

# FLYING LINES

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## PAPE DEVASTATES COMPETITION IN TURKEY SHOOT

Gene Pape won the title of Mr. Turkey, 1981, by besting an intrepid field of gobblers in the third annual Flying Lines Benefit Turkey Tournament in Eugene, Ore., Nov. 22. Pape carried away a 21-pound turkey to keep him and Carol company, as a reward for winning the quadrathon contest. He managed to come in first in speed, racing and combat, and place second in stunt.

The Turkey Tournament is an annual Flying Lines financial booster, designed to provide lots of flying fun with very little cost or preparation. Five entries showed up and had a ball, though the contest did almost nothing to raise funds for the newsletter. The entry fees just covered the cost of prizes!

Besides Pape's turkey, Ken Burgar carried away a Goldberg Buster kit for second prize, Bill Varner selected a Goldberg Voodoo for third, Bruce Guenzler took a Sterling Stearman PT-17 for fourth, and FL's own John Thompson won -- what else? -- a Flying Lines T-Shirt! In any case, there were exactly enough prizes for the number of contestants.

What the contest lacked in numbers of entries, it made up in hilarity. Things got so crazy at times, that contestants nearly forgot they were soaking wet. Yes, in addition to everything else, it started raining at about 3 p.m., just about in the middle of the stunt sector, and never stopped.

Pape, who came out to watch and was urged by everyone to enter, went home and shortly came back with a secret weapon -- a combat Devastator (48" span foam wing with Fox Combat Special) with a bolt-on landing gear alleged to be some 20 years old. By a unanimous vote of the competitors, Pape was welcomed to the fold. Everybody figured he'd stuff it in the stunt pattern, but it wasn't to happen.

That Devastator may have looked funny with wheels, but it sure went fast. Pape won the speed portion of the contest with a 105.53 mph proto speed (14 laps from a standing start, including combat-style whoop-de-do takeoff). Ken Burgar's Combat Special-powered Ringmaster also was hot, going 93.71. Varner followed with a Mongoose II, Combat Special-powered, going 78.23 mph. Thompson, using a ST .35-powered Mongoose, went 75.13. Bruce Guenzler, showing true sporting spirit by using a Fox .35-powered Flite Streak, went 51.26 mph.

Things were more or less routine in speed, compared to what followed. Racing was absolutely bananas!

The preliminary heats were almost normal. Pape turned a blazing 6:30 prelim for the 100 laps, flying a fast heat with Burgar. Thompson also made the final after a heat with Varner and Guenzler's solo heat. It was the feature race that defies description. Because of a large speed difference, Pape was allowed to fly a solo heat, turning an 11 minute time. Then came the fateful race between Burgar and Thompson. They started together and raced closely for about 60 laps, pitting simulataneously. All semblance to what is commonly known as racing here ended.

The Thompson team, with Thompson flying and Mike Hazel pitting, was puzzled at the early pit, having expected about 95 laps on the first tank (200-lap race). However, the plane was soon off and running again. More puzzlement at another pit stop about 50 laps later. Upon inspection, Hazel noted a large hole in the huge fuel tank, but proceeded with the fueling. Upon flipping the prop, a conflagration erupted. While Hazel blew, patted, waved and cursed, the flames merrily licked at the engulfed airplane. Finally Pape, who had been timing, came over to disconnect the lines. Hazel, dancing like a ballerina, flounced to a nearby puddle and threw in the plane with a splash, then dived in after it and turned it over to put out the persistent flames. The process broke the fuselage and left the plane a soggy, half-covered, scorched wreck.

But wait! There was the sound of silence -- sudden silence! Burgar's Fox had just launched it's crankshaft into orbit. Hazel and Pape rescued the sinking Mongoose, hot-stuffed it back together, banded on another tank, reconnected the lines and finished the race with a time of 24:58. A valiant effort that left everyone with sore sides from laughter. Thompson, Guenzler and Burgar soon retired to the cars to repair their planes for more action. (Burgar installed a new engine, as urged by the other competitors, and Guenzler wrapped some Fascal on a wing that had begun disrobing).

Stunt became an endurance effort, since nobody's plane was equipped with tank capacity for a stunt pattern. Most fliers took only one attempt as the

TURKEY, continued

rain began to cascade. Burgar made it all the way to the vertical eights before bumping the ground, to beat out Pape, who didn't get as far but got there fast. Varner, Guenzler and Thompson followed.

Guenzler's Fox .35 and Flite Streak proved airworthy right to the end, making it to the final in combat against Pape, whose sheer speed gave him the wind. Most of the combat was knots only because of the rain drenching streamers, but Guenzler did a good job of staying away from Pape and even taking a pass at him once or twice. Varner had done the same in the preliminary match, but neither could avoid the inevitable cuts. Varner took third by virtue of a glow-plug spit, since neither he nor Thompson had a plane left after the early matches. Burgar's plane, you recall, died in the stunt pattern.

When it was all over, Pape's Devastator survived with only a small nick in the foam inflicted by Guenzler. The rest of the planes ranged from badly broken to destroyed. But all agreed, there are few planes who have done more flying in a single day!

Here is a summary of results:

1. Gene Pape, Eugene, Ore., 39 points. -- Devastator, Fox Combat Special Mk III.
2. Ken Burgar, Poulsbo, Wash., 33 points. -- Ringmaster, Combat Special Mk III.
3. Bill Varner, Astoria, Ore., 30 points. -- Mongoose II, Comb. Special Mk III.
4. John Thompson, Cottage Grove, Ore., 29 points. -- Mongoose, ST .35 G/21.  
Bruce Guenzler, Eugene, Ore., 29 points.-- Flite Streak, Fox .35 stunt.

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5 Rounds of Slow

All AMA Slow combat rules apply except:

- 1) Everyone flies five times. All matching is done by random draw in five rounds.
- 2) Final Placing: Determined by the number of wins. In case of ties, number of cuts and air time is used as a tie-breaker. Any remaining ties are decided by a flyoff match.
- 3) Safety Rules:
  - a) Any flyer involved in a match where there is a flyaway due to a mid-air, line tangle, or cutaway is disqualified and all scores cancelled.
  - b) Any flyer involved in two mid-airings that render one or both planes unflyable as they land will not be allowed to fly again. His scores will stand for the final placings.

# RACING ROUNDUP

by mike hazel

Coming right up is the fourth year of our region's Northwest Sport Race Drizzle Circuit, for sport racing Northwest Style. This year will be basically identical to last year's format with both the Fox event and the super sport edition of sport race each going two rounds, and then a final.

The finalists, as most of you know, accumulate points that will be necessary to place in the season standings. Check the flyer regarding the rest of the details, including the schedule and sites (Flyer was in November issue).

If you haven't tried sport racing, come out and give it a try. Unless there's something wrong with you, it'll be great fun. Even the stunt grunts come out and seem to have fun. (That isn't really a slam, as I have been beat by stunt grunts!)

Speaking of Fox .35 engines...This year I believe we have come to a consensus of requiring stock engines. This was not included in the first version of the rules, and was somewhat of an oversight. Actually, we did not think there would be any problems of participants trying to soup up these engines. (Ed: As a matter of fact, there has not been, and everything seen to date has been box stock equipment.)

Here is some information lifted out of the CL-RPM newsletter regarding specifications on that motor: The venturi size is .272 bore. Check it with an "I" size drill, or use a 9/32 (.281) drill as a go-no-go gauge. A Fox with raised ports will not four-cycle. Stock overlap is .040 (+ .010) between intake and exhaust ports. Also, watch out for .36 pistons and sleeves. Due to different timing these will run faster. Altering the intake port in the crankshaft will yield an RPM gain. A stock crankshaft can be used for comparison purposes.

Now, one thing I don't want to hear is that old song and dære about how "nuthin' is box stock if it has been run," and that breaking in the engine is removing material from the piston, etc. All racing folk with common sense can understand what the wording and intent are all about.

Now for some words about super sport: Faster and exciting action, design flexibility, semi-honking engines, neat-keeno trick equipment, etc. well, those are some words that come to mind. I would like to see the participation in SS pumped up a bit. Racing the Fox is fine, but if you want a taste of real racing, give this class a try.

I believe that this year will see quite a development of performance. The Fox class should remain about the same level, but SS times will really drop, according to this writer. Last year the best SS planes would run about 90 mph airspeed, and anybody with good pits could win on any given day. I predict that this year will see a few 100+ airspeeds, and the final time may approach, or best, the 7-minute barrier. My calculations require a minimum 105 airspeed, and of course reasonably good pits and a fast start. Who will be the first on the block to accomplish this?

The Salter-Knoppi team are rumored to be running very fast. Dave Green has threatened to have a 100-mph entry this year, and Dave normally backs up what he says. No doubt, however, the globally feared Nitroholics Racing Team will be cleaning the clocks this season. Now that I have stuck my size 9½ where my lunch goes, I'd better get something going...

Soapbox: Here is a favorite subject of many an active competitor: The Armchair Legislator. This is the person who just loves to give their two cents worth on how your event should be regulated. The fact that they do not participate in the event is of little bearing upon their questionable motives. No doubt one argument from the bench racers is that they would compete if the rules were changed to "such and such" or allow "this and that." Coincidentally, such an amendment would probably allow for equipment that this person already has. Therein lies one of the mystery motives, selfishness. No matter what the rules might be, they would probably be wrong for these people. Another motive may be that of simple ignorance. Something may sound good on paper to the inexperienced in that event, but in reality may be a bad idea. This may be because it has been tried and failed, or just the result of cloudy thinking. Another motive is among the most strange: Nostalgia. "Back way when, we required two wheels on our Ringmasters, they looked neater that way." I've actually heard remarks like that, and won't even bother to comment. Now these are just the bad motives. I suppose the armchair legislator can come up with some ideas that are progressive, and contribute to the enjoyment and participation of a given event.

I suppose this rhetoric makes me sound like a wet blanket or snobbish regarding some of the voices in the evolutionary process of rules development. Just the opposite, sports fans. My point is simply that while everybody is

RACING, continued

entitled to their opinion, it should be the active participants who have the heaviest say in their event. The AMA used to really have a problem with this, but the advisory committees have been a good check on this. A place for everybody and everybody in their place, eh?

(One last word from the editor: As racers, our request to the armchair legislators would be this: Put together an entry, put in the practice and preparation we have, race with us for a year, and then express your opinion. You'll have a much more receptive audience.)

QUICK PIT STOPS

\*\*\*Well, it appears that the new, improved version of the Fireball glow plugs do not measure up. At the price, they would be a bargain if they worked, but unfortunately they do not. The problem of the inadequate seal has been solved, but now the element doesn't hold up. This makes them like the recent run of K&B plugs.

\*\*\*Chop's Products, suppliers of specialty 1/2A racing goodies and other equipment, appear to be liquidating their stock. Send them a SASE for a price list of their specially priced stock. The address is P.O. Box 316, Yardley, PA, 19067.

\*\*\*The K&B plain bearing .35 is still available direct from the factory, and they also have a full stock of parts. Write K&B for price quotes and parts list. The engine catalog number is 7860.

\*\*\*Would any of you in racing land be interested in a "clinic" type of racing meet? The general concept would be to run rounds of races very strictly by the book. This means plenty of disqualifications and penalties, followed by a critical review of pit and pilot techniques, and plenty of practice. The main idea of this would be to develop some good and safe racing habits, and competitive strategies. Please write me if interested.

Fast Racing.

--Mike Hazel, 1040 Windemere Dr. N.W., Salem, OR 97304 (503) 364-8593.



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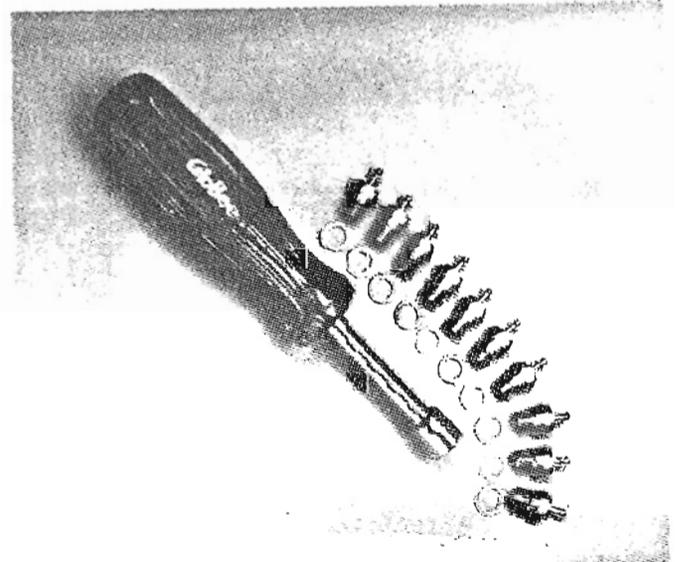
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## NWSR 1982 RULES ADD STOCK ENGINE CLAUSE

The 1982 rules for Northwest Sport Race, which go into effect this month, have only one change from the 1981 version. As was the practice in 1981, but not clear in the rules, the Fox .35 stunt engine must be of stock condition. The rules designate what "stock" means. Northwest Super Sport Race rules are not changed. Copies of the rules can be obtained from FL. The new NWSR rules are:

### 1982 RULES FOR NORTHWEST SPORT RACE

1. **PURPOSE:** It is the intent that this event will provide the novice competitor a beginning racing event, racing with other competitors using similar and designated equipment which is readily obtainable and operates in a basic fashion.
2. All pertinent rules from AMA unified racing rules shall apply, in regard to safety and conduct of races, except as follows.
3. **ENGINE:** The only allowed engine shall be the Fox stunt .35, which shall be a stock, unmodified engine operated on suction feed. (Stock is defined as absolutely unmodified except for needle valves and spray bars.) No exhaust extensions are allowed except bona fide mufflers which do not increase engine performance.
4. **Aircraft:** The model shall be built from commercially manufactured kit. It must be similar to one of the following examples: SIG: Banshee, Fokker D-7...CARL GOLDBERG: Shoestring, Buster, Gosmic Wind...M&P: Mongoose, Cherokee, Cardinal, Bonanza...MIDWEST: Magician...TOP FLITE: Flite Streak, Tutor...STERLING: Ringmaster, Yak-9. The kits listed are .35 size and of the profile fuselage type with full built-up wing.  
**MODIFICATIONS:** Major changes to the kit design such as clipped wings, shortened fuselage, partial omission of tail assembly, etc., are not allowed. Reinforcement of the nose and engine mount areas is permissible. Landing gear location and construction is entirely optional from what may be included in the kit. The only requirement for landing gear is that it shall have a minimum of one wheel, two inches in diameter or larger, and the plane shall rise off ground.
5. **FUEL TANK:** The fuel tank shall be fully external and forward of the wing leading edge, and located on the outboard side of the fuselage. The tank may not be designed so as to cowl the engine. All tank vents are limited to a maximum size of 1/8" outside diameter. The tank may not be pressurized, but the vents may be directed forward into the airstream.
6. **PROHIBITED EQUIPMENT:** Equipment and devices standard to full-race aircraft prohibited. These include: Fuel shutoff, pressure re-fuelers, fast-fill systems, "hot glove" electric contact systems, centrifugal carburetor switches.
7. **PULL TEST:** The plane and entire control system shall undergo a pull test of 35 pounds.
8. **LINES:** The minimum diameter of lines shall be .018" and shall be of the stranded type with a length of 60 feet measured from the handle grip to the fuselage, plus or minus 6 inches.
9. **RACES:** Preliminary heats shall be of 70-lap duration, with one pit stop minimum required. Feature races shall be of 140 laps with two pit stops minimum. All races shall be flown with at least two entrants, and not more than four entrants. At contests where entrants fly preliminary heats to determine finalists, at least three entries shall proceed to the final races. The decision on number of finals entrants shall be made by the event director, and made in advance before the start of any preliminary heats.
10. It is assumed that the usual sportsmanship of Northwest modelers will prevail in the running of this event. The event director may disqualify any entrant that is not keeping with the spirit or intent of this racing event.

11/23/81 FL/jmt

### AD RATES

Advertisements in Flying Lines help support the newsletter and the control-line hobby. Prices are \$6 for a half-page ad, \$4 for a quarter page, and \$15 a year for hobby shop directory listings, and \$1 for five lines of classified advertising. Also available, staple-in brochures (price negotiable based on weight). Club contest flyers stapled in free of charge.

# FLIGHT SCHOOL

by john thompson

In previous columns we've covered some basics of helping a beginner learn to fly, and we've given the beginner some tips on making a trainer kit a useful learning tool. This time, we'll talk about some basic needs the beginner has for support equipment, and about preparation for flying.

As always, we acknowledge that the real beginners may not see flying Lines, and urge the FL readers to pass the newsletter on to those beginners, or at least the information in this column. Most of all, help those beginners!

## THE WELL-EQUIPPED BEGINNERS' TOOL BOX

As soon as you begin flying model airplanes, you will see that you have a lot of support paraphernalia to take to the field along with your airplanes. You will have a lot better relationship with the experienced modeler that helps you if you move quickly to amass your own supply of tools and spare parts, and stop fishing around in his tool box. Undoubtedly your experienced helper is glad to lend you a lot of his stuff, but try to gain independence as soon as you can.

The first thing you need to have a well-equipped tool box is a tool box. This can vary widely. One well-known competitor uses a cardboard box, sometimes referred to as the "Rich Porter Custom Zoot Field Kit." A handy accessory is a worn paper bag. But Rich has his own way of doing things, and the more common approach is some kind of more permanent carrier. This could be a metal or plastic tool or tackle box, or you could make your own wooden version. I prefer a box with a lid and a latch because of the chance of getting your box full of rain in our damp climate, but many popular field boxes are open-topped. For a start you can get by with a fairly small box but you will eventually want to move to something large enough to carry quite a bit of stuff to the field. Let common sense and your personal modeling interests be your guide.

Now that you've got the box, what to put in it?

First of all, secure a supply of the most common tools applicable to model airplanes. A few of them are: glow plug wrench, prop nut wrench or screwdriver, a small screwdriver with a long-enough handle to give you some leverage in tightening down things at the field, a pair of pliers, needle-

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## FLIGHT SCHOOL, continued

nose pliers, wire cutters, crescent wrench (a small one!), and a sharp knife. As you move into larger airplanes, you'll want a set of No. 4 and 6 Allen wrenches and my favorite tools -- screwdriver-handled nut drivers for No. 4 and 6 nuts. There are many more tools you could use, but these will get you started. Oh, by the way, make sure the knife is the type that has a retractable blade, for safety in the tool box. A file comes in handy, and a scissors.

Now for the supplies. Some modelers carry most of their workshop with them, and with good reason. How much spare equipment you take may depend on how far your flying field is from home. Since I usually fly 30 miles away from home, my flight box is designed to allow me to do most simple repairs on the field. Here are some basics for a beginner's box: Spare props, spare glow plugs (even  $\frac{1}{2}$ A plugs don't last forever!), a wide variety of nuts and bolts (No. 2, 3, 4, and 6), some copper wire, some brass tubing, spare battery clip assembly, spare line clips, extra lines (never carry only one set -- lonely lines break faster!), and any other minor hardware items you might need. Oh, these, too: extra fuel tubing and fuel filters (you do filter your fuel, don't you?), rubber bands, Hot Stuff and 5-minute epoxy. If you are using a plastic-covered built-up wing, get a little bit of Fascal from your local combat flier to repair covering tears. Some baking soda will help the Hot Stuff set faster under the damp and greasy field conditions. I usually carry some lead weight for on-field balancing. Carry your fuel outside the box to prevent spillage.

The list could go on and on, but you can make your own list if you remember that the most disappointing thing can be to have to quit flying because you don't have some tiny part.

You probably won't need too many integral engine parts because unless you're competing you'll do your engine repairs at home. However, spare needle valves and prop nuts and head and backplate bolts can save you grief if you have only minor problems at the field. Oh, and don't forget your fuel bulb!

## SOME TIPS FOR GETTING READY TO GO FLYING -- AND COMING HOME

The more time you spend preparing before you leave home, the more time you can spend flying when you get to the field. I personally hate to have to do last minute things at the field. One friend of mine after three years of flying still seems to always be building his plane at the field. I'd go nuts!

Advance preparation is essential in competition but a good idea for beginners, too. Good habits make good modelers. Here is a good routine to go through:

Spend some time the day or evening before you go flying getting ready. Come on, now, you know a day before you're going! Unpack that tool box that's been getting jumbled with use. Go over your list of things (actually writing a list is a good idea) and make sure you've got it all. Gather up the tools that are laying around the workshop and make note of any you're missing. Plan to replace them, not to mooch at the field! Clean out the box and get the tools and spare parts in it, neatly organized so you can find everything.

Check out the things you will need to use. Got your fuel? Lines? (Are those lines good, or did you kink them last time?) Handle (not worn out, is it?) Battery charged, or still good if it's not rechargeable? Battery clip broken? Check all that stuff.

Airplane: Check the wheels, skids, hinges, bellcrank bolt if it's external, leadouts, and anything else that might be coming loose or wearing out. Twist the wing and fuse a little to make sure your last hard landing didn't break something. Check your engine mounting bolts, head tightness, etc. Inspect fuel tubing for frays or leaks. Spray bar tight? Inspect your push rod, rod guide, elevator horn and fastener.

You know the obvious stuff to do when you get to the field. Lay out your lines, fill the fuel bulb, etc. Don't forget the more subtle -- and more important aspect. Check the engine mounting bolts, and the prop tightness. A prop tightened the night before will loosen up if the temperature goes up and down!

Now you're done and had a successful day of flying. Roll those lines up carefully and put everything away. Wipe off your plane with a rag (forgot to mention that earlier -- always have a rag!), and this means all of it, and get it as clean as you can. Clean it again when you get home, with window glass cleaner if it's plastic covered. Besides making the plane easy to handle, look nice and not harmful to car upholstery, this cleanup will help you discover breaks and worn items. Do the cleanup even if you crashed. You can't repair a slimy, greasy fish of a plane.

Those simple guidelines should help your flying go more smoothly and reduce your frustration level to a point where you can concentrate on flying, not other things.

## RANDOM THOUGHTS

\*\*\*I have seen more young beginners give up on a flying session because their "engine won't work" than I can believe. Here is a rule of thumb: If you have a Cox  $\frac{1}{2}$ A engine that does not have an obvious fatal problem such as a broken shaft or a bent cylinder, assume it is you, not the engine, that's

wrong! Cox #A engines are the most reliable motors alive. If it won't run, chances are 95 percent you've got the needle valve set wrong, probably too lean. There's another 4 percent chance the head is loose, or there's dirt in the reed. There's a one percent chance something's really wrong with the engine. How to solve your problem: If the engine starts and goes krrriipp! and quits, it's too lean. If it sputters and blows out a lot of smoke and blubbers to a stop, it's too rich. It's also too lean if it starts out strong and then sort of slowly peters out without sputtering. My guess is to try opening the needle if it seems balky, all the way out if necessary, then start working it slowly the other way. Eventually you'll get it running. Remember, you want the engine to be two-cycling but not killing itself. Get it set blubbery rich and just carefully sneak up to a two-cycle. If you're working with a big engine line a Fox .35, you want it to break back and forth between a four and two-cycle on the ground. Sometimes a reed valve engine will not suck fuel the first time it's used cold. Plug one tank vent and force fuel in the other. That'll clear it out. If there's an expert around, ask for help, if you can't start it yourself.

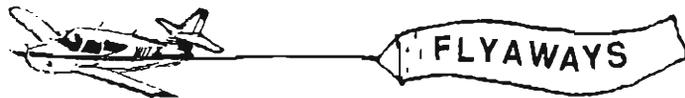
\*\*\*Avoid the temptation to make your first planes works of art. Make them functional, even ugly. You'll never learn to fly a beautiful airplane, you'll be too afraid of crashing. Learn to fly first, then make them pretty.

\*\*\*DO NOT FLY NEAR OR UNDER POWER LINES! Sparks can jump from those wires to your lines and kill you. Look around the field before you start to fly and make sure you're safe!

\*\*\*Beginners tend to wander around when they're flying, particularly if they're still prone to dizzy spells. Put down a bright marker rag or some other reference point and practice staying with it, even if you're dizzy.

\*\*\*Don't be afraid to ask your local experts for help. But make sure your questions indicate you've done a little thinking about it on your own.

--John Thompson, 1411 Bryant Ave, Cottage Grove, OR 97424.



#### RANDOM TIPS AND RIBS FROM THE FL WORKSHOP FLOOR

====We have received word from the organizers of the First Annual Northwest Model Exposition that control-line will be a part of the big model show Feb. 6 and 7 at the Western Washington Fairgrounds at Puyallup, Wash. There will be trophies for control-line display airplanes as well as for RC and free-flight categories, says Bob Pfeiffer of Firgrove Model Supply. A flying demonstration also is scheduled. There will be door prizes, a drawing, banquet, etc. See the flyer in this issue for details. There is a Jan. 15 deadline for registration for recreational vehicle parking. Write the Mt. Rainier RC Society, 10611 136th St. E, Puyallup, Wash., 98373.

====Mild-mannered Max Thue has picked up the whip to lead the Seattle Skyraiders in 1982. Other officers in the Northwest's most energetic club are Bob Danielson, vice president; Yvonne Thue, secretary-treasurer. Skyraiders, don't forget your Jan. 9 meeting at the Thues'.

====A tip from the Skyraiders' newsletter, edited by "Skywriter" Dave Mullens: "Winter is coming. Have any opened jugs of fuel setting around? The nitro in the fuel attracts water vapor something fierce. Keep the lid on tight. A couple of wraps of tape won't hurt. Keep the fuel off the cold cement floors (not in the house, either, Dummy). Might save yourself some frustration with diluted fuel in the springtime."

====Some stunt product tips: Ed Robbert Custom Fuel Tanks, 1616 Meadowthorpe Ave., Lexington, KY 40505. Randy Hancock Tanks, Rt. 1 Spring Station Road, Midway, KY 40347. Stripped threads repair on OS Max engines, Ed Robbert. Control horns, flaps, bellcranks, very trick equipment, wynn Paul, 1640 Maywick Drive, Lexington, KY 40504. Dykes ring installation, sleeve chroming, other engine work, Vic Garner, 283 South Livermore Ave., Livermore, CA 94550. Tell 'em all Flying Lines sent you.

====Twinn-K Enterprises, maker of GloBee products, has come out with a new glowplug wrench of the screwdriver handle type. Very nice, with a short shank. FL has suggested they make a long-shank version for combat fliers, to make it easier to get at those recessed engines -- and we have a letter from Twinn-K they'll look into it. Their present product is called a "Bee Twister."

====This won't come as a surprise to newspaper readers. The family of a New Hampshire man has filed a \$10 million damage suit against an RC club, a flier, and the New York Jets football team as a result of the man's death Dec. 9, 1979. The man was hit by an RC plane that crashed into the crowd during a demonstration at a football game. This could happen in CL, too, if we get sloppy. In the words of CL supporter Paul Agerter of Eugene Toy & Hobby, "Just a good reminder what could happen. Might be good to think of extra insurance whenever spectators are going to be present at our meets." Extra caution, too.

## FLYAWAYS, continued

====The Spokane Scale Internats will be June 11, 12, 13, 1982, at Deer Park High School (static) and Deer Park Airport (flying). Events listed are stand-off, team and giant scale, along with AMA scale if enough entries. Once again, we're unsure about whether there will be control-line, since the flyer doesn't say. If you know, fill us in. For information, write Bruce Nelson, E 807 Vicksburg, Spokane, WA 99208.

====More product news. From Sterling, we have a set of their new thrust wedges. These little pylong thingies are designed to provide engine thrust realignments in 1°, 2° or 3° amounts. Perfect to take the place of those front lug washers and even out the stress on crankcases. Try them on your next Ringmonster. Sterling Models, Inc., 3620 G St., Philadelphia, PA 19134.

====Help! We've lost a FL reader. Philip Ambrose, combat flier, last seen living in Wentville, Mo., apparently left no forwarding address when he moved. If anybody knows where to find him, let us know.

====We have word from Homer Smith, District XI vice-president, that the Academy of Model Aeronautics has selected Lincoln, Neb., as the site of the 1982 National Championships. We were there in 1979. It's a lovely town and a very nice flying site. Homer also offers to help out with formation of a Northwest Contest Directors' Association, which recently got under way.

====Also from Homer Smith: At least a couple of Northwest clubs have contacted him, suggesting that an active control-line flier be put on the Control-line Contest Board to represent the Northwest. The current representative is Dan Rutherford, Model Builder's CL columnist, who has not been active in competition in the past two or three years, but maintains an interest in the competitive affairs. Homer asked FL to take an informal survey of CL fliers on this point. Please drop us a post card and say whether you want a change or are satisfied. We'll compile the information and send it on. If there is a sufficient showing of interest, Homer says, he will hold an election to select a new member.

## PROFILES / PROFILES / PROFILES / PROFILES / PROFILES / PROFILES / PROFILES DAVID BABULSKI -- MODELER, HAM, ROCKETRY BUFF, ELECTRONICS WHIZ.

The first person to respond to the Flying Lines request for biographical data was David Babulski, 37, of 2110 Quarry Ave. S., Lakeland, Minn., 55043.

David, a member of the Minneapolis Piston Poppers, is a senior educational program developer for the 3M Technical Training Center and has spent six years flying model airplanes. He and his wife Karen have three children, including daughter Tami, an active control-line flier.

Babulski enjoys sport, stunt and scale modeling. He began at age 12 with Comet stick & tissue models, and from there moved to plastic models and amateur rocketry at age 15. He dropped out until age 24 when he got involved in rocketry again. He competed in rocketry, and then discovered control-line at age 31. Though he does some competition, he's mostly a sport flier.

He is currently active in free-flight model rocket boost gliders, and in fact markets a kit for one called the Salamander-5 under the business name of Nova Research Associates, P.O. Box 305, Lakeland, Minn. 55043. He also is very active in control-line as a member of the Piston Poppers, and currently is building a Nobler. Next project is a Top Flite P-47. He now flies a Top Flite Tutor and scale planes.

In real life, he works as a technical writer and technical instructor in electronics, electro-mechanics, for the 3M company in St. Paul. He also is an amateur radio operator (WBOUKK-Gen. Class), is a gardener, a water-color painter, and operates the rocketry business. He hopes to expand his hobby firm from its present rocket launcher and glider kits into control-line kitting within the next two years.

His comment: "I enjoy Flying Lines very much. Efforts like yours are necessary if CL is to continue to grow. I am advisor for a 3M-sponsored Explorer post in model aviation. 70% of the youngsters had never heard of CL, but RC they knew about. Needless to say, that situation has been corrected.

David Babulski is further proof that modelers are interesting people! Flying Lines urges all readers to send us their biographies. A form for the purpose was in issue No. 30. Share yourself!

## THE FLYING FLEA MARKET

SCALES -- For sale, precision restaurant-type scales with large easy-to-read faces. Prices: 2-lb. scale, \$32.50. 5-lb. scale, \$33.50. Price includes parcel post shipping, add \$1.75 for first class. Mike Hazel, 1040 Windemere Dr. N.W., Salem, Ore. 97304.

FOR SALE -- Almost new 40-channel C.B. radio, almost never used, for \$50, including antenna. Must sell!! John Thompson, c/o FL.

# WHERE THE ACTION IS

UPCOMING ORGANIZED EVENTS

Listed below are the coming events in the Northwest for control-line model aviation. If you know of any not listed here, please remind the organizers to get us the information so the rest of the world can get the word. Don't wait until the last minute -- give us as many months lead time as possible.

FL will list any Northwest modeling event -- including contests, shows, or fun-fly events. Flyers will be stapled into the newsletter if an adequate supply is provided. All contests are AMA sanctioned unless otherwise noted.

Here's what's happening:

- Jan. 10.....KENT, Wash. -- Northwest Sport Race Drizzle Circuit Contest No. 2. Sorta Scale, 9 a.m. Northwest Sport Race at 11 a.m. sharp, Northwest Super Sport Race to follow. Racing points accumulate for circuit trophies. Site: Boeing Developmental Center. Contest Director: Dave Mullens, 15559 Palatine Ave. N., Seattle, WA 98133 (206) 365-5436.
- Feb. 14.....ASTORIA, Ore. -- Northwest Sport Race Drizzle Circuit Contest 3. Rat race, 9 a.m., NWSR at 11, NWSS follows. Site: Port of Astoria. Contest Director, Dave Green, 200 w. Franklin Ave., Astoria, Ore., 97103. (503) 325-7005.
- Feb. 28.....EUGENE, Ore. -- Flying Lines Third Annual 1/2A Fun Day. 1/2A speed, 1/2A proto speed, 1/2A stunt, 1/2A combat, 1/2A Mouse Race Classes I&II. (Tentative -- More details to come). Site: Mahlon Sweet Airport.
- March 14.....YAKIMA, Wash. -- Northwest Sport Race Drizzle Circuit Contest 4. Precision aerobatics and Class I Mouse race, 9 a.m. NWSR at 11, NWSS to follow. Site: Valley Mall. Fee: \$5 for any and all events. Contest Director: John Thompson, 1411 Bryant Ave., Cottage Grove, OR, 97424 (503) 942-7324. Merchandise prizes.
- March 21.....MERCED, Calif. -- Racing and speed contest sponsored by Frank Hunt. More details to come. Contact Frank Hunt III, 551 Brookdale Dr., Merced, CA.
- April 11.....EUGENE, Ore. -- Northwest Sport Race Drizzle Circuit Contest 5. 1/2A combat at 8:30 a.m., NWSR at 11, NWSS to follow. Final circuit trophies to be presented. Merchandise prizes. Site: Mahlon Sweet Airport. Fee: \$3 for one event, \$2 each additional. Contest Director: John Thompson, 1411 Bryant Ave., Cottage Grove, Ore., 97424 (503) 942-7324.
- May 29-30.....EUGENE, Ore. -- Northwest Regional Control-line Championships. The biggest model airplane contest in the Pacific Northwest, with the full range of control-line events and classes, and competitors from all over the West. More details to come. Don't miss it! Contest Director: Mike Hazel, 1040 Windemere Dr. N.W., Salem, Ore. 97304.

## HOBBY SHOP DIRECTORY

### WASHINGTON

- HOBBY HOUSE -- Control-line, free-flight and RC supplies, 10011 Holman Road N.W., Seattle, Wash., 98177 (206) 782-1809.
- THE HOBBY PLACE -- Control-line and RC supplies, specializing in parts. 1415 N.E. 80th, Seattle, WA 98115. (206) 525-6757. Owned by Dodie Long. "If we don't have it, we'll get it."
- FIRGROVE MODEL SUPPLY -- Radio-control, control-line and gliders. 10611 136th St. East, Puyallup, Wash. 98373. (206) 845-7675. Owned by R.B. (Bob) Pfeiffer.

### CALIFORNIA

- HERB'S SPEED AND RACING PRODUCTS -- Speed pans, epoxy glass speed tops, and other supplies. Send SASE for info. 1621 M St., Merced, CA 95340. (209) 722-7836. Owned by Frank Hunt.

SUPPORT FLYING LINES ADVERTISERS  
THEY SUPPORT CONTROL LINE FLYING

LAST CHANCE FOR RAFFLE!

STILETTO DRAWING JAN. 25!

FL RAFFLE RETURNS -- STILETTO KIT IS PRIZE

The Flying Lines raffle returns thanks to the generosity of Don McClave, Portland stunt flier extraordinaire, who has donated a very fine prize.

The prize is a Stiletto kit manufactured by Dick Mathis Design Group. Now out of production, this kit was one of the finest stunt kits ever made, and it was a very expensive item. Stiletto is the airplane designed by Les McDonald and used by McDonald to win two world championships.

To sign up for the raffle, these are the ticket prices: 1 ticket for 50 cents, 3 tickets for \$1, and 7 tickets for \$2. Fill out the form below and send it to FL. All proceeds support the newsletter.

Name \_\_\_\_\_ Address \_\_\_\_\_

Telephone \_\_\_\_\_ Number tickets \_\_\_\_\_ Amount enclosed \_\_\_\_\_

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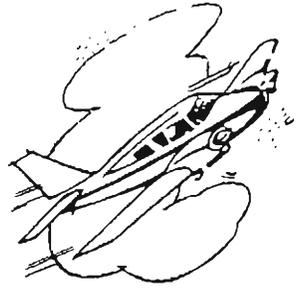
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## AIR MAIL

COMMENTS.....NEWS.....VIEWS  
FROM THE FLYING LINES READER



DEAR FL:

Congratulations on the Regionals, sounds as if it was super. Very nearly made it down but a camping trip came along, the van developed a funny kind of howl in the rear end and so on...

On the Cheap Imitation, actually you could have called it the DGI for Damn Good Imitation. I thought I would tell you where you missed just very slightly. Which is actually cheating, as I am going by the final version of the Dirty Beaver, not the published one. Can't remember which model Buzz Wilson used to do the plans from.

Anyway, the best DB8s have a  $27\frac{1}{2}$ " span,  $6\frac{3}{4}$  chord. The trailing edges were built up but I can understand changing that part. I put the motor  $1/8$ " closer to the leading edge but they are a little squirrely...pulling a streamer generally tames them down, though. Someplace along the line I started making the motor mounts from  $3/8$ " ply and I'm sure that I have always cut the motor mount so that it is built into the center rib, extending just past the spars, notched for the spars and drilled for the leading edge. And I used a leadout position that is just a touch farther back. But other than nit-picking things, you really did come very close to a DB and Charlie was cheatin' a little bit 'cause he had one of my models for what seemed like a year...judging by the condition of the motor when I (finally) got everything back, it had been flown a lot! Anyway, if he told you guys that he had never flown any  $\frac{1}{2}$ " combat, now you know the truth...

Oh, yeah, I always used really soft  $\frac{1}{2}$ " square balsa for spars, just seems easier to cut the notches than when working with  $1/8$ " stock.

Always liked to use a super-adjustable control horn of some kind as the usual horns with the holes a part give too coarse an adjustment. Look for RC-type aileron fittings; there are some molded nylon bits that are real handy.

In fact, I often used a hinge pin-control horn arrangement where soft (and threaded on one end) wire was bent on one side to act as the hinge pin, passed through a bush in the boom and extended along the leading edge of the stab for  $\frac{1}{2}$ " before getting bent up vertically. This vertical piece was the threaded end, of course, and one of those previously mentioned nylon widgets was just screwed on and hooked up to a Kwik-Link.

I was going to write sooner but I thought I might be at the Regionals and, in any case, wanted to see what happened with Goodyear at the '81 Regionals. So now seems an appropriate time to mention that maybe the racing fliers ought to be considering a limited class of Goodyear. I am personally in favor of just adopting the Albuturkeys' GY rules, as they seem sensible and would mesh nicely with the racing philosophy now so well proven with sport and super sport race. Or we could go a step further and limit the engines to the Fox .15 snarly p.b., which in effect is the Albuturkey rules. I had the rules in the Model Builder CL column a couple of months back. I don't think that many potential limited GY fliers have good p.b. .15s around. Surely all the old OSs are worn out by now and the Cox .15 won't now and never would restart anyway.

Don't forget that for some reason GY in the old days was a terrifically popular event, the "old days" meaning pre-Rossi days, and it wasn't that long ago. But remember the Regionals where we had 35 plus entries in GY?! And this could very easily be done again as in limited GY everybody would be going just about the same speed, with Fox .15s, p.b. version, as we did back then with Supertigres. Hmm. Actually the rotation would be slower, as the AMA standard lines, 60-footers, should probably be used. And we flew four-up!

Thinking back, there were a few instances where fliers got in over their heads and crashed. But then I was never involved in any racing where a model where a model got stuffed in so it couldn't have been too bad. Jeeezzzzz, that sentence got screwed up; meant to say that I was never involved in a GY heat or main where my model went in...did see a few crashes, though. Are you reading this, Newkirk?

The thing is that back then, GY was where you started in racing. The current crop of M.W. racers, brought up on sport race models, flying a mild GY on 60' lines ought to be able to cope very well and would probably jump at the chance to fly something that is a bit more like a racer, has a few extra gimmicks on it to fiddle with, is kinda scale looking, is inexpensive to operate, almost as inexpensive to build, and opens the door to more creative building than simply beefing up a kit model.

Give it some thought. My ever-faithful old Lil' Rebel hangs on the

AIR MAIL, continued

wall, waiting to once again show you guys the fast way 'round to the finish.

--Dan Rutherford, 4705 237th Place SE, Bothell, WA 98011

(Editor's Note: Let's have some response from you racers to the questions Dan's raised. Is Goodyear as we know it as dead as it seems? Could it be revived with a limited class? Would it duplicate or complement the new super sport class? Like Dan, our GY hangs on the wall, the engine dead of old age and enthusiasm to build another to compete alone waning.)

DEAR FL:

I'm going to take a few minutes of my very valuable time to thank you for your splendid newsletter. I subscribe to several of them and I'd much rather find FL in my mailbox than any of the others. I particularly enjoy Mr. Humphries' Carrier and scale stuff, the stunt (pardon me, aerobatics) trimming info, and the high-zoot (did I use the term correctly?) combat designs.

In fact, I built a couple of "Cheap Imitations" and they are terrific! They came off the building board with the CG in the right place and almost a full ounce lighter than some currently popular kit jobs that I had built earlier. They have also taken a lot more punishment and I don't have to tell you how well they fly!

All the major dimensions are the same; I only made a few minor changes. I put on a foam leading edge that is stuck to a full-depth 1/8" sheet spar, the elevator is laced to a small, stubby, triangular plywood stabilizer, and I retro-fitted gussets (plywood) on either side of the motor mount after I broke one when it hit kind of sideways.

I used the foam leading edge for a couple of reasons; I have a lot of money tied up in the transformer, I think it might reduce the number of wings I break because of the resilience of the foam and the strength of the spar, and the foam might snag a streamer leader that I might normally miss. Most of the foam is left exposed but I used Seal-Lamin in the area behind the prop to keep the exhaust residue from soaking in.

The elevator change is just a matter of whim. I don't like the standard music wire and tube construction because I have gotten Zap or polyurethane varnish in every one I've tried and I don't feel that they're as easy to fix right if they get damaged during a match.

The only other thing I did was to decorate them a little -- I'd rather not build a plain plane as long as I can keep the finishing time down to an hour or so. There's no danger of my producing a Grand Concours winner, but no one can say that my models aren't colorful either. I have used magic markers under polyurethane varnish on a couple of solid 1/2A racers with reasonable success but I was stymied by the large expanses of open framework on the combat designs. I tried coloring the ribs before I glued up the wing but it can't be seen in the air. Finally, I hit upon spraying the sticky side of the Seal-Lamin before ironing it on. It works just fine so long as you remember to keep the design upside down and tape the pattern to the middle of a sheet of newspaper to avoid overspray problems. I've tried several cans of spray paints such as Krylon, epoxy paint, and some kind of cheap enamel from the dime store with excellent results. If you get fancy with the design (like camouflage or all Fokker red with iron crosses) you'll have to mask off where it will be attached to the wood, but there ain't no limit as to what you can do relatively quick and it's all fuel proof!

Come to think of it, there is something I would like to see in a future FL: some information on the tricks of fast repair during a combat match. I'm sure with all the combat you guys fly out there you must have some tricks, tools and materials that are used to get back in the air quick. I have a little zip-lock bag in my field box that contains all my fixit stuff. I use the clear bag so that I can see the contents and don't have to grope (I love that word) around to find something in the bottom of the box when my hands are shaking.

The most important item is, of course, the cyanowhatsis glye. I use Zap because of the small size bottle (1/4 ounce) and the small hole (I don't use the teflon tube). I cover the top with a small square of Saran Wrap or Monokote backing before putting on the cap because I had a bad experience with the top of the bottle sticking to the cap of another brand of CA glue and spilling all over my hand when I tried to unscrew it.

Anyway, I also wrap a thin strip of Saran Wrap around the Zap bottle and secure it with a rubber band. This is used if I have to apply pressure over the glue such as squeezing one piece over another. I keep a pill bottle containing microballoons for filling small gaps with the CA glue. I use microballoons instead of baking soda because I can mix it with the CA glue or five-minute epoxy, which is also in the bag in two small tubes. I've had problems cleaning off fuel residue before I could repair covering damage or apply a splint over epoxy. Windex, Glass Plus, etc., that are used as plane cleaners seem to leave some kind of film that defeats the purpose. The only thing I've found that will do the trick is lacquer thinner, but it's not always successful and it does eat foam. Patches on the covering and some foam leading

AIR MAIL, continued

edge repairs are done with clear, vinyl, auto upholstery repair tape. This stuff is really neat, it sticks like crazy, is thick and tough, and comes in a useful width (2 inches).

The rest of the stuff in my bag is pretty standard; small pieces of scrap glass cloth that have been left over from a building session, copper wire that is wrapped around one of the epoxy tubes, dental floss for repairing the elevator hinges, round toothpicks that are used for small splints and mixing the epoxy, and the ever-useful popsicle sticks.

Some beat-up playing cards found their way into the bag recently and have proven to be just the thing for a mixing palette. Last weekend, flying 1/2A combat practice, someone else took a hit in the bladder area that could have been quickly fixed if we had had a spare bladder tube. Since this could occur in a contest, I'm going to start keeping the toothpicks in a nickel coin tube with the hole reamed out for the bladder tubing (some folks around here also use the tubes toothbrushes come in).

As you can tell from the above list, most of the stuff I carry is more useful for repairs at a more leisurely pace. What I'd find helpful is some tips on getting back in the air during a match.

Well, my lunch hour was up a while ago, so I'd better stop rambling on and get back to work. Thanks again for FL and keep 'em coming.

--Raymond Lefrancois, 465 Chinquapin Trail, Christiansburg, VA 24073.

DEAR FL:

Read Orin Humphries' column, where he recommends kit-built models, instead of plans built models for carrier Classes I and II.

However, I regret to say it, but the only kits now available are the Sterling Corsair for Class I and the Guardian for Class II.

Sturdi-Bilt is no longer producing their Corsair or Mauler, and haven't for some time. If you can find a Mauler kit complete, feel lucky, as it is a very good flier as Terry Miller has demonstrated. Of the two Sterling kits, the Guardian is better, as it was designed for carrier Class II. However, it can be converted to Class I by relocating the motor mounts. The corsair was designed as a CL scale, with carrier capabilities by modification (quite a bit (ask Orin). There are no kits on the market at all that are designed for profile.

The new F6F by Sterling is easily converted, as is their Mustang, and both are legal.

I am still acting as Navy Carrier Advisory Committee member from this district as the chairman of NCAC and also the Control Line Contest Board asked me to stay on until someone could be found. No volunteers, so I was re-appointed to the slot.

Anyway, the final vote of the CLCB is in, and those that want to start a new project during winter building time can go ahead with their dream ships. No drastic changes were made that would obsolete present equipment, nor would it cancel any records that now exist. The biggest change was that the new rules cycle will allow ball bearing 36s in profile. That means that you don't have to convert your K&B 5.8s to plain bearing.

As for myself, I am going to stick with my trusty ST .35.

Keep your hook dry.

--Bill Skelton, 45 SW 11th, Box 105, Warrenton, OR 97146.

DEAR FL:

...I am a helicopter pilot in the U.S. Army and in the middle of September I am going to be relocating to Fort Lewis, WA.

What I am writing about is the Drizzle Circuit contests that you hold up there in that part of the country. I have been reading about this circuit in Flying Models and I've become very interested.

I would appreciate if you could send me a copy of the rules of sport race, super sport race and any others unique to these events. Also I would like a list of contest dates and other events that will be coincidental to the contest.

I appreciate your help and would like to meet you at some time in the future.

--Pete Bergstrom, U.S.A., OMR#2 Box 3697, Ft. Rucker, AL, 36362.

(Editor's Note: Rules for NWSR and NWSS always available from FL. Send SASE, please.)

DEAR FL:

I've just finished processing the 5 sanctions (for 1981 Northwest Sport Race Drizzle Circuit Contests) and will mail them to AMA headquarters tomorrow. It's a pleasure doing business with you folks who do things on time, and correctly! I've been ukie flying a couple of times in the last month (first time in umpteen years), had lots of fun, and had the pleasure of meeting Dick Salter and some other locals.

Enclosed is my check for a subscription to Flying Lines.

--Tom Cope, CL contest coordinator for Dist. XI, 23262 SE 57th St., Issaquah, Wash., 98027.

DEAR FL:

FL is a great newsletter, and once I get settled again, I can start building/rebuilding for next season. Only two ships got off the ground -- a Bad News Mouse racer with stock Tee Dee, 5½x4 wood prop, various fuels used. The other was a 6-year-old Nobler that was rebuilt (the front end) with a McCoy .40, 10x6 wood, 10% fuel.

Plan on building two more mousers, using many ideas from FL. Keep up the great work!

--Mark Messerly, 126 Beedle Drive, #210, Ames, Iowa. 50010.

DEAR FL:

Enclosed please find the questionnaire from the last issue of Flying Lines. Also, would you mind giving our Canadian Nats a plug in your newsletter? A complaint I get from US fliers is that a majority don't know about it. So here goes:

1982 Canadian Nationals -- July 18-24, Edmonton, Alberta.

Sunday, July 18 -- Registration.

Monday, July 19 -- Combined speed, junior mouse race, open mouse race.

Tuesday, July 20 -- Open rat race, Jim Walker, junior balloon bust.

Wednesday, July 21 -- Goodyear "A" (modified engines), Goodyear "B" (unmodified engines), FAI combat.

Thursday, July 22 -- Slow combat, open balloon bust.

Friday, July 23 -- Fast combat, carrier I/II combined, profile carrier.

Saturday, July 24 -- Stunt, scale.

I think Orin Humphries has done an excellent job conveying to the readers what our Nats is like. We try to have events diverse enough for the novice and expert alike. For further information, contact me.

P.S.: Hope to have more of us out at next year's Northwest Regionals.

--Paul Gibeault, 15605 121 St., Edmonton, Alberta, Canada T5X-3BB

DEAR FL:

I'd like to be able to build a "Cheap Imitation" of Rich Porter's "Ridiculous." Reduced-size 3-views, measurements and moments, and a full-sized wing rib template would be great.

I like your descriptions of winning models in racing and combat events... engine, prop, etc. Keep that up. But maybe you could include more precise dimensions of the planes (measurements, airfoil, 3-views) maybe not all the time but for popular designs, consistent winners or new innovations. For instance the "Cro-Magnon Super Sport" and "Proctologist II" (combat). You must remember that us Virginia folks don't get to actually see your models so it's impossible to steal your good ideas unless you provide more data.

Whatever you decide to do about increased postal rates is fine by me. I'd gladly pay more -- third class is OK. Reduced number of issues makes sense, too. I know it's hard to keep cranking it out.

By the way, I just finished two more Cheap Imitations and have two more to build for reed valves. I love 'em.

--Raymond Lefrancois, 465 Chinquapin Trail, Christiansburg, VA 24073.

DEAR FL:

I just received recent information that will affect the carrier event. At the AMA meeting at the recent Nats in Texas, some concern was expressed about the Perfect line connectors. The feeling is that they are not strong enough and some contest directors had banned them without prior warning at meets.

The final decision was to ban the use of these connectors in all carrier classes at any future meet.

The accepted connectors will be the Sullivan or Pylon Brand connectors, or the equivalent type that can be purchased in various sizes, etc., at your local sporting goods store in the fishing department. This will give a greater variety of sizes, over the hobby shops' packs, and more for the money.

As this is a safety matter it takes affect immediately.

--Bill Skelton, P.O. Box 105, Warrenton, Ore 97146.

DEAR FL:

I wanted to thank the Seattle Skyraiders for a fine meet that they put on. I particularly appreciated the inclusion of the speed events, and look forward to increased participation next year.

--Mike Hazel, 1040 Windemere Dr. N.W., Salem, OR 97304.

AIR MAIL, continued

DEAR FL (Attn. Combat Dept.):

I thought you might get a kick out of the enclosed article by Richard Bach (author of Jonathan Livingston Seagul and others).

It sounds like fun -- the risk a bit high, maybe!

Richard Bach is alive and well, living in Oregon last I heard. Best he get in model aviation -- no problems with the FAA, it's safer, costs less and is more fun. (I've been involved with both).

I enjoy FL. Keep up the good work.

--Dennis Patera, 1823 East End Ct. NW, Olympia, WA 98502.

(Editor's Note: Dennis sent us an article from April, 1970 Air Progress about full-scale combat, just like our model combat. They used real airplanes, towing long crepe paper streamers at the end of 200-foot strings. "Model airplane builders have been doing this for years," writes Bach, "but the sport is a bit more zesty when you are up there in the sky yourself, blurring the world around your head.")

DEAR FL:

For Bob Kampmann and all others being mercilessly harrassed about racing one's shadow.

Dear Bob:

Take a plane on a bright sunny day, grab the guy giving you a hard time about racing your shadow by the scruff of the neck and head for the flying field.

Put your plane in the air, instruct the kibitzer to watch the shadow (best if the sun is not directly overhead -- then it's a dead heat and uninteresting).

The kibitzer will see the shadow first overtake and then fall behind the real model and if the flyer wants to and the sun angle is correct he can make the shadow cut across the circle, go way outside it, and by proper whipping technique, make it appear on landing that the real model won by landing so that the sun is shining on the plane's tail first. It's actually a dead heat.

When the race is over, the flyer goes casually over to the kibitzer's location and, equally casually, strikes up a conversation with his shadow, accusing his shadow of cheating by not staying within the confines of the circle...waits an appropriate time for the replay and declares himself the winner by default.

--The Shadow Knows.

(Editor: We don't know who the shadow is, but we do know he lives in San Diego, Calif. (postmark) and has a handwriting like Larry Miles.)

### IN CASE THERE'S SOMETHING MISSING IN YOUR LIFE...

Flying Lines publisher Mike Hazel was doing some housecleaning the other day and determined that back issues of a number of Flying Lines issues from the past are available in limited numbers.

If you are a new subscriber and would like to know what you missed, or if your library of FL lacks one back copy, contact us and we'll fix you up. Send 75 cents per copy to FL at the address on the masthead.

We also have a large number of extra copies of the speed dolly drawing from issue No. 28, by Chris Sackett. Send 35 cents for each of those.

Here are the issues available: 5, 7, 8, 9, 10, 12, 14, 17, 19, 22, 23, 26.

## FLYING LINES

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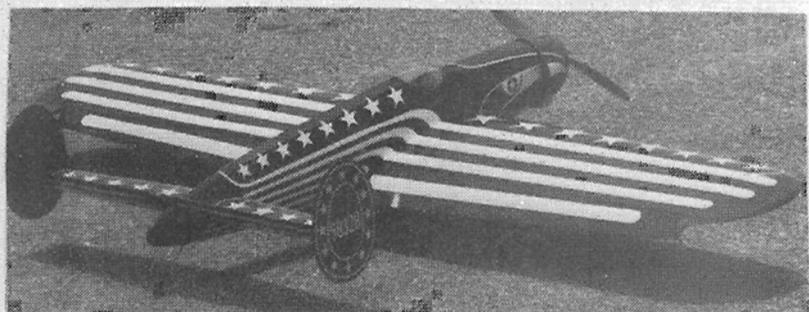
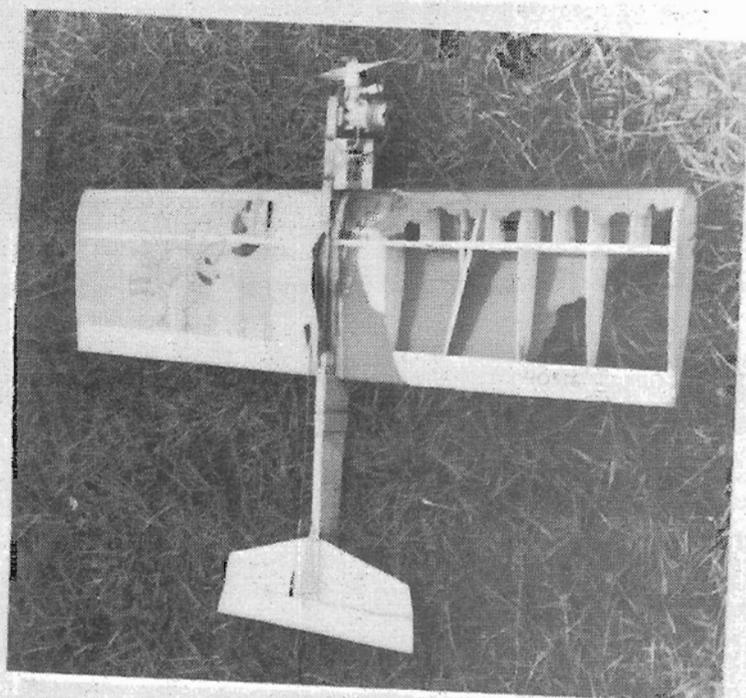
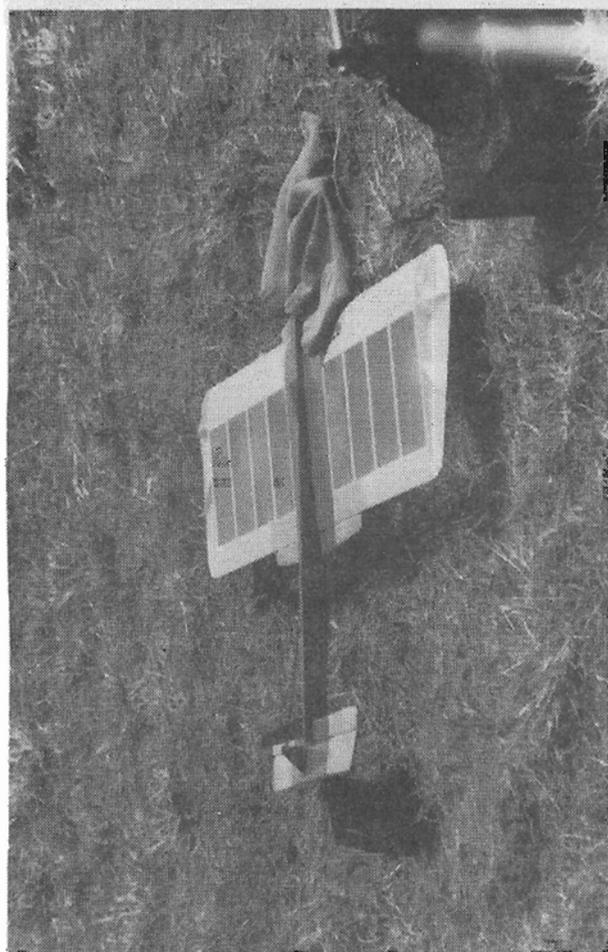
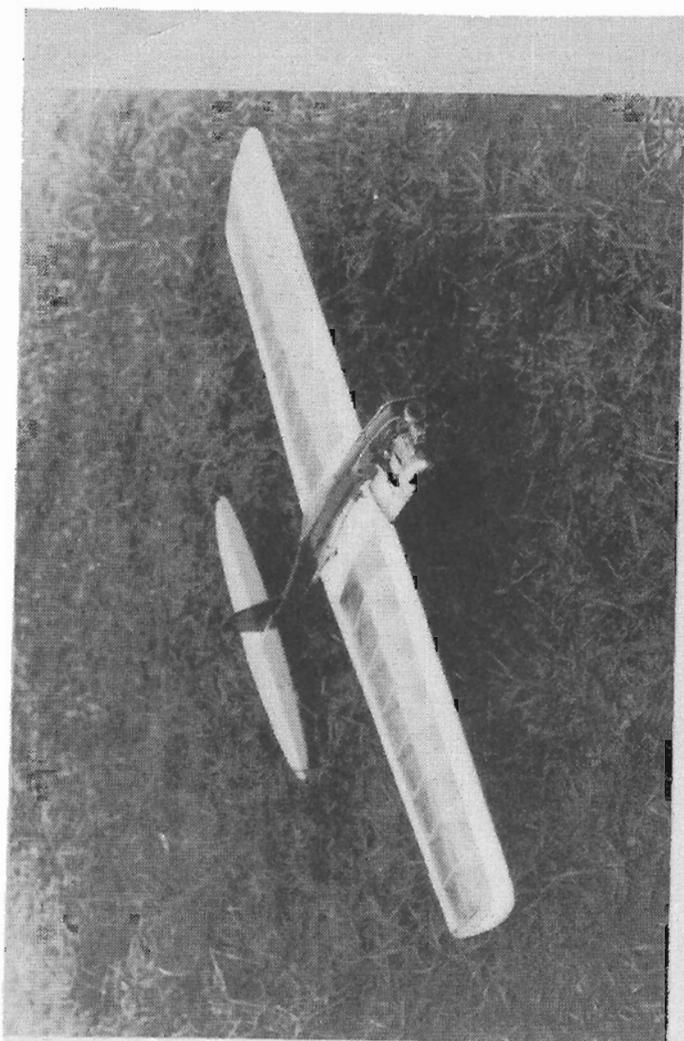
Flying Lines is produced monthly by a dedicated staff of volunteers interested in keeping lines of communication open between Northwest modelers. FL is totally independent of any organization, depending entirely on subscriptions, advertisements and donations for financial support.

FL is your link with the rest of the Northwest's control-line modelers. Help keep it alive by spreading the word. Wear your FL T-shirt and tell your buddies what it stands for. T-shirts available at \$8 -- name your size and color.

Price for subscriptions is \$5 for six issues and \$9.50 for 12 issues. Canada and Mexico: \$5.50 for six issues, \$10 for 12 issues. Overseas, \$10 for 6 issues and \$18 for 12 issues. U.S. funds, please.

Here is the FL staff:

Publisher.....	Mike Hazel	Aerobatics....	Rich Schaper	Speed....	Mike Hazel
Editor.....	John Thompson		Paul Walker	Scale....	Orin Humphries
Photo Editor..	Chris Genna	Combat.....	Gene Pape	Sport....	Larry Miles
Carrier.....	Orin Humphries	Racing.....	Mike Hazel	Beginners..	John Thompson



#### THE NATS AND THE NUTS

That describes the photos this month. As a reminder of sunnier days, two pics from the 1981 Texas Nats. At left, slow combat plane by the Denny Clan of Wichita, Kans., excellent flier. At right, something different in a stunter, red-white-blue creation of Guner Dombrowski of Salem, N.J. Top photos are the nuts who attended the Turkey Tournament in November during Eugene's rainstorm. Gene Pape holds wheeled version of "Devastator," the winning plane. Ken Burgar's Ringmaster won appearance judging but the Fox Combat Special spit its crankshaft. John Thompson's Mongoose, with charred canopy and open wings, after fire during racing. It lived to fly again! Thompson photos.