

Flying Lines

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It looks like a big year for Northwest CL

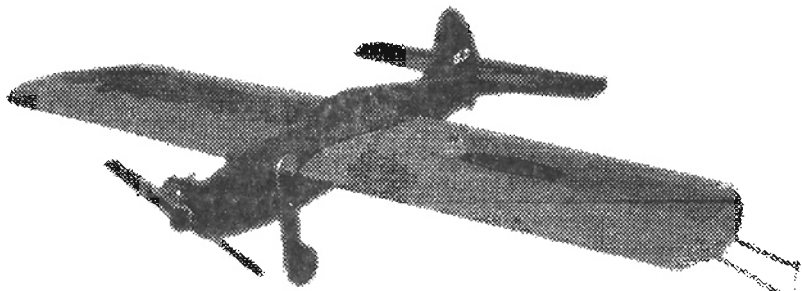
The bellwether of the potential for well-attended and exciting competition is always the number of inquiries received by Northwest Regionals management about the annual three-day blowout in Roseburg.

If the mail, e-mail and phone calls received so far this year are the usual indication, the 2001 Regionals will be the biggest ever in terms of attendance. Requests for rules and flyers have been coming from far and wide.

We've also received considerable indications of budding CL competitors in a number of categories being mentored by the experts in their areas. We hear of new combat fliers in the Puget Sound area, a big batch of junior racers being groomed in Oregon, stunt novices burning up the skies in several places. Over the coming year, we expect to see that reflected in contest entries, as well as stunt flying. See Dave Shrum's article in this issue about some ways of bringing CL fliers along in your local area.

As we look over the contest schedule, it looks like one of the busiest years for CL activity in the region. Lots of us will be putting plenty of miles in this year getting to contests far and wide — but it's also nice that we have plenty of activity in our local areas, so it's not always a big trip to the contest.

With the advent of the contest season, it's time for the annual *Flying Lines* rules issue. Contained in this edition is a complete set of all the current rules for Northwest control-line events. These are the rules which are created for events that originated in this region. They are supplemental to the AMA rulebook events. It should be



Racing planes don't have to be ugly. The Nitroholics Racing Team's Northwest Sport Racer is a Brodak Super Clown. FL photo

noted that the AMA rulebook applies to any matters not covered in the Northwest rules. If you don't have your AMA rulebook, you can get one from AMA headquarters. You can contact AMA through its Web site, www.modelaircraft.org, or at the mailing address and telephone number on your AMA card.

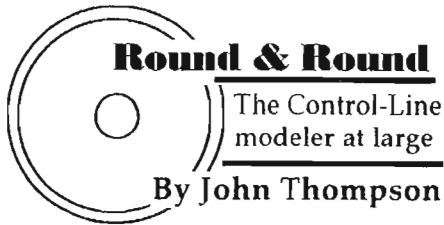
Questions about the Northwest rules can be addressed to the rules coordinator in care of *Flying Lines*.

The rules are developed through a proposal-and-ballot process, and used to standardize competition for fairness on the field, as well as in calculation of Northwest standings and records.

The first step in competition is knowing the rules. Here they are!

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Modeling thought for the month:

"Every great idea has a disadvantage equal to or exceeding the greatness of the idea."

— Hunt's Law

Well, it was worth a try ...

Some of the more interesting discoveries related to our model building hobby turn up in places where we're not looking for them.

I've mentioned in this space before that interesting model-related items can be found in odd stores where airplane builders tend not to hang out. An example is the fabric store, where all manner of peculiar pins and fasteners await discovery. Remember that the next time the Significant Other is browsing in a favorite shop. Wander down a different aisle and be alert for a serendipitous modeling discovery.

A chance encounter in an artists's supply store caused a major project in my model workshop to be shelved while I built a whole different airplane just to try this "new" product. The experiment is complete and the major project (a Classic stunter) is back off the shelf and on the workbench.

What I found in the art store was a potential covering material that I thought could, if successful, produce an unusual finish for an aerobatics plane. Rather than risk the whole big plane on an untried technique, I snatched a Baby Flite Streak off the Eugene Toy & Hobby shelf and built it as a test for the new material.

Conclusion: As a covering for a major stunt plane, the material is of doubtful utility. However, as a possible decoration on such a plane, or for covering a smaller or sport-type plane, it might be fun to use.

So, for what it's worth, here's what caused the latest "sidetrack" project in the *FL* workshop:

Artist's supply stores sell an art paper, much of it of Asian origin, which looks quite a bit like our silkspan, but has various decorations woven into it. The particular material I experimented with was from Thailand. It's gray with multicolored filaments scattered into it — red, blue, yel-

low, white, etc.

It's porous enough that it can be doped onto a silkspan or polyspan finish as a decoration, and it can be put on wet or dry, just like silkspan. I even was pretty successful in covering the entire small airplane, using techniques much like silkspan. It's relatively cheap and comes in a wide and wild variety of colors and patterns. It's evidently hand-made and as such the patterns do not repeat.

If you get the crazy idea to try some of this yourself, here are a few things to know about the artists' paper, based on my limited trial.

It's important to note that, because there is a wide variety of styles and weight of this paper, they may not all have the same handling characteristics. Be careful to experiment on something that doesn't matter before doing the real job.

You can put this material on wet, just as you do silkspan, but beware: It does not have the same generous working time as silkspan. You need to cut the paper correctly, position it just right very quickly, and get to applying the dope. You will not be able to pull and tug at the edges to eliminate wrinkles for more than a minute or so, because it will start to pull a part pretty quickly.

Partly because of the above, this material is not as easy to work around wingtips as silkspan. Best not count on being able to cover a complex curve.

The material will shrink dry tight just like silkspan, and can be trimmed with a sanding block like silkspan. Edges can get stiff and want to raise up if the material is put on dry, so in most cases, wet application probably is best. A little overlap is wise; too much will show.

If this tickles your modeling decoration fancy, have fun playing with it. And, if you find any other clever tricks or techniques in an unusual setting, be sure to send it to *FL* for Shop Tips.

Get well soon:

Belated best wishes to Northwest combat flier Max Boyd, who was badly hurt during the winter in a motorcycle accident in California. Max is in the midst of a lengthy recuperation.

We also read in *Torque Roll* that racing mainstay Mike MacCarthy is undergoing some cancer treatment. Get well soon, Mike. We're expecting you on the circle when your heats are called on Regionals weekend!

Send comments, questions and topics for discussion to John Thompson, 2456 Quince St., Eugene, OR 97404. E-mail JohnT4051@aol.com. World Wide Web: <http://members.aol.com/JohnT4051/NorthwestCL.html>.

Where the action is!

Coming events in Northwest Control-Line model aviation

April 7

Nostalgia Diesel Combat, Surrey Ultralite Field, 988 176th St., Surrey, B.C. First driveway 250 yards north of 8th Avenue on the east side; look for the red hangars. Info: Mel Lyne at mlyne@alpha.sea-to-sky.net.

April 7-8

Spring Racing Tune-Up and beginners' racing seminar, Bill Riegel Field, Salem, Ore. Saturday: How-to seminar conducted for novice racers, and beginners' racing events. Sunday: Open competition in Class I and II Mouse Race, Northwest Sport Race, Northwest Super Sport Race, Flying Clown Race. Info: CD Mike Hazel, (503) 364-8593, e-mail ZZCLSpeed@aol.com.

April 21-22

Jim Walker Memorial CL Contest, Delta Park, Portland, Ore. Saturday: Class I/II, .15 and Profile Carrier, Old-Time and Classic Stunt. Sunday: 80mph Combat, Precision Aerobatics. Info: Gary Harris, (503) 324-3450, e-mail SlowCombat@aol.com.

May 6

Carrier and Old-Time Stunt, Richmond, B.C. Contact Mel Lyne at mlyne@alpha.sea-to-sky.net. Carrier info: Mike Conner at (604) 465-7277, e-mail conrat@intergate.bc.ca. Stunt info: Chris Cox, (604) 596-7635, e-mail ccox1@telus.net.

May 12

Nostalgia Diesel Combat, Surrey Ultralite Field, 988 176th St., Surrey, B.C. First driveway 250 yards north of 8th Avenue on the east side; look for the red hangars. Info: Mel Lyne at mlyne@alpha.sea-to-sky.net.

May 25-27

30th Annual Northwest Control-Line Regionals, Roseburg Regional Airport and Douglas County Fairgrounds, Roseburg, Ore. All AMA and Northwest CL events. 30th anniversary banquet. Info: Craig Bartlett, (541) 745-2025, e-mail scraigbart@yahoo.com.

June 9-10?

Stunt-a-thon for Old-Time Stunt, Classic Stunt and Precision Aerobatics, in the Seattle area. Details TBA. Info: DGardner55@aol.com

June 23-24

Bladder Grabber triple-elimination fast combat tournament, Harvey Field, Snohomish, Wash. Info: Jeff Rein, 14326 102nd Ave. N.E., Bothell, WA 98011.

June 24

Racing contest for .15 Sport, Northwest Sport and Clown Race, Richmond, B.C. Info: Mike Conner at (604) 465-7277, e-mail conrat@intergate.bc.ca.

July 7

Nostalgia Diesel Combat, Surrey Ultralite Field, 988 176th St., Surrey, B.C. First driveway 250 yards north of 8th Avenue on the east side; look for the red hangars. Info: Mel Lyne at mlyne@alpha.sea-to-sky.net.

Lucky Hand Fun Fly, Bill Riegel Field, Salem, Ore. Bring any kind of plane. Fly any kind of flying you want. Make five flights, get a poker hand, maybe win a prize! Info: CD Mike Hazel, (503) 364-8593, e-mail ZZCLSpeed@aol.com.

July 21-22

Central Oregon Lawn Darts Stunt Contest Field of Dreams, Redmond, Ore. Info: Nils Norling, (541) 546-9132, e-mail hogrider@palmmain.com.

July 28-29

PAC Classic, Richmond, B.C. Saturday: Northwest Sport Race, Clown Race and Carrier. Sunday: Old-Time Stunt, Precision Aerobatics.

August 11-12

Can-Am Speed Championship, Upper Coquiltam River Park, B.C. Info: Marty Higgs, (604) 729-5286.

August 12

Skyriders Carrier Meet, somewhere in Seattle area. Info: Mike Potter at Skyspark58@cs.com.

August 25-26

Fifth Annual WOLF Summer Meet, Bill Riegel Field, Salem, Ore. Racing, combat and precision aerobatics events to be announced. Info: CD Mike Hazel, (503) 364-8593, e-mail ZZCLSpeed@aol.com.

September 1

Bruce & Gerry's 2nd Annual 1/2A Stunt Contest, Richmond, B.C. Info: Bruce Duncan, (604) 513-9450, a.b.duncan@home.com

September 15-16?

Raider Roundup for racing, stunt, combat and carrier, in the Seattle area. Details TBA. Info: DGardner55@aol.com

September 22

Nostalgia Diesel Combat, Surrey Ultralite Field, 988 176th St., Surrey, B.C. First driveway 250 yards north of 8th Avenue on the east side; look for the red hangars. Info: Mel Lyne at mlyne@alpha.sea-to-sky.net.

September 29-30

WOLF Speed Meet, Bill Riegel Field, Salem, Ore. Info: CD Mike Hazel, (503) 364-8593, e-mail ZZCLSpeed@aol.com.

October 13

Really Racing, Bill Riegel Field, Salem, Ore. Class I and II Mouse Race, Northwest Sport Race, Northwest Super Sport Race, Clown Race, AMA Goodyear, .21 Rat Race, Slow Rat. Info: CD Mike Hazel, (503) 364-8593, e-mail ZZCLSpeed@aol.com.

October 14

Fall Follies, Bill Riegel Field, Salem, Ore. Precision Aerobatics in four PAMPA classes. Info: CD Mike Hazel, (503) 364-8593, e-mail ZZCLSpeed@aol.com.

The Flying Flea Market

Classified advertisements — FREE for *FL* subscribers

FOR SALE: 2 Ea. Nelson 15 ABC FIRE, Exc., just back from Henry Nelson (new bearings, etc.) Used for FF and combat, U.S. \$135 or both for \$260; 1 Ea. Nelson 15 ABC FIRE longstack, C/W spinner, exc., low time used for GY, U.S. \$130; 1 Ea. NIB Irvine .15 MK 2 GY/FF Version, P/L chromed & fitted by Dye, fitted Nelson head, large venturi & pressure backplate, U.S. \$150; 1 Ea. NIB Irvine .15 MK 2 or speed, C/W spinner, P/L chromed and fitted by Dye, 4.9mm pipe stinger, U.S. \$185; also many excellent Irvine .15 parts for sale: heads, shims, spinners, P/L, venturis. Write for details & prices. 1 Ea original version Cyclon .15S FAI piped speed engine, Mint cond. in orig. handmade wood box W/ plexiglass top, C/W factory pan, prop, spinner, shutoff, tank & spare parts, also C/W Doc package for collectors, U.S. \$200; 1 ea. NIB Russian Cyclon .40 ABC pylon (RIRE) C/W, gorgeous 2-1/4-inch spinner, minipipe, head wrench, U.S. \$275. Paul Gibeault, 54-5380 Smith Drive, Richmond, B.C. Canada V6V 2K8, phone (604) 526 3386.

FOR SALE: All props and plugs 25% off; Eugene Toy & Hobby, 32 E. 11th Ave., Eugene, OR 97401. (541) 344-2117, www.eugenetoyandhobby.com.

WANTED: K&B 4.9 engines and parts. Also early version of Veco Tom Tom kit. Craig Bartlett, (541) 745-2025.

AEROBATICS INTEREST GROUP: Right now — as in **TODAY** — is the very best time to join PAMPA! Your \$25.00 will see a full year's worth of the world's best CL-specific magazine (at 100-plus pages we no longer call it a newsletter!) dropped in your mailbox. Send check or money order to: Shareen Fancher, 158 Flying Cloud Isle, Foster City, CA 94404.

FOR SALE: Vintage original model airplane plans circa: 30's to 70's. Rubber-FF-UC-RC-CO2-Jetex. Send #10 SASE for list to: Jerry Campbell, 2355 SE 43rd, Portland, OR 97215-3713, phone 503-233-2194.

WANTED: I am looking for AMA rulebooks for the following years: 1959-1963, 1966, 1968-1969, 1973, 1976-1977. Mike Hazel, 1073 Windemere Drive N.W., Salem, OR 97304.

J & J SALES now has three sizes of "UKEY-SPORT" CL ARFs in its new line. A new 300-sq.-in. suitable for .15 size engines. The very popular 420-sq.-in. for up to .35 engines (over 300 of this popular plane sold in past two years!) A new 500+-sq.-in. for up to .40 engines. This version has nearly full-length doublers. Give us a call at (509) 337-6489 or e-mail: ukeyman@altavista.net. Price: \$50 for the .15 size, \$60 for the .35 size, \$70 for the .40 size. All planes shipped POSTAGE-FREE.

NEEDED: Seattle area fliers are training several enthusiastic new combat fliers, and they need used fast combat engines to help get them started. If you have usable Fox Combat Special MK II, IV, VI or VII engines, or Stels combat engines you'll part with, contact Tom Strom at TStrom@aol.com, phone (206) 246-4258.

COMBAT INTEREST GROUP: Miniature Aircraft Combat Association offers national newsletter with technical articles, organizes national events, keeps national combat standings, and much more. Send \$15 dues to MACA, c/o Gene Berry, 4610 89th St., Lubbock, TX 79424.

NAVY CARRIER INTEREST GROUP: Navy Carrier Society offers newsletter with technical articles, organizes national events, keeps national standings and more. Contact NCS, c/o Bill Bischoff, 2609 Harris, Garland, TX 75041. Online: President Bill Calkins at clflyer@tbcnet.com.

RACING INTEREST GROUP: National Control Line Racing Association offers newsletter with technical articles, organizes national events, keeps national standings and more. Contact NCLRA, c/o Dave McDonald, P.O. Box 384, Daleville, IN 47334. Online: <http://members.aol.com/DMcD143>

YOUR AD HERE: Remember, classified ads are free to *Flying Lines* subscribers. Send yours in today for publication in the next edition.

Northwest Rules update

Presented here are the current official rules for all Pacific Northwest control-line special competition categories. These rules have been approved by Northwest model aviators as coordinated by *Flying Lines* newsletter. For more information about the Northwest rules, contact the *Flying Lines* editor. Extra copies of the rules are available at any time from *Flying Lines*.

RULES FOR NORTHWEST SPORT RACE

1. **Purpose:** It is the intent that that this event will provide the novice competitor a beginning racing event, racing with other competitors using similar 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 that do not increase engine performance. The Fox Manufacturing Co. hemi/stuffer kit modification is **prohibited**.
- 4.1. **Aircraft:** The model shall be built from, or an exact duplication of, a commercially manufactured kit. In the case of obscure or rare kits, some documentation, such as a set of plans, may be required by the contest director for confirmation of the airplane's kit status. Kits need not be in current production or distribution to qualify.
- 4.2. Models must be of profile fuselage type, and must conform to the general profile definition. The model must have a minimum fuselage length of 24" when measured from the propeller thrust washer face to the leading edge of the movable elevator surface.
- 4.3. The minimum wing area shall be 300 square inches. The wing must have a minimum thickness of 1 inch when measured at any point along the span, with the exception of the last two inches before each wingtip.
- 4.4. All models must have a canopy, horizontal stabilizer, elevator and vertical fin. Models must have a fixed landing gear with a minimum of one wheel, 2 inches in diameter or larger.
- 4.5. Modifications: Major changes to the kit design such as clipped wings, shortened fuselage, partial omission of the tail assembly, etc., are prohibited. Reinforcement of the nose and engine mount areas is permitted. Landing gear location and construction are entirely optional from what may be included in the kit, except as specified in section 4.4.
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-inch 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 are prohibited. These include fuel shutoff, pressure refuelers, fast-fill systems, "hot glove" electrical contact systems, and centrifugal carburetor switches.
7. **Pull test:** The plane and entire control system shall undergo a pull test of 35 pounds.
8. **Lines** shall be of a minimum .018-inch diameter, and lines 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 laps 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 contestants where entrants fly preliminary heats to determine finalists, at least three entries shall proceed to the final races. The decision on the number of final entries 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 this event. The event director may disqualify any entrant that is not in keeping with the spirit or intent of this racing event.

FL/jmt9/29/85 //Ed:4/15/93//rev2/12/95

RULES FOR NORTHWEST SUPER SPORT RACE

1. **Purpose:** It is the intent that this event will serve as an intermediate racing class between Northwest Sport Race and the AMA racing events.

2. All pertinent rules from the AMA control-line racing unified rules section shall apply in regard to safety and the conduct of races, except as follows.

3. **Engine:**

3.1 The "engine" is defined as the complete unit, ready to run, needing only prop, fuel and starting voltage, except that the glow plug, venturi and/or restrictor and spraybar and needle valve, gaskets, bolts, drive washer, front washer, prop nut, shims, piston ring(s) (if used), and ball bearings (if used) need not be considered part of the production unit. These parts are not subject to the rules regarding quantity or source.

3.2. No tuned pipes or exhaust extensions are allowed except bona fide mufflers which do not increase engine performance. Engines shall operate on suction feed. No variable or in-flight adjusting carburetors are allowed; however, any other modification of the intake is permissible except as noted below.

3.3. Two types of engines will be allowed:

3.3.1. Engines of .36 c.i.d. maximum with single bypass intake port. These engines shall not be restricted in regard to venturi dimension. There is also no restriction regarding engine rework, except that all major components shall be produced by the original manufacturer. No material or part may be added.

3.3.2 (a). Engines of maximum total nominal displacement of 0.4020 cubic inches (6.6 cc). Engines must be production units assembled from factory available production parts. Engines and parts, with the exception of the venturi-spraybar assembly, must have been produced in quantities greater than 500, and all must be available through normal retail outlets in the U.S.A. Parts substitution shall be limited to catalog listed parts produced in quantities greater than 500 units for the engine being altered and available commercially to anyone from the manufacturer of the engine. Engines may only be modified by removing parts or material from parts. No material or part may be added.

3.3.2 (b). The engine must be of the front-intake, single-bypass configuration. All air for the combustion process must come through the crankshaft. Altering nominal subport induction, timed holes in the case and the sleeve, or other techniques to circumvent the requirement that all air come through the specified venturi opening, are prohibited.

3.3.2 (c). No ABC or AAC piston/sleeve configurations are allowed.

3.3.2 (d). Each engine shall be equipped with a venturi and spraybar meeting the following restrictions: The venturi shall have an inside circular bore of not more than 0.315 inch. The venturi will maintain this diameter for at least 0.25 inch above and below the spraybar centerline. The spraybar assembly will be located precisely through the centerline of the venturi bore and shall have a circular cross section of diameter not less than 0.155 inch for the portion in the throat of the venturi. Exception: R/C carburetors may be used with the opening fixed in one position.

3.3.2 (e). The complete engine/venturi/spraybar system shall weigh less than 10.5 ounces (excluding muffler).

4. **Aircraft:** The model shall conform to the AMA slow rat specifications:

"Models must be of profile fuselage type, and must conform to the general profile definition. The model must have a minimum fuselage length of 24" when measured from the propeller thrust washer face to the leading edge of the movable elevator surface.

"The minimum wing area shall be 300 square inches. The wing must have a minimum thickness of one inch when measured at any point along the span, with the exception of the last two inches before each wing tip.

"All models must have a canopy, horizontal stabilizer, elevator and vertical fin ... Models must have a fixed landing gear with a minimum of one wheel."

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. The tank may not be pressurized, but the vents may be directed forward into the airstream.

6. **Pull test:** The plane and entire control system shall undergo pull test of 35 pounds.

7. **Lines:** The minimum diameter of lines shall be .018". Lines shall be of the stranded type, with a length of 60 feet measured from the handle grip to the fuselage, plus or minus 6" tolerance.

8. **Races:** Preliminary heats shall be of 70 laps duration, with one pit stop minimum required. The final or feature race(s) shall be of 140 laps duration, with three pit stops minimum required. All races shall be flown with at least two entrants, and not more than three entrants. At contests where entrants fly preliminary heats to determine finalists, at least three entries shall proceed to the final race(s). The decision on the number of finalist entrants shall be made by the event director and be made before the start of any preliminary heats.

10/89/DC/jmt//Ed:jmt/4/15/93

NORTHWEST FLYING CLOWN RACE

1. **PURPOSE:** This event is intended for all fliers and pit crews interested in a simple racing event which uses a common aircraft, emphasizes both speed and economy, and encourages the use of a wide variety of engines.

2. All AMA control-line unified racing rules apply, except as follows:

2.1. Airplanes and the entire control systems shall undergo a pull test of 25 pounds. Lines are .015 stranded steel. Length is 52 feet, plus or minus 6 inches, measured from the center of the handle to the fuselage.

3. **Engine:** Any design or make of piston engine is allowed, except that maximum engine displacement is limited to .19 cubic inches. Modifications are not restricted within the limits of the AMA safety code.

4. **Fuel tank:** Any design of fuel tank is allowed, including pressure systems, except as follows:

4.1. Fuel capacity is restricted to 1 ounce, with a +5% tolerance, 31cc maximum.

4.2. The fuel tank shall be fully external of the plane, on the outboard side of the fuselage, and entirely in front of the leading edge.

4.3. All tank vents are limited to a maximum size of 1/8-inch outside diameter. A spring-loaded pinchoff device capping the overflow vent on a uniflow tank is permitted.

5. **Fuel:** Glow fuel shall contain a maximum of 10 percent nitromethane with 20 percent lubricant and the rest methanol. Glow fuel will be supplied by the contest management. Diesel engines may use diesel fuel.

6. **Aircraft:** The only aircraft allowed is the PDQ Flying Clown or faithful replica. Changes to the planform, profile, or wing thickness are prohibited. Cheek cowls are prohibited. Wheels must be at least 1 inch in diameter, and be spaced laterally about 7 inches.

7. **Prohibited equipment:** Hot glove electrical contact systems, fast-fill setups and fuel shutoffs are prohibited. Shutoffs may be installed on the plane for test-flying, but must be bypassed during races.

8. **Races:** All preliminary heats and the final race will be timed for 15 minutes from start to finish. The contestant with the most laps wins. Preliminary heats may be 7-1/2 minutes if agreed to by a majority of contestants or required by contest time constraints. Records shall not be established for heats less than 15 minutes. There shall be either two or three pilots in heat races. At least three aircraft shall advance to the feature race. The decision on the number of feature entries shall be made by the event director in advance before the start of any preliminary heats. If more than three planes advance to the feature, races will involve at least two and no more than three airplanes.

jmt/cbbb/FL/rev:6-10-94/4/15/96*

rev1-10-98* rev2-12-99*

* ballot

RULES FOR NORTHWEST GOODYEAR RACING

- 1. Purpose:** It is the intent that this event will provide a form of Scale Racing similar to the AMA Scale Racing (Goodyear) class but without the expense and high speeds required in that class.
- All rules for AMA Scale Racing shall apply except as follows:
- 3. ENGINES:** The following list of .15-size engines are those permitted in this event. The engine used shall be a standard production unit; no prototypes or "factory specials" are allowed.
 - AME/Norvel:** Any aircraft version.
 - Fox:** Any aircraft version.
 - K&B:** Any aircraft version.
 - Cox:** Any aircraft version.
 - Conquest:** Any aircraft version from K&B, Cox or RJL
 - Enya:** Any aircraft version.
 - O.S.:** Any aircraft version.
 - Magnum XL-15A**
 - MDS:** Any aircraft version.
 - Mecoa Wildcat EP15**
 - Moki:** Any aircraft version.
 - MVVS 15 DFS/R**
 - MVVS 15 GFS/R**
 - Picco:** Any aircraft version.
 - Supertigre:** Any front-intake version
 - Thunder Tiger GP15**Engine reworking is permitted, providing that all major engine components are from the original manufacturer. (No hybrids or scratch-built major engine components permitted.)
4. Lines shall be 60 feet long, plus or minus 6 inches. Lines shall be .014" single strand lines (per AMA rulebook) or .015 multistranded.
5. Pull test will be 25 pounds.

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*ballot

RULES FOR NORTHWEST .15 CARRIER

(Provisional)

- 1. PURPOSE:** It is the intent that this event will provide an entry level Navy Carrier competition using a simple airplane.
- 2. AIRPLANES:** Any model is allowed; it is not required to be a model of a full-scale aircraft. Working functions are strictly limited to throttle, hook and elevator; no working flaps, ailerons, rudder, etc. The tail "wheel" may be a non-moving hook.
- 3. ENGINES** are limited to .15 displacement. Muffler pressure is allowed. Mufflers are recommended but not mandatory.
- 4. LINES,** as measured from the center of the handle's grip to the center line of the aircraft, must be between 52 feet and 52 feet, 6 inches, with a diameter of .012 inch or larger.
5. All AMA general rules, control-line rules and Navy Carrier rules shall apply unless specifically addressed above.

oh/jmt/4/16/93

RULES FOR NORTHWEST 80MPH COMBAT

1. **PURPOSE:** It is the intent that this event will provide a form of combat that is slower, more relaxed, and less destructive to equipment than all-out AMA combat events.
2. All rules for AMA (fast) combat shall apply except as follows:
3. **ENGINES:** Any engine up to .40 displacement is permitted.
4. **SPEED LIMIT:** The airspeed limit for all contestants shall be 80 mph, which is defined at 6.43 seconds for a two-lap period at 20-foot height. No devices capable of varying the speed of the airplane in flight, such as throttles or carburetors adjusted by elevator trim, are allowed.
5. **MATCH PROCEDURE:** Flying of matches shall be exactly the same as in AMA combat except as follows:

Airspeed timing:

The first airplane to launch will be timed for two laps after the first full lap, at a height of approximately 20 feet (brief deviations in height for safety reasons are permitted). If the time for those two laps is greater than 6.43 seconds, the airplane will be judged eligible to compete. Pilots must keep the plane near the 20-foot height; failure to do so will delay timing.

If the second airplane launched appears to the circle marshal to be slower than the first plane, after the first plane has been declared eligible, the circle marshal may waive the timing of the second plane and signal the start of combat. If the second plane appears equal to or faster than the first plane, the circle marshal may time the second plane as well before beginning combat.

In the case of a simultaneous launch, the faster airplane will be timed.

Airplanes will not be timed on successive launches in the same match, unless the circle marshal has reason to believe that a plane has passed the 80mph speed limit. The circle marshal retains the right to stop combat at any point and re-time any airplane that appears to have passed the 80mph speed limit.

Exceeding the speed limit:

If, on the initial launch, a plane is judged to be flying in excess of the 80mph speed limit, that plane's airtime watch will be cleared, and airtime will not be counted until the plane is judged to be consistently flying below the airspeed limit; combat will not be started until both airplanes are within the speed limit. If a plane is judged to exceed the limit at sometime during the match — after the initial timing — the airtime watch will be stopped and not restarted until the plane is judged to be consistently flying below the speed limit; combat will be stopped until both planes are below the speed limit.

6. **SCORING:** Per AMA Combat.

jmt/FL/1-21-94/rev:2-18-94/6-10-94/4-15-96*

* ballot

NORTHWEST SPORT JET SPEED

All AMA rules from the control line-general and control line speed sections shall be applicable, except as follows:

1) AIRFRAME:

1.1 Any design configuration and construction method is permissible so long as the contest management considers the model to be safe and sound.

1.2 The engine and engine mounts shall receive a 30 pound pull test.

1.3 The control system must be mounted external to the normal aircraft contours. This includes the bellcrank, leadouts or control lines, pushrod, and elevator horn. No more than one inch of the leadouts or control lines can be enclosed by the leadout guides.

1.4 The maximum weight of the aircraft in ready-to-fly condition, but not including fuel shall be 40 ounces.

2) LINES & PULL TEST:

2.1 The model must be flown on two single strand steel control lines of .018 inch minimum diameter. The distance between the centerline of the fuselage and the center of the control handle grip shall be a minimum of 60 feet.

2.2 The model and entire control system, lines and handle shall receive a 32G pull test.

3) ENGINE:

3.1 The allowed jet engines are the Dyna-Jet (standard or Redhead), Bailey Sport Jet, and the O.S. II-G.

3.2 It is required that the engine shall be in stock condition internally. No material may be removed or added to the engine, except as follows:

a. **Engine head:** Part or all of the head fins may be removed. Holes may be drilled into the head for purposes of engine mounting. Valve face may be lapped as needed for routine maintenance. Engine cowling is permitted, but the front of the cowl must be behind the intake throat.

b. **Flowjector:** Fuel feed holes may be drilled out to larger size, or filled and redrilled. (holes allowed in original location only) A short piece of metal tubing may be installed into the tire pump connection to facilitate quick removal of the air supply hose. Alternatively, the threads on the tire pump connection may be filed off, or filled in so as to make a smooth surface to facilitate quick removal of the air supply hose.

c. **Metering Jet:** Any metering jet may be used, and may be located anywhere between the tank and the flowjector.

d. **Tailpipe:** A stock tailpipe with ignition plug in place must be used. (starting ignition may be by means of a starting probe). Repaired tailpipes are permissible, provided stock dimensions have been faithfully adhered to. The front surface of the tailpipe (combustion chamber screw ring) and the lock ring may be lapped.

e. **Reed Valve:** Any commercially available valve may be used.

3.3 Interchanging of parts between the above listed engines is permissible.

3.4 Fuel delivery to the engine shall be by suction, no pressure feed is allowed.

4) FUEL:

4.1 Fuel used shall be the A.M.A. formula: 80% methanol & 20% propylene oxide.

5) OTHER:

5.1 Timing will be for 1/2 mile (7 laps).

5.2 All other general rules for control line speed flying (attempts, number of models, competition flying from pylon, timing of flights, etc.) shall be applicable.

5.3 Builder of the model rule is not applicable to this event.

5.4 Entrant of the model shall either be the pilot, or shall start the engine.

mwh2000

RULES FOR .15 NOSTALGIA DIESEL COMBAT

1.1. Engine: Any production .15 c.i.d. maximum diesel having a single ballrace or plain bearing, non-Schneurle, iron piston/steel cylinder.

1.2 Only suction fuel systems are permitted.

1.3 The propeller must be a Grish Tornado 8" x 6" White Nylon Flexi prop. The diameter must remain at 8", balancing may be done by sanding one blade face.

2.1 Aircraft: A nostalgia combat model must be a design which was in common use or kitted prior to December 31, 1970. It must have been designed for a .15 cu in engine.

2.2 Models must be an accurate plan view of the original. The following alterations are permitted:

- Addition to or omission of sheeted areas. Omission of vertical fins.
- Changes to airfoil or internal structure. Additional booms or substitution of wire for wood, or vice-versa.
- Recessing engine into leading edge.
- An upright engine mount may be changed to side mount.
- A balanced elevator may be changed to a conventional, and vice-versa.

The elevator must retain the original outline.

Such changes must be done using constructional techniques that were commonly used at the time the model was in use. Carbon, Kevlar or boron fiber is not permitted. Modern adhesives and coverings are permitted.

2.3 The following alterations are not permitted:

- Foam construction may not be used. Exterior controls may not be used.
- Metal motor mounts may not be used. Any changes to the original plan view except those outlined in 2.2 are not permitted.

The CD may decide to not accept a model which has been altered from the original design outline.

3.1 Pull test: 25 lb.

4.1 Lines shall be a minimum .015" diameter, stranded type, with a length of 52'-3" measured from the handle grip to the fuselage, plus or minus 6 inches.

5.1 Speed limit: 64 mph = 7.0 seconds/2 laps towing a streamer.

6.1 Number of models. One model per match. 3 models maximum per contest.

7.1 Pit crew. Two pit crew are allowed per contestant. A contestant may start his own engine.

8.1 Officials: A contest shall be run by a circle marshal who shall be the overall timekeeper, plus one scorer per contestant.

9.1 The match: One minute for engine starting and launching. The 5-minute match clock is started as the second plane launches or at the end of the one minute, whichever comes first. The match lasts 5 minutes.

Engines must be started by hand.

9.2 Scoring: One point is deducted for each second a contestant's plane is on the ground during the 5 minute match. 50 points are awarded for each cut of their opponent's streamer or string with knot. There are no kills.

The match shall continue after a mid-air collision or line break. Lines may not be changed during a match.

10.1 Contest Procedure: Each contestant shall compete in 5 rounds. 2 points for a win, 1 point for a tie, 0 for a loss. The top 4 flyers will then compete in 2 semifinals and a final to determine the winner.

10.2 Combat Site: A 5 foot radius pilots circle and a concentric 65 foot radius safety circle.

ml/jt/FL5/00p/ballot#164

QUICKIE RAT (NCLRA 1998 RULES)

1. **OBJECTIVE:** To provide a racing event that may easily be flown "three up" and which employs relatively inexpensive and easily constructed control line racing models. To encourage and promote the success of the "average" control line flyer in control line racing competition.

2. GENERAL:

2.1 **Applicability:** All rules from the Unified Control Line Racing Rules apply to this event except as modified, appended or specified here.

2.2 **Maintenance:** It is imperative that the performance level of this event be maintained such that it is always possible to safely race "three up" on stranded lines. If at any time it is felt that the event must be changed from the three up format for safety concerns or that solid lines are required, then the event rules should be immediately modified so as to reduce the aircraft performance level. It is recommended that this event be reviewed by the National Control Line Racing Association on a yearly basis. As a guideline, if nominal speeds surpass 105 MPH (17.14sec/7 laps), then the allowable venturi (part 4.7.1) should be reduced by 0.010". The sport of three up control line racing should be preserved at all costs even if individual equipment is temporarily obsolete.

3. MODEL SPECIFICATIONS:

3.1 Models will be of profile construction only. Refer to profile definition in Control Line General section. The use of cast pan or metal engine crutch is not allowed.

3.2 The control system, consisting of leadouts, bellcrank, pushrod and control horn will be totally exposed and external to normal airplane contours. The leadout wires will not be recessed into the wing, the pushrod will not be mounted inside the fuselage, nor will the bellcrank be allowed to be mounted inside the fuselage. The leadout tip guides may be inset into the wing but should not be more than 1/2 inch in length.

3.3 The line connections to the model will be external to the aircraft wing tip.

3.4 The fuel tank shall be totally outboard of the centerline of the crankshaft of the engine.

3.5 Pressure fuel systems are not allowed, with the exception that the fuel tank vent tubes may be directed into the airstream.

4. ENGINE SPECIFICATIONS:

4.1 Maximum total displacement shall be 0.4028 cubic inches (6.6cc). Engines must be production units assembled from factory available production parts. Engines and parts must have been produced in quantities greater than 500 and all must be or have been available through normal retail outlets in the USA. Parts substitution shall be limited to catalog listed parts produced in quantities greater than 500 units for the engine being altered and available commercially to anyone from the manufacturer of the engine. Engines may only be modified by removing parts or material from parts except as noted in the following paragraphs. No material or part may be added except as noted in the following paragraphs under this section.

4.2 The "engine" is defined as the complete unit, ready to run, needing only prop, fuel and starting voltage except that the glow plug, venturi and/or restrictor, spraybar and needle valve, gaskets, bolts, drive washer, front washer, prop nut, shims, piston ring(s) (if used) and ball

bearings (if used) need not be considered part of the production unit. These parts are not subject to the rules regarding quantity or source. In addition, chrome plating of a production cylinder is allowed.

4.3 The glow plug must have a thread dimension of 1/4-32.

4.4 The engine must be of the front intake configuration. All air for the combustion process must come through the crankshaft. Altering nominal sub-port induction, timed holes in the case and sleeve or other techniques to circumvent the requirement that all air come through the specified venturi opening are not allowed.

4.5 Only single by-pass port engines are allowed. The engine as purchased and as used shall be of the single by-pass configuration. No schneurle or PDP porting is allowed.

4.6 No ABC or AAC piston/sleeve configurations are allowed.

4.7 No variable area carburetors shall be allowed. Each engine shall be equipped with a venturi and spraybar meeting the following restrictions.

4.7.1 The venturi shall have an inside circular bore of not more than .315". The venturi will maintain this diameter for at least 0.25" at the throat of the venturi where the spraybar will be located at the midpoint of the area.

4.7.2 The spraybar assembly will be located precisely through the centerline of the venturi bore and shall have a constant circular cross section of diameter not less than 0.155" for the portion in the throat of the venturi.

4.8 No tuned pipes, mufflers or exhaust extensions are allowed.

4.9 The complete engine/venturi/spraybar system shall weigh less than 10.5 ounces.

5. FUEL SPECIFICATION:

5.1 The fuel for this event shall be supplied by the contest organizers and shall contain not more than 10% Nitromethane not less than 20% lubricant and the rest shall be methanol.

6. RACES:

6.1 Each contestant shall be allowed at least two qualifying heat races.

6.2 Qualifying heat races shall be 70 lap races with one required pit stop. It is suggested that only the best time of the two qualifying attempts be used as the basis for advancement to the finals.

6.3 Finals race shall be 140 lap races with three mandatory pit refueling stops.

6.4 All races shall be run with no less two or more than three flyers, races should be flown three up.

7. LINES:

7.1 Shall be minimum of two .018 diameter multi-strand only, and length shall be 60 feet plus or minus 6" as measured from center line of handle to center line of fuselage.

7.2 Pull test 35 Lbs.

8. FLYING REGULATIONS:

8.1 All flying shall be done between 6 and 20 feet altitude.

9. SPECIALTY ITEMS:

9.1 Shutoffs: allowed; fuel shutoffs are recommended for safety.

9.2 Hot gloves: allowed

9.3 Prop: open

NCLRA 12/99 ed/jmt

ON THE

CONTEST TRAIL

Results of Northwest Control-Line Competition

Let the fun begin...

The contest season officially opened for the year with a Navy Carrier contest in Richmond, B.C. on March 10.

Some weather issues caused a light turnout, but those who were there flew and had a good time.

Here are the results as reported by Mike Potter. Northwest standings points in parentheses:

PROFILE CARRIER (4 entries)

- | | |
|--|-------|
| 1. Shawn Parker, Seattle, Wash. (4) | 241.2 |
| 2. Mike Potter, Auburn, Wash. (3) | 221.2 |
| 3. Mike Conner, Pitt Meadows, B.C. (2) | 215.1 |
| 4. James Cox, Delta, B.C. (1) | 192.2 |

CLASS I/II CARRIER (1 entry)

- | | |
|------------------|------|
| 1. James Cox (1) | 95.7 |
|------------------|------|

.15 CARRIER (1 entry)

- | | |
|---------------------|-------|
| 1. Shawn Parker (1) | 214.2 |
|---------------------|-------|



The Carrier contest reported above kicks off the points chase for 2001.

Competitors across the region will be vying not just for the glory at the individual contests on the schedule, but for placement on the traditional leader board published in *Flying Lines* after each contest. For review of how the standings work, read the fine print at the end of the column.

One clarification of the standings rules: In some categories, particularly in Navy Carrier, it has been a local practice at some informal meets to

allow contestants to enter more than one plane and score in more than one place. A flier could take first and third places in the same event with two different planes. When this happens, the standings will count only the *highest* placement. Thus, in the case listed above, only the flier's first-place points will count.

Contests counted to date: March 10, Richmond, B.C.

Following are standings for updated events:

2001 STANDINGS

PROFILE NAVY CARRIER

- | | |
|------------------------------------|---|
| 1. Shawn Parker, Seattle, Wash. | 4 |
| 2. Mike Potter, Auburn, Wash. | 3 |
| 3. Mike Conner, Pitt Meadows, B.C. | 2 |
| 4. James Cox, Delta, B.C. | 1 |

.15 NAVY CARRIER

- | | |
|-----------------|---|
| 1. Shawn Parker | 1 |
|-----------------|---|

OVERALL CARRIER

- | | |
|-----------------|---|
| 1. Shawn Parker | 5 |
| 2. Mike Potter | 3 |
| 3. Mike Conner | 2 |
| James Cox | 2 |

Flying Lines keeps track of standings in all AMA rulebook and Northwest official events, in all Northwest sanctioned contests.

Your *FL* editors do their best to keep up with the results, but contest directors can help keep the standings up to date by making sure to send the results to *FL* immediately after the contest. If you spot errors, please let us know.

Results must include the placing in each event through fourth place and the report also must list the number of contestants in the event, in order for the point standings to be counted accurately.

Also, please include in your report the hometown of the contestants, and note which contestants are juniors. Only Northwest residents are counted in the standings (AMA Dist. XI and British Columbia). The score of each contestant also should be listed for general reporting purposes and for checking against the Northwest records.

Remember, only results that we receive can be counted, so send them in. If you flew in a contest that doesn't appear to be counted, contact the contest director or *FL* and let us know.

Special notes: Precision aerobatics expert fliers scores are multiplied by a factor of 1.5. When an individual is allowed more than one entry in a single event, only the highest-placing score shall be counted.

Send contest results, corrections and other correspondence regarding Northwest Competition Standings to John Thompson, 2456 Quince St., Eugene, OR 97404, e-mail JohnT4051@aol.com. For a printed copy of complete standings for any event, or for a copy of the rules for any Northwest event, send a self-addressed, stamped envelope.

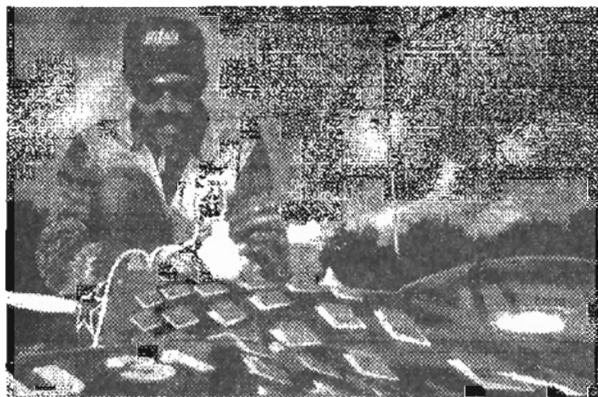
Stunt Stuff

Notes on Precision Aerobatics from Chris Cox

Four-Stroke Stunt?

I have recently been dabbling with a Saito .56 four-stroke engine. I chose the Saito as this is the engine of choice of Gilbert Berringer, who flew to a very convincing second place at the World Championships last year in Landres, France.

Gilbert had a Saito .56 installed in his very impressive Sukoi. This airplane has a very long and wide fuselage. The wing is approximately 650 square inches, but it looks much smaller due to the huge fuselage it is fitted to. Also unique to this design are the extremely tiny flaps, as compared to current North American ships. Amazingly, the corner radius exhibited by this aircraft is one of the tightest I have witnessed. No doubt due to the large degree of elevator movement. Also surprising is the extreme forward center of gravity location. I suspect this enhances the aircraft ability to exit the hard corners with little or no apparent bounce and superior tracking.

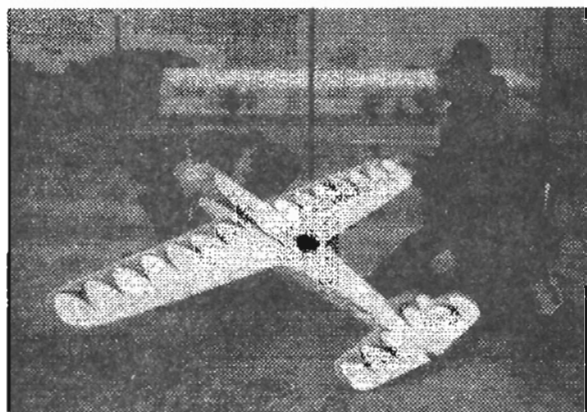


Gilbert Berringer fuels the Sukoi in preparation for another winning flight.

The sound of the Sukoi in flight is wonderful. The four-stroke Saito dutifully drones along, producing a most pleasant effect. I am fairly convinced that this deep, throaty sound in comparison with the high-pitched tuned-pipe whine heavily influences the judges and their scoring. One thing for certain, short of having Gilbert let me fly his airplane (I didn't ask, by the way), I would have to build one of my own if I want to

know whether the ship and power setup are truly superior to what I am currently flying.

I suspect that Gilbert would have been happy to supply me with plans should I have asked, but what I got from Gilbert instead were plans for his Gee Bee Sportster, which his son, Remy (World Junior Champion), was flying. Remy placed fourth at the Worlds, also using a Saito .56 for power! The Gee Bee looks to have all the same numbers as the Sukoi, but the styling was one that has to get the juices flowing if you are a Gee Bee fan. Happily, the corners displayed looked to be equally impressive as those of the Sukoi so the decision on which to build was not difficult.



Remy Berringer prepares his Gee Bee Sportster for an official flight, while father Gilbert looks on.

Prior to beginning construction on the Gee Bee, I was fortunate to receive a Saito .56 for my birthday! One lesson learned very early into my testing was to respect the power being produced by this engine. I had the misfortune of placing my thumb in the path of the propeller as the engine loped along at a sedate 8,000 rpm. Big mistake! The ensuing four stitches has convinced me that the respect afforded my PA .61 should also be shown to the Saito. Luckily, no nerve damage is apparent.

Next up was to install the Saito into a current stunt ship and see what the engine could do. Out came Defiant I, which started life with a ST .61 up front, later to be modified to accommodate the OS .40VF which, I have come to love over the

years, followed later by the PA .61. The Saito is the fourth engine to find its way into D-I's nose. I believe all who were present for the first couple of test flights will agree, the sound of a four-stroke is super. It just chugs along, and although very quiet, the torque available when you pull the nose up is undeniable. Very little change in speed is experienced and the tone of the engine seems unchanged from maneuvers to level flight. I was running with the R/C carburetor, so I felt the runs were not as consistent as I would like to see for competition use, however I have since received a beautiful venturi from Pete Bergstrom (son-in-law of "Big" Art Adamisin), which Gilbert tells me is an absolute must for steady, reliable engine runs. Its been much too cold of late to try, but some time in the next month or two I will head out with D-I for a little more testing.



Saito .56 installed in nose of Defiant I. A fairly straight forward installation. New hole for needle valve had to be drilled and some light modification to cowling made. Interestingly, the 6-ounce fuel tank was substituted for a four ounce tank as the four-stroke is much more miserly when it comes to fuel consumption, compared to the two-stroke engine.

Both Al Resinger (Al also has a Saito .56, as does Paul Walker!) and I are now hard at work building the Gee Bees. We have cut foam cores for the wings which we then proceeded to slice and dice, producing rib patterns for a geodetic wing. This type of construction provides for a light, strong and torsionally rigid wing. Also unique to these particular aircraft will be the molded leading edge and fuselages we have produced. The diameter of the fuselage is no less than 6 inches! Bill Werwage suggested to me in Landres that I could easily crawl inside and have a nap, if so desired. An exaggeration perhaps, but I think when you see these things in full life, you will be quite

surprised by how large an aircraft this is! Gilbert warns that the aircraft must be built extremely light in order to fly well, and this certainly seems to be providing Al and I with a real challenge. Hopefully we are up to the task!

It's unlikely we will be able to complete the new models in order to seriously campaign them this season, but we'll working at it so stay tuned.

Send comments to Chris Cox, 11693 72A Ave., Delta, B.C., Canada V4C 1B3. E-mail ccox@direct.ca

The Northwest is in the mood to grow

By Dave Shrum

In my last article, I explained how two clubs, the Eugene Prop Spinners and the Portland Fireballs are moving forward to bring new people into this fantastic sport. (Hobby is when you are building.)

I would like to bring to you some of the experience that I have had here in Roseburg, Ore. I would also like to hear from Alan Olsen from Hoquiam, Wash., and Larry Hyder from Madras, Ore. Key up, fellows — let's hear how your programs have fared over the past years. This series of articles is to give encouragement to all of the Northwest on how we can grow.

Spring 1995 — Parking lot of Food World, across from McDonald's restaurant in Roseburg. Mark Knigge and I were sitting on the bed of my flatbed truck and had just finished setting up the nets that would contain the future control-line flying circle.

Question — How did we get that flying site that was eventually used as the carrier circle for the 1996 Regionals? We asked. I went to the store manager of Food World and asked if we could set up a flying circle — with a containment net and the proper AMA insurance. After paperwork went through, we got it. We were on that site for about a year. You go look and you ask!

The same thing for the yearly flying circle at the Douglas County Fairgrounds. I went before the Fairgrounds board and asked if we could use the site for practice and contest flying on Memorial Day Weekend. Again, paperwork, insurance each year — we have been flying there ever since.

OK, now the biggie! Northwest Regionals at

OK, now the biggie! Northwest Regionals at the Roseburg Airport. We asked! Mark and I presented our case to them over three different meetings that year. It was a marathon of meetings between the airport commission, Eugene Prop Spinners and Umpqua Valley Modelers.

Was it worth it? Well, this will be our sixth contest and many memories later.

Speaking of memories, this will be the focal point of our banquet this coming 30th year. Both clubs will be at the head table and will be the guests of honor. They will have a few minutes to tell us their Northwest Regionals memories. We do not want to go beyond 45 minutes for this program. We hope we can open it up to the audience to participate. All of you, bring your photos!

As we sat there in 1995, we were anxious to start flying there because we thought it would be "Katy bar the door!" Not so.

Yes, people wondered what the noise was and would come over for a few minutes and watch. What we found out was there have been two or three generations of people since we flew control-line airplanes and they didn't have a clue what we were doing.

Did we get any new fliers from this? Yes! I still have my notebook that I carried with me at all times and would record the name and phone number of an interested person. (Note, don't go below 12 years old and insist on an adult bringing them.)

This developed into a building session for six weeks at the Bargain Bin hobby shop and flying sessions at the Fairgrounds with 10 students. Mike Hazel came down from Salem and helped out one session. They loved his noisy rat racer.

Conclusion: Ask, ask, ask.

Ask for flying sites.

Ask if a person is interested.

Ask if we could hold a contest there.

Sometimes you will be turned down, but continue to ask!

Flying out of our tangles

Two errors occurred in transcription of Paul Gibeault's "RPM" column in Issue 170:

- Words were omitted in the third paragraph.

A sentence should have read: Don't hesitate to mix and match pistons to obtain a tight setup.

- In the eighth paragraph, the prop size listed should have been an APC 7x4 cut to 6-5/8".

On Lines

By Jim Cameron

Last time I neglected to mention a nice benefit of being a member of the Pearson Air Museum. Admission to the Oregon Air & Space Museum (Eugene) and The Tillamook Naval Air Station is free.

Racing Try an old idea again?

When you talk about racing in this part of the country, Drizzle Circuit often comes into the conversation. Why is this? In my opinion, it's because when you went to a DC contest you got to race a lot.

When we started, it was Northwest Sport Race only. Everyone flew four rounds, and then we flew a final. If you didn't do well in one heat it wasn't life or death. It took all day to get through it, but it was a great day of racing. A good pilot could often go to a contest and fly in almost every heat and the final. This was because some people came and needed a partner.

For many years I have thought that one way to promote racing is to push a single event, such as Sport race (at some contests). Get away from having four or five events at every contest. I am not suggesting that we do less flying. As in the days of the Drizzle Circuit we could fly one or two events with many rounds (at least three). In this way contest organizers only have to fund one or two sets of trophies, and participants only need one or two types of planes.

One important benefit to this format is that everyone gets to race a lot. As it stands a competitor could be out after one heat. Another sad situation is when the attendance is so poor at a contest that heats are abandoned and finals are run instead. This doesn't promote flying. Another benefit to this format is that the event will be far more meaningful.

As with the Drizzle Circuit a competitor would have to fight for points through many rounds just to make the final. The only way to promote racing is to get people in the air. Contest

promoters should stress events with three and four teams flying each heat. This type of flying is the most exciting for the pilots and the spectators.

Phase two of this idea starts two or three years after its inception. When participation is at a good level again, another event can be promoted in the same manner. The difference is that now you have a group of teams that could vote on what the next event would be.

I am not suggesting that this format be used at all contests. This is just an idea that might boost interest.

Note: this format will work in other venues. In Canada Vintage Diesel Combat seems to be popular. I believe one reason for this is that everyone is guaranteed to fly many rounds.

If we are going to look at stunt as our example, we must include skill classes in our promotion of racing. It is my opinion that Stunt is one of the most entered events because of skill classes. This way the event includes a growing pattern for the team. Today expert racing teams fly all the events from mouse to rat leaving no place for the beginners. In the past I promoted "Beginner Clown Race" (anyone not in the 200 lap club is eligible).

I think Clown is a logical beginner event for many reasons: 1. As it stands Mouse is one of the "beginner events", and in the wind a mouse is the least forgiving of all race planes. A beginner pilot will have much more success with a .15-sized plane which will cut through more wind. 2. The break between beginner and expert is already in place (200 laps). 3. When a team attains the goal of 200 laps, no new equipment is mandated. 4. Beginners fly with experts in the same race to learn.

Another part of the promotion could be a series of articles in this newsletter dealing with each event. We could take the construction of a plane start to finish. Discuss rules (I know John did a great article on event directing a race; maybe he could republish it). Many years ago Mike Hazel did a column on pilot pips and etiquette for racing.

If any one has an idea for Jim Cameron's column, you can contact him at iflycontrolline@hotmail.com

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Combat Cornucopia

Combat
news and
views by
Mel Lyne

The Five N.W. Samurai at Tucson's 2001 "Top Gun"

Jeff Rein and Buzz Wilson flew down, while Gary Harris, Mel Lyne and Dave Baxter with his cheering section, wife Donna Baxter Baxter, drove. (Donna explained she was a Baxter and then married a Baxter! Cool, huh?).

Thursday was practice and learning day. All our motors ran slow even though it was 75 degrees. At 3,000 feet elevation and extremely dry in Tucson, we learned you need a bit more nitro to go fast.

Friday was the 1/2A warm-up contest with 21 entries.

Most were using Cyclon engines in Litehawks or Yuvenko Czech models. Larry Driskill and the Mears boys had very fast VA Mk 3 engines. Gary Harris ran a AME, Mel used a hot Tee Dee, and Jeff Rein used a Cyclon in his enormous "Sword of Death" plane.

Speeds on the 35 ft lines were very high with most matches being at a frantic pace. The three Northwest entries used the matches to tune up flying skills after the long winter break. Format was round 1, a losers round, then sudden death. So everyone got a minimum of two matches.

"Fast Gary Harris" kicked some butt and went out in three. "Cactus Mel" went out in round 2 in a furious match against Larry Driskill. "Out of Luck Jeff" had two great matches against good opponents. 1/2A was won by Richard Stubblefield.

After 1/2A everyone practiced with Fasts to be sharp for Saturday's main event. Al Deveuve looked to be the fastest with very good 4th generation Steve Hills Arrowplanes. Al explained to us that although his name is used for the kitted Al-lenplane, that is not what he flies. He actually has no connection with it.

Saturday morning, Contest Director Steve Stewart held the pilot's meeting. The fly-away rule was firm. If your engine didn't shut down within three seconds when your plane was cut loose, then you were out of the contest. No discussion.

Several people did try discussing this when it happened, but Steve was firm, and four flyers went out on flyaways.

Gary, Mel and Dave pitted as a team, and Buzz, Jeff Rein and Jeff Hanauer pitted as a team. Carnage on Saturday was extensive in the early rounds, and many name flyers were victims. Stubblefield, Driskill, George Cleveland, Mark and Chuck Rudner all exited early as their three lives expired. There were no easy matches.

The Northwest Samurai kicked some serious butt and sent a lot of great flyers home early. "Laid Back Dave Baxter" flew undoubtedly the slowest planes in the contest, using slower Foxes. This was his first foray into Fast since the 1970s and he didn't want to go too fast too soon. He flew his own style, rather reminiscent of the "Old Time" stunt schedule, and had a great time. Against George Cleveland "Laid Back Dave" bided his time looking like an easy kill, and then suddenly Dave had George's streamer, knot and all. It was a shocker. The cheering section roared! Sunday morning he did it again, Steve Smith being the victim this time. "Laid Back Dave" went 5 rounds, had a ton of fun, and announced that he is back in the Fast game after almost a 30-year hiatus.

"Kill 'em quick Buzz Wilson" was amazing on the Saturday. Four tough matches and four early kills! Buzz was hot. He nailed Wayne from Indiana just three seconds after the combat horn. Buzz was one of only three flyers to go clean for four rounds. We were ready to bet all the marbles on Buzz getting to the finals. Sunday, however, had Buzz's three charmed lives in serious danger. Tough matches with midairs and a wild dork got Buzz down to one life in round 8. His opponent was Mike Willcox. They had several furious exchanges, then a small midair after which Willcox crashed. Buzz had all of Willcox's streamer trailing from his plane. It looked like a kill. But when Buzz landed, Willcox's control horn was still attached to the streamer string. So it was declared a tie at the mid air and a rematch was ordered. In the rematch, Willcox was more cautious and used his flying skills to stay out of Buzz's reach, and finally killed Buzz. So Buzz was out in round 8, none matches with the reflly. A very good effort.

"Fast Gary Harris" came loaded for bear with Nelsons in Granderdogs. Match one had him in the air 2 seconds before his opponent, and a dou-

ble kill ended it. Gary got it on air time. Rounds 2 and 3 were a blur, winning one, losing one. Then late in the day "Fast Gary" was up against Andy Mears. Gary's Nelson was really hauling in a new Granderdog, the horn went and Gary got on Andy's tail and closed in. One cut, two cuts, then the kill.

It was over. Mears could hardly believe it and took a couple of passes at Gary. At the end Andy was lying on the ground laughing. It had been a classic pursuit match. "Fast Gary" could really get the job done when he had the horsepower. After four rounds Gary had one loss. Going into Sunday, Gary's Nelsons were a tad slower but still fast. After two more rounds "Fast" Gary was 4 and 2. Gary had flown Vince Capuano in a real struggle of a match with hard flying in line tangles. Suddenly Gary was cut away, but thankfully his Heppenstal fuel dump shut the motor down. With one life left Round 7 was against Roy Krupa. A wild match with furious exchanges and no one getting a real advantage. Then suddenly it was over, and "Fast Gary's" streamer was gone. It was "Fast Gary's" third loss, so he went out in 7 after some very good and hard-fought matches. A great effort and lots of lessons learned.

"Out Of Luck Jeff Rein" had his Nelsons screaming in Stels planes on Saturday, and he flew three great matches. But he came up just a smidge short on each match. A few lessons learned and some new stuff to try at Regionals and then Bladder Grabber. Maybe Lady Luck will smile on Jeff for the next contest.

Northwest Samurai No. 5 was "Cactus Mel" (hold the snickers please!). First match Saturday was all nerves against deadly Chris Jensen. Had the usual first match faux pas moves and Cactus got killed and had the model whacked. (Those Stels models don't like midairs!) Not a great start.

Round 2, second Stels model, used a hot Mk VI Fox, the hot Fox III still being dug out of the first wreck. This match went better although no kill.

I think the pit crew of "Fast Gary" and "Laid Back Dave" won it for Cactus. Round 3 against Andy Mears. Cactus was ready to kill something, ANYTHING!! Finally he got a kill — but whacked the 'effin' Stels plane in the process. (They do come apart nicely!).

So we drags the wrecks to the van and prepares for Sunday with a late night of fixin' stuff. Cactus is 2nd match up — early, too early.

Wheaties hadn't even gone down. This is

round 4 and Cactus is against N. Mears. Who?? Too many of them Mearses. Turns out to be teenager Nick Mears. Cactus now has the Fox III howling on 50% nitro in a new Granderdog. The Stels planes just weren't doin' it. Cactus gets up and is fast, fast, really, really fast — flies right in front of Mears. Served it up on a platter. What a schmuck! Got killed again. Round 5, down to one life left. Bobby Mears this time. How many more freakin' Mears are there?? Slowed the Fox III down a tad on 40% nitro. Speed seems good. The horn goes. The next 10 seconds are a blur, almost slow motion. As Cactus opens his eyes and the brain module powers up, Bobby Mears flies right in front of him. SNIP! Instant Kill. Piece of cake. Round 6. Finally, not a Mears. It's a Willcox, Mike Willcox. Anyone know this dude? Supposed to be good. Willcox is flying an interesting Fantail design, a simplified type of Lee Liddle Fantail model. Better go back to the 50% just in case he can fly. "Fast Gary" has a plane to get ready and "Laid Back Dave" is really laid back. So Cactus has Buzz and Jeff pit for him. The Fox III is really howling in the test run. The start horn goes and Cactus gets up dead rich. The "combat" horn goes and Cactus knows he is dead meat until the Mk III gets to full howl. For 45 seconds Cactus tries to hide in the grass doing very low underloop eights and stuff. Willcox is cool and just flies around taking an occasional swipe at Cactus' streamer. Nobody is more relaxed flying than Willcox. Looks like a golfer just taking his time. This is very deceptive. Suddenly, Willcox takes all but 10 inches of Cactus' streamer. He's still just alive. On Willcox' next pass, suddenly the Mk III leans out to full scream. Cactus instantly gets on Willcox' tail and the screaming Fox is a match for the Fantail/Nelson. Willcox can't lose Cactus and finally Cactus gets the kill. A nerve-wracking but satisfying match. The pit crew can't believe it figuring Cactus was toast.

This was actually extremely satisfying for Cactus since he had lost badly to Willcox when Mike was barely out of diapers, and on another occasion also. Back at the pits much chest beating ensued. Then it was Round 7. Lee Liddle from Texas this time with his very good Fantail design. At the horn speeds were about even, but as Cactus got on Lee's tail he found Lee tighter in the turns. This Fantail flew tighter and a tad faster than Willcox' model. Cactus tried to stay in pursuit and tried the anticipation game to line him

up. A couple of very close calls. Then a mistake by Liddle and Cactus had the kill. Round 8 and it's Al Deveuve.

Now Cactus had been cruising on 40% in the last matches and felt it could do the job. However his brain module idled back to powersaver mode and completely forgot that Deveuve had a very high performance model. The horn went and immediately Cactus was badly out-performed. Only then did he realize that he needed the Mk III howling on 50%. Too late now. Deveuve was accelerating away from Cactus in every turn. Man was he fast!! So Cactus gambled on the anticipation game. Missed him twice, then nailed him almost head-on. Not a lot of damage, but Cactus' streamer was gone and Al still had his. So Cactus was out in round 8. A decent effort.

When the dust all settled, Mike Willcox took first and \$1,200, Don Jensen took second with money, loot and a Nelson, Greg Hills took third with a loot pile, and Chris Hess took fourth with more loot. AME motors and Litehawk and Yuvenko planes were generously donated by Larry Driskill and George Cleveland. There were 41 entries and the Silverbell site with three circles was great.

A pretty good contest with great weather and warm sun which is rare in our Northwest in March. Saturday night at Lil' Abner's was a hoot, and the whole trip was very enjoyable. Many thanks to the contest organizers, CD Steve Stewart, Tommy Thompson and all the crew. And extra thanks to my fellow Northwest modelers Gary, Dave, Jeff, Buzz and Donna for a great effort. We just gotta do this one again.

See y'all at Regionals and the 'Grabber. Adios Amigos!

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