



NEWS OF NORTHWEST CONTROL-LINE MODEL AVIATION

1073 Windemere Dr. NW, Salem, OR 97304

Editor: Mike Hazel

AUGUST/SEPTEMBER 1994

ISSUE #116

IN THIS ISSUE: ROUND & ROUND BY JOHN THOMPSON (A RACING DIRECTOR'S PRIMER)
UPDATED CONTEST CALENDAR, CONTEST RESULTS, AND MORE.

COCKPIT CHATTER, FROM THE EDITOR

Welcome to this issue. As usual, just a little late, but better than never, eh?

Belated congratulations to Northwest Aerobatic icons Paul Walker and Don McClave for their victories in Precision and Classic Stunt events, respectively at the Nationals in Texas. Haven't had much word in regards to other competitors from FLYING LINES territory who attended. We don't mean to slight anyone here. How 'bout some news?

Speaking of the Nats, many of you have probably already heard that the big one is coming back to the Northwest in 1995. It will repeat in the Tri-Cities area, which was the 1989 venue. At this point all we know is the tentative dates are about the second week of July, and that there are some site selection/confirmations to be done. We'll keep you posted.

September 1st marks the deadline that rules proposals must be on their way to AMA HQ. The proposals submitted for the next rules cycle will be published in a future issue of MODEL AVIATION magazine. Be sure to watch for these, and give your input to John Thompson, who is our district rep on the control line contest board. Early indications are that there aren't a lot of proposals submitted this time round. Whew! A welcome relief in contrast to the last couple of cycles.

Speaking of rules, a couple of issues back, we asked for opinions on the question of allowing the factory after market parts for the Fox .35 in NW Sport Race. No input as of yet!!! Let's hear from you racers.

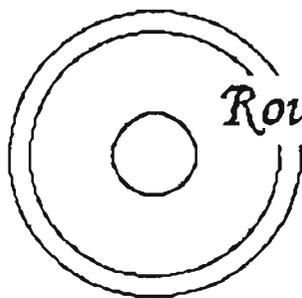
The next issue of FLYING LINES will be going to press at the end of September. Be sure to get in your contributions, whatever they may be. (articles, tech-tips, classified ad, mail to editor, poison-pen diatribes, etc. etc. etc.)

This issue is just making it out in time before the 1994 Raider Roundup. This is the last big meet of the season, and we would encourage everyone to attend. The RR has had some ups and downs the last few years, but the best way to help the Skyraiders put on this contest is to attend and show support. This is especially true for you racers, as there are four events for you this year. Recently it seems that the RR has resembled a stunt contest, with some sideshow events. However, those other events do deserve full status and recognition as the numbers have generally showed decent participation.

Want to travel? The California State Control Line Champs are being held on October 1 & 2, in Corning, California. Carrier, Speed, Stunt, Old Time Stunt, Scale, Endurance, and Racing are on the ticket. For information contact Don Chandler at 916-824-6999. Corning is way up North California, and really isn't as far as it sounds.

The competitor points standings will return in the next issue. This issue was just to tight to squeeze them in. As you know, points are compiled in individual and grouped type events, all leading to the overall top competitor totals at the end of the year. In the past, the only recognition was the mention in this newsletter, which is just an atta-boy. For this year, courtesy of Paul Rice, there will be a perpetual type trophy awarded. More news on that later.

Another Fox in your future? Word is out that Fox Manufacturing is now producing another updated combat engine, appropriately named the Mark VII. Contact the factory, as I believe these will be sold factory direct only, as was the Mark VI.



Round and Round

The Control-Line
modeler at large

By John Thompson

Gentlemen, start your engines!

Racing is one of the most enjoyable control-line competitive events because it has several attractive elements: There are several classes, so that fliers of any skill level can compete. You can compete in one specialty event or make a day of it and race in several classes.

The rules are fairly simple and the athletic skills vary by class so that nobody should have trouble finding a class they can enjoy. As skill improves, racers can move up the classes — from an elementary event like Northwest Sport Race to a top gun event like Rat Race.

The glue that holds a day of racing together and assures that it is enjoyable for all contestants is the racing event director.

As promised some time ago, we resume our series of articles on “how to be a contest official.” The goal of the series is to give Northwest competitors some instruction that might encourage them to volunteer as officials in upcoming contests. The first installment was on “how to be a contest director.” This installment is on “how to be a racing director.”

As with the racing events themselves, the job of acting as main racing official is simple and, if several simple guidelines are followed, it should be easy to get through a day with every contestant satisfied that he or she had a pleasant day and a fair chance in competition. However, the key to success even in a fairly simple job like racing director is *doing it right*. It doesn't take much of a lapse of judgement or misunderstanding of the rules to make a lot of competitors unhappy. A little time spent in advance preparation and in reviewing the task at hand will make the job go smoothly.

As stated in the article on directing a contest, the wise event director keeps in mind one goal: To assure that the competitors have a fair chance to compete. The contest is for the competitors; all other concerns — including the convenience of the racing director — are secondary. Remember at all times: The *race* you are judging is more important to the competitors than the banquet you want to attend later!

A good racing director is in a sense “invisible.” That is, the racing director does not affect the outcome of the competition — in the same way that a baseball umpire should not affect the outcome of the game. The racing director — or umpire — should conduct the activities in a way that his participation advances the goal of fair competition without becoming an environmental factor to be overcome.

For example, a racing director who doesn't follow the standard countdown becomes a hindrance to racing teams that have established a pitting routine that depends on that countdown. Similarly, a director that invents his own interpretation of the rules, different from the standard interpretation of other directors in the region, becomes a “surprise” condition that contestants won't appreciate dealing with.

That leads us to racing director's Rule No. 1: *Know the rules!*

Well before the contest day, the event director should have read and understood the rules of all events he is to run. This includes the unified racing rules section of the AMA rulebook, the specific section in the rulebook, and the official rules of any Northwest regional event. The racing director should know how many planes are allowed in a heat, how many pit stops, etc. He should also know what planes are and are not legal, what kind of lines to use and what the pull test is. Finally, he should have some sense for how these rules are interpreted by other racing directors. If the racing director has not participated in the events enough to know the standard practice, he should be sure to have an experienced racing director on hand on racing day that he can consult with in the case of any unusual occurrence.

It's important to know more than just the basics of how many planes of what type are allowed. Those AMA racing rules also must be well understood. Imagine the following scenario; do you know the answer to the question it raises?

Racing Quiz: *During a race, Team A's plane lands and is in the pit being refueled. Team B's plane shuts down and lands. As Plane B lands, it is entangled in the lines from grounded Plane A. As racing director, what is your ruling? (Answer at end of column).*

Incidents like this will come up; if the racing director doesn't know the rules, he'll be in trouble.

Now that you know the rules, let's move on to the standard procedure for a day of racing.

Before racing even begins, it is the responsibility of the racing director to make sure that the circle is available for racers to warm up before their event begins. At some sites, this may involve ejecting fliers from some other discipline; so be it. Clear the circle for racing well in advance of the scheduled start time. Like any other competitive event, racing requires some tuning up. The racing director also should make sure the circle is properly marked for the events to be flown; any deviations from proper marking should be pointed out to the pilots at the meeting (discussed below).

Once you have collected the names of the contestants from the registration table, convene a pilots' meeting at or shortly before the scheduled racing time. At that meeting, begin by making sure you have the names of all contestants; there could have been a slipup in registration or someone may not yet have entered. Get that taken care of now.

Also on the meeting's agenda is a check to make sure everyone knows the rules. If all the contestants are experienced in the particular event, this can be brief. If there are new people entered, some discussion may be necessary to clarify details.

The racing director should remind the contestants of the number of planes in the heats, and the number of pit stops. Make sure teams know whether they will run double heats or single heats, and if there are double heats, whether times will be added or the best times will be used.

Finally, there is the draw for heats. If this is not a round-robin race with a point system (such as a Drizzle Circuit format), do the best you can to accommodate conflicts between pit/pilot teams. Place partners who both have their own individual entries in separate heats as much as possible. It may not be possible to separate all partners in all heats. (In a round-robin format, the draw is random, with no accommodation for partnerships.)

Fill the heats as much as possible; that means that if the race calls for three-plane heats, have as many three-plane heats as possible. However, solo heats are not allowed, so split the contestants up in a way that provides traffic in all heats. For example, if you have 10 entries in a race that calls for three-up heats, the best scenario is two three-plane heats and two two-plane heats. The racing director has the authority, with approval of the teams at the meeting, to offer small numbers of planes in the heats if it is advisable because of the presence of inexperienced pilots in a particular race. The director also can attempt to put faster planes together and slower planes together to avoid unsafe speed differentials. Abide by the maximum number of planes in the heat specified in the rules; if you decide to take more than the maximum number of a single heat to the finals, split the finals into more than one heat.

If some unusual circumstance, such as a contestant dropping out, makes a solo heat unavoidable, attempt to recruit a volunteer team to provide traffic in the heat. In a "traffic" heat, only the official contestant is scored. If traffic cannot be recruited, the single contestant can run a solo "stiff-arm" heat. He is required to hold his arm out at length and walk the circle — *and no records set in this heat will be counted.*

The pilot's meeting also is the place to discuss any deviations from the rules that may be suggested by the circumstances. This is also the point at which waivers of insignificant deviations from the rules can be proposed. For example, one team from out of the area may have brought a plane for Northwest Sport Race that does not have the required 2-inch wheel. The racing director can ask the contestants if they will allow

the plane to race. If they unanimously consent, the plane can be admitted. This is not a "majority rules" situation. *If one team objects to a proposed deviation, the rulebook is followed to the letter.*

The pilots' meeting also offers the teams an opportunity to raise any questions they may have. Be sure to have a copy of the rules on hand for reference.

Make sure the teams know where to find the contest-supplied fuel for the events that require it. (You also should maintain, throughout the day, some measure of control over the fuel — make sure the jug is capped, and that the contestants are in fact using it!)

The final act of the racing director at the meeting is to advise the pilots when racing will begin and what kind of a between-heats clock he will maintain. This will be determined by the number of events and the number of contestants, but some kind of time clock is advisable even on days with a light turnout, to make sure that things move along. The racing director has some flexibility, but it must be used judiciously. One common time-saving practice is to set a 5-minute clock between heats but to cut to the 2-minute countdown when all teams are ready. If the 5-minute clock is used, it must be absolute. On a day of light turnout, you can dispense with the 5-minute clock and just keep the contestants moving, starting the countdown when all are ready.

Timing and watch handling:

You may have a permanent crew of timers, or you may recruit timers from among the contestants if there are enough on hand. The procedure for handling the scores is the same in either case.

Each timer is stationed at the starting point for each racing team. This positioning is important to assure an accurate timing and lap count. The timers start their watches on the "Go" signal and stop it when the prescribed number of laps is completed. They also watch to make sure the proper number of pit stops are made. Timers should be close enough that the pit crew can check their counter and watch, and they must make it available for the pit crews to see.

When the race is over, the timers *do not* reset their watches and counters. The timers carry their watches to the event director, who logs the times into his score sheet. If a plane does not complete the heat, the number of laps he turns is logged instead of a time. For AMA rulebook events, the times are logged through tenths of a second. For Northwest Sport Race, Northwest Super Sport Race and Northwest Goodyear, the times are rounded off to the nearest second. The event director resets the watches and counters — or allows the timers to reset them — *after all scores are logged.* This procedure allows further checking in the case of a timing or watch error. (A timing or watch error is a case in which the watch is not stopped at the end of the race, or the number of laps counted is incorrect, or the watch or lap counter malfunctions, etc., leading to an unknown score.)

A timing or watch error must be resolved. If it is a final race and the placing is obvious — that is, all affected contestants agree on the order of finish — the results can be official without the times. However, if a timing error occurs in a preliminary heat and the result could make a difference in selection of finalists, and if there is no satisfactory way of settling the question of score, than the contestant who did not receive a score *must be awarded a reflly*.

Countdown: This is one of the most important jobs of the racing event director. It is absolutely essential that the countdown be of a standard format and followed exactly for every heat. If the racing director hands the starting job off to another official, that new official should be instructed on the proper procedure. Failure to follow a standard countdown can place certain teams at a disadvantage.

This is the standard countdown: "2 minutes...1 minute...30 seconds...15 seconds...10...5...Go."

Note that there is no countdown from "5" to "Go." Long experience has shown that a "5-4-3-2-1-Go" countdown is an invitation for some eager team to start on "1." *Don't* count down from "5." Just say "5...Go." Similarly, don't deviate from the other standard markers. If you skip the "30 seconds" or the "1 minute," for example, you may cause a crew to miss a vital warmup marker. Skipping the "15" may cause a team to miss a warmup, or a prime, or to attach the battery too late. If their plane fails to start, they'll blame YOU.

Once the race is under way, the racing director's job continues. He should watch the race to make sure there are no flagrant violations of racing conduct, and he should be watching close to see any mishap occurs, in case some sort of a ruling may be needed. Some mishaps (like the one in the quiz) are covered in the rules and others are "just racing." It may not be possible to assign blame for every mishap and resolve every dispute, but you should be watching so that you know what happened. Let the rulebook be your guide in the case of questions.

Common violations that should be observed are whipping and flying high. The racing director also should watch for unsafe flying, such as takeoffs through a pit area, pitting too far inside the circle, etc., and advise contestants about them. In the case of an unusual mishap, the racing director may be called upon to make some quick judgements about how to deal with them — such a show to clear a line tangle or give permission to a crew to retrieve a plane from the interior of the circle.

It is standard practice to warn the pit crew about flying violations, and a three-lap penalty can be applied if the violations continue. Disqualification is the penalty for extreme cases. The racing director should be on the

lookout for *serious* violations, and should not disrupt the race with numerous warnings and/or penalties for minor, unintentional or momentary infractions.

The racing director should be alert for the possibility that he may be asked permission by a crew to enter the circle, or by a pilot who wishes to leave the circle. A pilot may not leave the circle — even if no planes are aloft — during the timed period of the race *unless he receives permission from the director*. The director may grant permission if he feels it is safe for the pilot to leave.

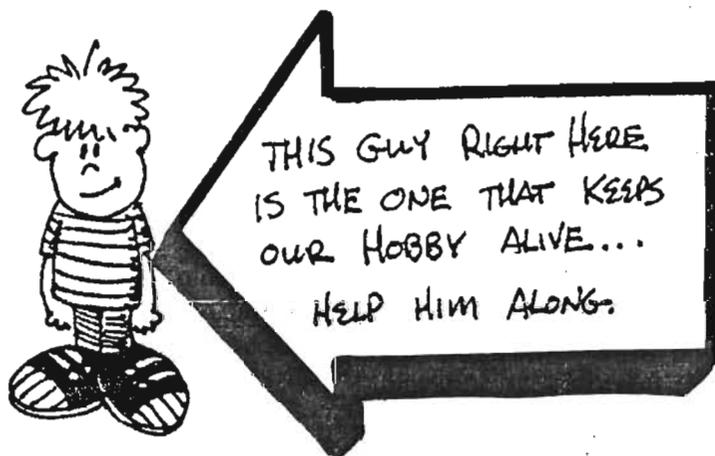
When the race is over, the timers deliver their watches to the starter, who logs the times and determines the results. The goal of preliminary heats to select finalists. In the final, the order of finish determines placing in the contest. Depending on the decision made early in the day, the finalists can be selected on the basis of fast heats, added double heats, or round-robin scoring.

The racing director should keep clear and accurate records of all heat scores. A sheet of paper on a clipboard can be used, but a racing form like those developed for the Northwest Regionals by Will Naemura is even better. A sample form is published elsewhere in the newsletter. The complete results should be turned in to the contest director.

The scenarios and rules discussed above cover only the most common circumstances; there are many other situations covered in the rulebook and regional rules. That's why it is so important to know the rules, and follow them.

Answer to Racing Quiz: *Team A is disqualified, and Team B is awarded a reflight. The AMA racing rules clearly state that line snags involving a plane on the ground are the fault of the plane on the ground; it is the grounded crew's responsibility to keep its lines down and out of the moving plane's path. The exception is a case in which there is no negligence — the grounded plane's lines were down on the ground but snagged anyway; if this occurs, both teams are awarded a reflly.*

Comments, questions, opinions, tips, ideas, etc:
John Thompson, 295 W. 38th Ave., Eugene, OR 97405. (73473.1407@compuserve.com.)



SLOW RAT (Jr. - Sr. - Op.)

(Sat 4:00 - 5:00)

Engine Size: .3600 max.
 Line Length: 59' 6" - 60' 6"
 Line Diameter: .018 solid

Pull Test: 45 lbs
 Heat Laps: 70 laps (2 heats) Pits: 1 (2 fliers)
 Final Laps: 140 laps Pits: 3 (2 fliers)

CONTESTANT	HEAT 1	HEAT 2	FINAL
1. _____	_____	_____	_____
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____
7. _____	_____	_____	_____
8. _____	_____	_____	_____

RACING FORM SAMPLE

P.A.C. INVITATIONAL, JULY 30 & 31, RICHMOND, B.C.

ADV/EXPERT STUNT (6 ENTRIES)	.15 SPORT RACE (8 ENTRIES)	NW SPORT RACE (5 ENTRIES)
1) GARY NELSON 559.5	1) LARRY BELL DNF	1) HENRY HAJDIK 9:27
2) LEE UBERBACHER 553.0	2) HENRY HAJDIK DNF	2) CHRIS COX 10:33
3) DON RICHARDSON 540.0	3) RICK MEADOWS DNF	3) PAUL DRANFIELD DNF
4) DAN RUTHERFORD 531.5	4) CHRIS COX DNF	4) MIKE CONNERS DNF
BEG/INT. STUNT (3 ENTRIES)	OLD TIME STUNT (3 ENTRIES)	
1) TERRY MITCHELL 410.5	1) CHRIS COX 276.5	
2) KARL BROWN 294.5	2) MIKE CONNERS 227.5	
3) MIKE CONNERS 183.5	3) FRANK BODEN 153.25	

C.B.B.B. COMBAT MEET, AUG 20, RICHLAND, WASH.

1/2 A COMBAT (4 ENTRIES)	GX COMBAT (8 ENTRIES)
1) JEFF REIN	1) DAVE THOMPSON 1710
2) BUZZ WILSON	2) GARY HARRIS 1540
3) GARY HARRIS	3) JEFF REIN 1540
4) TODD RYAN	4) TODD RYAN 1540

CAN-AM SPEED CHAMPIONSHIPS, SEPT 3 & 4, COQUITLAM, B.C.

1/2 A PROTO (2 ENTRIES)	JET SPEED (3 ENTRIES)	21 SPEED (2 ENTRIES)
1) CHRIS HAZEL 72.23	1) JERRY THOMAS 190.40	1) CHUCK SCHUETTE 147.72
2) BOB SPAHR 67.85	2) DICK SALTER 165.38	2) BRENT HAZEL 94.20
	3) MIKE HAZEL 163.72	
A SPEED (1 ENTRY)	FORM. 40 (1 ENTRY)	RECORD RATIO CASH AWARDS
1) BOB SPAHR 147.72	1) PAUL GIBEAULT 144.87	1) PAUL GIBEAULT (FAI) 106.64%
D SPEED (1 ENTRY)	FAI SPEED (2 ENTRIES)	2) CHUCK SCHUETTE (21) 99.83%
1) BOB SPAHR 159.09	1) PAUL GIBEAULT 179.75	3) BOB SPAHR (A) 97.78%
	2) WILL NAEMURA ATTEMPT	

SUBSCRIPTION EXPIRATION DEPARTMENT

THIS IS THE NEXT TO LAST ISSUE FOR THE FOLLOWING SUBSCRIBERS: BILL DRUMMOND, GARY HARRIS, MARTY HIGGS, GARY NELSON, BOB EINHAUS, JIM HOLMACK, TODD RYAN,

THIS IS THE LAST ISSUE FOR THE FOLLOWING SUBSCRIBERS: CHRIS COX, RON SALO, DENNIS PATERA, MIKE MCCARTHY, DAVE ROYER, JOHN HALL, GERALD SCHAMP, STEVE SCOTT, WILLIAM NAEMURA.

PLEASE RENEW PROMPTLY, SO YOU CAN KEEP UP WITH WHAT'S GOING ON. BESIDES, YOU NEVER KNOW WHAT MIGHT BE CONNECTED WITH YOUR NAME IN PRINT IF YOU DON'T SEE IT!

FLYING LINES is published nine times per year. Subscription rate is \$13.00 for USA, and \$15.00 for Canada (U.S. funds). Subscription expiration is noted on the mailing label -- beginning and ending issue numbers are listed after name.

NORTHWEST CL CONTEST CALENDAR

THE FOLLOWING LISTING IS A SUMMARY OF ALL KNOWN A.M.A. AND M.A.A.C. SANTIONED EVENTS AS OF 9-5-94. FOR FURTHER INFORMATION, PLEASE CONTACT THE INDIVIDUAL LISTED. CONTEST DIRECTORS AND CLUB LEADERS ARE ENCOURAGED TO CONTACT FLYING LINES AS SOON AS POSSIBLE WITH THEIR PLANS, INCLUDING ANY REVISIONS.

SEPTEMBER 17 & 18, KENT, WASH.

1994 RAIDER ROUNDUP

EVENTS: PRECISION AEROBATICS IN FOUR PAMPA CLASSES PLUS JUNIOR BEGINNER CLASS, CLASSIC STUNT, OLD TIME STUNT, PROFILE CARRIER, .15 CARRIER, CLASS I & II COMBINED CARRIER, 1/2 A COMBAT, 80 MPH COMBAT, FAST COMBAT, BALLOON BUST (JR) (SR-OPEN), CLASS I MOUSE RACING (JR) (SR-OPEN), NW CLOWN RACE, NW GOODYEAR, NW SUPER SPORT RACE, SPORT SCALE, PROFILE SCALE, NORTHWEST RECORD RATIO SPEED, AMA RECORD RATIO SPEED. SITE: BOEING SPACE CENTER. CONTACT: RICHARD McCONNELL, 14828 MILITARY ROAD S., #208, SEATTLE, WA 98168 PHONE (206) 242-7372. SPONSOR: SEATTLE SKYRAIDERS

OCTOBER 1, PORTLAND, OREGON

MEET CANCELLED

OCTOBER 8 & 9, RICHLAND, WASH

DESERT CARRIER BASH V

EVENTS: PROFILE CARRIER, .15 CARRIER, CLASS I & II CARRIER, OLD TIME STUNT, CLASS I MOUSE RACE, NW FLYING CLOWN RACE, NW SPORT RACE. SITE: HORN RAPIDS ATHLETIC COMPLEX. CONTACT: PAUL RICE (509) 627-3142, OR RICK MAGNUSON (509) 946-5724. SPONSOR: COLUMBIA BASIN Balsa BASHERS.

OCTOBER 22 & 23, EUGENE, OREGON

REALLY RACING & FALL FOLLIES

EVENTS: PRECISION AEROBATICS IN FOUR PAMPA CLASSES, MOUSE RACE CLASS I, MOUSE RACE CLASS II, NW GOODYEAR, AMA GOODYEAR, SLOW RAT RACE, RAT RACE, NW SPORT RACE, NW SUPER SPORT RACE. SITE: EUGENE AIRPORT, CONTACT: JOHN THOMPSON, 295 WEST 38TH AVENUE, EUGENE, OR 97405, PHONE (503) 465-1088 SPONSOR: EUGENE PROSPINNERS

THANKS TO
ALL THE
VOLUNTEERS



For INFO Contact
Rich McConnell
(206) 2A2-7372

AMA Sanctioned 'AAA' Model Airplane Contest

The Seattle Skyraiders Present:

RAIDER ROUND-UP '94

September 17th and 18th

Boeing Space Center
Kent, Washington

Saturday Event Schedule

9:00am	Mouserace 1	J
9:00	Navy Carrier	JSO
	(.15 Profile, Profile, Class 1 + 2 Combined)	
9:00	Combat (1/2 A & 80mph)	JSO
9:30	Mouserace 1	SO
10:00	Old Time Stunt	JSO
10:30	NW Sport Goodyear	JSO
12:00noon	NW Supersport Race	JSO
1:00pm	Classic Stunt	JSO
1:00	NW Flying Clown Race	JSO

Sunday Event Schedule

9:00am	Speed Record Ratio	JSO
	(NW and National)	
9:00	Fast Combat	JSO
9:30	Precision Aerobatics	J
9:30	Precision Aerobatics	SO
	(BEG, INT, ADV & EXP.)	
10:00	Scale Static Judging	JSO
11:00	Scale Sport & Profile	JSO
1:00pm	Balloon Bust	J
1:00	Balloon Bust	SO

CONTEST DIRECTOR: Dave Gardner (206) 226-9667

REGISTRATION: IS FROM 8:00AM UNTIL THE START OF THE EVENT, OR NOON WHICHEVER IS EARLIER.

Entry Fees: SR/OPEN is \$15.00 First Event, then \$10.00, \$5.00, \$5.00, to a Max. of \$35.00 (US)
JR: is \$5.00 First Event, \$2.00, \$2.00 \$1.00, to \$10.00 Maximum (US)

AMA or MAAC Membership is required of all participants and mechanics. AMA Membership is available at Registration.

AMA Events are per 1994-95 Rule Book ***** **KNOW THE RULES**

Safety Thong (wrist) required ALL EVENTS*....*.... Engine Safety Strap required in all COMBAT Events except 1/2A

Northwest Events are governed by current NW RULES

ALL EVENTS ARE TO BE FINISHED BY 4 PM SUNDAY

AWARDS Presentations will begin at 4:30 PM Sunday

Event Directors are responsible for scoring and placement of all entrants in events.

AMA Fast Combat requires fuel shutoffs.

SPEED - Separate entry fees apply to NW Record Ratio and U.S. National Record Ratio.

CARRIER - Multiple Entries allowed in each event, however separate entry fees apply.

Balloon Bust will be simplified to two balloon format.



The Flying Flea Market

Classified advertisements — FREE for FL subscribers

FOR SALE: FASCAL- CLEAR AIRPLANE COVERING FOR EITHER FOAM OR OPEN FRAMES. IT HAS STICKY ADHESIVE, SO IT'S ALSO GOOD FOR ON-FIELD REPAIRS. WORKS WITH HIGH OR LOW HEAT, AND CAN BE PAINTED. A MUST FOR COMBAT FLIERS. PRICE IS 75 CENTS PER FOOTS, PLUS SHIPPING. I'LL DELIVER IT AT CONTESTS IF CONTACTED IN ADVANCE. WRITE JOHN THOMPSON, 295 W. 38TH AVE., EUGENE, OR 97405, OR E-MAIL 73473,1407 COMPUSERVE COM. NO PHONE ORDERS PLEASE.

FOR SALE: ZOOT ZOOMER ANNOUNCES THE RELEASE OF HIS NEW .60 BENCH PROP, PRICED AT \$13.50. MANY OTHER SIZES OF QUALITY FIBERGLASS AND CARBON FIBER PROPS FOR COMPETITION WORK. BE WATCHING FOR MORE NEW SIZES TO BE RELEASED THIS YEAR, INCLUDING SOME LEFT HANDED UNITS FOR CARRIER!!!! SEND FOR A COMPLETE LIST: MIKE HAZEL, 1073 WINDEMERE DRIVE NW, SALEM, OREGON 97304.

FOR SALE: CLASS "C" HARTER SPEED PAN, UNPOLISHED AND UNDRILLED \$10.00, CLASS "A" TATONE SPEED PAN POLISHED AND DRILLED FOR K&B 15 \$10.00. M.A.N. STUNT PLANS, CHIPMUNK, ROAD RUNNER, AG-1 DUSTER FOR \$5.00 EACH. CENTRIFUGAL FUEL SWITCH FOR CL SPEED FROM "FRANNY'S CHROME SHOP", \$6.00 RICHARD KULAAS, 815 YAKIMA ST., WENATCHEE, WA 98801

FOR SALE: CUSTOM CONTROL LINE HANDLES, \$30.00. CALL MARK WAHLSTER, (503) 873-3775.

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

FLYING LINES

1073 WINDEMERE DRIVE NW
SALEM, OREGON 97304



EUGENE BR 974 --- 09-12-94 01-59 DCR # 1

JOHN THOMPSON 070
295 WEST 38TH AVENUE
EUGENE OR 97405

