

1411 BRYANT AVENUE COTTAGE GROVE, OREGON 97424

EDITOR: JOHN THOMPSON PUBLISHER: MIKE HAZEL

Jan. '80 NEWS OF NORTHWEST CONTROL LINE MODEL AVIATION Number 9

DRIZZLE CIRCUIT OPENS WITH A SPLASH

The 1979-80 Northwest Sport Race Drizzle Circuit got off to a damp start Dec. 9, with 12 intrepid souls appearing in Portland to establish their early positions in the drive for those big season trophies to be awarded next April. We got by without drizzle in 1978-79 everywhere except Portland; the Rose City did a repeat performance for us this season, getting wetter and wetter as the day went on. Maybe Seattle, Astoria and Eugene will repeat their nice-weather conditions of 1978-79.

The Dec. 9 contest started off with one of the best mouse races seen in some time, with some very fast planes and good times going hard at it in a Class I-only race. Dave Green of Astoria, Ore., took first with a 5:09 100-lap feature using a Little White Mouse. but it was Dave Mullens of Seattle who set the speed record with a 2:56 in a 50-lap prelim. There is no question that mouse race is becoming more popular and the competition is getting better every contest. Maybe there's something to be said about model aviation's fuel crisis.

By the time the main event, Northwest Sport Race, got under way, the atmosphere had turned to solid liquid. The rain maid engines refuse to start, pilots go blind and everybody's efficiency go out the window. The times show the effect.

It seemed that only the Simpson family of Silverton, Ore., was undaunted by the conditions -- further evidence that the Simpson & Sons Racing Team has become one of the top NWSR forces to be dealt with.

The day belonged to Richard Simpson, the quiet junior flier who breezed to wins in two preliminary heats, turned in the day's fastest prelim time, and then motored to first in the feature race. Not far behind was dad Roger Simpson who won all three of his heats and finished fourth in the feature. Also on hand was young John Simpson, who piloted Roger's entry with a classylooking hand-over-head style made necessary by his stature two heads shorter than his six-foot competitors.

Turnout for the contest portended a good season, equaling last year's opening-contest entry in spite of the dismal weather. The field included teams from Seattle, Astoria, Eugene, Cottage Grove and Longview areas. Air speed of all the entries appears to be bunching up closer together, no matter what the power plant-airframe combination, and there will be few races without suspense, if air speed is an indication. The Simpsons appear to be running quickly and consistently, while the team of GaryStevens and Tom Knoppi of Seattle also looked very fast. Like last year's No. 2 finisher John Thompson, Stevens-Knoppi had trouble with weather and other surprises, and should be fun to watch in future contests. Unknown quantities include the new team of Dave Mullens and Dick Salter out of Seattle, and Bill Varmer, last year's No. 4 finisher who threatens to campaign a biplane in the last four races. Last year's champion, Mike Hazel, appeared on his way to another success when a mad scramble in one of the prelims lead to the fatal crash of his Ringmaster, Fox .36 and all. He'll be campaigning entirely new equipment Jan. 13.

That's the date of DC No. 2, in Kent, Wash., at the Boeing Space Center. Goodyear is the secondary event, whichalso should hold some surprises due to the new rules on line lengths and diameters. Goodyear starts at 10 a,m., with NWSR at noon sharp. NWSR is the usual DC format of three prelims, a four-plane feature, and points accumulating for the championship. There will be merchandise prizes for both events. Entry fee is \$3 for one event, \$5 for both. See the contest calendar elsewhere in the newsletter for details of the other DC contests.

Here are the complete results of the Dec. 9 bash:

<u>A MOUSE RACE CLASS I</u> (35' x .012" lines)

ı.	Dave Green	3:14 heat	5:09	final
2.	Jeff Young	3:18 "	6:48	**
	Dave Mullens	2:56 "	7:03	**
-	Mike Hazel	3:23) "		
	Bill Varner	3:37 "		
	John Thompson			
	Roger Simpson	4:18 "		
	Richard Simpson			
	Bruce Guenzler			

DC RESULTS, continued

NORTHWEST SPORT RACE

FEATURE RACE
1. Richard Simpson 8:55 -- 12 points + 3 heats finished = 15 points
 (Yak-9, K&B .35)
2. John Thompson 9:15 -- 11 + 3 = 14 points (Ringmaster, K&B .35)
3. Rich Schaper 9:30 -- 10 + 3 = 13 points (Cherokee, Fox .36)
4. Roger Simpson 10:43 -- 9 + 3 = 12 points (Yak-9, K&B .35)
Preliminary heat winners: Roger Simpson, 3; John Thompson, 2; Richard Simpson,
 2; Mike Hazel, Rich Schaper
Championship Point Standings Best Heat
1. Richard Simpson. 15 4:20

I. Alchard Simpson	1.						12	4:20	
2. John Thompson.				•			14	4:35	
3. Rich Schaper .	•					•	13	4:27	
4. Roger Simpson.							12	4:26	SUPPORT FLYING LINES
5. Tom Knoppi				•			3	4:42	ADVERTISERS THEY
5. Dave Mullens .							3	5:31	SUPPORT CON IROL-LINE
5. Dick Salter									MODEL AVIATION
5. Gary Stevens .									
9. Mike Hazel							1	4:27	
9. Jeff Young							1	6:50	
11. Dave Green		•	•				0	53 laps	
12. Bill Varner .							0	27 laps	
12. Bill Varner .	٠	•	•	٠	•	•	0	27 laps	

PAPE'S COMBAT PRIMER By Gene Pape

(Editor's note: FL has invited Gene Pape, an accomplished combat model designer, to share some secrets to building competitive airplanes. Now, on the off-season, is a good time to be thinking about how to make next year's (oops -- this year's) equipment better. Here are Gene's pointers.)

It's time to take a look at the basic things that are important to a control line combat model. In all classes of combat, the single most important thing is the engine. It must be as powerful as possible within the rules of the event. It must be easy to start. And, most of all, it must be consistent. A really fast engine will make most anything fly well. Right now, the Fox Combat Special is the only engine a beginner should consider for fast or slow combat. The next most important point to consider is that the model must be absolutely straight. If it is not straight, it will lose line tension in maneuvers. In order to fully utilize the potential of any combat model, it must have a good steady pull on the lines so you can fly it without looking at it. The time to make sure the wing is straight is just after you finish building it. If you have a jig to build your wings in, try to arrange things so you can put the wing back in the jig after it is covered to check for warps. If you can't do that, arrange four soft drink cans on a flat surface, one on each corner of the wing. Press a straight pin in the centerline of the leading

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January, 1980

COMBAT PRIMER, continued

edge and trailing edge at each tip. Now rest the pins on the pop cans. When both the leading and trailing edges appear straight when you sight down them and the wing rests on all four pins at the same time, the wing is straight. Two related items are next on the list. Balance point and leadout

location.

Most older combat models were nose-heavy. In order to achieve the ultimate fast combat model, the engine must be recessed into the leading edge. Many designers don't agree with this. They claim that longer, heavier tails will bring the balance point back to where it belongs. There are two problems with this. One is that any added weight is a disadvantage. The other is that the prop acts as a gyroscope and the farther ahead of the center of gravity it is, the more leverage it has, not only hampering turning but causing the model to yaw when pitched.

The main consideration when recessing the engine is access to the glow plug. Be sure you can change it in the middle of the match. The exact balance point will have to be decided by experimentation. Somewhere between 20 and 25 percent of the wing chord from the leading edge should be about right.

Leadout location is another factor to be determined by trial and error. Many of the older designs, the Voodoo in particular, were designed to be flown on .015" lines. In order to perform properly on .018" lines, the leadouts must be moved back some. In order to decide where to position the leadouts, start with the centerline between the two leadouts at about 50 percent of the wing chord. Note that the bellcrank location has nothing at all to do with leadout location. Final location will be determined purely by personal desire. If the leadouts are too far forward, the model will be slack on launch and while maneuvering. Also, it will be somewhat slack in level flight. If they are too far back, the model will slow excessively in maneuvers.

On some of the new high-aspect ratio tapered-wing models, the leadouts can actually warp the wings during maneuvers. This causes the plane to flop around and makes most of these "trick" airplanes not really very good combat models.

Notice I didn't really mention weight. Light is nice, strive for it wherever practical, but don't sacrifice necessary strength and rigidity for it. If your wing folds in maneuvers, or your tail breaks when you land, you won't win very much.

If you analyze your present machines, keeping these things in mind, you should be able to come out with a very competitive piece of gear. Good luck.

--Gene Pape, 4528 Souza St., Eugene, OR 97402.

AD RATES

Advertisements in FLYING LINES cost \$5 per issue for a half page, \$3 per issue for a quarter page, \$10 per year for Hobby Shop Directory listing, and \$1 for five lines for classified ads.

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1	= Hardware	·# Props	* Engines		

TURMOIL ROCKS NW RECORDS!!! Yes, friends, there's a new rules cycle (1980-81) about to begin. That means that all records previously set in events where rules have changed, are wiped out. The first competitions this year will set the new records.

Rules changes have wiped out records for Goodyear racing, slow rat race, and Formula 40 speed. (In Goodyear, lines have been increased from .012" x 52' to .014" x 60'. Slow rat rules now require solid lines. Formula 40 is now limited to 40% nitro.fuel.) In addition, the new rulebook eliminates C speed and B proto speed as events, and adds Formula 21 as a junior event. Just for you record buffs, here are the records to be wiped out by the rules changes (Northwest records have been kept by FL since the 1979 NW Reg-

ional championships, so these are about 9 months worth of records): Goodyear 80-lap prelim, 3:52, Mike Hazel. Goodyear 160-lap feature, 7:31, John Thompson. Slow rat 70-lap prelim, 4:14.4, Mike Hazel. Slow rat 140-lap feature, 8:33.6, John Thompson. (Those slow rat records will change in '80, since some folks are building real slow rats instead of using sport racers, we understand.) Formula

building real slow rats instead OI USING Sport Later, 40, 149.5, Mike Hazel. Here are the complete NW records, as of Jan. 1, 1980: *¹/₂A MOUSE, CLASS I 50-1ap: 3:05 (Jim Cameron) 100-1ap: 6:36.9 (Cameron) *¹/₂A MOUSE, CLASS II 75-1ap: 4:24 (Gilbert-Shelby) 200-1ap: 14:32 (Cameron) GOODYEAR 70-1ap: -- 140-1ap: --SLOW RAT 70-1ap: -- 140-1ap: --RAT RACE 70-1ap: 2:35.55 (Mike Hazel) 140-1ap: 5:21 (Mike Hazel) FAI TEAM RACE 100-1ap: -- 200-1ap: --NW SPORT RACE 70-1ap: 3:53 (John Thompson) 140-1ap: 7:40 (John Thompson) ¹/₂A SPEED: 76.57 mph (Jeff Bell) JET SPEED: 165.83 (Mike Hazel) A SPEED: 125.82 (Mike Hazel) FAI SPEED: 88.05 (Scott Newkirk) B SPEED: 148.95 (Mike Hazel) JAPROTO: 71.97 (Jeff Bell) D SPEED: -- PROFILE NAVY CARRIER: 208.78 (Marty Phill: FORMULA 21: PROFILE NAVY CLASS I NAVY CARRIER: 268.98 (Terry Miller) CLASS II NAVY CARRIER: 319.65 (Orin Humphries) PROFILE NAVY CARRIER: 208.78 (Marty Phillips)

*FL has waffled about how to recognize performances in mouse race on 35-foot by .012 stranded lines, which have been used in some races. First we didn't recognize them, then we did, now we don't. However, some excellentraces have been held in the past year, including at the Dec. 9 Drizzle Circuit contest. We will continue to list officially only mouse races run on standard AMA lines We will continue to fist officially only mouse races run on standard AMA lines (.008 x 42' single strand) but hereby acknowledge the "bests" to date on the 35-footers: Dave Mullens of Seattle, Wash., turned 2:56 for a 50-lap prelim and Dave Green of Astoria, Ore., turned a 5:09 for a 100-lap final, both at the Dec. 9 contest. Our last previous records were for 70-laps (3:27) and 140-laps (6:30) both byJohn Thompson. See the trouble we have with apples and oranges when AMA rules aren't followed. (The Dec. 9 contest was all Class I, by the way.)

Flying Lines' Northwest records are open to all AMA-sanctioned contest performances by Northwest residents, no matter where the contests are held. Some documentation is required for acknowledgement of records set out of the region.

REGIONALS VOLUNTEERS STILL NEEDED

Anyone and everyone willing or able to help with the Northwest Regional Control Line Championships in any capacity is urged to contact the Eugene Propspinners as soon as possible. The contest is "tentative" until we have a complete roster of officials, helpers, movers and shakers signed up. Contact Gene Pape, 4528 Souza St., Eugene, OR 97402.

EXHIBITIONISTS INVITED

FLYING LINES has been invited to organize a demonstration of controlline flying in conjunction with the Benton County RC Show April 12-13. Since the finale of the NWSR Drizzle Circuit is April 13, we agreed to put on a show on the 12th.

on the 12th. Now we are looking for volunteers to perform. We envision one or two stunt exhibitions, a few combat matches, and perhaps a sport race heat. All would be for show only. Anyone interested, please contact John Thompson, 1411 Bryant Ave., Cottage Grove, OR 97424, before Feb. 1. There's an opportunity also for a static display. "nybody wishing to get involved in that should contact Jim Trump of DJ's Hobbies, 2025 NW Circle Boulevard, 'Corvallis, OR., 97330, (503)753-7540. Flying will be off grass at the Benton County Fairgrounds, Corvallis.

EDITORIAL Last month, a tragic event occurred in the world of model aviation that should concern us all. At a football game in Shea Stadium a radio control model airplane show team's "flying lawnmower" dived into the crowd and criticall injured one man and hurting another less seriously. The event was reported nationwide by the news madia nationwide by the news media.

The incident provoked me to write a rather harsh letter to the editor of <u>Model Aviation</u> magazine, criticizing in general any show group that flies over crowds and takes anything but the strictest precautions against any kind of mishap in a crowded place. Having seen some hair-raising close calls at local shows, I had feared such an accident was coming somewhere, some time. However, having gotten that matter off my chest in my letter to MA, I had to turn and face some realities related to our own branch of the hobby. Most of us have a reasonable concern for our own safety, and that of our

Most of us have a reasonable concern for our own safety, and that of our helpers and competitors, but we sometimes overlook the fact that model aviation is one of the rare sports which is almost as dangerous for the spectators as it is for the competitors.

That is particularly true in combat, though there also is an element of danger in racing and speed events. Rules are designed with utmost care in regard to safety, but there is one factor rules don't deal with, and it is very difficult to control. That factor is the spectator himself. what most of us take for granted -- that combat planes get cut loose,

a funny vibrating noise means heads up for a flying engine, that smooth-flying

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STAGE II ENGINE Cox Black Widow with TD 049 piston & sleeve, <u>KILLER KRANK</u> , HOT plug, teflon reed. List \$28.09 <u>SALE \$20.50 ppd</u>	"These while s
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Flying Lines

January, 1980

EDITORIAL, continued

rats occasionally bounce and scatter parts -- is unknown to most spectators. The convincing evidence is the number of spectators who will sit right in front of the combat circle at any given contest and chat with their backs to the action. Myself, I stand up and face the action whenever there's a match going on. That's because I know combat. Here's my point: we've gone a long time in the Northwest without a

serious injury resulting from competition. But old-timers remember some nasty mishaps in the distant past. All of us now active remember any number of near misses in recent years. In view of what happened at the RC air show in New York, it may be time for us to step back and take a new look at our spectator safety precautions.

Let's look at what we can do and can't do. First, what we can't, or won't do: We won't stop flying models. We can't keep combat planes from coming loose, colliding or disintegrating in the heat of battle. We can't prevent rat racers from crashing, lines from breaking, props from throwing blades. What we can do: We can make spectators more aware of the hazards of the hobby, by verbal warnings and maybe even by posting some signs around the flying circle. We can keep spectators as far away from combat circles as the site will practically allow. And we can keep our eye out for every instance in which we can better assure the safety of our spectators.

To do these things may take a little bit of extra effort from contest officials who already are overworked and from participants who are already busy trying to keep their competitive act together. We may never realize our efforts are paying off as long as we never have an accident. The first bad mishap will certainly tell us what we could have done and didn't.

Like all combat fliers, racers, etc., I sincerely hope it isn't my plane that hits a spectator, but while I'm holding the E-Z just there isn't anything I can do to prevent it. I'm depending on the rest of you modelers to keep the spectators safe when I'm flying. And I'll keep on telling people to watch the combat -- even if it makes me feel silly to do so -- in order to protect them from your plane. Winning contests in this hobby requires a team effort. So does keeping

the hobby safe.

--John Thompson, editor

NORTHWEST COMPETITION STANDINGS FL's Northwest competition records are designed to recognize outstanding performances by control-line modelers of the region. However, there are groups of fliers left out of those awards due to the nature of their events. Specific-

ally, these are the combat and stunt fliers. That is why FL will start a new feature with the February issue, the 1980 Northwest CL Competition standings.

This will be a listing of CL competitors who have placed in AMA-sanctioned contests in the Pacific Northwest in racing, carrier, stunt and combat. The rankings will be based on a simple system, described as follows:

Points will be awarded to the persons placing first through fourth in each event at each contest, based on the number of entries. First place will be worth points equal to the number of entrants, second is worth number of entrants minus one, third number of entrants minus two, and fourth number of entrants minus three. (Example: In a contest with 15 entries, first place is worth 15 points, second 14, third 13 and fourth 12.) Here are the categories we will keep track of: AMA combat, FAI combat, slow combat, $\frac{1}{2}A$ combat, overall combat, precision aerobatics, Class I-II carrier, profile carrier, mouse race, Goodyear race, rat race, slow rat race, Northwest Sport Bace, speed

Sport Race, speed.

Obviously, we've combined some events, such as speed and precision aerobatics, due to the proliferation of classes and the paucity of participants.

The system of ranking was selected by a scientific research method known as the "shot in the dark" approach. We'll go with it unless somebody finds a huge enough loophole to make us change our minds. 1980 may be an experiment that will lead to a better system (though hopefully no more complicated).

One factor will be essential in maintaining these records -- we must have the number of entries at each contest, in each event. This hasn't been too difficult, particularly when one of FL's reporters attends a contest. However, results submitted by mail sometimes leave out the number of entrants. You contest directors could save FL a lot of long-distance phone calls by including the number of entrants. We'll do the rest of the work. By the way, just to see how it would go, we worked up 1979 combat standings. We won't print the whole list, because of the disparity caused by our lack of data on number of entrants in some contests. Suffice it to say that

standings. We won't print the whole list, because of the disparity caused by our lack of data on number of entrants in some contests. Suffice it to say that the tops in each event were Gene Pape. AMA (the Bladder Grabber helped, Gene); FAI, Phil Granderson; slow and ½A, Keith Iwanski, as near as we can tell. One other note: Also by arbitrary legislation, we have decided to recognize the standings of Northwest fliers in Northwest competitions only. Thus, an unnamed California pilot, flying a peculiar foam-winged airplane, does not become the 1979 AMA combat champ. That would be embarassing. That bit of perochialism follows the lead of our competition records. bit of parochialism follows the lead of our competition records.

Any comments, raves or brickbats will be welcomed.

Flying Lines

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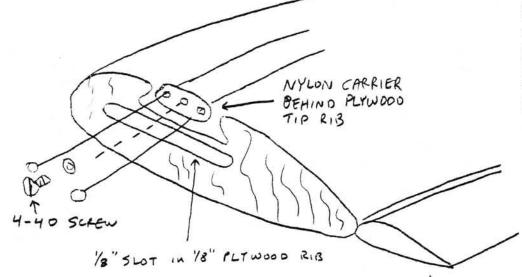
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HERE

January, 1980 <u>SCHAPER ON STUNT</u> By Rich Schaper

Page 6

Building and installing the adjustable leadout guide in that new stunter will make trimming yaw possible. Although your plane can be built without this feature, fining tuning would be impossible to achieve. Once again the name of Bob Hunt of "Control Specialties Corp." appears. If you're inclined to buy rather than make your own, Bob markets two different types of leadout



TOP FLITE

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guides. The first one is the most common for the beginner and features a pre-set line spacing of \ddagger ", $\frac{1}{2}$ ", 3/4" and l". Bob's second guide is called the "Multi-Just." The difference is that with this guide, the leadout spacing also is adjustable. This gives you anywhere from \ddagger " to 3" line spacing. Therefore you have two types of adjustment. For more information on these and other accessories,

write Bob at: Control Specialties Corp. 205 Wood Avenue Box 268

Middlesex, N.J. 08846

For those ready to make your own, read on:

A very effective and cheap guide can be constructed from a Top Flite 3" nylon bellcrank. The part we want to use is the section normally used for the pushrod. Separate with your X-Acto saw close to the mounting bolt hole. We now have a piece of nylon

hole. We now have a piece of nylon with three holes. Tap the center hole with a 4-40 tap. Taps of this size are local hardware items.

3"

A 4-40 screw about $\frac{1}{2}$ " long with a flat washer will be used to secure the leadout carrier to the plywood (1/8" Sig Lite Ply) body. If your wing tips are flat, just make a 1/8" Sig Lite Plywood wing tip rib with a 3" long x 1/8" high **slot** on the center line of the rib and toward the front section of the rib.

The line spacing is a little close at $\frac{1}{2}$ " but will work all right. For built-up wing tips, cut your plywood $\frac{1}{2}$ " in height and $3\frac{1}{2}$ " in length. Then slot 3" by 1/8". Epoxy to the inside of the wing tip. The diagram goes with the explanation.

--Rich Schaper, P.O. Box 608, Kelso, WA 98626.

HOOK NOOK Navy Carrier Notes By Orin Humphries

Have you ever seen a carrier ship fly low over a deck with the hook bouncing between the wires and missing them? Have you seen a plane make a perfect arrested landing only to bounce back, become disengaged from the rope and wind up on its back? These things are easily cured by doing two simple things to your...

TAIL HOOK

I have heard of a hook bouncing the length of the deck once without grabbing a wire, and I have actually seen it happen twice. Thwack, thwack, thwack, eight or nine times and no rope grabbed!

thwack, eight or nine times and no rope grabbed! 'Twas at the Canadian Nats I first saw this. A missed approach that was needlessly missed. Over the years, both of this month's items have been said many times -- they are not ideas of mine -- but need to be repeated periodically to catch thepeople who happened to miss the articles they last appeared in.

First, do you have a rubber band to hold your hook down and prevent its bouncing on the deck? One out of three carrier pilots do not have this on their planes. I do. Next time your hook bounces over the wires, tell yourself what you need.

In Canada, I saw three planes miss all the landing points, taking them out of contention on a particular attempt, because the plane rebounded after making a perfect rope grab. In the bouncing around, the plane wound up upside down, losing 100 points that it had just almost made. The rope came out of the hook during the bouncing.

HOOK NOOK, continued

All these three planes needed was a rope trap on the hook. A rope trap does exactly that. The rope cannot become disengaged and thus restrains the airplane as it bounces upon landing. And the trap is so simple to make. Wrap and solder a piece of .030" wire to the hook shank just ahead of the mouth of the hook part itself. Have this thin wire reach all the way across the mouth of the hook to the far side and a teeny bit past, but do not solder it there, of course.

In practice, this wire is flexible enough to allow the rope to enter the hook at the speeds we land at. No matter how slow we land. But, the shape of the hook at the speeds we fand at. No matter now slow we fand. But, the shape of the hook, being at an angle to the shank, I guess I should say, makes it harder for the rope to try to pass in the outward direction from the hook. The rope stays trapped in the hook. The plane stays right side-up far more times. I have rope traps on all of my hooks, and have never landed upside-down. Okay, without looking, what two things do you have to have for your hook that you may not now have? How will these things help you? Get all of your landing points: use these two simple things. We shall talk again of hook systems, throttle systems, and so forth.

We shall talk again of hook systems, throttle systems, and so forth. But next time, we first will talk about something far more pressing to the profile pilots: How in heck do you adjust that %\$#*& MAG II carburetor? I don't know much about it, and I am begging for all the input I can get from you kind people.

Happy landings, fellow hookers!

--Orin Humphries, 5208 N. Elgin, Spokane, WA 99208.

WHERE THE ACTION IS

The schedule of control-line activity is already starting to grow for 1980. Following is a listing of all events we at FL are aware of. If you know of a contest or informal event not listed here, remind the contest director to send details to F^{\perp} for inclusion in the next edition of the contest calendar. No need to wait until the flyer is ready -- give us the outline now so people can start planning. FL also will publish flyers (free of charge) and report results. Fun-fly events can be listed, too.

- Jan. 13.....KENT, Wash. -- Northwest Sport Race Drizzle Circuit No. 2. Northwest Sport Race (three preliminary heats for each entry, four-plane final, points accumulate for circuit trophies). Scale Race (Goodyear). Site: Boeing Space Center. Entry fee \$3 for one event, \$5 for both. Merch-andise awards for both events. Goodyear starts at 10 a.m., NWSR at noon sharp. Contest Director: "on Scoones, 5325 229th SE, Issaquah, WA 98027, (206) EX2-2636. Sponsored by Red-Max.
 - Feb. 10.....ASTORIA, Ore. -- Northwest Sport Race Drizzle Circuit No. 3. NWSR (above details) and ½A combat (two classes--reed valve and anything goes). Site: Camp Rilea, south of Astoria on Highway lOL. Entry fee, \$3 for one event, \$2 for each additional event. Combat on .012" x 35' lines. Combat starts at 9 a.m., NWSR at noon sharp. Contest Director Dave Green, 200 W. Franklin, Astoria OR, 97103 (503) 325-7005. Sponsored by North Coast Control Line Aeromodelers' Society (CLAMS). Trophies. Feb. 24.....EUGENE, Ore. -- ½A FUN DAY, sponsored by Eugene Propspinners. ½A Speed, ½A combat, ½A mouse race classes I & II, ½A stunt. All events JSO combined. ½A specialty merchandise awarded
 - All events JSO combined. A specialty merchandise awarded through third place in all events. Entry fee is \$3 per event, \$10 maximum, juniors half-price. Site: Mahlon Sweet Airport. Contest Director: Mike Hazel, 1319 Aspen St., Eugene, OR 97401
 - March 9.....SEATTLE, Wash. -- Northwest Sport Race Drizzle Circuit No. 4. NWSR (above details) and slow combat. Entry fee \$3. Trophies. Site: Carkeek Park. Contact John 'hompson c/o Flying Lines or Al Johnson, c/o Hobby House, 10011 Holman Road NW, Seattle, WA, 98177. Sponsored by Seattle Skyraiders. Combat starts at 10 a.m., NWSR at noon sharp.
 - April.13....EUGENE, Ore. -- Northwest Sport Race Drizzle Circuit No. 5. NWSR (above details), Scale Race (Goodyear) and FA¹ team race. Merchandise awards. Circuit trophy presentation. Entry fee \$3 for first event, \$2 for each additional. Site: Mahlon Sweet Airport. Contest Director: Mike Hazel, 1319 Aspen St., Eugene, OR 97401. (503) 726-1185. FAI team race starts at 9 a.m., Coodyear at 10 a.m. NWSH at noon sharp. Sponsored by Eugene Goodyear at 10 a.m., NWSR at noon sharp. Sponsored by Eugene Propspinners.
 - May 24-25....(tentative) EUGENE, Ore. -- Northwest Regional Control-Line Championships (AAA). Navy Carrier (all classes), precision aerobatics (PAMPA classes), scale, speed (all classes), Northwest Sport Race (standard and expert), AMA rat race, AMA slow rat race, Scale Race (goodyear), mouse race, AMA combat, slow combat, FAI combat. Contact Gene Pape, 4528 Souza St., Eugene, OR 97402 (503) 689-1623.

ACTION, continued

Aug. 30-31...EUGENE, Ore. -- Northwest Control-Line Racing Championships, sponsored by Nitroholics Racing Team. AMA rat race (JSO), AMA slow rat race (JSO) AMA mouse race Classes I and II (JS)(O), Scale Race (Goodyear) (JSO), FAI team race (JSO), Northwest Sport Race (standard and expert classes), Formula 40 speed (SO) Formula 21 speed (J). Contest Director: Mike Hazel, 1319 Aspen St., Eugene, OR 97401 (503) 726-1185. Site: Mahlon Sweet Air-port. port.

NOTE: All events are AMA sanctioned unless otherwise listed. Age grouping key: J = junior (under 15). S = senior (15-18). O = open (19 and older).

AIR MAIL

(Editor's Note: R.F. Stevenson, the inimitable engine collector, old-timer and all-round modeler, sends the following list of coming events, some of which are interesting notes on the "other" kinds of model aviation.)

Feb 2, 1980: Model Engine Collectogether and Swap Meet, Boeing Developmental Center Cafeteria, on the Duwamish River near the Oxbow Bridge, south end of Boeing Field runway, Seattle, all day. For information see Robert McKain, 19427 S.E. 267th St., Kent, WA 98031, (206) 631-3056. Feb. 3, 1980: "Misery Meet" free-flight contest, sponsored by Kent Strat-O-Bats, Hart's Lake Prarie, Ft. Lewis, Wash, all day. Contact Tom Cashman, 2521 S.W. 323rd St., Federal Way, WA 98003, (206) 927-4989. Feb. 16-17, 1980: RAMS 13th Northwest Radio Control Model Airplane Show, Sea-Tac Airport Hyatt Hotel, 17001 Pacific "ighway S., Seattle, WA 98118. Contact Dr. Ralph Brooke (206) 824-5440. --Ref. Stevenson, 8326-17th Ave. N.W., Seattle, WA 98117.

--R.F. Stevenson, 8326-17th Ave. N.W., Seattle, WA 98117.

Dear FL:

Fuel shutoffs for Northwest Sport Race.

To be, or not to be, that is the question. The question, of course, is whether to allow fuel shutoffs or continue without them. With the price of fuel required for this event it would seem to be a good idea. Some positive points would be:

1. Shorter practice sessions.

2. Less fuel required for practice.

3. Quicker needle valve settings.
4. And, of course, it would add a little more spice to the event.
And, I'm sure that after the fuel shutoff, such niceties as "top-drawer" racing wheels and funny-ported engines would soon follow. If this sounds like I'm against the fuel shutoff, you're wrong. AMA has several CL events that allow the use of such accessories. Personally, I could live with or without the fuel shutoff in sport race.

But, remember one thing. NWSR was originally set up to get fliers into a cheap, low-key racing event. Then after a year or two of sport race it was hoped these fliers would branch out into other control-line racing events. This has been fairly successful.

So, in closing, if we, the Northwest area fliers, are to continue to have a starting block for the beginning racer, maybe we should leave the fuel shutoffs for the real racing events.

--Rich Schaper, P.O. Box 608, Kelso, WA 98626

Dear FL:

Just gotta throw in my 2 bits worth into the "flap" about shutoffs for NWSR, even though Mike says I have to move to Or-y-gun for my opinion to count.

First off, there's nothing "high-technology" about shutoffs when a dummy like me can figure out how to make one (with some coaching and a diagram from Vic Garner.) Kustom Kraftsmanship, Fourmost Racing Products and Tatone are commercial shutoffs that I know of, although Taton's is sort of lightweight for CL use.

All the "plus" reasons you list (FL, December, '79) are right, noble, etc., but what I believe that has been overlooked is that with a shutoff, a good team can significantly reduce pitting time during the race. With most of the sport racers being more or less equal in air speed, this becomes a large factor. To keep the element of "sport" in NWSR, I'd vote against shutoffs <u>if</u> I was an Orygunean.

Anyway, we'll see you guys at the NW Regionals, with or without 's. You have a good newsletter. Keep it up! shutoffs.

--Bob Kampmann, 8737 Baxter Way, Orangeville, CA 94010.

Dear FL:

Just received the latest copy of your newsletter and wanted to tell you how much we enjoy reading it. It keeps on getting better (which is hard to do). We really look forward to its arrival each month.

We are happy for the newsletter's success and hope it continues and grows even bigger for you. Much appreciation for your hard work and devotion -- you two guys are two of the nicest we met at the Nats. Take care and keep up the wonderful job.

--Sherry (Toodles) Holland (co-editor, CL-RPM racing news (Editor's note: We're blushing.)

THE FLYING FLEA MARKET (Classified ads)

FREE ISSUE OF "THE MODELERS' SWAP SHEET" TO FLYING LINES READERS !: --Just send a 15¢ stamp to cover mailing costs and receive a FREE issue of M.S.S. listing bargains galore in all phases of modeling. Send \$5 for a full year's subscription -- 12 issues -- and receive four free ads, or take out a three-issue trial subscription for \$1 and get one free ad. Send to: M.S.S., 20 Sylvan Road, Clifton, N.J. 07012.

OUCH: -- Has your finger been whacked one too many times by that balky engine? Beat on the prop next time with the Neater Beater, a hand-made leather starting thong. This two-fingered thong is tough yet pliable, and includes a palm flap for good grip and quick on-off. Laced for adjustability. Specify right or left hand. Send \$5 to John Thompson, 1411 Bryant Ave., Cottage Grove, CR 97424.

HOBBY SHOP DIRECTORY

DEATTLE INTERLAKE HOBBIES -- Control-line and RC supplies, specializing in parts. 1406 N. 80th St., Seattle, WA 98103. (206) 525-6757. Owned by the Reifel family. "If we don't have it, we will get it." HOBBY HOUSE -- Control-line, free-flight and RC supplies. 10011 Holman Road NW, Seattle, WA. Owned by Allyn Johnson. (206) 782-1609. <u>PORTLAND</u>

HOBBYLAND -- 20 years serving all model aviation enthusiasts. 4503 N. Interstate Ave., Portland, OR 97217. (503) 287-4090. Owned by Ken Thorstad. (Hobby Shop Directory listings are presented as a service to area model aviators who want to know where to go for their CL supplies. If your favorite shop isn't listed here, show them your copy of FLYING LINES and suggest they sign up. Ad rates listed elsewhere in the newsletter. Support FL advertisers -- they support us.)

OOPS: (So nobody's perfect!)

We've been informed that we garbled the slow combat results from the '79 Bladder Grabber, which was held Oct. 6, in Redmond, Wash. David Ireland was the winner, with Dick Salter second and Keith Iwanski third. We had Ireland and Iwanski switched. They ought to know -- they are flying partners. That's our mistake for 1979. Who will be the victim in 1980?

WE LOVE YOU READERS,

Can you believe it, renewals are starting to come in, and we haven't even a sked for them yet! Flying Lines was first published in May, 1979, and now is in issue number 9. Our subscribers span the continent, with most, nat-urally, in the Facific Northwest. One significant milestone (for us, at least) was that all the entrants -- yup, 100 % -- in the December 9 Drizzle Circuit contest, both in mouse and sport race, were F^L subscribers. Still, we are continuing to build our subscriber list in our ongoing effort to improve and maintain communication among Northwest modelers of the CL pursuasion. You our faithful readers are our missionaries. Help us round

CL pursuasion. You, our faithful readers, are our missionaries. Help us round up those beginners, fallen away, or just out-of-touch fliers and bring them back into the fold with a FL subscription. The cost is \$6 for 12 issues, payable to FLYING LINES, 1411 Bryant Ave., Cottage Grove, OR 97424.

BLADDER GRABBER ACTION

Photographer Chris Genna caught many excellent shots of combat action and general hubbub on Combat Day, Oct. 7, the second half of the now-famous 1979 Bladder Grabber in Redmond, Wash. This is the first of three picture

pages FL will present on the Bladder Grabber weekend. Top, left: Part of the lineup of combat planes in the pit area. With 26 entries, it was a busy place. (Presence of FL Editor John Thompson, left,

and Publisher Mike Hazel, right, merely coincidence, as were their brief appearances in the combat circle.) Bottom, left: Howard Rush holds court among the crowd of spectators, while Dirty Dan "ugherford, white shirt, looks on and Steve Sacco looks in the rule book. Steve, from Massachusetts, stopped off to fly combat while on vacation.

Top, right: Combat action between a Bosta, probably Niel White's, and unidentified opponent. Looka like da Bosta gotta killed! Center, right: A peek at Saturday events, which included stunt. This is a low inverted pass by Joe Dill's stunter. Bottom, right: Gene Pape, top NW finisher in fast combat, tunes Fox on his Devastator, while Thompson waits to launch. Gene came in third, behind Mike Petri and Rich Brasher.

Watch this space next month for more Bladder Grabber photos.



