

FLYING LINES

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Mel Marcum, longtime Eugene Prop Spinners officer, attended the Jan. 30 fun-fly and flew his very nice .38 Special. It has throttle control and makes nice touch-and-go landings. Details of the fun-fly inside this issue. *FL photo.*

Greetings, and welcome to this somewhat overdue issue. Ye Olde Editor was taken a bit ill and lost a few good days of his life. Argh! Many things got pushed back, and I am still trying to catch up. You may see things referenced in this issue as if they were future events, but now they have come and gone. Again, just due to being way behind things.

This is our annual NW rules issue. All the current stuff is in here. Be sure to set this aside for future reference! As always, rules are available from FL HQ, but this issue should take care of you for now.

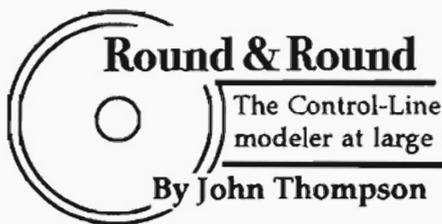
Northwest CL Regionals: A mass mailing was made earlier this month with flyers and advance entry information. If for some reason you were missed on this mailing, please request an advance packet. A copy of the flyer is included in this issue for reference. The next issue of *Flying Lines* will have all the latest news and info regarding the Regionals.

Hey, don't get disconnected! If your name follows, then this is the last issue of your subscription. It's time to re-up!

Greg Beers, Preston Briggs, John Clemons, Bob Dash, Jerry Eichten, Dave Gardner, Gary Harris, Igor Panchenko, Paul Rice, Dave Royer, Dick Salter, Paul Walker.

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Modeling thought for the month:

"Change is not merely necessary to life. It is life."

— Alvin Toffler

A quiet revolution?

All winter long we have been hearing a rumbling of a resurgence of interest in Northwest Sport Race, the venerable Fox .35/kit plane racing event that has existed for about 25 years.

Response to our "Racing Made Easy" article in Issue #203 and other indications suggest that 2005 will see quite a few new entries on the racing circle. We hear of burgeoning groups of new racers in British Columbia, Eastern Washington and elsewhere.

Welcome aboard, all!

A quick review: NWSR is the event that provides an entry into racing with simple equipment that anyone can buy and build. Stock Fox .35 engines, planes built from kits (or from kit plans). Simple technology. It's interesting enough to attract experienced fliers, who provide help, advice and pilot training to the novices. A good time is had by all.

Racing activity has been down in general in the past couple of years but shows promise of a resurgence thanks to the new interest in NWSR.

So, while we're at it, a couple of us old-time racers have come up with an idea to make this type of racing a bit more friendly to the masses (including novices, neighbors and the guys on the next circle).

Mufflers.

Ouch! I knew you'd throw up your arms and howl like that. No, wait. We're not going to change the rules to require mufflers. What we're doing is *encouraging people to try* mufflers on their NWSR planes.

The idea originated with Paul Gibeault, an experienced racing, speed and combat guy who is always thinking about ways to improve our hobby.

Paul also came up with an idea for encouraging the use of mufflers on NWSR planes — an award for the best 2005 performance with muffled

NWSR equipment.

We haven't worked out what the prize will be, but after the 2005 season, Paul Gibeault and the Nitroholics Racing team will give away some sort of prize (a kit, or engine, or something like that) to the person who turns in the best performance with a muffled sport racer.

We'll look over the 2005 results and decide which performance wins. It may be a great heat race, or a great feature race, or a series of races showing consistency. Somehow, we'll figure out who deserves the prize.

One important caveat: We're talking about using a *stock Fox muffler*. Absolutely no MACS or other performance-enhancing mufflers. Just screw on the muffler that came with the engine.

This actually has been tried before. Way back in NWSR Drizzle Circuit days the Nitroholics ran a muffled entry for a season or two. So we already know this:

You'll have to practice your starts and restarts because the techniques are different. You will have to get your engine started and warmed up with a stunt-style choke, not an exhaust prime. Once it's warmed up, it's pretty much standard Fox starting procedure. Also (this is important) before every race you'll need to check your head bolts, because the heat generated by the muffler will cause the head to loosen up. Substitute the Phillips bolts with Allen-head bolts to facilitate this.

Bolt a muffler on and get out there and practice. It would be really cool to see the first NWSR race of the year with four-up whisper-quiet racers. Who knows where this could lead? Muffled jets? Time will tell!

••• Boy, you couldn't have ordered a better day for our Jan. 30 fun-fly in Eugene (see report elsewhere in this issue). But maybe the best thing about the event was seeing some young people out flying. Ryan Banks, 10, topped all the old geezers with 10 flights, and C.J. Underdahl made quite a few as well. Keep it up, guys!

••• The Northwest Regionals will use an advance entry system again this year. Everyone will receive a flyer soon. Make sure to sign up in advance, get a discount, and guarantee yourself a T-shirt or sweatshirt. The registration crew will thank you!

John Thompson can be contacted by mail c/o Flying Lines, or by e-mail at JohnT4051@aol.com. Web site: <http://members.aol.com/johnT4051/NorthwestCL.html>.

Where the action is!

Coming events in Northwest Control-Line model aviation

APRIL 3

TEAM CL FUN FLY. Site: DeAlton Field, at the Evergreen Aviation Museum, McMinnville, Oregon

Note: Non-club members of TEAM must pay either a daily \$5 visitor fee, or no charge with museum admission. Non-muffled engines not permitted at site. Sponsor: The Evergreen Aero Modelers. Contact: Jerry Eichten, e-mail: jeichten@aol.com

APRIL 23 & 24

Fireballs Spring Meet. Site: Delta Park, Portland, Oregon. Events: Record Ratio Speed, Carrier & Racing events TBA, 80 MPH Combat, Old Time Stunt, Precision Aerobatics. Sponsor: Northwest Fireballs. Contact: Scott Riese (503) 246-4631

MAY 27 - 29

Northwest Control Line Regionals. Site: Albany Municipal Airport. Albany, Oregon. Events: Most classes of Aerobatics; Combat; Navy Carrier; Racing; Scale; and Speed. Sponsor: Northwest Regionals Management Association. For more information contact either Flying Lines or the NW Regionals website: <http://groups.yahoo.com/group/NWCLregionals>

JUNE 18

Swap Meet. Toledo, Washington, at high school. Contact: Jim Bassett, duckair@toledotel.com

JUNE 18 & 19

Skyraiders Stuntathon. Site: Thun Field in Puyallup, Washington. Events: P-40 Stunt, Old Time Stunt, Classic Stunt, Precision Aerobatics, Carrier. Sponsor: Northwest Skyraiders

JUNE 25

(tentative)

Big Money Vintage Diesel Combat. Site: Arlington Airport in Arlington, Washington. Event: Vintage Diesel Combat in Five rounds. Contact: Mel Lyne (604) 898-5581, e-mail: mlyne@sea-to-sky.net

JULY 2

Lucky Hand Fun Fly. Site: Bill Riegel Model Airpark in Salem, Oregon. Sponsor: Western Oregon Control Line Flyers. Contact: Mike Hazel (503) 364-8593

JULY 10 - 16

A.M.A. Control Line Nationals. Muncie, Indiana.

JULY 30 & 31

Western Canadian Stunt Championships Site: Rice Mill Road in Richmond, B.C. Events: Old Time Stunt, Classic Stunt, Precision Aerobatics. Sponsor: Vancouver Gas Model Club. Contact: ChrisCox (604)596-7635 e-mail: ccox1@telux.net

AUGUST 6 & 7

(tentative)

Bladder Grabber. Site: Harvey Field in Snohomish, Washington. Event: triple elimination AMA Fast Combat. Contact: Jeff Rein i_fly_combat@yahoo.com

AUGUST 6 & 7

Prairie Fire Stunt Contest. Edmonton, Alberta. Events: Classic Stunt, Old Time Stunt, Precision Aerobatics. Sponsor: Alberta Control Line Flying Club. Contact: Bruce Perry (780) 472-9000, e-mail: abperry@telux.net

AUGUST 27 & 28

Northwest Summer Speed Meet. Site: Bill Riegel Model Airpark in Salem, Oregon. Events: All AMA speed classes, plus NW Sport Jet Speed. Sponsor: Western Oregon Control Line Flyers. Contact: Mike Hazel, 503-364-8593

SEPTEMBER 3 & 4

Raider Roundup. Site: Magnuson Park at Sandpoint N.A.S., Seattle, Washington. Events: P-40 Stunt, Old Time Stunt, Classic Stunt, Precision Aerobatics, Carrier, Sport Scale. Sponsor: Northwest Skyraiders.

SEPTEMBER 17 & 18

(tentative)

T.E.A.M. Contest. Site: DeAlton Field at the Evergreen Aviation Museum, McMinnville, Oregon. Events: P-40 Stunt, Classic Stunt, Precision Aerobatics. Sponsor: The Evergreen Aero Modelers. Contact: Jerry Eichten, e-mail: JEichten@aol.com

OCTOBER 8 & 9

Fall Follies. Site: Bill Riegel Model Airpark in Salem, Oregon. Stunt and Racing events TBA. Sponsor: Western Oregon Control Line Flyers

THE FLYING FLEA MARKET

Free ads for the Flying Lines Subscriber

CONTROL-LINE SUPPLIES: Remember — We ship UPS daily. Eugene Toy & Hobby, (541) 344-2117, www.eugenetoyandhobby.com.

RACING MADE EASY: Get the Nitroholics introduction to racing packet, and you'll be on your way to success in NW racing competition. Packet includes general racing tips, articles on how to set up a NW Sport and Super Sport racer, and NW racing rules. Send \$2 to *Flying Lines*, and get the packet via mail.

COMBAT SHUTOFF: H&R MKIII Combat Fuel Shutoff now available. Sliding bellcrank design. CNC milled 7075 anodized and hard coated aluminum. Brass bushing and line buttons. 3" for Fast and 80MPH, all new 2" for F2D and 1/2A. \$25 plus \$5 S&H. Contact Jeffrey Rein at jeffrey.a.rein@boeing.com, or (425) 823-6053.

VIDEOS FOR SALE: Two hour videos of the Vintage Stunt Championship 14, 15, and 16. The VSC 16 video is available on DVD, and all three are available in VHS. Also the 2003 Northwest Regionals Precision Aerobatics competition are available for \$15 plus \$3.85 shipping, each. Videos are 2-hour summaries of the highlight flights, with stills and captions. Available from Bruce Hunt. Call (503) 361-7491 or e-mail at bhunt@swbell.net

FASCAL: Back by popular demand. The ultimate combat plane covering, good over open frame or foam. Available in full 27"x150' rolls. Contact me for price and availability info. John Thompson, JohnT4051@aol.com.

FOR SALE: Old magazine plans on CD's. Thomas Wilk, 301 W. Redwing Street, Duluth, MN 55803 e-mail: Tawilk36@cpinternet.com

FOR SALE: Sig Field Boss power panel, only used one season. \$10. John Thompson, JohnT4051@aol.com

FOR SALE: O.K. 60 ignition with Champion plug and coil. \$100.00 Rex Abbott 360-681-5067, e-mail: rex1945@juno.com

PRICE LISTS for ZZ! PROP are available from Mike Hazel. Glass and Carbon props for speed, racing, free flight, and other applications. Reliable service for over ten years. E-mail: ZZCLspeed@aol.com

WANTED: K&B greenhead .201, OS Max .35FP, Cox Medallion .051. Condition from excellent to NIB. Tom Kopriva 541-484-6048

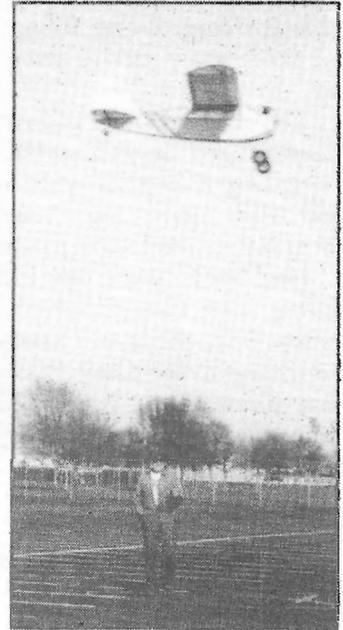
The USM (Universal Stunt Machine) can take you from raw novice to expert. Easily assembled in two or three evenings. I have overview, contest results, details, excruciating details, needless details and mind-numbing details. I am not selling anything but CL Stunt; send large, triple-stamped S.A.S.E. to Dan Rutherford, 4705 237th Place SE, Bothell, WA 98021. Contact me at: dlr111845@yahoo.com

FOR SALE: Packet of racing plane plans. For GY: "Mike Argander Special", "Li'l Rebel", "Buster" (from Sig kit). Plus: Mayer "Alley Rat" for Quickie Rat; Streaker IV (Mouse Race I), and 8-1/2 x 11 inch reduced plan of "Nashville Rat IV" (slow rat). The Alley Rat plans are new and pristine, the other full size plans are used, but in useable shape. All for \$25 postpaid. Mike Hazel, 1073 Windemere Drive NW, Salem, Oregon 97304

COMPUTER CONSULTING: If you own a computer and are having problems uploading your pix of that Profile you built, give me a call! In-house computer support and training for home, small & mid-size businesses. I am a Control Line flyer as well. www.qjwconsulting.com, quincyw@qjwconsulting.com, 360-936-7829

FOR SALE: one O.S. 40 FP-S, new in box with new in package after-market NVA. \$99 postpaid. Mike Hazel, 1073 Windemere Drive NW, Salem, Oregon 97304 503-364-8593

Eugene Jan. 30 Fun Fly



It was a fabulous day for flying at the season-opening event in Eugene. Sixteen fliers kept four circles busy, two asphalt two grass.

Clockwise from top:

- Crowd watches Floyd Carter's spark-ignition old-timer. Pic shows overview of the vast Eugene field (eight circles!)

- Floyd flies the sparker.
- Mike "ZZ" Hazel with his dad's autogyro. Note the rotor bearing: a Fox .35 crankcase and shaft.
- The gyro flies!

FL photos

What a start to the 2005 flying season!

The first organized activity of 2005, as far as we know, was the Eugene Prop Spinners Raffle Fun Fly on Jan. 30 in Eugene, Ore. And what a day it was!

Shirtsleeve weather! Sunshine, almost no wind, all day long at the Eugene Airport, once the home of all those spectacular Regionals contests.

On this day, it was just a broad expanse of space for control-line flying: two asphalt circles and three grass circles were in use much of the day.

The sign-up sheet indicated that 20 modelers attended, and at least sixteen flew. All kinds of interesting airplanes were in the sky: stunters, combat planes, racing planes, carrier planes and lots of just general sport planes.

Highlights of the day included Floyd Carters flights with two different spark-ignition airplanes. Boy, those old sparkers are impressive, and impressively noisy. Not to be outdone in the noise department, Mike "ZZ" Hazel's sport jet plane made a couple of flights to wow the bystanders.

Several potential new CL fliers showed up to watch and help out.

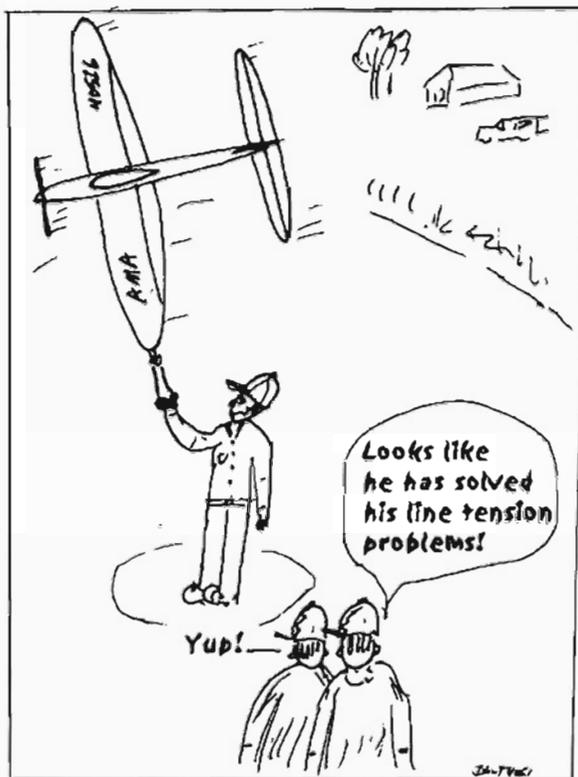
At the end, some prizes were awarded on the basis of the flying raffle (make a flight, get a ticket for the raffle). A special award went to young Ryan Banks of Eugene, who had the most flights of the day with 10.

All in all, it was a fabulously successful day for the first (somewhat) organized event in Eugene in several years.

The fun-fly was a joint production of the Eugene Prop Spinners and the Western Oregon Control-line Flyers of Salem. The fun will continue on the WOLF home field, Bill Riegel Field at Salem Airport, on March 12. Again, it will be a raffle fly.

To add to the early-season festivities, the TEAM Club of McMinnville, Ore., has added a similar fun-fly on April 3 at the DeAlton/Bibbee CL Circles, at the Evergreen Aviation Museum in McMinnville.

Thanks to all who came to Eugene — we'll see you in Salem and McMinnville!



SHOP TIPS

Here's another one of those little surprises you find in a shop that's *not* a hobby shop — at least not *our* kind of hobby shop. In an art supply store you may come across a little package of "sanding sticks." These are abrasive ceramic sticks in four sizes ranging from 3/16" to 3/8", perfect for sanding holes, round corners, or any kind of small or tight curved surface. They're distributed by Loew Cornell. I've already found several uses for them.

— John Thompson

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*.

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 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.

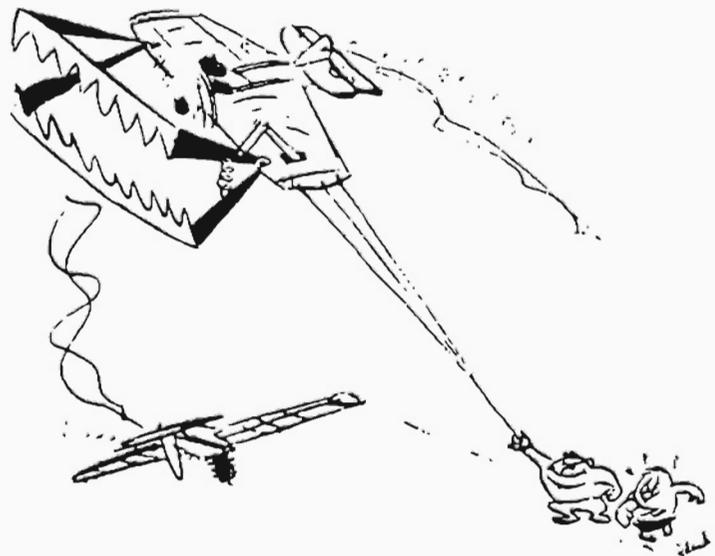
Exceeding the speed limit:

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



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

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**
 - Mokl:** 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.

mwh/jmt 3-27-93 // revFL 1/20/99* revFL12/1/9

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.
- All AMA general rules, control-line rules and Navy Carrier rules shall apply unless specifically addressed above.

oh/jmt/4/16/93

RULES FOR VINTAGE 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 may be any prop sold as an 8x6. The original diameter must remain untrimmed. Balancing may be done by sanding one blade.

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 3-foot radius pilots' circle and a concentric 65 foot radius safety circle.

RULES FOR OPEN DIESEL COMBAT

- 1.1. **Engine:** Any diesel engine up to .21 c.i.d.
 - 1.2 Only suction fuel systems are permitted.
- 2.1 **Aircraft:** Any design is permitted.
- 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:** 70 mph = 6.4 seconds/2 laps.
- 6.1 **Number of models.** One model per match.
- 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/FL3-2003p/ballot189

NORTHWEST P-40 STUNT

1. **PURPOSE:** This event is intended to provide a competitive opportunity for fliers of all ability levels using profile-fuselage airplanes limited to .40 engine displacement.
2. All rules for AMA precision aerobatics shall apply except as follows:
3. **Airplane:** Any profile airplane is allowed.
 - 3.1. The engine may be mounted in any configuration — side-mounted, upright or inverted.
 - 3.2. Doublers or triplers and cheek cowls are allowed, including faired spinners, but the fuselage must meet the "profile" definition of 3/4" thickness by the trailing edge of the wing/flap hinge line, and the engine must be fully exposed from lugs to plug.
4. **Engine:** Any engine up to .40 size, including four-strokes (no 60% rule for four-strokes).
 - 4.1. Mufflers are allowed, but not mandatory. Any exhaust system is allowed.
5. **Lines:** Line sizes must follow AMA Precision aerobatics guidelines
6. **Pattern:** Standard AMA Precision Aerobatics pattern.
7. **Appearance:** There are no appearance points.
8. **Skill classes:** Whenever possible, competition shall be divided into two skill divisions, as follows:
 - 8.1. **Expert:** Any flier may enter this class.
 - 8.2. **Sportsman:** PAMPA expert-class skill fliers may not fly in this class.

jmt/mwh/dg/12-02/FL/186ballot

NOSTALGIA NAVY CARRIER RULES

3.1. Engine Specifications: Engine and fuel system specifications shall be as listed in the current AMA regulations for each event.

3.2. Moveable Leadouts: Vertical or horizontal position of the leadouts relative to the model may not change in flight.

3.3. Electronic Control Systems: Electronic control systems are not permitted

4. Builder of the Model: The builder of the model rule does not apply to Nostalgia Navy Carrier.

5. Historic Model Bonus: A bonus of 20 points will be awarded for models which were published or manufactured prior to January 1, 1978. The Contest Director may require proof of eligibility, which shall be the responsibility of the contestant. Proof may consist of dated published plans, magazine construction articles, or advertisements. To qualify for this bonus, models must comply with the following requirements:

5.1. Modifications: No modifications to the original design are permitted, except as listed below. Any modifications other than those listed in section 5.2 which, in the opinion of the event director, significantly change the appearance or performance of the model as it was originally designed, shall not be permitted. This prohibition includes, but is not limited to, changes in airfoil, changes in dimensions, and use of moveable control surfaces not included on the original design.

5.2. Allowable Modifications:

5.2.1. Landing gear may be changed in length or material, but must exit the model at the original position. A tail wheel may be substituted for a skid and vice versa. Wheels may be of any diameter.

5.2.2. Leadout position may be changed from that shown on the plan. Ground-adjustable leadouts are permitted.

5.2.3. Control travel, control mechanism location, and control mechanism may be changed.

5.2.4. Tip weight may be changed or may be adjustable.

5.2.5. Tail hook and its location may be changed.

5.2.6. Structural changes to strengthen the aircraft are permitted.

5.2.7. Building and finishing material substitutions are permitted.

5.2.8. Location of access hatches may be changed.

5.2.9. Engine mountings may be changed, and engines of different displacement may be used.

6. Non-Schnuerle Engine Bonus: Non-schnuerle engines will receive a bonus of 20 points.

7. Carrier Deck: A carrier deck corresponding to current AMA regulations will be used.

8. Records: Records will not be established for Nostalgia Navy Carrier.

9. Combination of Classes: Class I and Class II may be combined for Nostalgia Navy Carrier. If classes are combined, Class I models will receive a five percent bonus on total score (multiply Class I total score by 1.05). Profile Class will not be combined with Class I and Class II in Nostalgia Navy Carrier.

MP/FL197

NORTHWEST SPORT JET SPEED

All A.M.A. 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 35 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, 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 minimum diameter. The distance between the centerline of the fuselage and the center of the control handle grip shall be a minimum of 70 feet.

2.2 The model and entire control system, lines and handle shall receive a 75 pound pull test.

3) ENGINE:

3.1 The allowed jet engines are the Dyna-Jet, Bailey Sport Jet, and the O.S. II.

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 (6 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.

mwh/2003/FLballot196

QUICKIE RAT

(NCLRA 2005 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:

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

b. 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:

a. 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.

b. 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.

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

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

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

4. ENGINE SPECIFICATIONS:

a. 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.

b. 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.

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

d. 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.

e. 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.

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

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

i. The venturi shall have an inside circular bore of not more than .292". 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.

ii. 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.

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

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

5. FUEL SPECIFICATION:

a. 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:

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

b. 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.

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

d. All races shall be run with no fewer than two or no more than three flyers; races should be flown three up.

7. LINES:

a. 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.

b. Pull test 35 Lbs.

8. FLYING REGULATIONS:

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

9. SPECIALTY ITEMS:

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

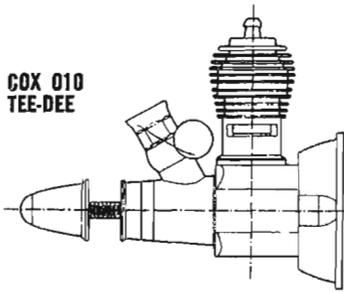
b. Hot gloves: allowed

c. Prop: open

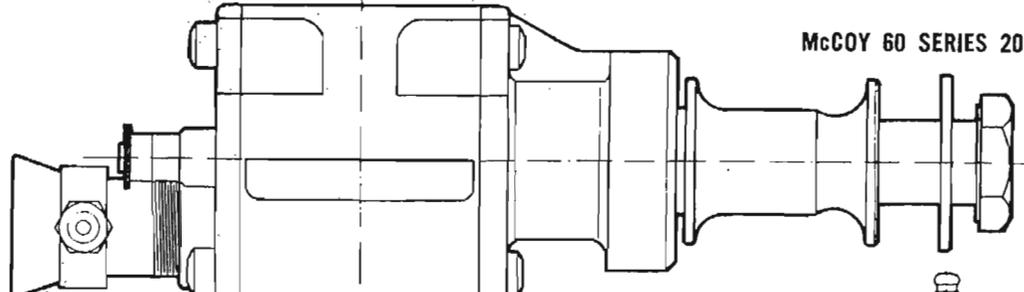
NCLRA 12/99, 1/05 ed/jmt

SOME OF OUR FAVORITE ENGINES FROM THE 1960'S

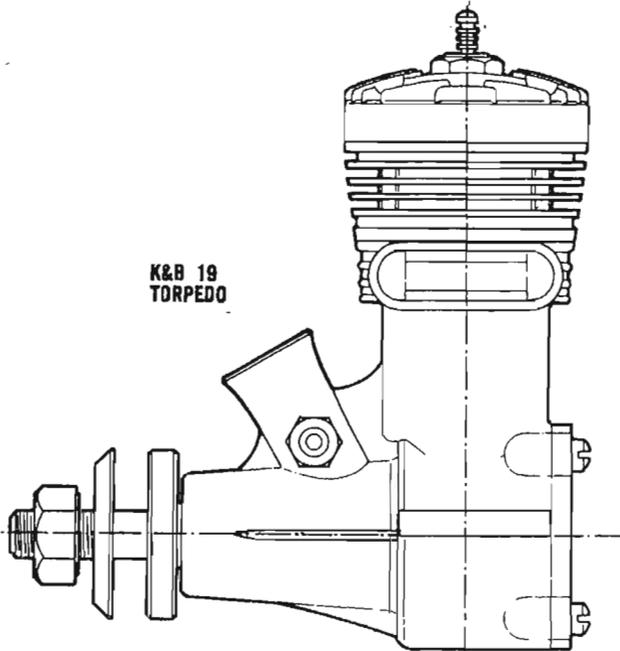
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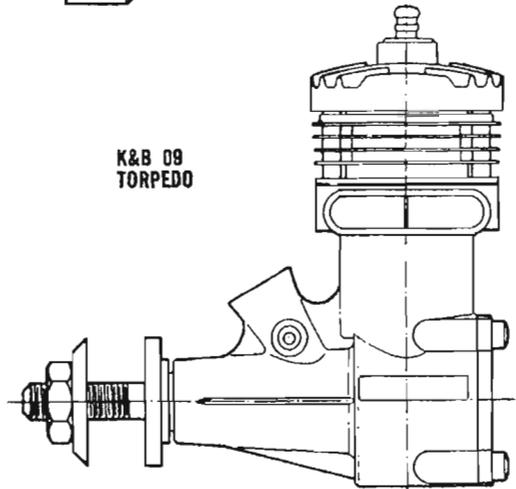
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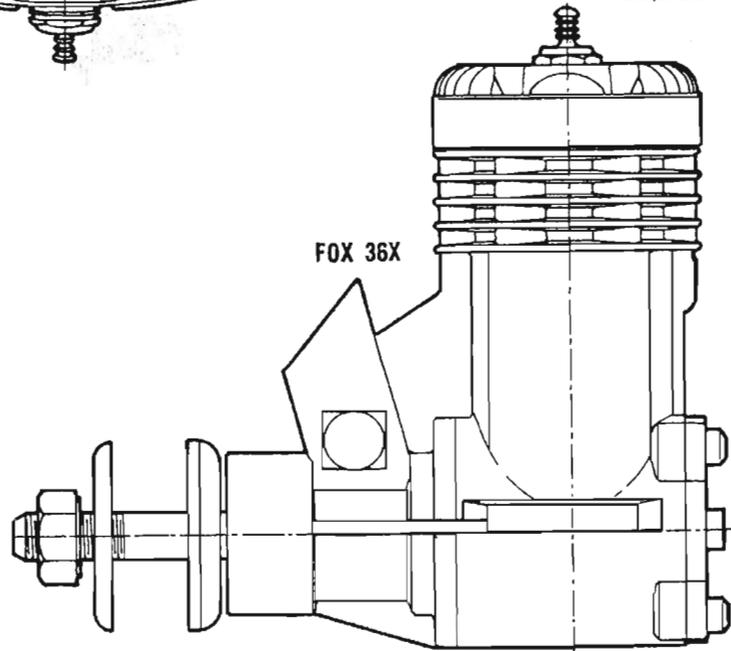
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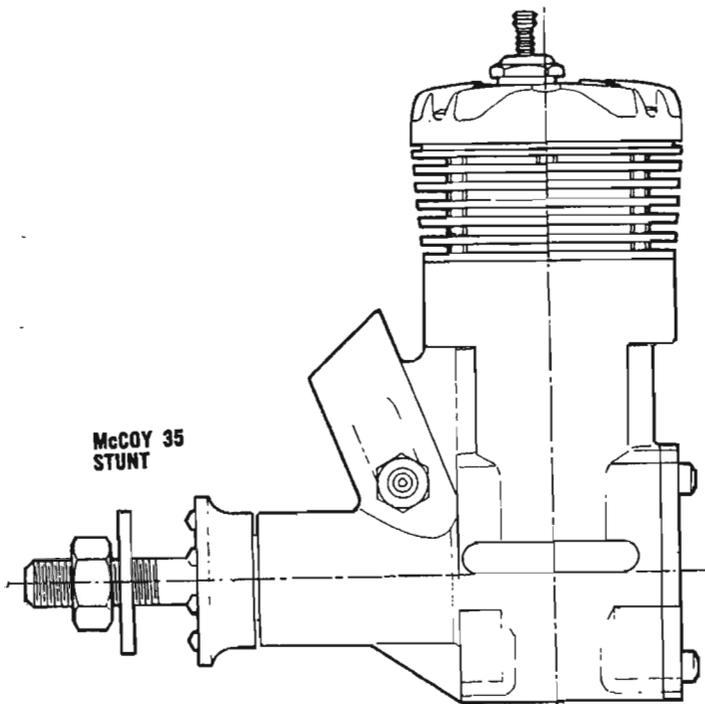
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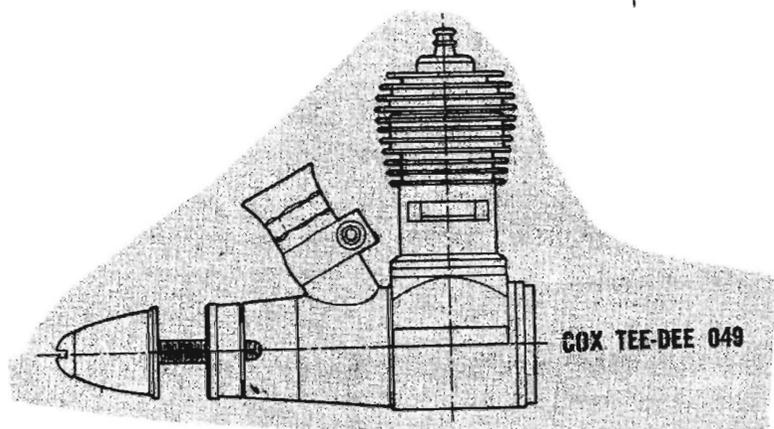
FOX 36X



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STUNT



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"NORTHWEST FIREBALLS"
"Jim Walker" Memorial
SPRING TUNE UP
2005



The spring event is back and better than ever.

The "Northwest Fireballs" will hold a TWO-DAY Control Line Event at Delta Park Portland, Oregon
(Exit 307 north - 306 south off I-5)

APRIL 23rd and 24th

On Saturday we will hold

Speed Record Ratio, Carrier 1-2 and Profile 15-36

OTS will be on GRASS

**Northwest Sport Race and or *Clown*

On Sunday we will hold

80 MPH Combat, PA-Stunt all classes

Starting Times are 9:30am-5:00pm Both Days \$10 First event \$5 Second \$20 Max

**Will be held at the same time as speed subject to entries*

Contact Scott Riese at 503 246-4631 Or SRiese5283@aol.com



AMA #1427

The Real Dirt

by Dan Rutherford

Line-Size Changes in CL Stunt

Oh, dread. Whenever AMA's rule book calls for different line sizes, our models fly worse, not better.

Not this time. Thanks to a lot of work from our own Mr. Dave Gardner, there have been changes, and I advise you to look through them either by ordering your own 2005-2006 AMA rule book or on-line at AMA's web site.

I will admit to only having scanned the changes, as my jaw dropped when noting that CL Stunt models powered by .0801ci to .2550ci engines can actually drop back from the previously required .015 cable to .012 cable. Or .010 solids should you want to put up with the things. The required pull test will be 15 pounds.

This is excellent news. While I have never referred to using .015s on any of my O.S. 20FP-powered models as the equivalent to "flying on chains," in comparison to use of .012s during sport flying sessions, there is indeed an easily noticeable difference.

Uh, to the point where a couple times I considered just leaving .012s on at least a couple models, taking my chances on getting caught at a contest. Please note: I never did it, but such was very tempting!

While all 20- to 25-powered models will benefit from use of .012s, the ARF *Flite Streak* will be first among equals under this new rule. No real need for an adjustable lead-out guide, for example. And a lot less line whip. Okay, not a huge problem to begin with, but readily noticed when switching back and forth between .012s and .015s. It may now even be possible to use 61- or 62-foot lines in this application.

As long as we are talking about lines, an excellent source for what they call "wire rope" is McMaster-Carr. Google the preceding, call up wire rope. The part number for .012 is 3458 T141. Other sizes are available. I think in quantities of less than 100 feet the price is

\$0.03 per foot. Anything over 100 feet is \$0.02 per foot. They ship same day. Via Fed-Ex, meaning in this area it is one- or two-day delivery. The phone number for McMaster-Carr sales department is 562.692.5911.

PAMPA Business

As this is a general-interest CL newsletter, we will tread lightly here. But we've got a pretty serious problem with CL's most successful SIG (Special Interest Group).

There is quite a litany of complaints from my side of the equation, best summed by there being no sense in fixing something that isn't broken. While a lot of this can be considered political, and as a group we tend to wave off a great deal of this sort of stuff as not only being beneath us, but also interfering with quality time spent building and flying, I am distressed to relate that it's different this time.

The latest is an almost complete rewrite of the PAMPA bylaws, a project initiated by PAMPA President John Brodak. There has been more manipulation of committees and outright violation of existing bylaws than I ever thought possible in the gentlemanly hobby of CL Stunt.

As I write this, proposed changes--a couple of which transfer power from our elected district representatives to the presidency, a real bad idea no matter who is in this office--are to be published in March/April 2005 Stunt News.

A ballot for voting on each article will be sent directly to all PAMPA members. It will include a stamped, addressed envelope for mailing. Even when I was PAMPA District XI Director, a position now occupied by Bruce Hunt, I never asked much of you guys and gals. I'm asking now. Please vote an emphatic "No!" on every single proposal.

If updating our bylaws is so important, it needs to be done within a set of rules which have served us well for around 30 years, many of these simply having been ignored in a head-long rush to change an organization with an amazing record of success.

Thanks.

MORE RACING COMMENTS *from the Flying Lines readers.....*

My Input for Northwest Sport Race
Kenny Johansen
Stanwood, WA

To start, I would like to say thank you to everyone who has been voicing their views on improving NWSR. The thought of any CL event going away is very disappointing. Although, there are a few key points that have been overlooked, one being the most important point of all.

Point #1 - Everything Dan has said about the LA .25 is quite accurate and experience learned. Most every time I've been to the Arlington flying site, I've seen Dan out flying his Flite-Streak. Although, I have experienced the difficult hot starting with my FP .20, LA .25, and LA .40. The design of the O.S. engines is very good, but I found that it takes quite a bit of prime to restart when hot. All that being said, the LA .25 still a very good engine. In fact, the point that I believe has been missed here is that they are a bit too good.

The Fox .35's are a challenge, but that is a good thing. I have been running them for the last two years prepping and practicing for NWSR. Anyone who has any experience with them knows that 13,000 rpm is about the max for one of those engines. Anything over that and you go home with pieces of a Fox .35. At those kind of rpm's, we have planes flying in the high 70's, low 80's mph range. It was explained to me that NWSR is an introductory, beginner's event. The LA .25's will easily run another 2,000 - 3,000 rpm's higher with the same props. That will push these beginner's planes well into the mid to high 80's. I don't think that is a good idea for an entry level event. I fly both diesel and 80 mph combat and there is a huge difference between the 64 mph d-bats and the 80's. If we stay with the limited Fox .35, this beginner's event will stay limited.

Point #2 - Although NWSR has a few rules of it's own, it is a very common type of race. With bit of internet searching you will find the term "Fox Race" all over the country. If we make the change to the LA .25, our event becomes solely a Northwest event. At last year's regionals I met people from 5 different states. If we want people to return each year we need to make sure we have events that are compatible with other events

within the traveling range of our contestants. For example: It is very unlikely that I would travel to compete in a Fox Race in Texas, but someone who lives in Nevada or California would go to Texas as well as Oregon. Just the same as I will travel to Richmond BC and Oregon. Our Regionals are centrally located for a reason. It sounds like Joe has some good interest growing in Eastern Washington. That will make for a good-sized event this year.

Point #3, THE MOST IMPORTANT POINT OF ALL - The concern we all have here is common. We don't want to see this or any other CL event die. We have seen this happen before and the root cause is always the same. No matter what event, hobby, or sport, if the attendance is not high enough, the function will die! Changing the rules or the engine is not the answer. The problem we have is promotion.

I am a business manager by trade, and I plan, implement, audit, and improve business processes every day at the Boeing Company. I have seen many programs implemented and not promoted, and their life cycle is usually very short.

The longevity of Control Line Model Aviation depends on life long commitment by the people involved. It was very easy for me to see our problem at the Regionals last year. Every event I watched or participated in had very few or absolutely no junior competitors. On top of that, all the adult fliers are all "Retreads". We've all been at it for years. We've started when we were young and have either stuck with it or gone away and come back. Well the bad news is: None of us are getting any younger and we will all come to a point where we are no longer able to perform the sport. Are we all willing to let the sport die at that point? I hope not! My 10 year old son is very interested in competing and I am committed to taking him all the way to the nationals.

If we are all serious about maintaining this sport, then each and everyone of us need to grab a hold of a junior or a beginner adult somewhere and start teaching them how to fly. I'm sure doing my part. My son is flying, and both his younger sisters want to fly too. I've encouraged both the girls by designing my own planes and naming them after them. On top of that, I have at least two other boys and a coworker, the same age as me, ready to start flying. We must promote our sport!

How many of you are mentoring a pilot in

training? How many "once upon a time" fliers are out there who don't know our events exist? I knew nothing of them up until two year ago. How many hobby shops don't have our fliers or copies of this newsletter hung up on their bulletin board? Two of my local hobby shops have increased their level of CL supplies in the last year, and they compete well with on line prices. How many of you are taking an active part in sponsoring or helping out at events? My family and I host one or two fly-ins a year on our 8 acres. It's amazing how many people stop in when there is sign on the highway that says "Fun Fly". I recently found out that you have to be certified by AMA to be a contest director (CD), so I told Mel Lyne that I'm interested in order to promote the sport in our local area. (Steve Helmick I hope you are reading this.)

We all have to get involved. The good news is: We are communicating about this issue and that creates interest and involvement. Dan, Joe and others who have written in, your efforts towards promoting NWSR are to be applauded. Keep up the good work. There are three generations of fliers in my family right now and I aim to see at least a fourth in my lifetime. So let's all dust off our race planes, grab a pit person and start racing, and while you're at it, bring someone new.

Thanks
Kenny

Over the last number of months I've been following the discussion re N/W 35 Sport Race and changes that some are proposing . I've talked to some of the other Sport Racers in B.C. and I think that changes will not accomplish the desired results. I make this statement based upon history with this event in Canada. Some years ago the N/W 35 Sport Race rules were forwarded to those in Ontario who were interested in this type of racing. One of the things they did was modify the rules to make it easier for beginners, this IT DID NOT DO !!! Always the more experienced competitor will still have the advantage, unless you bar them from competing in this event or in some other way divide it into experience classes.

Here in B.C. we are trying to ignite the flame of N/W 35 Sport Race again and feel we may have 5 or 6 teams competing by this summer. Probably 4 teams will be at the Regionals in May

all with Fox engines. If the O.S. 25LA is allowed then there will have to venturi diameter checks. I have an O.S. 25LA NIB and I also have a just about completed racer with a Fox in it and I have no interest in using the O.S. as a race engine.

As for the one or short list, of aircraft types allowed, again Why? A larger aircraft, like the Skyray, or CG Shoestring, have problems in moderate winds especially for beginners. Over the last number of years the most popular models have been the M&P Mongoose, M&P Bonanza, Dick Peterson's Artesian, and now the Super Fly is starting to show up. But there have been any number of other models flown with some successes, why restrict the choices ? What is needed is someone to produce and market the Artesian again, as it's a proven stable model.

To summarize, changes are not going to improve anything so why are they needed ?

Regards
BruceDuncan

Hi Bruce,

Interesting letter you wrote.

This year in Edmonton, we will see at least one OS 25FP on a Super Fly. Les is the main exponent of this & we will see how it goes. Of course at our level we allow hemi heads, stuffer backplates etc, as when you have only 4 racers you don't really care. Especially when you know those changes help in stunt but not racing....I also have an OS 25 nib awaiting something... Actually, I want a model that I can easily swap the 2 engines so's I can obtain some proper test results. Such a model I don't yet possess either...nor am I building one.

AS to why changes are thought needed.... we'll my thought is anything to make the event easier. CHEAP is also easier (on the pocketbook). It is a REAL TOUGH proposition. I'D personally allow ANY newbie a LOT of slack in their first year or so....about the ONLY item not addressed is the TANK. I've half the nerve of trying dirty Dan's clunk type tank w/ OS engine w/ & w/o muffler. I'm hoping muffler'd engines can be made to work w/ NWSRers, as too many of us (myself included) have damaged hearing.

One ALSO may BE ABLE TO FLY THE DARN THING (AND PRACTICE!) in a place

other than a designated model park due to the lower noise. I do suspect we'll see mufflers on NWSR's just about the time of the 2nd coming.....but some of us like the challenge of changes for the better as opposed to just changes...

Sadly, few if any of us make it our "work" to research this stuff properly.....just my 2c.

Your last comment to have Brodak make kits of the Artesian is RIGHT ON!! Why don't you ask him?? With the original designer deceased, copyright issues ought not to be a problem...

Paul Gibeault

With a view to revival of racing in general and the NWSR Event in particular - some changes are being proposed which suggest a restriction in both the airplane to one specific model (Brodak Superfly) and a replacement of the Fox 35 Engine with the readily available O.S. 25LA. I have competed in this event since 1985 and I am only too familiar with the shortcomings of the FOX 35 ENGINE. I have repaired more vibration cracks in my Bonanza than I could count, and over the years the plane gained a whole lot of epoxy weight - just to make the necessary repairs from the vibration of all the Fox 35's that I had occasion to use in that model. I have never been a great lover of Fox Engines with the exception of the "15" BB Schneurle !

Furthermore, I have used O.S. ENGINES from the beginning of time, and I have always considered them to be a top notch reliable and powerful engine and I believe that the O.S. 25 LA is also an excellent engine. Having said that- I should add that in 2004 I finally retired my Bonanza in exchange for a new Brodak Superfly which I consider to be a stable competitive model.

HOWEVER- I DO NOT BELIEVE THAT WE SHOULD ATTEMPT TO RE-INVENT THE WHEEL!

Let's STAY with the Fox 35 Engine and yes we could experiment with trying the O.S. 25LA or even the O.S.25 FP as an ALTERNATE engine. But whatever we do - let's NOT KILL THE EVENT by dictating that ONLY ONE AIRCRAFT can be used !!! - Or for that matter, let's not dictate that we are only allowed one prop or one fuel tank ! The next thing we know someone will tell us that we can only paint the plane One Colour - Red! I have enough trouble accepting our Cana-

dian Flag - of course it was just a coincidence that our then- Prime Minister Trudeau - who brought us the Flag, the Litre & the Killometer just happened to have started his political career in the Communist Party ! But then again we shouldn't get politically incorrect should we?

VARIETY is the spice of life! Let's promote it - not destroy a great event. We have a lot of eligible NWSR planes & engines hanging in our workshops just ready-to-go. Why spend time and money to replace good equipment when it's so unnecessary??? We don't need obsolescence - we simply need a little effort to promote Northwest Racing. With all the talent out there -we can create interest through some innovation .. Perhaps some Racing Demos in our local community or local flying site or perhaps some Inter-Club Challenge Racing! There's nothing like a four-up Final ! Win or Lose it doesn't matter. It's the challenge of the event & the team effort that makes the fun ! We might even gain some new membership and some young blood and this event is perfectly suited to create enough excitement and participation that we will all benefit - we just need some dedicated team effort !

Cheers, Henry Hajdik, Pres. Pacific Aeromodellers Club - British Columbia...

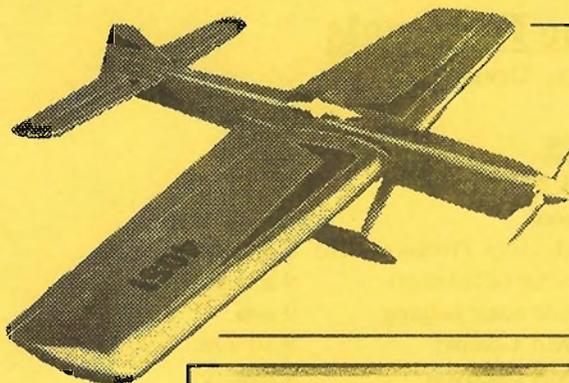
It's been very good to be able to air this discourse on one of very own Northwest events. While racing action in the NW is a bit weak in general these days, it does sounds like the NWSR event is going to make a great comeback in 2005. And this event has been the backbone of NW racing for many years.

So far the consensus seems to be to just leave the event alone. The alternative view(s) of allowing some other engine(s) is probably a good idea to study, and perhaps within the context of local club activity we can get some more data on this over the next year or so.

Meanwhile, love 'em or hate 'em, looks like we will be running Fox 35's in Sport Race for now.

Thanks to everyone who has taken the time to express their views and share their ideas on this. And thanks especially to Dan Rutherford who was able to thoughtfully "stir the pot" sufficiently to get you folks to think and comment about this. Editor

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- SCALE — AMA Precision, AMA Sport Scale and Profile Scale!
- SPEED — 1/2-A, 1/2-A Proto, A, B, D, FAI, Jet, Formula 40, .21 sport, .21 Proto, NW Sport Jet!
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Bob Stalick, 1930 N.W. Heron Point Ct., Albany, OR 97321 freeflitter@aol.com

FOR INFORMATION, CONTACT:

Contest Director Craig Bartlett, 205 N.E. Cedar Lane, Corvallis, OR 97330
e-mail scraigbart@yahoo.com — Info available by phone from John Thompson, (541) 689-5553

The Northwest Regionals are brought to you in part by
Eugene Toy & Hobby, (541) 344-2117, www.eugenetoyandhobby.com

The Northwest Control-Line Regionals

Albany Municipal Airport, Albany, Oregon

SCHEDULE OF EVENTS

<u>FRIDAY</u>	<u>SATURDAY</u>	<u>SUNDAY</u>
Vintage	1/2-A Combat 8:30 a.m.	Speed 8:30 to noon
Diesel Combat 10:30 a.m.	Speed (all classes) 8:30-5	Adv.-Exp. Precision Aero 8:30 a.m.
Speed (all classes) Noon-5:30	Carrier (all classes) 9-5	Carrier (all classes) 9 a.m.-4 p.m.
Carrier (all classes) Noon-5	Old-Time, P-40 Stunt 9 a.m.	Scale static judging 9 a.m.
	Classic Stunt appearance 9 a.m.	AMA Combat 8:30 a.m.
NW Goodyear Noon	80mph Combat 11 a.m.	AMA Goodyear 9 a.m.
	Mouse Race I (Jr.-Sr.) 9 a.m.	NW Sport Race (Jr.-Sr) 11 a.m.
Clown Race 2 p.m.	Mouse Race I (Open) 9:30 a.m.	NW Sport Race (Open) 11:30 a.m.
	NW Super Sport Race 11:30 a.m.	Scale flights Noon
	Classic Stunt Noon	Quickie Rat Race 2 p.m.
	Beg-Int. Aerobatics Noon	Contest ends 4:30 p.m.
	Mouse Race II 1 p.m.	Award Ceremony 5 p.m.
	.15 Rat Race 2 p.m.	
	PA appearance 4 p.m.	

SCHEDULE NOTES

Registration Friday 10 a.m.-5 p.m., Saturday and Sunday 8 a.m.-noon.

Absolutely no engine running before 8 a.m. any day.

RULES INFORMATION

- AMA events are per **2005-2006 rule book**, except as noted below. **Know the rules!**
- Official Northwest Rules will be used for the following events: *NW Sport Race, NW Super Sport Race, NW Goodyear, Flying Clown Race, .15 Carrier, Nostalgia Carrier, 80-mph combat, Vintage Diesel Combat, P-40 Stunt and Northwest Sport Jet Speed.* *Quickie Rat will use updated 2005 NCLRA rules.* For complete rules, write John Thompson, 2456 Quince St., Eugene, OR 97405, JohnT4051@aol.com. **Not knowing the rules is no excuse — get a copy now!**
- **COMBAT** — Fast, 80mph and 1/2-A double-elimination; Diesel five rounds if time permits. *1/2-A combat will be flown on 42-foot lines, starters OK.* **FLYAWAY SHUTOFFS required in Fast and 80mph: Failure of a shutoff results in disqualification from the event.** Be sure that yours works!
- Precision Aerobatics Model Pilots Association rules will be used for *Old-Time Stunt and Classic Stunt.*
- **Safety thongs required in all events.**
- Contestants may at some times be required to assist in timing or judging.

OTHER INFORMATION

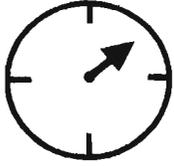
- AMA or MAAC membership required for all participants. AMA membership available at registration.
- Only participants and officials allowed in flying areas. All others must stay outside roped-off or restricted areas.
- Absolutely no alcoholic beverages on flying field during meet hours.
- Awards — Trophies through second or third place and merchandise through third place in each event and age grouping. Event champion trophies for each category!
- **Product vendors contact Contest Director for permission and site info.**
- Primitive camping allowed on site (no hookups). Commercial camping/RV locations nearby.

FOR MORE INFORMATION, CONTACT:

Contest Director Craig Bartlett, 205 N.E. Cedar Lane, Corvallis, OR 97330

e-mail sraigbart@yahoo.com — Info also available by phone from John Thompson, (541) 689-5553

The Northwest Control-Line Regionals are sponsored and produced by the Northwest Regionals Management Association in association with *Flying Lines* newsletter and Northwest control-line clubs.



Northwest Competition Records

Best performances established between Northwest CL modelers in sanctioned competition

1/2 A Speed	VACANT (NEW RULES)			
A Speed	187.23	Paul Gibeault	12-2-01	El Monte, Calif.
B Speed	161.37	Ken Kortness	5-25-02	Albany, Ore.
D Speed	171.85	Ron Salo	5-27-00	Roseburg, Ore.
Jet Speed	168.62	Loren Howard	5-23-03	Albany, Ore.
Formula 40 Speed	162.54	Marty Higgs	9-04-04	Richmond, BC
21 Sport Speed	153.78	Loren Howard	9-18-99	Salem, Ore.
FAI Speed	183.52	Will Naemura	9-19-99	El Monte, Calif.
1/2 A Profile Proto	VACANT (NEW RULES)			
21 Proto Speed	133.03	Chris Sackett	5-25-97	Roseburg, Ore.
NW Sport Jet Speed	146.52	Loren Howard	8-15-04	Salem, Ore
Mouse Race I - 50-lap	2:14.35	Todd Ryan	7-13-01	Muncie, Ind.
Mouse Race I - 100-lap	4:22	Paul Gibeault	7-15-99	Muncie, Ind.
Mouse Race II - 70-lap	3:01.02	S&S Racing Team	5-24-02	Albany, Ore.
Mouse Race II - 140-lap	6:31.41	S&S Racing Team	5-24-02	Albany, Ore.
AMA Scale Race-70-lap	2:53	Todd Ryan	7-00	Muncie, Ind.
AMA Scale Race - 140-lap	5.51	Todd Ryan	5-25-03	Albany, Ore.
NW Goodyear - 70-lap	3:42.22	Todd Ryan	5-24-02	Roseburg, Ore.
NW Goodyear - 140-lap	8:01	Julie Rice	5-27-95	Eugene, Ore.
Slow Rat Race - 70-lap	2:41	Todd Ryan	7-00	Muncie, Ind.
Slow Rat Race - 140-lap	5:49	Todd Ryan	7-16-98	Muncie, Ind.
AMA Rat Race - 70-lap	2:24.21	Todd Ryan	5-25-02	Albany, Ore.
AMA Rat Race - 140-lap	5:38	Todd Ryan	5-24-98	Roseburg, Ore.
.15 Rat Race - 70-lap	Vacant			
.15 Rat Race - 140-lap	Vacant			
FAI Team Race 100-lap	3:28.49	Ryan/Gillott	7/12/03	Muncie, Ind.
FAI Team Race - 200-lap	7:40	Knoppi/McCollum	6-84	Shanghai, China
NW Sport Race - 70-lap	4:00	Bruce Duncan	5-12-87	Richmond, B.C.
NW Sport Race -140-lap	7:58	Todd Ryan	10-11-03	Salem, Ore.
NW Super Sport - 70-lap	3:12	Todd Ryan	5-27-01	Roseburg, Ore.
NW Super Sport - 140-lap	6:38	Todd Ryan	5-28-00	Roseburg, Ore.
Quickie Rat - 70-lap	VACANT (NEW RULES)			
Quickie Rat - 140-lap	VACANT (NEW RULES)			
Flying Clown Race, Laps:	319	Todd Ryan	8-4-00	Coquiltam, B.C.
Class I Carrier	370	Todd Ryan	8-6-00	Richmond, B.C.
Class II Carrier	330.25	Orin Humphries	9-19-87	Kent, Wash.
Profile Carrier	353.7	Mike Potter	5-29-04	Albany, Ore.
.15 Carrier	244.7	Todd Ryan	5-26-01	Roseburg, Ore.
AMA Endurance	VACANT (NEW RULES)			

Records as of January 1st, 2005

A few rule changes wiped out some of the Northwest marks: In the 1/2 A Speed events, standard 10% nitro fuel is now required, no more high nitro! The AMA CL Endurance event has been changed to a 30cc (1 ounce) fuel tank limit from the previous four ounce tank And NCLRA Quickie Rat has a revised maximum venturi size of .292 inches down from the previous .315 size.

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