

FLYING LINES

1411 BRYANT AVENUE
COTTAGE GROVE, OREGON 97424

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PUBLISHER: MIKE HAZEL

June 1979 NEWS OF NORTHWEST CONTROL LINE MODEL AVIATION Number 2

ANOTHER REGIONALS MAKES HISTORY

1979 Championship Highlights

The 1979 Northwest Regional Control Line Championships suffered from gas pains -- the kind that prevents people from making long trips to toy airplane contests. Several groups and individuals that usually make the Regionals were missing this year. Forty-one persons entered, compared to 58 last year, which itself was a decline from the previous year.

Nonetheless, those that came found competition up to the level they expect from a Regionals, and there were some excellent moments for spectators as well as contestants. A few brief rain showers on Sunday provided breaks in the action but caused no major problems since the pace was leisurely with the low entry level.

Joe Kall, of Lakewood, California, appears to be establishing an annual tradition of setting records at the Regionals. Joe's Formula 40 speed ship set a new senior record at 158.83 miles per hour, breaking his Regionals 1978 record of 155.51.

Those who get a thrill out of top-notch competition got plenty, as there were close races, wild combat matches and even a cliffhanger in the stunt circle. Competitors proved again that the number of entries has nothing to do with the quality of competition.

Perhaps the most spectacular performance of the weekend came in an event with only two entries, FAI combat. Phil Granderson of Seattle, Wash. (defending AMA combat national champion), and Richard Brasher of Foster City, Calif. (a la Rotation Station), stopped every movement on the field for the duration of their one match. Phil and Rich put on what may be one of the best combat duels seen in these parts. For 2½ minutes the pair slugged it out in a close-quarters head-to-head match that used every inch of the circle. The match ended in a mid-air collision, with both fliers having three cuts and Brasher winning on 20 seconds of air time. Well-deserved applause greeted both pilots after the match.

Granderson got his revenge a day later, winning AMA combat in a 10-entry field that included several top names. Phil wound up in the final against a cool Californian named Ralph Cooke. Though Ralph had one loss and Phil was undefeated, Ralph pulled even with a kill, bringing the combat down to one deciding final match. Granderson struck like a rattlesnake, killing Cooke only seconds into the match. Ralph, however, did take the open slow combat trophy home to Anaheim.

Mike Hazel of Eugene and Tim Gillott of Salinas, Calif., provided some thrills in rat race, while Tim's G&H racing team partner, Jeff Hollfelder of Castro Valley, Calif., snuck through for first place. The final between Hazel and Gillott, both flying Gillott's Shark design, went to Mike with a 5:21 time, while Gillott was one second behind at 5:22. Hollfelder, with the help of Gillott's flawless pitting, flew another Shark to first place with a 5:04.

Gillott was not to be denied some glory, however, and he wowed the crowd with a Goodyear time of 5:41.7, following up a heat of 2:46.8, both excellent times. Tim won going away.

After writing the rules several years ago, Mike Hazel stepped down from his usual lofty post as Event Director and entered Northwest Sport Race. As usual, NWSR drew the largest entry, but that didn't stop Mike, who chugged to a win with a modest 9:45 final time. Everybody in the four-plane final wound up three-pitting, an unusual circumstance. Mike also collected his perpetual trophy, presented to the Regionals to the winter Drizzle Circuit grand champion.

The M&M team, Fred and Joyce Margarido of Fremont, Calif., dominated the speed circle, winning ½A, A, B, D and Jet. The crowd at the trophy presentation detected a definite blush from Scott Newkirk of Seattle, Wash., when he was presented his trophy for FAI speed at 88.05 mph. He was the only entry.

Some of the nitro-drinking, noise-blasting go-fast types may view the stunt circles as a haven for pipe-puffing gentlemen with clipboards, shiny, whooshing planes and as much excitement at turnip judging at the county fair. Not so at this year's Regionals, again a condition that prevailed in spite of low entry.

All eyes were on the domed grass circle when Granderson and Rich Schaper of Kelso, Wash., went at it for the expert precision aerobatics title. Phil had shown up with a pretty new plane but was the only entry in expert until Schaper decided to move up from advanced and make it a contest.

When P.T. sauntered over from the Combat circles, Rich had already made one flight, turning in a 438 score. Scorning warmup flights, Phil started right off with an official flight, scoring 436, and the stage was set for the climactic second round. Upon hearing the score, Phil went right back up for his second flight, going ahead with a 451 score. Rich talked like a man on the run but was cool as a Fireball plug in the circle. He turned in a crisp 453 score to edge into first place.

Newcomer Rick Railston of Yakima, Wash., recorded a very creditable 454 to take the advanced title. Young Richard Simpson, a junior, won beginner with a 254 score, flying a Fox .15-powered Akromaster. Richard, fresh from a high finish in the Drizzle Circuit, captured junior-senior Northwest Sport Race with a 10:30 time.

Eugene's Jeff Shelby came out of retirement to win profile carrier, and perennial Regionals competitor Orin Humphries captured class I and II carrier.

The Eugene Propspinners extend thanks to the many event directors, field helpers and others who made the Regionals its traditional success. Special thanks to Gary Stevens for helping obtain trophies, to Dave Green and the CLAMS for registration, Jim Zehrung and the Aeroliners for the carrier deck, and to Homer Smith, AMA district vice president, for helping coordinate event directors and solicit prizes for the 1979 Regionals (and for thumbing a stopwatch all weekend.)

Thanks also to the following prize contributors: Eugene Toy & Hobby, Little Puffer-Billy, Hobby Hangar, Repla-Tech, World Engines, Kraft Systems, J&Z Products, Pactra Industries, Satellite City, Sterling Models, Sig Manufacturing, Top Flite Models, K&B Manufacturing, Fox Manufacturing, Sullivan Products, and Windsor Propellor Co.

Complete Regionals results appear elsewhere in Flying Lines.

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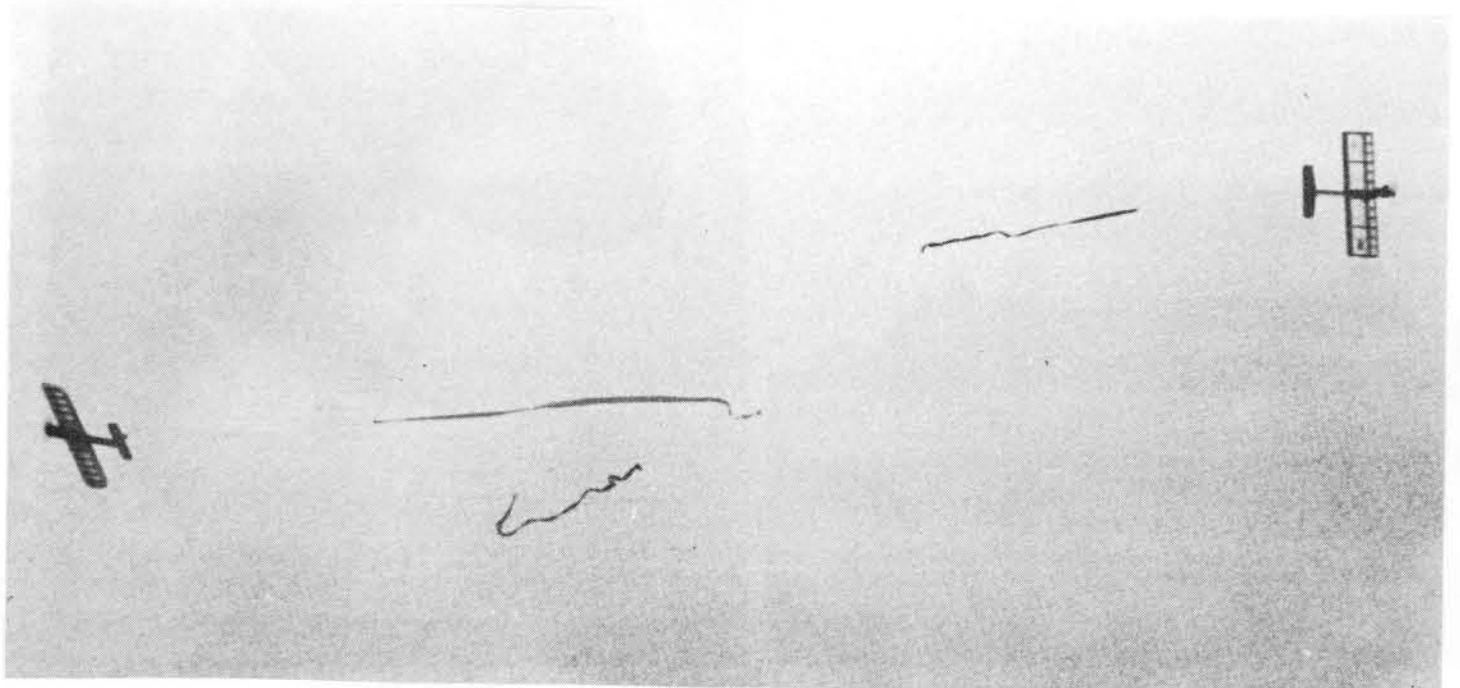
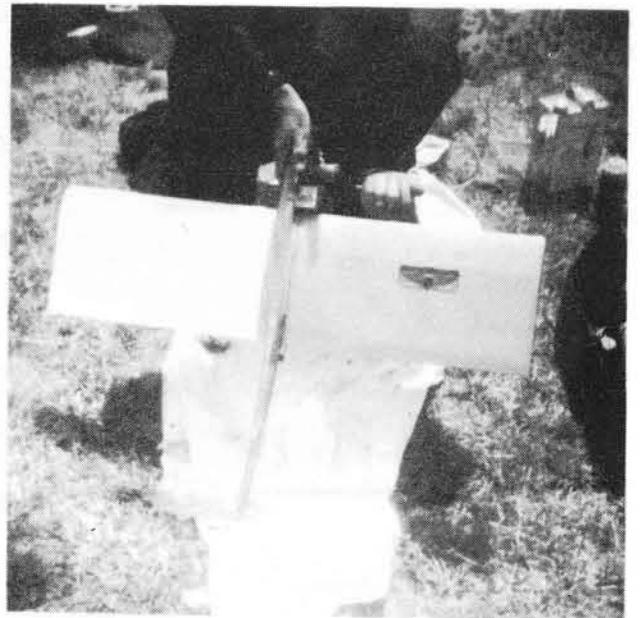
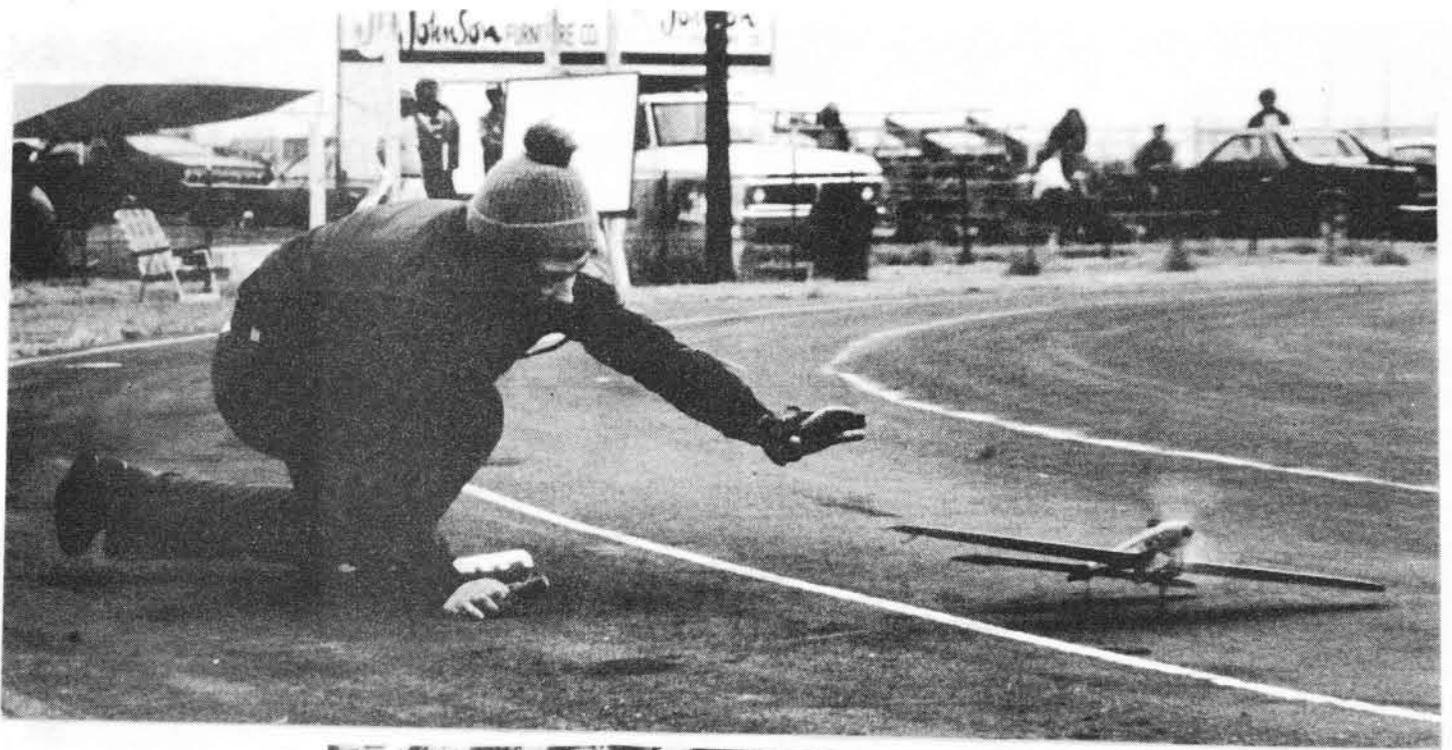
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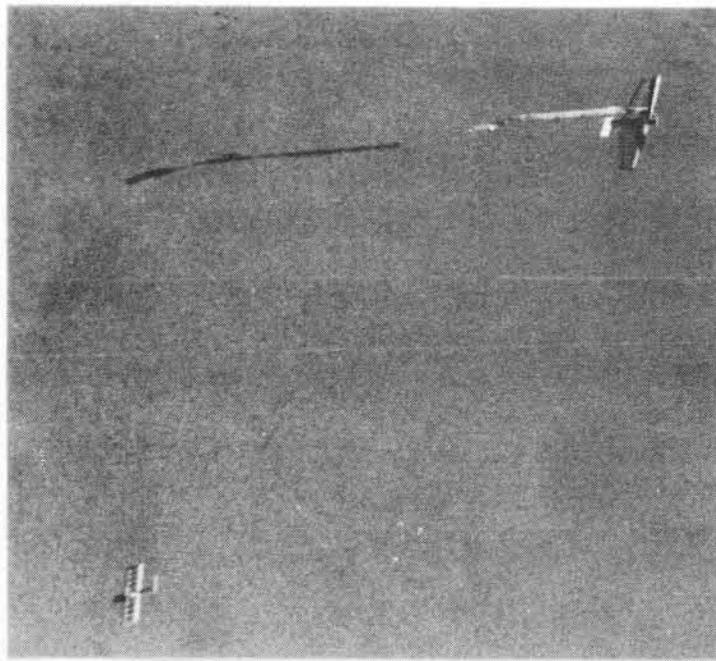
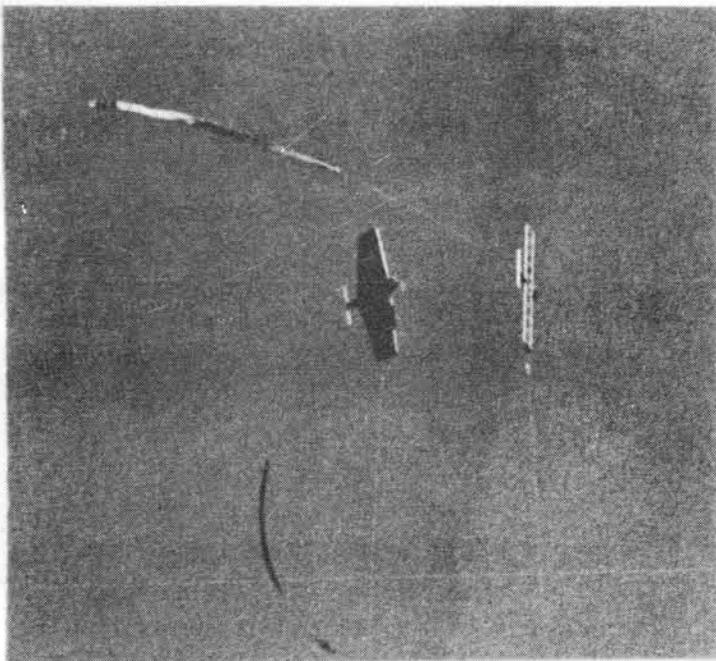
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PHOTOS: Top: Tim Gillott launches a Shark rat racer
 center left: Homer Smith, District VP Center: Mike Hazel prepares jet.
 Center right: Vic Garner and sport racer Bottom: Ralph Cooke cuts
 John Thompson's slow combat plane.



Top: FAI combat action. Brasher attacks PT Granderson, and carries off streamer 1/3 second later.

Center: Gary Stevens pits his NW Sport Racer.

Bottom Left: PT Granderson flying Stunt. Bottom Right: Corsair landing
Chris Genna Photos



EUGENE PROP SPINNERS

NW CL REGIONALS 1979

OFFICIAL RESULTS

GOODYEAR OPEN (8 entries)

1st	Tim Gillott	5:41.7
2nd	Ken Kall	6:36.7
3rd	Vic Garner	9:07.7
4th	Jeff Hollfelder	79 Laps
5th	Bob Boling	3:33 (heat)
6th	John Thompson	4:11 "
7th	Gary Stevens	28 Laps

GOODYEAR JR-SR (1 entry)

1st	Joe Kall	46 Laps
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AMA SLOW RAT RACE JSO (4 entries)

1st	Steve Marxheimer	7:51
2nd	Vic Garner	8:11
3rd	Bob Boling	37 Laps

AMA RAT RACE JSO (6 entries)

1st	Jeff Hollfelder	5:04
2nd	Mike Hazel	5:21
3rd	Tim Gillott	5:22
4th	Steve Marxheimer	7:09
5th	Gary Stevens	6:30(heats)
6th	Vic Garner	45 Laps

NW SPORT RACE OPEN (14 entries)

1st	Mike Hazel	9:45
2nd	Vic Garner	9:53
3rd	Roger Simpson	10:21
4th	PT Granderson	10:26
5th	Bill Varner	4:42 (heat)
6th	Gary Stevens	4:52 "
7th	Jeff Young	4:55 "
8th	Ken Kall	4:57 "
9th	Jim Cameron	4:59 "
10th	Tracy Brazzle	5:37 "
11th	David Ireland	8:32 "
12th	Orin Humphries	44 Laps
13th	Dave Green	DQ (overrun)

NW SPORT RACE JR-SR (3 entries)

1st	Richard Simpson	10:30
2nd	Joe Kall	11:41
3rd	Kevin Buzzell	93 Laps

PROFILE CARRIER JR-SR (1 entry)

1st	Jeff Zehrung
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PROFILE CARRIER OPEN (5 entries)

1st	Jeff Shelby
2nd	Stan Johnson
3rd	Bill Skelton
4th	Orin Humphries
5th	Loran Howard

CARRIER I & II JSO (3 entries)

1st	Orin Humphries
2nd	Loran Howard
3rd	Terry Miller

SCALE JSO (1 entry)

1st	Terry Miller
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SLOW COMBAT JR NO ENTRIES!

SLOW COMBAT SR-OPEN (8 entries)

1st	Ralph Cooke
2nd	Jeff Young
3rd	David Ireland
4th	Gary Stevens

AMA FAST COMBAT JSO (10 entries)

1st	PT Granderson
2nd	Ralph Cooke
3rd	Norm McFadden
4th	Richard Brasher

NW CL REGIONALS RESULTS - CONTINUED

FAI COMBAT	JSO	(2 entries)	STUNT	BEGINNEER	(4 entries)
1st	Richard Brasher		1st	Richard Simpson	254
2nd	PT Granderson		2nd	Jeff Young	241
$\frac{1}{2}$ A SPEED	JSO	(4 entries)	3rd	Terry Miller	170
1st	M & M Team	99.96	4th	Orin Humphries	100
2nd	Doug Hinckley	94.60	STUNT	ADVANCED	(3 entries)
3rd	George Gilbert	80.61	1st	Rick Railston	454
4th	Jeff Bell	76.57	2nd	John Clemans	424
A SPEED	JSO	(2 entries)	3rd	Roger Simpson	327
1st	M & M Team	162.24	STUNT	EXPERT	(2 entries)
2nd	Mike Hazel	116.84	1st	Rich Schaper	453
B SPEED	JSO	(3 entries)	2nd	PT Granderson	451
1st	M & M Team	165.83			
2nd	Mike Hazel	142.46			
D SPEED	OPEN	(1 entry)			
1st	M & M Team	183.98			
JET SPEED	JSO	(2 entries)			
1st	M & M Team	170.87			
2nd	Mike Hazel	165.83			
FORMULA 40 SPEED	JSO	(3 entries)			
1st	Joe Kall	158.83			
2nd	Mike Hazel	148.09			
3rd	Scott Newkirk	127.88			
FAI SPEED	JSO	(2 entries)			
1st	Scott Newkirk	88.05			
$\frac{1}{2}$ A PROTO SPEED	JR	(1 entry)			
1st	Jeff Bell	71.97			

NORTHWEST CONTROL-LINE RECORDS COMPILED

One feature of FLYING LINES that we previously mentioned is a column covering records within the Northwest by area modelers. These will be Northwest area records. While the records we keep track of will be by Northwest modelers only, they need not be set in the Northwest. However, any record broken elsewhere must have some documentation to be included here.

Also, as previously mentioned, the slate starts clean at the Northwest Regional Control-Line Championships. The reason for this is so people won't say, "Hey, I beat that back in '72, etc.", and want to get their old performance listed. It would be pretty hard to sort out what is legitimate and what is questionable. Best that we start from scratch all at once. So, if you did it before, let's see you do it again. That's kind of the idea here. Spark up a little competition amongst ourselves, plus being able to compare our area against national records.

Events that we will keep track of will be everything listed as follows: Carrier events; speed events, AMA racing events, both heat and final times; Northwest Sport Race, both heat and final time. Times from sanctioned meets only.

Following are the newly set records, plus many categories which are wide open.

½A MOUSE, CLASS I	50-Lap: --	100-Lap: --
½A MOUSE, CLASS II	75-Lap: --	200-Lap: --
GOODYEAR:	80-Lap: 4:11.2 (John Thompson)	160-Lap: --
AMA SLOW RAT:	70-Lap: --	140-Lap: --
AMA RAT RACE:	70-Lap: 2:37 (Mike Hazel)	140-Lap: 5:21 (Mike Hazel)
FAI TEAM RACE:	100-Lap: --	200-Lap: --
NW SPORT RACE:	70-Lap: 4:25 (Mike Hazel)	140-Lap: 9:45 (Mike Hazel)
½A SPEED:	76.57 (Jeff Bell)	JET SPEED: 165.83 (Mike Hazel)
A SPEED:	116.84 (Mike Hazel)	FAI SPEED: 88.05 (Scott Newkirk)
B SPEED:	142.47 (Mike Hazel)	½A PROTO: 71.97 (Jeff Bell)
C SPEED:	--	B PROTO: --
D SPEED:	--	FORMULA 40: 148.09 (Mike Hazel)
PROFILE CARRIER: *	CLASS I CARRIER: *	CLASS II CARRIER: *

* Carrier scores were not immediately available at press time. We'll get them in the next issue.

DRIZZLE, ANYONE?

FL hasn't received much response to the questionnaire in the May issue, asking opinions about a 1980 Northwest Sport Race Drizzle Circuit. We asked a number of questions about the kind of winter circuit you'd like next year if any. Planning will soon get under way for the '80 circuit, so send us your responses soon.

The only NWSR rules change being considered at this time is a new requirement that factory-provided intake restrictors be used. This would be a refinement of existing rules requiring use of stock equipment. It would be intended to keep a certain type engine from dominating the circuit, which seems to be a possibility under present rules interpretations.

Another change that may come about in the '80 circuit is a move from four preliminary heats per flier to three. There also has been a suggestion to add a second class of sport race, allowing slightly hotter equipment.

None of these changes are set in concrete yet. Let your opinions be heard!

Carrier Doldrums, Continued:

at the CLAMBash in Astoria the turnout was small (four or five) and that was with no gas problem.

This year Boeing is including open profile carrier on July 21. August 26 is the Aeroliners at Delta Park. The CLAMS are at the present time planning for around Labor Day weekend at Camp Rilea if they can firmly nail down the site far enough ahead of time to apply for their sanction. So, fellows, let's get out in force, show everybody that carrier fliers still exist and support the sponsoring groups or we won't have any carrier meets in the Northwest.

Keep your hooks dry.

(Editor's note: Bill's address, for those who want to contact him on carrier topics, is Box 105, Warrenton, OR 97146.)

ENGINE COLLECTORS' NEWS

R.F. Stevenson, engine collector extraordinaire, provides the following:

Model Engine Collectors Association's next MECA Collectogether for Region 3 (Alaska, Idaho, Montana west, Oregon and Washington), is planned for July 7. The swap meet will be held at the Boeing D.C. Center cafeteria from 3:00 p.m. to 9:00 p.m. (near the Ox Bow bridge on the Duwamish River). Region 3 director is Robert E. McKain, 19427 S.E. 267th, Kent, WA, 98031, (206) 631-3056.

The Tenth Annual Grand National Collectogether is scheduled for Salt Lake City, Utah, July 23-24, 1979, in conjunction with a meet of the Society of Antique Modelers (free-flight.)

Steve also says: "In the Seattle area for the past 20 years, many modelers buy their fuel from "Hal" Tolford. He has all the ingredients. You may buy them separately or he will mix them for you (5 gallons minimum sale.) Contact Harold Tolford, 1131 N. 94th St., Seattle, WA, (206) LA3-7593 after 6 p.m.

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WHERE THE ACTION IS

Northwest Control-line Competition Calendar, as of June 6:

- JUNE 17.....REDMOND, WASH. -- Slow, FAI combat (JSO), 1/2A mouse race (J)(SO).
Site: Marymoor Park. Buzz Wilson, contest director, (206) 743-1037. Trophies for mouse race, merchandise for FAI and slow combat.
- JUNE 23-24..EUGENE, ORE. -- Race Time '79 (AAA) features all speed events, Goodyear, AMA slow and fast rat race, Northwest Sport Race marathon (30 minutes), FAI team race, special pit stop event. Site: Mahlon Sweet Airport. Mike Hazel, contest director, 1319 Aspen St., Eugene, OR 97401.
- JULY 21-22..KENT, WASH. -- Boeing Management Association Scholarship and Open Contest. Goodyear, stunt, 1/2A proto speed, AMA combat, slow combat (JS only), Northwest Sport Race. Site: Boeing Space Center. Contact Ted Caputo, Boeing Management Association, P.O. Box 3707, Seattle, WA 98124.
- JULY 29-AUG. 4...AMA AAAA National Championships, Lincoln, Neb. All AMA events. Write AMA HQ for details, registration forms. (Registration must be in by July 11 to avoid substantial late entry fee.
- AUG. 18.....(tentative) EUGENE, ORE. -- Propspinners' Annual Summer Meet. Held in conjunction with NW free-flight championships. Traditionally fast and slow combat, Goodyear, Northwest Sport Race, Rat. Contact Gene Pape, 4528 Souza, Eugene, OR 97402, (503) 689-1623.
- AUG. 26.....PORTLAND, ORE. -- Aeroliners' annual Control Line Classic. Northwest Sport Race, 1/2A mouse race, precision aerobatics, AMA combat, carrier. Site: Delta Park. Contact Dave Gardner, 17870 Shasta Trail, Tualatin, OR, 97062, (503) 638-4224.
- SEPT. 1-2...ASTORIA, ORE. -- Second Annual CLAMBash, sponsored by North Coast Control Line Aero-Modelers' Society (CLAMS). (tentative). A two-day contest and social bash is contemplated. Contact Dave Green, contest director, 200 W. Franklin, Astoria, OR 97103.
- SEPT. 16.....(tentative) EUGENE, ORE. -- RatBash Racing Contest. AMA rat race and ??? Site: Mahlon Sweet Airport. Mike Hazel, contest director, 1319 Aspen St., Eugene, OR 97401. (503) 726-1185.
- OCTOBER ?...REDMOND, WASH. -- Bladder Grabber for AMA combat. Contact Gary Stevens, 217 NW 40th, Seattle, WA, (206) 633-3992.
- OCT. 21.....(tentative) EUGENE, ORE. -- RatBash II racing contest. Same details as Sept. 16.
- WHAT?...Your contest did not appear on the FL calendar? Well, get off your tailwheel and send us the info!

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NORTHWEST CL PROFILES -- Orin Humphries

(Editor's Note: Each month, FL will present profiles of Northwest CL modelers. This month's profile is about Orin Humphries, our carrier editor. Other modelers are invited to send short biographical sketches about themselves.)

Orin's own words tell his biography best:

"I am 37 years old and have been modeling since the third grade. My many hobbies center around aviation, and include photo and scale documentation collecting, writing, aviation art, photography, carrier and multi-engine scale.

"I am blessed with a jewel of a wife, Janet, who is very supportive of my hobby interests and two super kids, Carol, 10, and Ricky, 7. Ricky is in his first year of flying Dad's old C-class profile ships.

"I was trained as a physicist and employed as a science teacher, and I have an after-school model club. My boys and I are known to pile ourselves, planes and sack lunches into my pickup and head for flying fields and contests here and there, things I dearly enjoy doing.

"I originated and lead the Spokane U-Control Assoc. for its five-year history, which was quite an experience.

"Non-modeling activities include being a green belt in karate, and pursuing planetology and astrophysics."

Herewith is Orin's first carrier column offering:

HOOK NOOK
By Orin Humphries

Hello, carrier fans!

I hope you are as enthusiastic as I am about us having our own Northwest newsletter. I am grateful for the opportunity to write this column and share things with you on our mutual interest. Note that I said, "share;" this will be a two-way street with any and all input welcome!

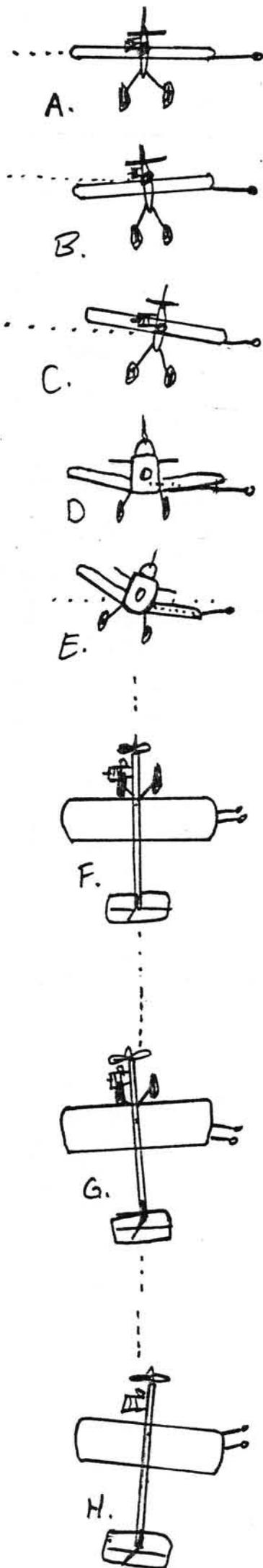
Let me introduce myself and establish my credentials with you first. I built my first carrier ship in 1965, and have been to the Canadian Nats as a carrier judge, and have flown in other contests around the Northwest. I got first place at Eugene with my CORSAIR (yellow notes, F2G) the last two years. You might have seen my camouflaged A-26 INVADER scale ship at Eugene some time. 'Nuff trumpet blowing.

But where am I in carrier? Actually, I have not flown in a zillion contests; just a medium-experience guy like all of you. Not a gray-haired sage, but I've seen enough things happen consistently in carrier contests that I have some Truths to lay on you. Bed-rock, nuts and bolts stuff that many people are overlooking.

High technology, high cost, high complexity models are not to be found in my workshop. I'm against all of that, but that is merely a matter of taste (low cost is necessity, not taste). And so I will write about down-to-earth things that you will need to apply if you want to knock me off at Eugene, fella.... (just kidding; don't get the wrong impression.)

On with the show. Think of a model you have flown that had zilch pull in the lines, a model that seemed to want to come in on you. Think of a model you saw fly in on the pilot and crash, probably on take-off or shortly thereafter. Torqued in on him, didn't it? WRONG. Before I lay it out, go grab your RINGMASTER and do this: hold it up by its leadouts at arm's length and turn it so you are looking at the nose (pointing it at you). Note the angle at which the wing hangs. Are the wings really vertical when hung by the wires? Go on, go check. I'll still be here.

SKETCHES: Leadout position: the plane must hang like A,B,D,F or G. It must NOT hang like the others.



HOOK NOOK, continued

If you looked carefully, you saw that the model hung so that it was slightly rolled inboard, toward the pilot, if it were in a flying attitude. Now do you recall all the times you have been flying a RINGMASTER and found yourself looking at the top of the inboard wing? Thought it was a wing warp, didn't you? Fellow hooker, it was...

LEADOUT POSITION

This applies to every control-line model. Most people aren't aware of it, or, if so, are aware of only one of the TWO aspects. Don't tune me out because you've flown forever and are champion of Oregon and Mars. The second aspect is overlooked by more people than there are razorback clams in the ocean. The first one is, of course, hanging the model by its leadouts and looking at the top or belly of the model to check the "rake" angle. This means, to our new-to-the-hobby readers, that we are checking to see that the nose of the model is properly pointed outboard from us when the model is in flight. In other words, when the model hangs from its leadouts, the nose must be lower than the tail by a small amount, not to exceed 4 degrees nose down. The leadouts must exit the wingtip sufficiently far aft of the leading edge to hang like this. If it doesn't, I don't care where the kit or designer shows it, MOVE IT.

Old hands know this already, but this is for everyone. Now, the second aspect, which from what I've seen may catch as many as 50 percent of the rest of you.

Hang the model from the leadouts with the nose pointing at you. It must hang at such an angle that the two wingtips are either exactly vertical or are slightly counter-clockwise from vertical. If it hangs vertically, then when you fly it, you will be looking exactly at the wing tip; the model will be dead level to you. If it hangs counter-clockwise rolled from vertical, then you will be looking at the lower surface of the inboard wing; the model will be rolled slightly outboard away from you. This is what you want as it will promote tightness in the lines. The sketches will illustrate the above. (Editor's Note: Turn the page sideways as if the planes were hanging from the leadouts.)

Before I tell you what to do about the leadout position on this second aspect, let's look at what makes the model hang and fly at the angles it does.

From geometry (who remembers any of that?) it takes exactly two points to establish a line in space. For an already completed model, the points are the control handle and the position of the leadouts which may or may not be correct. In flight, the forces on the model will cause it to roll whichever way is necessary to put the center of gravity (CG) of the plane on this line also. This establishes the roll angle of the model on its lines. It may be level, it may be rolled away from you giving tightness to the lines, or in many cases, it is actually rolled toward you slightly giving mush to the lines in extreme cases. CORSAIRS with lines coming out the wingtip are examples of this. Having the leadouts as one of the points is bad.

For an unfinished model the best thing to have as the second point is the CG, not the leadout exit. Imagine the model is hanging from the control handle which is nailed high up on the barn wall. Imagine further that the leadout position has not yet been finalized.

There is an imaginary line between the handle and CG, and the model must be oriented properly to this line. You change its orientation to the line by varying the leadout exit location before the model is completed. Let me say this another way. Say the model is now finished. Now, in your mind's eye, visualize the model in flight, flown by your buddy, and coming straight at you at eye level. With your "magic wand," reach out and roll the aircraft so it is either level or is slightly rolled away from the pilot. Your wand has varied the leadout position just right to get the roll angle as it needs to be.

Now, somehow, you are in a helicopter flying overhead as your friend flies your model below you. The helicopter follows the model around the circle so you can view the angle the fuselage makes with the lines. You use your wand again to yaw the plane on its lines so its nose is either dead ahead or slightly yawed away from its pilot. You have varied the rake angle of the leadouts.

Again, you change the position of the leadout exits or the height of the leadout guide (depending on the model's arrangement) so that the model is at the correct angle between the CG and the control handle. You adjust the roll and yaw angle this way.

HOOK NOOK, continued

Your RINGMASTER will be rolled right only if your leadouts exit at the BOTTOM of the tip rib, not on the rib centerline as per the kit instructions. Why don't you see any CORSAIRS at contests any more? All the kits had the leadouts exit at the tip. This is too high for that plane. It will roll the bird in on you. Pilots didn't like the mushy feel in the lines in a CORSAIR. My CORSAIR's leadouts exit at the bottom of the third rib in from the tip and the bird is roled 3 degrees outboard, giving me tight lines.

But in a CORSAIR, that could give bellcrank problems, which are easily dealt with, and other bellcrank problems will be dealt with next time. Yes, I have something about that you haven't thought of, perhaps.

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

SCHAPER ON STUNT
By Rich Schaper

(Editor's note: Rich Schaper, one of the Northwest's most active precision aerobatics pilots, is the FL stunt editor. Here is his first column.)

I have been involved in building model aircraft since the age of 12. I am now 31 and wonder if I'll ever outgrow it. I surely hope not, as this is my means of self-expression.

I have built many types of CL models over the years but finally decided stunt planes were the ultimate in CL. Although I still build other types of aircraft, nothing is as challenging and satisfying as flying a stunt plane.

Learning to fly stunt can be a difficult and sometimes frustrating experience. I can clearly remember every airplane I crashed trying to learn the different maneuvers in the AMA stunt pattern. Then in 1976 I went to the Northwest Regionals. Being able to see what the maneuvers were really supposed to look like helped my flying tremendously.

If you are able to buy a used stunt ship that you know flies well, get it. A good-flying stunter will allow you to learn more quickly and easily while holding the mortality rate down. If you want to fly stunt and don't have experienced help, then you should get a copy of Dick Mathis' "How to Fly U-Control." This was very helpful in my learning the stunt pattern.

Also, most beginners' building techniques aren't as good as the more experienced builders. Remember, lightness and strength are very important in a competition stunt ship.

Although there is a lot to discuss about the maneuvers, I feel having a well-built stunt ship is an aid to your learning the AMA stunt pattern.

I'll start by naming a few of the profile stunt ships that seem to fly well. Sig Manufacturing has two kits, the "Banshee" and the "Twister," the Twister being the better of the two in my opinion. Both of these ships are very straightforward in design and building procedure and have no adjustable features for trimming.

M&P Enterprises markets the "Excalibur," a Dick Mathis design. This ship is a semi-profile design, meaning it has a sort of a built-up nose but still has a side-mounted engine. This ship really hangs out on the lines and should be a good first or second stunt trainer.

Al Rabe has a good looking profile design. The "Mustunt I" again is a little different design for a profile. The Mustunt I should be considered an advanced profile design. Some of the major differences are 1) upright engine, 2) fully sheeted wing, 3) moveable rudder, and 4) adjustable leadout guide. This ship was published in the Feb. '73 issue of American Aircraft Modeler. I think plans are still available from Al.

Top Flite has a new stunt trainer called the "Tutor." This ship is of the standard .35 size but has a little shorter wingspan at 45 inches than the others. Although I haven't built or flown the Tutor or the Mustunt I, they are good-looking designs. I've run out of space so I'll be back in a coming issue. Meanwhile, send your questions and views to:

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

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