tends to fly along the direction the crankshaft is pointing in. What happens in the case of downthrust is that to get the crank level, the plane necessarily is in a nose up attitude. Now, what do you suppose it's going to do during high speed, guys? Climb like a homesick angel! You have to hold 90% of your down control to keep it below 30 feet altitude. No up thrust, no down thrust, men. Which brings us to our next and final point. How do you align the engine for zero thrust up or down?

On Super Tigre and K&B engines your most likely guess to the above question, sight along the cooling fins, would, unfortunately be a mistake. You see, the cooling fins on these popular engines are NOT aligned with the centerline of the engine. Look very carefully at the bolt pattern on the head in relation to the fins and you will see what I mean.

SOLUTION

Remove the exhaust baffle, if your engine has one, and rubberband a piece of motor mount along the exhaust stack. This will be parallel to the centerline, so use that for sighting. Measure how far from center the face of the exhaust stack is and mark that on the model's plans. Find a point that same distance from the thrust line on the plans back near the tail and mark that. Draw a reference line on the plans between these two marks. Finally, scribe a reference mark into the wood of the fuselage in this offset location, deeply enough to show even after the model is painted. You will then have a lasting reference mark years later when you remove the engine for maintenance and need to re-align it. Simply put a piece of motormount on the stack and sight along it to the reference mark. (Do I need to say, 'replace the exhaust baffle'? I suppose I should so someone wont get the wrong idea... I know what I mean, do you?)

Pleasure is all mine, men. Orin Humphries, 509-325-9773, No. 5208 Elgin, Spokane, WA 99205

SPEED SCOOP



LIFE in the FAST LAP

by: MIKE HAZEL

This year promises to be another active one for the speed fliers. A real busy season is on hand: In April we have the speed trials in Portland, the big shootout is at the Regionals in May. Up North, the NW speed champs happen in Richmond, B.C. in June, and action is repeated the following month at the "Canned Nats". In September, the Washington champs cap off the season. Let's get ready! Check those flying wires, and tear down the planes and get them cleaned out and safety checked.

This month I have a miscellaneous bag of hints and kinks that you may

find useful.

--- Props too small are safer on your engine than props too large. Over loading your engine can easily result in a burndown on a bad setting.

--- At a contest, consider going for an official right off. How many times has your best time been a practice flight? If the flight is not going good, then get off the pylon. You still have three shots left. Besides that, on a busy day, you always run the risk of not getting another chance at an official.

--- Build your two wire ships with the elevator surface on the inside if practical. (then you can always be sure which way it will move!)

- --- Always train fuel bladders to fill from front to rear of plane. This eliminates the possibility of the fuel line to engine being kinked.
- --- Always have identical size (and trained) bladders made up for spares.
- --- Always wire on fuel lines to fittings where slippage could occur.
- --- Don't use old fuel for contest flying. Save it for engine break-in.
- --- Do always filter your fuel. Use a filter when filling syringe, and if possible, between fuel tank and engine.
- --- Do have extra props carved and balanced before the contest.
- --- A properly designed pit box can save you attempts on the flight line. Keep it simple, but do have a spare glow plug, prop, wrenches as necessary, bladders, fuel, and syringe, all this as a minimum.
- --- When flying Formula 40, practice smooth takeoffs to achieve the best score, leveling off at a maximum altitude of six feet.
- --- In any class, do some experimenting to find out at what altitude you can achieve the best speed. Carefully note flying characteristics, and fuel feed tendencies.
- --- Novices, practice your engine starting sequence on the clock, so as to be ready for the "real thing". Too many times, novices panic when the engine doesn't start immediately, not taking into account that there is a bit of time to calmly use.
- --- Put brightly colored tape on your takeoff dollies so you can easily find them after launch. (or you can paint them!)
- --- Beginners, do watch carefully at contests, and listen.
- --- Experts, do help a beginner!
- --- All participants, do help the event director if asked to punch a stopwatch!
- --- Remember to put on your competition license number on the plane. This is required!
- --- Keep a logbook to record notes regarding your flights. It's hard to know where you are going, if you can't remember where you have been!
- --- Don't be a speed "hermit". Join the North American Speed Society!
 Also, participate in your local club or other organization.

NW COMPETITION RECORDS

RECORD PERFORMANCES ESTABLISHED BETWEEN NORTHWEST MODELERS IN SANCTIONED COMPETITION

Dave Green of Astoria, Ore., kept up his assault on the Northwest Super Sport Race record book at the Feb. 9 Drizzle Circuit contest by lowering the heat record he had set only a month earlier. Green turned in a 3:26 heat, not once but twice in the same contest. The month-old record was 3:29.

Flying Lines keeps track of the best performances of Northwest control-line fliers in AMA-sanctioned contests (or MAAC-sanctioned contests using AMA rules), and in Northwest regional events. Here are the complete records as of FEB 30:

100-lap: 5:08 (Knoppi-McCollum) 50-lap: 2:35 (Knoppi-McCollum) MOUSE RACE I 200-lap: 9:21 (Bill Varner) MOUSE RACE II 75-lap: 3:54 (John Thompson) 140-lap: 70-lap: GOODYEAR 140-lap: 8:03 (Dave Green) 78-lap: 3:56 (Dave Green) SLOW RAT 140-lap: 5:38.36 (Dick Salter) RAT RACE 70-lap: 200-lap: 7:49 (Knoppi-McCollum) TEAM RACE 100-lap: 3:51 (Knoppi-McCollum) 140-lap: 8:53 (Beers-Cole) NW SPORT RACE 70-lap: 4:03 (Henry Hajdik) 140-lap: 7:45 (Dave Green) NW SUPER SPORT 70-lap: 3:29 (Dave Green) HALF-A SPEED: 88.2 mph (Paul Wallace) FAI SPEED: 158.98 mph (Scott Newkirk) HALF-A PROTO: 83.63 (Paul Wallace) FORMULA 21: 79.54 (Rich Salter) FORMULA 40: 152.28 (Scott Newkirk) A SPEED: 181.56 (Chris Sackett) JET SPEED: 194.73 (Chris Sackett) B SPEED: 184.57 (Chris Sackett) PROFILE NAVY CARRIER: 232.5 (Bob Parker) D SPEED: 170.71 (Mike Hazel) CLASS I NAVY CARRIER: 311.1 (Rick Wallace) CLASS II NAVY CARRIER: 323.7 (Loren Howard)



709 Crescent, Sunnyside, Wa. 98944

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AIRMAIL





COMMENTS, NEWS, and VIEWS from FL READERS

Dear FL.

I like the new format! For the past many years, I have hassled with filing FL and/or its articles. Now they'll finally fit in letter files without folding!

Also read Bill Winter's letter- I think he hit a nail square on the head! Most of us rarely fly for the fun of it anymore. If we're not flying

in a contest, we're practicing for one!

Early in my model hobby activity, in the early 50's, I flew more laps and loops, with more different airplanes than I have since flying in competition. Available time and business activities are part of the problem, of course, but we don't seem to encourage newcomers to fly, just because the hobby is an adventure!

It seems that we all promote our particular entry level competitive event for the newcomer to participate in. On the other hand, our only organized (or disorganized) activities seem to be contests. Part of the problem, too, is lack of regular CL flying sites. We can't say, as we did at one time, "Come out to the _____field. There's always someone flying on the weekends."

There is much more of that activity with RC flyers, in spite of the horror stories of new flyers facing the old established guard. Even in FF, typically you can just fun fly at most of the organized indoor and outdoor meets. Generally, you can go to these meets, meet people, shoot the breeze, get a little (or a lot) of advice, knock off a few flights, and generally have a good time. You may never have competed with even a stopwatch, but you feel good about what you did.

The Skyraider's have a beginner's day in the spring, just for introducing people to the joys of screwing one's self into the ground with a toy airplane: Seriously though, how many of us still remember the thrill of that first successful flight, mostly with the assistance of our equally ignorant buddies, fighting off the dizzies, trying to keep that Firebaby (or whatever) on a level path, until that seemingly endless fuel tank ran out and we glided to a bumpy landing?

As with a lot of activities, as we gain exparience we become blase about those original exciting feelings and push into competition to attempt

to maintain them.

As a sometimes competitor, I put off building something for fun because I don't have time to build even the competition airframes for those events. I have been sketching bipes, twins, deltas, etc., over several years. Sometimes I think that Sarpolous, Sheeks, Dahlke and Frank Macy have more of Bill Winter's approach. Model flying is for fun and experimentation, as well as the development of competition planes.

As a CD and event director, I strongly support competitive activity because a lot of people like it. We have also seen a lot of people become better builders and flyers because of competition. The intricacies of engines, control systems and trim have a much better chance of being learned properly from people who have already been over the coals, so to speak.

To recap this rambling work, I am saying that contest flying is a neat activity, which I enjoy from both an adminisitrative and participative standpoint. To attract other people, perhaps less competitive, into our activity, we need to provide some outlets for gathering, such as fun flys, where nobody is scored, no prizes are awarded, and everyone does their own thing.

Thanks for grinding through all this, Mike. You know I'm a long-time supporter of the hoboy and our NW activities. I know that scheduled activities and newsletters are the secret to the interest in CL which we enjoy in the Northwest.

I would like to see, however, some non-events scheduled along with the major events. I think you'll see a modified calendar by the Skyraiders

by 1987 to allow more of this sort of thing.

For 1986, however, you can count on the Gardners to run stunt at the Regionals and to CD the Skyraider's Raider Roundup! Thanks for listening-keep up the good work!
-----Dave Gardner, 17210 109th PL SE, Renton, Washington 98055

Dear FL.

Enclosed is a check for \$12 to cover the cost of 10 issues of Flying Lines. Keep up the good work.
---- Melvin Schuette, Po Box 293, Auburn, KS 66402

Dear FL.

Thanks for the reminder. Here's enough to take me to the century mark. Also, nothing wrong with the new format. It worked for me for a number of years. (Circlemasters newsletter).

----David Copeman, 2033 Jonathan Dr., Sterling Heights, MI 48310editor's note: Thanks Dave! You are signed up longer now than anyone on the roster!

HI MIKE,

MISSED YOU AT THE EXPO. WE TRIED TO TAKE UP THE SLACK THOUGH AND CONVINCE THE RC TYPES THAT WE ARE STILL OUT THERE GOING ROUND AND ROUND. THE FLYING DEMO REALLY IMPRESSED A LOT OF PEOPLE THIS YEAR. THEIR WAS ONLY ONE GROUP OF HELICOPTER FLIERS THIS YEAR AND THEY DIDN'T SEEM VERY INTRESTED IN PUTTING ON MUCH OF A SHOW.

I DON'T CARE WHAT ANYONE SAYS I LIKE THE NEW FLYING LINES FORMAT. SAME SIZE AS THE SKYWRITER, MAKES IT EASIER TO BORROW MATERIAL.

Tom Cope is going to be out of town from March 12 until mid may. He is requesting all CD's to get their sanctions in before March 12. You might pass the word along during your travels.

SURE GLAD WE SHORTENED UP THE CONTEST SCHEDULE. THOSE CANADIANS ARE GOING MORE BESERK THAN WE DID. OH WELL, NICE TO SEE SOMEONE ELSE TAKING UP SOME OF THE WORK LOAD.

-----Dave Mullens, 15559 Palatine Ave N., Seattle, WA 98133

SUPPORT FLYING LINES ADVERTISERS THEY SUPPORT CONTROL LINE FLYING

OBSERVATIONS FROM THE PANTHERS PIT

By Vice President HENRY HAJDIK

Congratulations to the membership and life members and the life members of the VGMC for providing their support to the very successful gala dinner and dance held at the Town and Country Inn, on Sat. Dec. 28/85. Without your help it would not have been possible to achieve such great results in the 8 short weeks alotted for preparation of this function. No doubt we might well have prepared for this reunion at least 12 months sooner. Be that as it may it's important to consider that every effort was made to contact former VGMC members and the enthusiastic response was extremely gratifying.

Your writer had the privelege of working with a number of people who each contributed a substantial amount of their time and professional expertise to the success of this function. Special thanks are extended to these individuals;

- 1) Mr HAL RUPPE & the catering staff of the Delta Town & Country Inn. We particularly appreciated the special addition of salon 'C' in addition to the original contract use of salons 'A' & 'B'.
- 2) The CHEF for the prime rib dinner & black forest cake & wine, from all guest accounts it was superb.
- LES BLANK of Sounds Great Music Services for a job well done.
- 4)DENNIS BRUTON VIDEO for his excellent work on the video camera. VGMC club members will view this banquet film at the January general meeting.
- 5) CHRIS SACKETT for handling banquet tickets and front door introductions "thanks Chris" for your work also on the life member roast, great job. However henceforth Chris will undoubtedly recall that ancient Chinese proverb 'When honorable gentleman places too much fat in fire while preparing dinner roast, he must remember never to sit in pan'.
- 6) JACK OSTER for his discreet handling of a difficult situation to ensure the proper management of the Life Membership award to Chris Sackett.
- 7) ISABEL HAJDIK & FRANCIS HANNAH for overseeing the banquet registrar duties and keeping Chris relatively calm.
- 8) FRANK BODEN, Club President for his assistance in co-ordinating the Life membership award and for arranging for the preparation of the special VGMC 50th ANNIVERSARY BANNER which will be highlighted in the video on Jan. 25th.
- 9) FRANK RUTLAND and all the life members who responded to their roast with a roast of the host. Great job fellows...welcome home!
- 10) A special thank you to all the beautiful ladies who attended this gala and who each contributed appreciably to the party atmosphere. Perhaps next time we will see all of you at the flying field in our search for new modellers.
- 11) MIKE HAZEL-Editor of Flying Lines and C/L columinist for Model Builder Mag. for his preliminary coverage of our 50th anniversary celebrations and for historical data on the VGMC circa 1935, as documented in Jan/86 Model Builder magazine....thanks Mike.

Finally we extend our congratulations to CHRIS SACKETT. On the occasion of this 50th Anniversary it seemed fitting that the award of a life membership be granted to an individual who has so relentlessly worked to preserve the Vancouver Gas Model Club to be one of the truly great modelling clubs in North America. Chris has spent countless hours editing the Hot Head and Speed Times magazine as well as running most of the club contests in the past two years. The newsletters that Chris edits play a critical role in providing important communication on club activities and technical data in respect to Free Flight and Control Line flying. Chris has given selflessly of his time and talent in respect to the re-organization of the VGMC His leadership has been a vital asset in preparation of numerous competition events for the benifit of his fellow modelers.

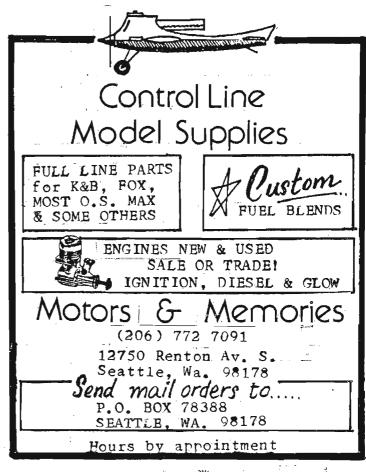
NORTHWEST COMPETITION STANDINGS

The Half-A Combat standings race opened and juggling occurred in the Northwest Sport Race and Super Sport Race standings at Drizzle Circuit Contest 3 Feb. 9.

Flying Lines keeps track of the performances of Northwest Control-Line model aviators in sanctioned AMA/MAAC Northwest competitive events. Information about the scoring system and printouts of complete standings are available from the acting statistician, John Thompson, at 1505 Ash Ave., Cottage Grove, OR, 97424. SASE, please.

Top fliers in events in which standings have changed, as of Feb. 19, are:

NORTHWEST SPORT RACE (2 1. Dave Green 2. S&S Racing Team 3. Glenn Salter 4. Beers-Cole Racing 5. Dick Peterson	contests, 20 entries) Astoria, Ore. Seattle, Wash. Seattle, Wash. Vancouver/Portland Renton, Wash.	19 17 15 10 7
NORTHWEST SUPER SPORT R 1. Dave Green 2. John Thompson 3. John Hall 4. Dick Peterson 5. Beers-Cole Racing 6. Dick McConnell	ACE (2 contests, 15 enti Astoria, Ore. Cottage Grove, Ore. Puyallup, Wash. Renton, Wash. Vancouver/Portland Seattle, Wash.	13 10 8 7 6 4
OVERALL RACING (5 cont 1. Dave Green 2. S&S Racing Team 3. Beers-Cole Racing 4. Glenn Salter 5. Dick Peterson 6. John Thompson 7. John Hall 8. Dick McConnell 9. Dick Salter	Astoria, Ore. Seattle, Wash.	33 17 16 15 14 10 8 4
HALF-A COMBAT (1 conte 1. Dick Salter 2. Rich Salter 3. Bill Varner 4. Glenn Salter	est, 5 entries) Seattle, Wash. Seattle, Wash. Astoria, Ore. Seattle, Wash.	5 4 3 2
OVERALL COMBAT (1 com 1. Dick Salter 2. Rich Salter 3. Bill Varner 4. Glenn Salter	Seattle, Wash. Seattle, Wash. Astoria, Ore.	5 4 3
4. arenn parrel	Seattle, Wash.	2





"Think you've got the feel of it?"

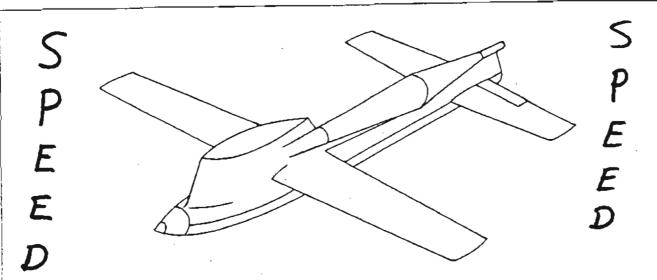
WHERE THE ACTION IS

CONTESTS and EVENTS THAT ARE COMING UP

Listed below are the Northwest Control Line model aviation events known to FLYING LINES as of 2-25-86. All events listed here are sanctioned by AMA or MAAC. All sanctioned events are open to AMA & MAAC members unless otherwise noted.

- MARCH 16 -----SEATTLE, WASHINGTON-----
 Seattle Skyraiders 3 X 1
 One plane and engine used to fly NW
 Super Sport Race, Stunt, and Balloon
 Bust. Trophies for first place in each
 category and through third place for
 best overall. Site: Carkeek Park
 Fee: \$5 Contact: Dave Mullens
 15559 Palatine Ave N. Seattle. WA 98133
- APRIL 6 -----RICHMOND, BRITISH COLUMBIA--Vancouver Gas Model Club Racing Series
 Event: NW Sport Race Site: Richmond
 Field CD: Chris Sackett (604)299-4500
- APRIL 13 -----PORTLAND, OREGON------
 NW Sport Race Drizzle Circuit Meet #5
 Events: NW Sport Race, NW Super Sport
 Race, AMA Slow Rat Race. Season
 trophies awarded. Site: Delta Park
 CD: Wayne Spears
- APRIL 20 -----PORTLAND, OREGON-----
 NW Control Line Speed Record Trials
 Events: All rule book speed events.
 Site: Delta Park CD: Mike Hazel
 (503) 364-8593
- APRIL 26-27 ---SPANAWAY, WASHINGTON-----Bill's Hobby Town Spring Tune-Up
 Events: ½A Combat, Fast Combat, Slow
 Combat, Precision Aerobatics (four
 classes), Old Time Stunt, Combined
 Scale, Carrier
 Contact: Dave Mullens , 15559 Palatine
 Ave. N., Seattle, WA 98133
- MAY 4----RICHMOND, BRITISH COLUMBIA--V.G.M.C. Spring Opener
 Events: "33-1/3", NW Sport Race,
 Profile Carrier Site: Richmond Field
 CD: Chris Sackett (604) 299-4500

- MAY 23-25 -----EUGENE, OREGON-----
 NW Regional Control Line Championships
 Events: RACING: Rat, Slow Rat, Mouse I,
 Mouse II, Goodyear, NW Sport Race, NW
 Super Sport Race, COMBAT: ½A, FAI,
 Slow, Fast PRECISION AEROBATICS;
 Four PAMPA classes, Old Time Stunt
 SCALE: AMA precision, Profile
 SPEED: ½A, A, B, D, FAI, Jet, Form 40
 NAVY CARRIER: Profile, Class I, ClassII
 & BALLOON BUST Trophies and merchandise awarded thru third in all events.
 Largest CL meet on the West Coast
 Site: Mahlon Sweet Airport (Eugene)
 CD: John Thompson, 1505 Ash Avenue
 Cottage Grove, OR 97424 (503) 9427324
- JUNE 21-22----VANCOUVER, BRITISH COLUMBIA-NW Control Line Speed Championships
 All speed events flown Site: Richmond
 Field Contact: Chris Sackett, Box
 82294, North Burnaby, BC Canada V5C 5P7
- JULY 13 -----KENT, WASHINGTON------
 Seattle Skyraider's Boeing Air Fair
 Stuntathon. Details to be announced
- JULY 20-26----VANCOUVER, BRITISH COLUMBIA--Canadian Nationals
 Events: Formula 40, Record Ratio Speed,
 Fast Rat Race, NW Sport Race, Combined
 Class I & II Carrier, Profile Carrier,
 Junior Stunt, Open Stunt, .15 Combat,
 Slow Combat, AMA Fast Combat, Sport
 Scale. Note: Pre-entry date is June 13.
 Contact: Mr. Brian Dalling, 4214-W.
 15 Ave, Vancouver, BC V6R 3A6
- AUGUST 30-31---VANCOUVER. BRITISH COLUMBIA--V.G.M.C. Internats--Tentative
- OCT 5-----RICHMOND, BRITISH COLUMBIA--Vancouver Gas Model Club Racing Series
 Event: NW Sport Race Site: Richmond
 Field CD: Chris Sackett (604) 299-4500



******** NORTHWEST CONTROL LINE SPEED RECORD TRIALS *******

APRIL 20, 1986

AMA "A" SANCTIONED

SITE: DELTA PARK PORTLAND, OREGON TIME: 10AM to 4PM

All rule book speed events flown. There are no awards for event placings, however there will be prizes. Each official flight earns one chance for the speed equipment drawing to be held at the end of the day. (fuel, props, pans. etc. etc.) Fees: \$5 for one event, \$10 for two or more events. \$2 charge for Formula 40 fuel. contest director: Mike Hazel (503) 364-8593

-----MORE CONTEST CALENDAR NOTES -----

Flying Lines has just received word that the Canadian Nationals is going to expand the control line event schedule (free flight, too). This is in response to a lot of inquiries and requests from people all over going to Vancouver B.C. for the Exposition. Details are sketchy right now, but we should be hearing something soon about this. At any rate, the limited event roster will be modified to include just about every event. If you saw your favorite class missing before on the calendar, it is probably now included. Another thing that is also sketchy at this point, is exactly what rules will be used for what event. AMA or MAAC? It would be wise to order the appropriate MAAC rule book. See the Feb. issue of FL for those details. Regarding the event expansion, presumably the seven entrant minimum will still be in effect. If it might be close, better get your buddies to enter too, so your event won't be cancelled!

John Salvin wrote to let us know that he will be CD at this years Bladder Grabter. Please see the contest calendar for that one. John would also like everyone to know that the Northern California Combat Association is putting on a meet in Redwood City on April 27. The events are FAI and Fast Combat. Give John a call for more details. (415) 254-7720

The Southern California Controline Association has recently published a complete contest calendar for their area. If you would like a copy of this, send a SASE to: Morrie Leventhal, 1788 Niobe Ave., Anaheim, CA 92804. or you can call for more information: (714) 535-6570



















"A collage of NW faces and activity"



MARCH 1986



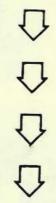
Prices for subscriptions: U.S.: \$6 for 5 issues and \$12 for 10 issues.

Canada and Mexico: \$6.50 for 5 issues and \$13 for 10 issues. Overseas by surface mail: \$7 for 5 issues and \$14 for 10 issues. Overseas by airmail: \$12 for 5 issues and \$24 for 10 issues. U.S. funds, please. Make checks or money order out to PLYING LINES. PL subscribers may place personal ads in the classified section at no charge. For business advertising, contact the editor for rates and specifications.

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Combat	John Thompson
Racing	Dave Green
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Carrier	
Competition Stats	John Thompson



SALEM, OREGON 97304



