

FLYING LINES



NEWS OF NORTHWEST CONTROL LINE MODEL AVIATION

1073 WINDEMERE DRIVE NW
SALEM, OREGON 97304

EDITOR: MIKE HAZEL

FEBRUARY 1987

ISSUE NUMBER 80

INSIDE.....

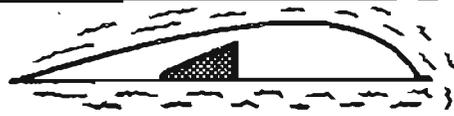
-Drizzle Circuit #3 Report
-Flight School by Jim LaBarge
- O.S. 40FP Stunt Engine, by Don McClave
-Cheap Imitation plan ($\frac{1}{2}$ A Combat)
-OOPS, guess that's about it

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

JOHN,
LINCOLN ROOM RESERVATIONS
TAKEN CARE OF.

_____ M _____

COCKPIT CHATTER



NOTES FROM THE EDITORS' DESK

Greetings! The first thing you will undoubtedly notice about this issue, is that it went on a diet. This is due to a number of factors, the least of which is the effort just to get this thing out every month or so. However, the main reason is to just get back on cycle. You will note that this is the February issue, and it is still February!

Also, there is not a lot to share at the moment. Please don't feel cheated however, as there are usually two issues a year that more than compensate. (and they are real bears to put out!) Fair is fair.

Last month an updated contest calendar was promised. Oops, and sorry. It did not materialize. The listing this month is a duplication. However, here are some notes which brings things a bit closer to accuracy. First of all, The Spring Tune-up, typically held in Spanaway, Wash., is still tentative, but details should be known soon. The Clambash in Astoria, Oregon is tentatively set for June 14th. Events there will be much the same as last year.

There may also be a Stuntathon this year, details here very tentative. One meet that has been firmed up is the Summer Record Trials in Kent, Wash. This will be held August 15-16, and is for all CL rule book record events. This includes all speed, carrier, and endurance.

Lastly and certainly not leastly, the Bladder Grabber is still on the tentative list. Howard???? Again, hope to have the complete calendar pretty well focused by the end of March.

Another reason for this issues brevity is the other activities of ye olde editor. Yes Virginia, I try to fly model airplanes as well as write about them. The end of the month is usually a double barrel situation for me, as I have a firm deadline for my Model Builder column manuscript. (which is coming right up immediately after I finish this!)

Lots of projects in the cooker and on the drawing board. Dick Peterson and I are working on a Formula 40 project that will make our current design look like a Ringmaster. But it is top secret and I have said too much already. Also in the works is the FAI team race program with Dick Salter. This event is so much fun that I might quit my job, mortgage off my home, and become a diesel derelict.

Coming up on the California contest circuit is a speed and racing meet in Merced on March 15th. I mention this for the benefit of my buddies in Cal, see you there! (that should be fair warning).

Speaking of Cal meets, here is a mention for the Money Nats, being held in South El Monte (LA) on April 4th and 5th. This is for triple elimination AMA Fast Combat only, and top prize is one thousand bucks in real cash-ola. If you fly combat, you probably already know about this one, but in case you don't, there it is. For more info write to: Steve Hills, 20 - 25th St., Hermosa Beach, Calif 90254.

You combat fliers who have been patiently awaiting the release of the Fox Combat Special Mk VI should have one in your hands by now, that is if you paid for one! I received mine on the 19th. This sucker looks hot! We will probably be sharing some performance information from the Combat department very soon.

That's about it for now. Besides the contest calendar update next month, also be looking for an update on NW Competition Records and NW Competition Standings. We also have some reader mail to catch up on.

THE FLYING FLEA MARKET

BUY, SELL, TRADE

FOR SALE OR TRADE: Tiger Jet nib & Eureka F-86 kit - designed for tiger jet. both for \$200 or trade for recent model Dyna jet nib. Berkeley B-17 52" span kit and box in excellent cond. \$75 or trade for ST 60 stunt engine nib or used very low time. Burt Brokaw, 494 E. 700 N. Ogden, Utah 84404 phone (801) 782-7723

WANTED: Super Tigre 60 new or like new. Also 50's & 60's UC stunt kits. - Walt Menges, 8040 N. 1st Street, Phoenix, AZ 85020 or call evenings (602) 944-1763

WANTED: Webra Mach I 2.5 cc Diesel, E.D. 2.46 cc Diesel, MVVS or Oliver Tiger Diesels- 2.5 cc- Henry Hajdik, 1629 London St., New Westminster, B.C. V3M3C8, or call evenings(604) 526-9554

FOR SALE: Flying Lines back issues. Fill in the gaps of your FL library. Singles \$1 each. Four or more @ 50¢. Issues available:

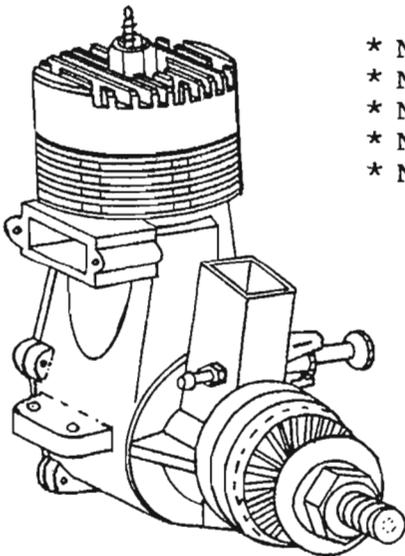
| | | | | | |
|----|----|----|----|----|----|
| 4 | 11 | 13 | 16 | 17 | 29 |
| 32 | 33 | 35 | 36 | 37 | 38 |
| 39 | 43 | 44 | 45 | 47 | 48 |
| 49 | 50 | 51 | 52 | 53 | 54 |
| 57 | 60 | 61 | 62 | 64 | 65 |
| 66 | 68 | 69 | 70 | 71 | 72 |
| 74 | 75 | 76 | 77 | 78 | 79 |

FOX "COMBAT SPECIAL" MK-VI .36

AN IMPROVED VERSION OF THE WELL KNOWN MK-IV.

FEATURING.....

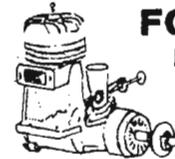
- * NEW CRANKSHAFT WITH .590 MAIN.
- * NEW ALUM. PISTON.
- * NEW HARDENED CYLINDER LINER.
- * NEW .218 DIA. WRIST PIN.
- * NEW METHOD OF LOCKING THE WRIST PIN ELIMINATING THE SNAP RING PROBLEM.



- WE ARE RETAINING THE DUAL BALL BEARINGS, THE TWO PIECE HEAD, AND THE SHIELDED THRUST WASHER OF THE MK-IV.
 - THE WEIGHT IS ABOUT THE SAME.
 - THE NEW MOTOR IS EXPECTED TO RUN ABOUT 10 MPH FASTER THAN THE MK-IV.
 - DELIVERY IS ANTICIPATED ABOUT JULY 1.
 - THIS MOTOR WILL BE SOLD DIRECT ONLY.
 - THE PRICE IS \$80.00.
 - ORDERS WILL BE SHIPPED IN ROTATION.
- ****CALL OR MAIL IN YOUR RESERVATION****



5305 TOWSON AVENUE
FORT SMITH, ARKANSAS 72901
(501) 646-1656



FOX 15BB

Powered the World's Champion Combat Model. You still

cannot beat it without paying over \$100.00.

49.95



FOX 35 STUNT

Over a million sold. For stunt models weighing up to 36 oz. Has won over 10,000 trophies for its owners.

44.95

FOX BELL CRANKS

Made from hard aluminum. No bind pivot bearing. Much stronger than nylon. Used by most flyers who don't want to risk a bell crank failure.



Two Sizes

2.75 EITHER SIZE

WHERE THE ACTION IS

CONTESTS and EVENTS THAT ARE COMING UP

Next month this department will be given what should be a more or less final update. That will include firm dates, details, etc. Contest directors, club honchos, please let us know ASAP. Next month we will also integrate the VGMC schedule, which is listed separately.

| Date | City / Site | Meet | Contest Director |
|------------|-----------------------|-----------------------------|------------------|
| Feb 8 | Portland/ Delta Park | Drizzle Circuit #3 | Gene Pape |
| Feb 28 | Seattle/ Carkeek Park | Skyraiders Beginners Day | ? |
| Mar 8 | Portland/ Delta Park | Drizzle Circuit #4 | Mike Hazel |
| Mar 22 | Seattle/ Carkeek Park | Skyraiders 3X1 | ? |
| Apr 12 | Portland/ Delta Park | Drizzle Circuit #5 | Wayne Spears |
| Apr ? | ???????????????????? | Spring Tune Up (Skyraiders) | tentative |
| May 22-24 | Eugene/ Mahlon Sweet | NW Regionals | Dave Green |
| Jun ? | Astoria / ? | ClamBash | Dave Green ? |
| Jul 11-19 | Lincoln, Nebraska | AMA Nationals | |
| Aug ? | Kent/ Boeing Center | NW Record Trials | Dick Peterson |
| Sep 19-20 | Kent/ Boeing Center | Raider Roundup | |
| Summertime | Somewhere | Bladder Grabber ? | |

1987 V.G.M.C. CONTEST SCHEDULE FOR CONTROLINE AT RICHMOND FIELD

| | | |
|-----|------------|--|
| A | MARCH 1, | FIRST ANNUAL 1/2A SNAPPER EVENT (Stunt, Spot Landing, Beauty) |
| A | MARCH 15 | VGMC SPORT RACING SERIES No 1 (NW Sport Race, 15 Sport Race) |
| A | APRIL 12 | VGMC SPORT RACING SERIES, No 2 " " |
| AA | MAY 17 | SPRING UKIE TUNE UP (33 1/3, Sport Race, 15 Combat, Snapper) |
| A | JUNE 14 | VGMC SPORT RACING SERIES No 3 (NW Sport Race, 15 Sport) |
| AA | JUNE 20/21 | NORTHWEST C/L SPEED CHAMPIONSHIPS (All Classes C/L Speed) |
| A | JULY 26 | WEST COAST FAI TEAM TRIALS (FAI Speed) |
| A | AUGUST 2 | VGMC SPORT RACING SERIES No 4 (NW Sport Race, 15 Sport Race) |
| AAA | SEPT 5/6 | 43rd VGMC INTERNATS (18 events for STUNT, RACING, SPEED, CARRIER COMBAT, SCALE & SPORT EVENTS) |
| AA | OCT 4 | VGMC SPORT RACING GRAND FINALE (NW SPORT RACE \$250 in prizes) |

FLIGHT SCHOOL

by: Jim Labarge



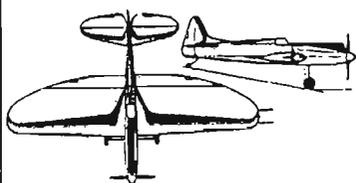
Butterflies and first flights.....

As with any sport, and ours is a sport, you must be in shape for it. The biggest worry for a beginner is getting dizzy, falling down and crashing. Overcoming the dizzy problem is easy. The old timers used to say to practice spinning until you can spin 25-50 times, stop and not be dizzy. Good idea, you don't need to spin fast, just practice turning at a 2-3 second revolution and do it a bit at a time. Don't try to go 50 times the first time. One thing that helps in real flight situations is that you are watching the model and since it is turning at the same speed that you are, things don't seem to be moving. Don't try to be like Mike Hazel and his jet speed model, just be ready.

Now that you are used to the spinning motion it is time for that fateful time, first flight. Lay out the lines and handle, whether dacron or steel no twists or damage is allowed, remember, no lines, no control and that equals disaster. A good length for an .049 model is 26' from handle to model. Connect up the lines, check the movement of the elevator. Using a straight arm if you raise your hand the elevator should go up, lower your hand and the elevator should go down. The hardest thing for a beginner to do is to use small movements of their arm, we don't want to be all over the sky just fly straight and level. Now if possible get an experienced flier to help with the first few flights out in the center of the circle with you. A good pilot can recover the model if you just let him, even if you are in pretty bad position.....if no one is there to help, well try and relax, fill the tank $\frac{1}{2}$ full, start the motor, get it running well, let your helper hold the model and walk out to the handle. Take a deep breath, relax, (ha ha) and motion your helper to release the model. Your hand should be at horizontal and leave it that way for a moment until the model builds up speed. Many models will take off by themselves so don't get froggy on the handle. The idea is to survive the first few flights, pilot and model, so just try to fly straight and level. If all goes well you should run out of fuel in a few laps and the motor will stop. Don't quit flying the model just because the engine stops, fly it until it lands.....

No doubt your legs are shaking, and you are tired, rest a few minutes and do it all over. As with any skill the more you practice the more you grow in that skill. It is not a bad idea to spend the first few flying sessions doing nothing but trying to fly level and get used to everything... later comes even more fun, aerobatics, and other neat games. Now that you are flying you can see why we spend so much time and work building our models, FUN.....

Next time.....We're flying, now what.....



Tom Dixon
Suite 401
1938 Peachtree Road
Atlanta, Georgia 30309

CLASSIC REPLICAS CL PLANS
BOLLY COMPOSITE PROPS
MERCOS, FOX, K&B ENGINES
STUNT ENGINE REWORK

Virginia Craftsman, Inc.

348 ARGYLL CIRCLE
HIGHLAND SPRINGS, VA. 23075
PHONE: 737-7557

CUSTOM MADE ENGINE &
AIRPLANE ACCESSORIES
for
COMBAT SPEED RACING

The O.S. 40FP engine has attracted a considerable amount of attention as a potential new engine for the stunt fraternity. Budding champion Jack Pitcher has been running one with some success all summer, and we recently spent a day-- and some 20 flights-- testing a wide range of engine combinations. The result may be of interest to those considering the engine.

The stunt version of the O.S. 40FP is designated the "FP-S". It comes with two venturies, a .280 (installed) and a .265. A control line needle valve assembly is installed and the engine is assembled with two .016 head gaskets, instead of the single head gasket found in the R/C version. Otherwise, the two engines are identical.

At 8.1 ounces (without muffler), the .40FP is the lightest engine to come along in years, comparable to the old McCoy .35 or K & B Torpedo .35 of the 1950's (I realize the this comparison dates me!). O.S. quality is among the best in the industry, so durability should be quite good. The lapped piston means no ring gaps or seals to worry about.

The FP is a Schneurle ported engine, which means easy starting and more power than other porting configurations. Unfortunately, in the past, this also meant a nearly uncontrollable tendency to surge-- especially in outside maneuvers. Not so with the FP. It has extremely mild port timing and does not have the typical Schneurle tendency to break just when you don't want it to.

Now, what to do to make the engine run well? To begin with, throw away the stock muffler. Besides being heavy, there seems to be no way to get it to run well. There's too much back pressure, but opening up the exhaust hole turns the thing into a tuned pipe. In about two laps, the engine "comes in" and away you go in a ninety m.p.h. stunt flight. Hal DeBolt would have loved it-- shades of the Stuntwagon!

Instead of the stock muffler, use the same S.S.T. muffler that you use on your S.T. 60 with 16 - 20 holes open. Unlike the FSR engine series, the FP doesn't like much back pressure. To install the S.S.T. muffler, just run a 6 - 32 tap through the muffler attachment holes in the crankcase and egg out the mounting holes in the muffler slightly.

The FP comes with two .016 head gaskets installed, which seems to be optimum. A third gasket results in a power loss without any noticeable benefit, while using only one gasket makes the engine run rough and break excessively during maneuvers.

Like all stunt motors, the FP loves "Northwest Blend" stunt fuel; that is, 10% nitromethane, 25% castor oil and 65% methanol alcohol. It runs better on this fuel than on synthetic or castor/synthetic blends and will last longer.

The owner's manual suggests using an O.S. 25FP venturi if necessary to smooth out the engine run. Frankly, it was quite difficult to notice any change in run smoothness, but the power definitely was less using this set-up. Jack started using the .25 size venturi because his plane was originally built for a .35 and had just a four ounce tank. That's the only reason to consider using a small venturi, because the larger venturi definitely provides more power.

Power is the FP's only weak spot. Weak, that is, if you think of it in the same terms as an FSR .40. It's more like a very strong .35 and should perform quite well in Noblers, Chipmunks, Cobras and the like weighing around 40 - 45 ounces. Jack's Twister and Paul Walker's Cobra fly quite well in the wind with FP .40's, and the engine is light and small enough to fit nicely in these aircraft. Just put in a five ounce uniflow tank (Taff makes one for \$5.95), mount a 10½ or 11 -6 prop and you're likely to be quite pleased with the result.

One final note. The needle valve assembly is of traditional O.S.

design, but with finer threads. It's perfectly acceptable, but installing a Kustom Kraftsmanship universal needle valve assembly is a good idea because it gives a very fine adjustment. If you choose to do this, you'll have to drill out the case and venturies slightly to accept the K.K. assembly. No big deal, just remember to put tissue in the case before you drill it to keep metal particles out of the engine.

★ ★ ★ ★ BUY ★ FACTORY ★ DIRECT ★ AND ★ SAVE ★ ★ ★ ★

**WE ARE SHOOTING DOWN
HIGH BALSA PRICES —
WITH SUPER QUALITY!**

Satisfaction Guaranteed
Direct Only



CUSTOM CUT CONTEST BALSA
All Sheets One Piece • Sanded to Close Tolerances
AAA Grade • Kiln Dried • Shipped 100%
If you are a serious modeler and want performance
you must try our 4-6 lb. balsa

| BALSA SHEETS | 36" 48" 30" | BALSA STICKS 36" 48" |
|--------------------|---------------|----------------------|
| 1/16 x 2 | .33 | 1/16 x 1/4 .09 |
| 3/32 x 2 | .40 | 1/16 x 3/8 .10 |
| 1/8 x 2 | .43 | 1/16 x 1/2 .14 |
| 3/16 x 2 | .49 | 3/32 x 1/4 .12 |
| 1/4 x 2 | .56 | 3/32 x 3/8 .16 |
| 1/32 x 3 | .37 | 3/32 x 1/2 .18 |
| 1/20 x 3 | .37 | 1/8 x 1/8 .08 |
| 1/16 x 3 | .37 .49 .31 | 1/8 x 1/4 .11 .16 |
| 3/32 x 3 | .44 .58 .37 | 1/8 x 3/8 .12 .18 |
| 1/8 x 3 | .54 .71 .45 | 1/8 x 1/2 .18 .24 |
| 3/16 x 3 | .62 .82 .56 | 3/16 x 3/16 .11 .18 |
| 1/4 x 3 | .73 .95 .81 | 3/16 x 3/8 .17 |
| 5/16 x 3 | .86 | 3/16 x 1/2 .22 .30 |
| 3/8 x 3 | .88 1.24 .71 | 1/4 x 1/4 .16 .24 |
| 1/2 x 3 | 1.10 1.55 | 1/4 x 3/8 .19 .26 |
| 3/4 x 3 | 1.65 | 1/4 x 1/2 .21 .30 |
| 1/16 x 4 | .58 .76 .48 | 1/4 x 3/4 .34 .44 |
| 3/32 x 4 | .70 .94 .56 | 1/4 x 1 .40 |
| 1/8 x 4 | .80 1.06 .66 | 5/16 x 5/16 .21 .28 |
| 3/16 x 4 | .93 1.22 .75 | 3/8 x 3/8 .27 .37 |
| 1/4 x 4 | 1.10 1.34 .84 | 3/8 x 1/2 .32 .46 |
| 3/8 x 4 | 1.65 2.25 | 3/8 x 3/4 .42 .55 |
| 1/2 x 4 | 2.25 2.61 | 3/8 x 1 .52 |
| MATCHED SHEETS 42" | | 1/2 x 1/2 .36 .53 |
| 3/32 x 4 | 1.00 | 1/2 x 3/4 .46 .62 |
| 1/8 x 4 | 1.08 | 1/2 x 1 .58 |
| 3/16 x 4 | 1.20 | 5/8 x 5/8 .48 |
| 1/4 x 4 | 1.31 | 3/4 x 3/4 .67 |

| BALSA TRIANGLES 36" | BALSA PLANKS 36" |
|---------------------|------------------|
| 1/4 x 1/4 .25 | 1 x 1 .85 |
| 3/8 x 3/8 .30 | 1 x 2 1.50 |
| 1/2 x 1/2 .35 | 1 x 3 2.00 |
| 3/4 x 3/4 .45 | 1 x 4 2.80 |
| 1" x 1" .55 | 1 1/2 x 3 2.75 |
| | 1 1/2 x 4 3.60 |
| | 2 x 2 2.25 |
| | 2 x 3 3.25 |
| | 2 x 4 4.35 |
| | 3 x 3 4.95 |
| | 3 x 4 6.88 |

LIGHT 4-6 LB. WOOD 36"
Excellent for
stunt & combat

| |
|---------------|
| 1/32 x 3 .25 |
| 1/20 x 3 .25 |
| 1/16 x 3 .25 |
| 1/8 x 3 .25 |
| 3/32 x 3 .25 |
| 1/4 x 3 .25 |
| 3/8 x 3 .25 |
| 1/2 x 3 .25 |
| 3/4 x 3 .25 |
| 1" x 3 .25 |
| 1 1/8 x 4 .91 |
| 3/32 x 4 1.17 |
| 1/8 x 4 1.38 |
| 3/8 x 4 2.07 |
| 1/2 x 4 2.82 |

| BASSWOOD 48" | PINE STICKS 36" 48" | HARD MAPLE 18" |
|-----------------|---------------------|-------------------------|
| 3/16 x 3/16 .26 | 1/8 x 1/8 .13 .17 | 1/4 x 3/8 .40 |
| 3/16 x 1/4 .30 | 1/8 x 1/4 .16 .23 | 3/8 x 3/8 .45 |
| 3/16 x 3/8 .38 | 1/8 x 3/8 .20 .27 | 3/8 x 1/2 .50 |
| 3/16 x 1/2 .46 | 3/16 x 3/16 .17 .24 | 3/8 x 3/4 .58 |
| 3/16 x 3/4 .60 | 3/16 x 3/8 .23 .32 | 1/2 x 3/4 .69 |
| 1/4 x 1/4 .42 | 3/16 x 1/2 .30 .40 | |
| 1/8 x 3/8 .49 | 1/4 x 1/4 .28 .37 | |
| 1/4 x 3/4 .80 | 1/4 x 3/8 .30 .42 | BIRCH DOWELS 36" |
| 3/8 x 3/8 .80 | 3/8 x 3/8 .37 .52 | 1/8 .09 |
| 3/8 x 1/2 .70 | | 3/16 .11 |
| 3/8 x 3/4 .90 | | 1/4 .14 |
| 1/2 x 1/2 .90 | | 5/16 .25 |
| 1/2 x 3/4 1.00 | | 3/8 .32 |

| BUNDLE DEALS | SPRUCE STICKS 36" 48" | 3 PLY BIRCH 48" |
|------------------------|-----------------------------|----------------------------|
| 20-1/6 x 3 x 36 6.85 | 1/8 x 1/8 .15 | 1/64 x 12 5.25 |
| 20-1/16 x 4 x 36 10.20 | 1/8 x 1/4 .18 .24 | 1/32 x 12 4.25 |
| 20-3/32 x 3 x 36 8.45 | 1/8 x 3/8 .20 .29 | 1/16 x 12 4.35 |
| 15-3/32 x 4 x 36 9.55 | 3/16 x 3/16 .25 .34 | 1/8 x 12 4.50 |
| 15-1/8 x 3 x 36 7.15 | 1/4 x 1/4 .31 .45 | |
| 10-1/8 x 4 x 36 6.75 | 3/8 x 3/8 .45 .63 | 5 PLY BIRCH 48" |
| 15-3/16 x 3 x 36 9.00 | 3/8 x 1/2 .55 .70 | 3/32 x 12 5.70 |
| 10-3/16 x 4 x 36 8.10 | 1/2 x 1/2 .60 .80 | 1/8 x 12 5.85 |
| 10-1/4 x 3 x 36 6.30 | 1/2 x 3/4 .68 .88 | 3/16 x 12 5.85 |
| 10-1/4 x 4 x 36 8.90 | | 1/4 x 12 6.00 |
| 10-3/8 x 3 x 36 8.50 | SPRUCE TRIANGLES 36" | |
| 5-3/8 x 4 x 36 6.25 | 3/8 x 3/8 .45 | |
| 5-1/2 x 3 x 36 5.40 | 1/2 x 1/2 .61 | GROOVED L.G. MOUNTS |
| 5-1/2 x 4 x 36 8.55 | 3/4 x 3/4 .77 | 12 inches |
| 10-3/32 x 4 x 48 8.45 | | 3/8 x 3/4 (1/8) .40 |
| 5-1/8 x 4 x 48 4.85 | LITE PLY 48" | 3/8 x 3/4 (5/32) .40 |
| 6-3/16 x 4 x 48 5.85 | 1/8 x 6 1.50 | 1/2 x 3/4 (3/16) .45 |
| 5-1/4 x 4 x 48 6.25 | 1/8 x 12 3.00 | |

| TAPERED SHEETS 36" | TRAILING EDGE 36" |
|--------------------|-------------------|
| 1/4 x 2 .65 | 1/4 x 1" .32 |
| 1/4 x 3 .85 | 5/16 x 1 1/4 .39 |
| 3/8 x 2 .68 | 3/8 x 1 1/2 .46 |
| 3/8 x 3 .98 | 1/2 x 2" .70 |
| 1/2 x 3 1.20 | |

| LONE STAR EPOXY | INSTANT GLUE |
|-----------------|------------------|
| 9 oz. List-8.95 | 1 oz. Thick 2.98 |
| 5 min. 5.98 | 1 oz. Thin 2.98 |
| 15 min. 5.98 | 2 oz. Thick 5.50 |
| 30 min. 5.98 | 2 oz. Thin 5.50 |

Fox Engines, Rev-Up Props
etc. at discounts. Send
SASE for complete catalog

Call: (806) 745-6394 10 am - 6 pm Central Time
1623 57th St., Lubbock, TX 79412

Handling Charge—\$3.00. We pay UPS. Add \$2.00 for C.O.D. \$3.00 extra for PP, APO, FPO.
We accept Visa, Master Card, personal checks, or C.O.D. 4-1/8% tax in Texas. US currency only. Minimum Order \$10.00

★ ★ ★ ★ ★ LONE ★ STAR ★ MODELS ★ ★ ★ ★ ★

CAROLINA-TAFFINDER

8345 DELHI ROAD
NO. CHARLESTON, S.C. 29418
(803) 553-7169

We blend our fuels with only the purest grades of nitro-methane and other ingredients. Fuels may be ordered in 4-PAKS of half-gallons or gallons, plus single gallons. Mix or match fuels and/or ingredients in 4-PAKS.

Lubrication Content:
Standard Blends: 20% blend of Castor & Synthetic Oils.
"PA" Blends: 23% " " " " " "
"C" & "PAC" Blends are ALL Castor versions of the above.
4-Cycle Blends: 16% Castor Oil
Custom Blending available. Call or write for quotation.

TAFF'S
CUSTOM

BLEND

MODEL FUEL

THE DRIZZLE CIRCUIT

ROUND and ROUND in the RAIN?



The third installment of the 1987 Drizzle Circuit took place on Feb. 8th. The entry was up slightly over the January race. Circuit points for NWSR were juggled a bit as a result of the placings. Jim Cameron did not make the final, so fell from first rung down to third. The SHT team strengthened their hold on first place (they tied last month with Jim), and Dave Green is close behind. Wayne Drake is in fourth place, which for this event, is the "bubble". With two races left to go, racer's luck dictates that fourth or fifth place could still be in the money.

In the Super Sport class, the top three places were unchanged for circuit points. The S&S team pulled off a victory, however, putting them in the fourth place "bubble" status.

The secondary event was $\frac{1}{2}$ A Combat. Although there can only be one first place, in my book anyone cranking on TeeDees in the winter deserves a prize.

Here's the full layout, including accumulated circuit points:

Secondary Event: $\frac{1}{2}$ A Combat (5 entries) 1st- Glenn Salter;
2nd- Bill Varner; 3rd- Dick Salter; 4th- Richie Salter

NW SPORT RACE (9 entries)

heat winners: round 1: Dave Green 4:14; S&S Team 5:16; Dick Peterson 4:41
round 2: Dick Peterson 4:32; SHT Team 4:31; Wayne Drake 4:28

| | | | |
|--------|-----|-------|---------------|
| Final: | 1st | 8:45 | Dave Green |
| | 2nd | 8:53 | Wayne Drake |
| | 3rd | 9:42 | SHT Team |
| | 4th | 12:44 | Dick Peterson |

NW SUPER SPORT RACE (8 entries)

heat winners: round 1: Dave Green 4:01; SHT Team 4:26; S&S Team 3:46;
round 2: Bob Danielson 3:55; Dick Peterson 4:29; S&S Team 4:02

| | | | |
|--------|-----|------|---------------|
| Final: | 1st | 7:52 | S&S Team |
| | 2nd | 8:48 | Dave Green |
| | 3rd | 9:39 | Bob Danielson |

(heat: 4th 4:14 SHT Team

-----DRIZZLE CIRCUIT POINTS STANDINGS-----

| NW SPORT RACE | | | NW SUPER SPORT RACE | | |
|---------------|----------------|----|---------------------|----------------|----|
| 1. | SHT Team | 23 | 1. | Dave Green | 21 |
| 2. | Dave Green | 21 | 2. | SHT Team | 14 |
| 3. | Jim Cameron | 18 | 3. | Dick McConnell | 12 |
| 4. | Wayne Drake | 17 | 4. | S&S Team | 10 |
| 5. | Bob Danielson | 11 | 5. | Bob Danielson | 9 |
| 6. | Dick Peterson | 10 | 6. | Jim Cameron | 5 |
| 7. | S&S Team | 6 | 7. | George Mickey | 4 |
| | Dick McConnell | 6 | 8. | Dick Peterson | 3 |
| 9. | George Mickey | 3 | | | |
| 10. | Dan Burdick | 2 | | | |

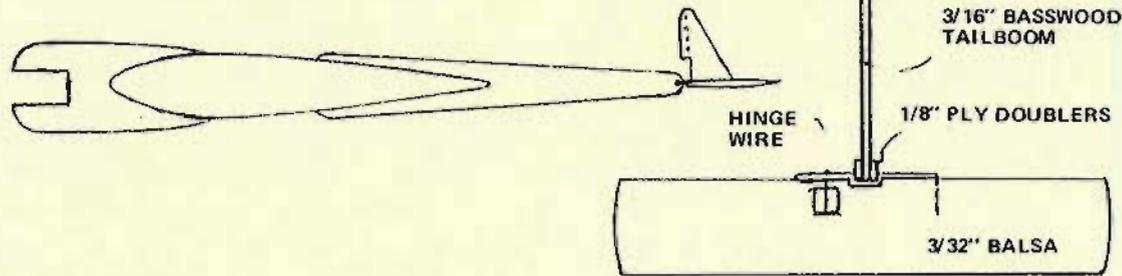
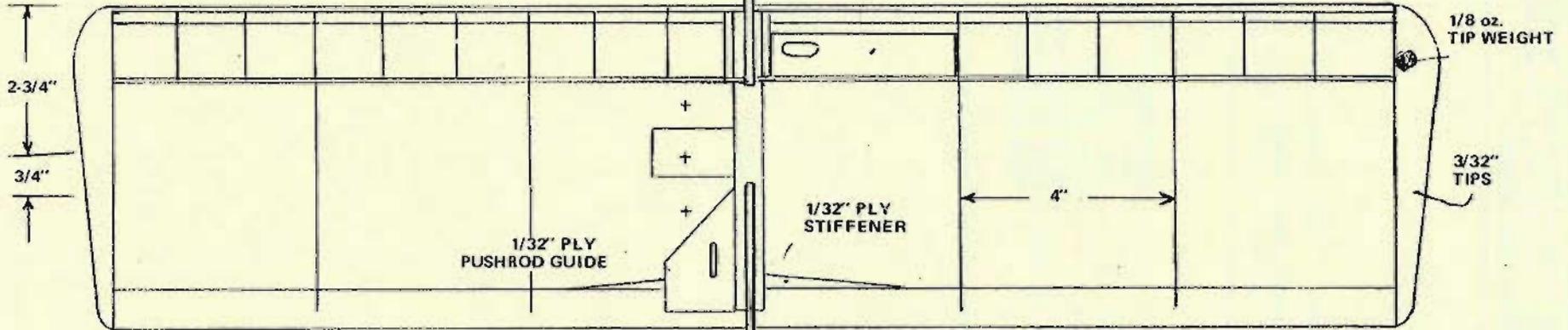
1/3 SIZE SHOWN:

OFFSET MOTOR MOUNT
1-2 DEGREES TO OUTSIDE

1" DIAMETER
BLADDER TUBE

WING CONSTRUCTION:

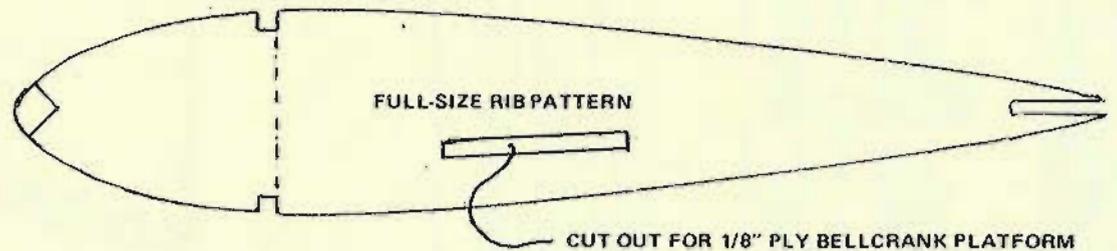
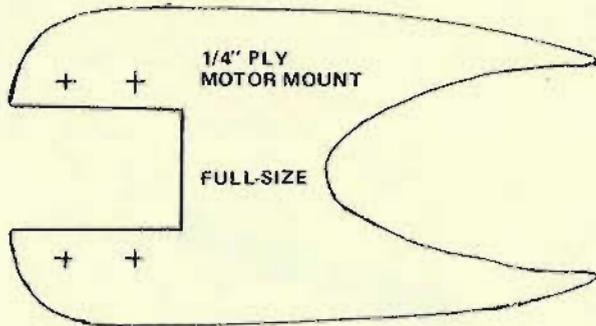
- 1/4" SQ. SPRUCE L.E. 1/8" SQ. SPRUCE SPARS
- 1/16" Balsa RIBS & FALSE RIBS
- 1/2" Balsa CENTER RIB & 3/16" FRONT DOUBLERS
- TRAILING EDGE: 3/32x3/4" Balsa



cheap imitation
for 1/2A combat

BY: GENE PAPE & JOHN THOMPSON
DRAWING: MIKE HAZEL

See CL column in May 1986
Model Builder for const. text.



FLYING LINES is produced ten times a year by a dedicated staff of volunteers interested in keeping lines of communication open between Northwest control line modelers. FL is totally independent of any organization, depending entirely upon support from subscribers, advertisers, and donors.

Prices for subscriptions:

| | |
|-------------------|--|
| USA: | \$6 for 5 issues and \$12 for 10 issues. |
| CANADA & MEXICO: | \$6.50 " " \$13 " " " |
| OVERSEAS SURFACE: | \$7 " " " \$14 " " " |
| OVERSEAS AIRMAIL: | \$12 " " " \$24 " " " |

Make check or money order payable to FLYING LINES. U.S. funds, please.

FL subscribers may place personal ads in the classifieds section at no charge. For business advertising, contact the editor for rates and specs.

The FLYING LINES staff:

| | | | |
|--------------------|----------------|-------------------|----------------------------------|
| Editor..... | Mike Hazel | Combat..... | John Thompson |
| Aerobatics..... | Paul Walker | Racing..... | Dave Green |
| Scale..... | Orin Humphries | Beginners..... | Jim LaBarge |
| Engines..... | Paul Gibeault | Speed..... | Mike Hazel |
| Round & Round..... | John Thompson | Carrier..... | Orin Humphries |
| Sport..... | Larry Miles | Competition Stats | John Thompson/ Dick McConnell |
| Typing Asst..... | Bob Kampmann | | |

1073 WINDEMERE DRIVE NW
SALEM, OREGON 97304

FLYING LINES

26 FEB

FIRST CLASS MAIL

FIRST CLASS MAIL

John Thompson
1505 Ash Ave
Cottage Grove, OR 97424

26 FEB
PM
1987
OR 973

