**President's Column – Bill Lee**

**Reminders:**

**Nominations** for President, Vice President and Secretary/Treasurer will be taken during the months of March and April. Please send all nominations to Tim and/or me. Also remember that I will not be running for re-election and somebody needs to step up.

**NATs** planning is progressing well. We published the schedule in the last issue of the *Torque Roll*, and it is also available on the NCLR website. At last look, the schedule posted on the AMA calendar on their website is incorrect. (We've been trying to get that fixed for a couple of months.) You might also want to look at the rest of the 2008 NATs information that is available on the website as well.

**Upcoming contests:**

U.S. World Invitational Site: Paradise Field, Ocklawaha, FL. This is at Dave Wallick's new personal flying site. February 23-24.

Cabin Fever in Tucson the first weekend in April.

Denny Shauer Memorial Site: Sepulveda Basin in Los Angeles on February 16-17.

**FAI Rules changes:** Looks like there will be some substantial rules changes for F2C coming soon. Lots of detail changes and a few substantive ones. In the mill for approval now include increasing the wire size to .35 mm, also eliminating the pilot and canopy although a painted cockpit will likely be required, and the current minimum dimensions will still be in place. I'll have more details on this in the next *Torque Roll*.

**Membership renewal and upcoming election**

Just a reminder that you need to renew your membership by March 1 in order to vote (see the Bylaws) in the elections that will be held in June of this year. With the distinct possibility that there will be multiple candidates for the open spots, you need to be ready to vote.

You can renew online at the NCLR website, or via paper to Dave Rolley. A copy of the membership form may be seen here:

http://www.nclra.org/Membership/MembershipForm.pdf

You can check the expiration date of your membership by going to the “Members Only” page of the website, logging in and asking for the “Membership” data. Your info will be listed and it will include your membership expiration date.

Your membership expiration date will also be included on the mailing label of the paper copy of the *Torque Roll* that you receive.

**In our thoughts:** We need to keep John and Helen McCollum in our thoughts and prayers as Helen progresses in her treatments. Last I heard was that the procedure worked, but she is a real sick lady as a consequence.

**SOUTHWEST REPORT - RON DULY**

We were pleased to welcome Russ Green to our Region for a few days of Hobby Shop-hopping and flying. Russ was part of the team that set the Flying Clown record at the NATS in 2006. He was out here on business but had the weekend for some c/l fun in the sun. The weather was great (hear that, Tim? No snow.....). D&D Racing, the Kusik Clan and DRRT kept Russ in the center of the circle flying whatever we offered. We had him fly my Clown with a Zalp engine against D&D's OS powered plane. I tried pitting but that Dawson guy beat me out of the pits every time. I appreciate my pitman (Burke) more than ever, now.

We tested my B/T/R to find out if the over-heating problem had been corrected. It is better and actually restarts now but the tank gave us problems. The original coffin-style (half-coffin shape) with a 1/3 back pick-up resulted in lean end-of-the-tank runs. A new taller and narrower tank has replaced it and will be tested soon. The design of the plane allows side-to-side movement to "tune" the tank and hopefully overcome the leaning out problem.

Dave Dawson with his award winning B-TR, won appearance award at the winter AMA convention in Muncie.
One of the "highlights" of the day was watching the D&D Team (Dave Hull and Dave Dawson) blow the crank on a Webra 28 that DRRT had loaned them. We all wanted to see Dave Dawson's beautiful B T/R fly (1st Place winner at the AMA show). Seems that there is a limit as to how far the crank can be bored out. Probably a few thou less that what it was!

**Dave Dawson's current B-TR project**

We are looking forward to the first SCAR contest of 2008 on Feb. 16/17 at Sepulveda Basin. Our SW Region will be keeping track of all results turned in by our members. The SW Regionals in Arizona will yield the first results. SW Regional records will be established for each racing event as well as Top 10 scores for the year (plus whatever else Darrell can be talked into). We look forward to a great year of racing.

---

**SOUTHEAST REPORT - BOB WHITNEY**

The sun is out, temp, 80 deg wind 3 mph, lets fly. The World Champs are only six months away...that will come fast, Mr. Lambert! Jason and I were out last weekend brushing off the cobwebs. The weather was great and our stuff was really going well. Jason and I hit the 16's with a 16.9, there is no way we could race at that setting, but it is a first for us.

Jason and I are going to Cabin Fever to defend our 15 Rat and Mouse 2 titles and hopefully start a new streak in F2C. Come on ASHER and HOLLAND lets have some fun. We might even let McSlow play if he plays nice.

Our new old resident racer, Jim Bradley has been busy. He now has a Quickie Rat and a Fox Racer in the air. He is looking to bring them to Tucson and give it a try.

Seems as though 25 Slow Rat is catching on. I think it is going to be a good event. I have a feeling there will be a good number of them at Tucson. I hope to have something ready myself... That is if anyone knows where to get a P/L for an Irvine 25! I was breaking mine in on the bench and on the 2nd run the plug element broke and went through the engine taking out the piston, is this fun or what?!

In F2C we use a hand held weather station to tell us of changes in temp and air density. I think this would also work for glow engines for props. Jim Bradley has tried every prop he could find on his Fox Racer. Yesterday while testing I asked him about the APC thin 9/6, he said no it was too slow, try it anyway I asked. It was faster than anything we had tried by 1/2 second, by checking the weather you can match the prop to the day. No Ron, you can’t have your W/S back till after the worlds.

This last one is for the F2C guys the RC boat guys use a flow meter to set their needles and it works pretty good. I haven’t seen it work to good for controlline BUT we are always trying to get the exhaust prime just right in F2C. What if we take one that is working well, put it on the flow meter, get a reading and set the others up the same. I think I have info on where to get the stuff to make up the meter if anyone is interested?!

Still don’t have a circle good enough around here for a contest. But still looking, Rad.
I'm looking forward to the Cabin Fever Contest this spring. But I'll certainly have my work cut out for me if some of the "big" names who mentioned that they are planning to attend, actually do.

The current crop of rules proposals are now at the stage where counter proposals can be made. One of these proposals is for changes to try and revitalize the Slow Rat event. The proposed rules will be tried at the Cabin Fever Contest on April 4, 5, 6. I believe that this will be the first test for these new rules. If you have an interest in Slow Rat, you might want to attend this contest to check out the new .25's and how they perform and maybe get a head start on everyone else in your area.

For some of the events that I currently compete in, I have only one good engine. TQR was one of those events.

I'm sure that most everyone who has competed in this event has bought one of the ready to go K&B 4011, or 8011 engines from Vic Garner. I was no different. With Vic deciding not to produce any more engines, I thought I'd take a run at trying to build an engine as good as my current example. I wanted at least 2 more good engines, and through various transactions, I found myself with a brand new series '71 Torpedo 40, and three 4011's, two of them new and one used. Could I build two good engines from these four?

The first thing I did was disassemble each engine, keeping all of the parts from each engine together. Next was a trip to a fellow modelers shop to borrow his dial bore gauge. This fine piece of equipment would allow me to select the roundest two of the four liners I have. These were set aside. Interestingly, the roundest liner was from the series '71 Torpedo 40!

The liners were carefully deburred so that the ring would not catch on horizontal edges of the ports. The rings were carefully removed from the pistons, so as to not impart a twist into them. The bottoms of the rings were then carefully lapped on a fine, flat stone to remove the machining marks, but no more. Feeler gauges were used to select the pistons with the tightest ring groves. I then made a lathe mandrel to fit the pistons onto so I could remove any burrs and polish out the scratches.

The rings were then installed, and lapped to the ring groove bottom with after run oil and a careful twisting motion by hand.

If you are really careful, you could lap the bottom of the piston’s ring groove on a lathe, but be careful not to impart an angle here. The ring groove must be square to the piston sides.

The crankcases were selected by the process of fitting the liners. If the liner wouldn’t install and remove without force, that crankcase was rejected. The reasoning, was that the K&B liner is quite thin and too tight a fit into the crankcase may affect the roundness of the liner as it conforms to the crankcase. There really is much variance in the machining here. Another area to check is the part of the crankcase where the front end bolts to. The front end should fit tightly into the crankcase recess, when using a 4011 front end, as 2/3 of the rear bearing is supported by the crankcase. At this point I was not confident of the overall quality of K&B's machining tolerances. The next logical step, if you really want to get crazy here, is to machine a mandrel that fits very closely into the liner hole, and rests on the bottom inside of the crankcase. Then you measure to the mandrel from each mounting flange, add half the mandrel diameter, and later on after measuring up your front end you can determine if you have to add, or remove gaskets to get the crankpin centered with the liner hole. Getting this correct will prevent much of the piston skirt scuffing.

The choosing of the front ends was rather easy. I wanted new. So, the used one was set aside for spare parts. Having already timed the cranks, I removed them and the front bearings from the housings, performed the modifications to the timing windows, which was done on the closing side only, cleaned everything, and re-installed them into the housings. However, one of the new housings had the bearing saddles machined so large that both front and rear bearings were a push fit. Out came the spare front end housing; problem solved. The next step was to spot face the sides of the venturi housing so that the needle valve assemblies I was using would have the spraybar’s exit hole centered.

Extra long Super Tigre Needle valve assemblies were used, and are available from Leonard Neumann (www.clstunt.com) or email him at: MrStuka@clstunt.com. Henry Nelson can also supply a needle valve assembly that has enough length if you spot face the sides of the venturi boss.

The heads were selected by measuring the plug depth, and the head depth. I managed to find two of the four that were the same, or nearly the and they fit the liners acceptably.

Assemble the engine dry and check for any binds or rough spots. Now is the time to fix them if you are able.

One last modification was performed, and it is entirely optional. I reduced the depth of the exhaust stacks a bit, and I drilled and tapped the stacks on my engines for an exhaust prime. I use the fuel
nipples that come with the original R/C carbs for this. You will have to experiment with the size of the hole until you obtain satisfactory results.

Below is a picture of the finished product.

Next up is the break-in running to seat the ring, and the performance testing.

That's it for this issue, keep building.

2008 CONTEST SEASON- STEVE WILK

The flying season is about to start in parts of the county and now is the time to start making plans. I have put together a list of most of the contests around the country. So get your calendar out and map of the US and start making plans.

One of the things that I have been trying to do each year is to go to a new contest every season. Last year we attended the Denver Contest to fly some speed, for the first time. We arrived late Wed night and spent two days seeing the sights and two days flying. The mountains were magnificent and we are planning on going back again this year. And to make a great contest better, they will have several racing event this year.

This year we are looking forward to the Tucson contest. We will be flying into Tucson, this spring, to start off our flying season. It sounds like this will be the contest to make this year. And we are already talking about next year. There are several contests that we are considering, Northwest Regionals, a SCAR contest and maybe a New Jersey Contest. This year we will attend 3 racing contests, 4 speed contests, and 6 combat contests. Some many contests so little time.

As I look over the lists of contest and events there are several things that pop out. California has the most active racers in the country. They hold six racing contests through out the year. New Jersey does not have all their contest dates yet but they will have 4-6 contests very year. The rest of the clubs will have 1-2 contests.

Next I looked at what they are flying. There are a lot of clubs flying F2C and F2CN at their contests. It wasn't that long ago that the only place you could fly F2C was the Nats. And it seems that F2CN is starting to take off. Of the AMA events Mouse II, Scale Racing and 15 Rat are not being flown much. Fox Race also seems to be declining from its glory days, but Super Slow Rat has taken it place. Quickie Rat and Clown Race are going strong with B-Team Race right behind. These four events are relatively new and are more popular then most AMA events.

There are several Club events that are interesting. Foxberg, Big Goodyear and Warbird, these are all variations of Fox Race. Each with there own twist to suit the clubs interest. Sport, SCAR and 1oz Goodyear are a low tech version Scale Racing. This might be some another event for NCLRA to consider. It seems that the low tech events are the most popular.

Several of the clubs have web sites with there club rules. Check them out and show up a new contest this season.

Central Arizona Control Line Club
http://www.controlline.org/

Dallas Model Aircraft Association
http://www.dmaa-1902.org/

SCAR Southern California Air Racers
http://www.microair.info/SCAR/

Northwest Control- Line Model Aviation
http://flyinglines.org/
## 2008 Racing Season

<table>
<thead>
<tr>
<th>Event Date</th>
<th>Location</th>
<th>FAI</th>
<th>AMA Events</th>
<th>NCLRA Events</th>
<th>Club Events</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feb 16-17</td>
<td>Van Nuyes, CA</td>
<td>X X</td>
<td>X X</td>
<td>X X X X X X</td>
<td></td>
</tr>
<tr>
<td>Feb 23-24</td>
<td>Ocklawaha, FL</td>
<td>X X</td>
<td></td>
<td>X X X X X X</td>
<td>X</td>
</tr>
<tr>
<td>Apr 4-6</td>
<td>Tucson, AZ</td>
<td>X X X X X X X X X</td>
<td>X X X X X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Apr 19-20</td>
<td>El Monte, CA</td>
<td>X X</td>
<td>X X</td>
<td>X X X X X X</td>
<td></td>
</tr>
<tr>
<td>Apr 26-27</td>
<td>Dallas, TX</td>
<td>X X</td>
<td>X X</td>
<td>X X X X X</td>
<td></td>
</tr>
<tr>
<td>May 23-25</td>
<td>Eugene, OR</td>
<td>X X X X</td>
<td>X X X X X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>May 24-25</td>
<td>Topeka, KS</td>
<td>X</td>
<td>X X</td>
<td>X X X X X X</td>
<td></td>
</tr>
<tr>
<td>Jun 14-15</td>
<td>El Monte, CA</td>
<td>X X</td>
<td>X X</td>
<td>X X X X X X</td>
<td></td>
</tr>
<tr>
<td>Jul 14-18</td>
<td>Muncie, IN</td>
<td>X X X X X X X X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aug 9-10</td>
<td>Wichita, KS</td>
<td></td>
<td>X X</td>
<td>X X X X X X</td>
<td></td>
</tr>
<tr>
<td>Aug 30-31</td>
<td>Denver, CO</td>
<td>X X</td>
<td>X X</td>
<td>X X X X X X</td>
<td></td>
</tr>
<tr>
<td>Sept 20-21</td>
<td>El Monte, CA</td>
<td>X X</td>
<td>X X</td>
<td>X X X X X X</td>
<td></td>
</tr>
<tr>
<td>Oct 18-19</td>
<td>El Monte, CA</td>
<td>X X</td>
<td>X X</td>
<td>X X X X X X</td>
<td></td>
</tr>
<tr>
<td>Dec 6-7</td>
<td>El Monte, CA</td>
<td>X X</td>
<td>X X</td>
<td>X X X X</td>
<td></td>
</tr>
<tr>
<td>??-??</td>
<td>New Jersey</td>
<td></td>
<td></td>
<td>X X X X X X</td>
<td></td>
</tr>
</tbody>
</table>

Matrix by Steve Wilk.
Thanks, Steve!
NATIONAL RECORDS

SLOW RAT
Jr (70 Laps) 5:16.20 Scott Matson 7/10/00
(140 Laps) 6:47.37 Scott Matson 7/10/00
Sr (70 Laps) 4:29.63 Howell Pugh 7/20/94
(140 Laps) 10:58.47 Doug Short 7/10/00
Op (70 Laps) 2:36.31 Bob Oge 7/18/91
(140 Laps) 5:24.94 Mike Greb 7/19/90

½ A MOUSE 1
Jr (50 Laps) 2:37.57 Scott Matson 7/15/99
(100 Laps) 5:18.14 Scott Matson 7/17/99
Sr (50 Laps) 2:44.68 Dave Rolley Jr 7/15/99
(100 Laps) 5:20.11 D.J. Parr 7/16/98
Op (50 Laps) 2:12.3 Jim Holland 7/16/04
(100 Laps) 4:22 Ryan & Gibeault 7/15/99

½ A MOUSE 2
Op (70 Laps) 3:01.24 MacCarthy/Kerr 7/11/03
(140 Laps) 7:16.03 Whitney/Hallas 7/11/03

SCALE RACING
Jr (70 Laps) 2:50.65 Bob Fogg III 7/16/91
(140 Laps) 6:08.55 Bob Fogg III 6/23/92
Sr (70 Laps) 3:15.12 Doug Short 7/11/00
(140 Laps) 5:40.05 Bob Fogg III 7/11/95
Op (70 Laps) 2:39.38 Willoughby/Oge 7/15/97
(140 Laps) 5:33.04 Bob Fogg Sr 7/16/91

F2C TEAM RACING
Op (100 Laps) 3:15.46 Lambert/Fluker 9/04/05
(200 Laps) 6:57.36 Lambert/Ballard 7/15/98

F2CN (NCLRA RULES)
100 Laps 4:23.10 Bill Lee/Jim Ricketts 7/09/07
200 Laps 10:37.8 R. Whitney/D. Hallas 7/11/05

‘B’ TEAM RACING
Op (35 Laps) 1:24.34 Burke/Duly 7/12/05
(70 Laps) 3:11.51 Burke/Duly 7/12/05
(35+70 Laps) 4:35.85 Burke/Duly 7/12/05
(140 Laps) 6:45.1 Burke/Duly 7/13/04

RAT RACING (15 RULE)
Op (70 Laps) 2:44.6 Jim Holland 7/15/04
(140 Laps) 5:33.1 Jim Holland 7/15/04
Jr-Sr No record established

NCLRA FOX
Jr (100 Laps) 5:57.11 Scott Matson 7/11/99
Sr (100 Laps) 5:28.09 Scott Matson 7/16/02
Op (100 Laps) 5:32.55 Tim Stone/Bob Oge 7/10/05

NCLRA CLOWN
Op (15 Min.) 331 Laps
Ron Duly/John McCollum/Russ Green 7/12/06
Op (7 ½ Min.) 160 Laps
Don Burke/Ron Duly 7/13/05

NCLRA TEXAS QUICKIE RAT
Sr (70 Laps) 3:04.22 Scott Matson 7/12/01
Sr (140 Laps) 6:20.20 Scott Matson 7/12/01
Op (70 Laps) 3:04.28 Jim Holland/Bill Cave 7/14/05
(140 Laps) 6:07.01 John McCollum/Bill Lee 7/14/05

NCLRA SUPER SLOW RAT
(100 Laps) 6:27.59 Don Burke/Ron Duly 7/10/05

Welcome to MBS Model Supply

CONTROL LINE FLYING BRODAK
CARMICHAELS, PA, USA

RITCH'S BREW.
THE WINNER'S CHOICE
**EDITORS' COLUMN - TIM STONE**

**Nats stuff...** We expect to see a pretty decent turnout at the Nats this year. Goodyear, Clown & F2C will have 2 days of preliminary races followed by Finals on Weds 7/16. The plan is to go with at least 2 heats for GY & Clown & possibly 3 in F2C. Here is the matrix for running the races.

**Tues PM Social gathering...** Bill Lee has extended an invitation & Free eats to all at the Nats on Tuesday 7/15 on the field, at his RV. If you have never seen it well... you can’t miss it! Thanks, Bill & Sandra, we are looking forward to it.

<table>
<thead>
<tr>
<th>Flying Clown Schedule 2008 NATs</th>
<th>NOTE: Elimination and Semi-Main rounds are 7 1/2 minutes, Finals are 1</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>No. Of Entries</strong></td>
<td>18</td>
</tr>
<tr>
<td><strong>Heats</strong></td>
<td>Go To Semi-Main</td>
</tr>
<tr>
<td>Rd.1</td>
<td>6X3</td>
</tr>
<tr>
<td>Rd. 2</td>
<td>5X3</td>
</tr>
<tr>
<td>Rd. 3</td>
<td>3X3, 2X9</td>
</tr>
<tr>
<td>Semi-Main</td>
<td>2X3</td>
</tr>
<tr>
<td>Finals</td>
<td>TOP 3</td>
</tr>
<tr>
<td><strong>No. Of Entries</strong></td>
<td>12</td>
</tr>
<tr>
<td><strong>Heats</strong></td>
<td>Go To Semi-Main</td>
</tr>
<tr>
<td>Rd.1</td>
<td>4X3</td>
</tr>
<tr>
<td>Rd. 2</td>
<td>3X3</td>
</tr>
<tr>
<td>Rd. 3</td>
<td>1X3, 2X9</td>
</tr>
<tr>
<td>Semi-Main</td>
<td>2X3</td>
</tr>
<tr>
<td>Finals</td>
<td>TOP 3</td>
</tr>
</tbody>
</table>

From Steve Wilk... Steve seems to cope with the Minnesota winters by keeping busy in the workshop. Here’s one of his new Slow Rat motors:

![Slow Rat Motor](image)

Steve writes:

Here are some Pics of my Slow Rat Motor. It is a HPI 25 Truck Motor. There are not a lot of 25 car motors. This one is used on a Savage R/C Truck. I bought it on ebay for $60, used.

Here are the following mods to get to this point.

1. Turn down the the heat sink head
2. Milled some of the cooling fins on the case.
3. Make a new backplate, I’m told a OPS will fit.
4. A Rossi 21 Trust washer is a perfect fit.
5. Made a spinner nut
6. Make a Venturi 3/8” bore with a sprinkler
7. Modify a Nelson NVA

Now if it ever warms up I will test run it!
SUPPLIERS

B & L HOBBIES
7606 Weymouth Rd., Hammonton, NJ 08037-3404
Harters Speed Pans, T/R Pans, Rev-Up & Top Flite
Speed Props, Torque Units and more (Paul Haley)
609-567-9365

BRODAK MANUFACTURING
Everything c/! 100 Park Ave, Carmichaels PA,15320
724-966-2726 email flyin@brodak.com

CS ENGINES AMERICA
113 North Chase Ave., Bartlett, IL 60103
G/Z .049/.061 Engines; sales, service & parts. (Bill
Hughes)
e-mail williamhughes4@comcast.net 630-736-6036

DARP
31052 Mason St.
Livonia, MI 48154 DARP Magnesium Speed Pans for
all classes including A, B, D, F-40, 21-S, and 21
Proto. (Barry Tippett) e-mail:
btippett@ameritech.net 734-266-7290

ELIMINATOR PROPS
Steve Wilk 3257 Welcome Ave. N.
Crystal, MN 55422 763-531-0604
e-mail swilk@cpinternet.com

STEVE EICHENBERGER
Custom Fiberglass Performance Props: Moulded tops.
Steve Eichenberger 480-730-0016

GILLOTT RACING PRODUCTS
Custom engine reworking, hard chroming
Tim Gilloitt 1063 Harding St.
Salinas, CA,93906 Phone 831-449-2052

JUST ENGINES LTD
Newby Cross Farm,Newby Cross
Carlisle, CUMBRIA CA5 6JP England
All engine and engine accessory needs; Popular
engines plus spares and Pipes.Irvine, Moki, Mvs
(http://www.justengines.unseen.org)

JON FLETCHER
Custom replacement engine parts, needle valves.
33 Lagari Close, Wingham, NSW 2429
Australia Tel. 61 2 6553 4548

LONESTAR BALSA
115 Industrial Lancaster, TX 75134
Info 972-218-9663 Order 800-687-5555
Fax 972-218-9211 http://www.Lonestar-
Models.com
12/04/07 BUSINESS SUSPENDED DUE TO FIRE

MBS MODEL SUPPLY
PO Box 282 Auburn KS 66402

Contact Melvin Schuette 1-785-256-2583
Solid Wire Sets and other C/L needs
http://www.members.cox.net/mbschuette.

RITCH’S BREW
Fuel ready mixed top quality finest ingredients.
4104 Lark Lane, Houston, TX 77025 713-661-5458

MEJZLIK MODELLBAU
Borova 14, 64400 BRNO,Czech Republic Distributors
of PROFI line of Russian FAI speed gear. PROFI
Engines, Pipes, Pans, Props, Tanks, Handles and FAI
Speed Models in kit form or ready built. (Tomas
Mejzlik) Phone: 420-5-432-1888 Fax: 420-5-432-
18880 e-mail mejzlik@brno.comp.cz

MODEL ENGINE SPECIALTIES
15477 Owens Rd, Hinckley, IL 60520 815-286-3969
Custom engine reworking, liners chromed and
honved to your specs, racing parts. (Bob Oge)
boge@isp-west.com

NELSON COMPETITION ENGINES
121 Pebble Creek Lane, Zelienople, PA 16063
Manufacturer of NELSON Racing Engines and parts,
FAI Pans for F2A & FIC Custom Button Heads,
Nelson Glow Plugs, many other specialty engine
items. (Henry Nelson) Phone: (724) 538-5282 e-
mail: nelcomp@fyi.net

MARC WARWASHANA
Rubber fastfills, wheels. 11577 North Shore Dr.
Whitmore Lake, MI 48189-9124
Phone: 734-449-7355 E-Mail:
whelieman@gmail.com

OLD MAGAZINE PLANS & MORE ON CD
Tom Wilk, 301 W. Redwing St.,Duluth, MN 55803
Phone: 218-724-0928(hm) E-Mail:
tawilk36@cpinternet.com

ZALP ENGINES
Zalp F2C&F2D engines- Bob Whitney
456 Garvey rd sw, Palm Bay FL 32908
f2cracer@aol.com

VIC GARNER
For Sale, Texas Quickie Rat Engines...
Quickie Rat engines. K&B .40s Race
prepared with all the go-fast modifications
that I know of. Placed 1-2-3 at 2004 Nats.
Updated 2005 versions with .292 venturi
perform better than previous model! Call
or email:
Vicgarner@aol.com or 925-447-3786

121 Pebble Creek Ln. Zelienople, PA 16063 724-538-5282
THE “TOPCLASSICAL”

29TH ANNUAL MODEL AIRPLANE CONTEST

May 24- 25, 2008, Gage Park – Topeka, Kansas
Sponsored by the Topeka Control Line Association
Contest Director – Jim Lee
(785) 266- 7714

EVENTS

Saturday
1/2A Mouse I (JS)(O)
Class II Goodyear (JSO)*
Big Goodyear (JSO)*
Quickie Rat*
Team Race
75 MPH Combat
1/2A Combat
Balloon Bust (JS)(O) 1:00 p.m.
*10% SIG Fuel provided

Sunday
PAMP Stunt (Beg JS)(O))
   (Intermediate)(Adv)(Exp)
Old Time Stunt (JSO) (PAMPA Rules)
PAMP Basic Flight
Profile Carrier
Sportsman Profile Carrier
Class I & II Carrier Combined
.15 Carrier

ENTRY FEES: Open - $10.00 first event, $3.00 each additional event
   Jr & Sr - $3.00 first event, $1.00 each additional event

Safety thongs will be required in all events except racing.
Balloon Bust – 60’ lines, fast time, four balloons, reverse order, 5 minute limit.
Basic Flight, Beginner Stunt and OTS will be flown in the grass circle, adjust gear and prop to suit.
Trophies through 3rd place. Special trophies for: Spirit of ’52; Stunt Concours; Hi Point Racing

We will have a free picnic for all contestants, wives, helpers, etc. at 6:00 p.m. on Saturday.
Presents

U.S. World Invitation

Control Line Racing Competition

Saturday Feb 23 and Sunday Feb 24, 2008

Take 40 East from Ocala Or West from Daytona To Hwy 314A Ocklawaha, Florida 32179!
South on 314A 2.4 Miles! Left Hand Side There Is An Orange Airplane On 4125 Address Post. For Additional Directions Please Call 352-625-2156

Contest Director: H. David Wallick  home:(352) 625-2156  cell:(352) 502-2476

This will be two separate contests February 23rd and 24th from 7a.m. - 5:30p.m. Entry fee will be $100 covering both contests. Automatic double entry both days for F2C teams at no additional cost. Free to contestants, all you can eat lunch will be served both days. Starting at 6p.m. free dinner buffet with drinks “Beer and a Band” from 7 to 11pm. Those wanting to avoid Yankee lager open bar and wine will be available, formal dress not required. Beautiful 1st, 2nd, & 3rd place trophies will be given out Sunday for both contests.

“Top Dog Trophy for best Jr. & Sr.”

Coffee, donuts and practice 7a.m. both days, contest at 9a.m.

SATURDAY: Fox Racing, Clown Racing, Quickie Rat, F2C (Limited 19/10), F2C (FAI), F2F (F2CN).
SUNDAY: BTR(American Rules), F2C(Limited 19/10), F2C(FAI), F2F(F2CN), Yankee/British Goodyear (Any 15 Diesel, Any Tank, Any Goodyear, 52 feet, 100 lap, two pits. 200 lap 5 pit final. We have lender planes for this event, let’s have some fun.

F2C (Limited 19/10) don’t try to use your fast models for this event, they won’t win. Planes will be timed three times, once before each pit then averaged. Seconds will be added to models faster than 19/10. Speeds of 18.9/10, one sec. 18.8/10, two sec. 18.7/10, three sec. and so on. A model with an average of 18/10, 10 seconds will be added to the score. This is all about having fun and getting better as a team, not speed.
The Central Arizona Control Line Club
PRESENTS
CABIN FEVER 2008
With lots of help from the Cholla Choppers and others........

DATE: April 4, 5, 6, 2008  PILOT’S MEETING: 8:00 AM Sat & Sun

LOCATION: Cholla Choppers Flying Field, Christopher Columbus Park, Silverbell Road, Tucson Arizona*

FEES: $20.00 Entry (includes first event, and fuel fee) $5.00 each additional event
Contest Director Ken Gulliford (623) 877-8823  Asst CD Mark Smith (623) 877-8968

SATURDAY EVENTS
FAI F2C (Self Governed)
NCLRA Super Slow Rat (SSR)
Mouse I (Modified Production Reed Valve)
Mouse II (Spring Starters – Any Fuel)
NCLRA F2CN (External Controls Waived)
NCLRA Super Slow Rat (SSR)
NCLRA .25 Slow Rat (Provisional)
B-Team Race
Southwest Sport Speed .35 (Time Permitting)

AMA RULES: (313) Mouse I, (314) Mouse II, (318) F2C, (311) Rat Race (.15)
NCLRA RULES: Clown, Fox, SSR, Texas Quickie Rat, B-Team Race, .25 Slow Rat, F2CN
SCAR / ACLA RULES: Formula Unlimited
CACLC RULES: Southwest Sport Speed .35

Contact Ken Gulliford for Rules Questions (623) 877-8823 or kgrtr@cox.net

SUNDAY EVENTS
FAI F2C and F2CN – Make-ups
Rat Race
SCAR / ACLA Formula Unlimited
NCLRA Texas Quickie Rat
NCLRA Clown Race
Southwest Sport Speed .35 (If not flown Saturday)

RULES DEVIATIONS and Special Instructions:
Mouse I - Modified Production Reed Valve Engines Only
Mouse II - Spring Starter and Any Fuel Allowed
.25 Slow Rat - Engines up to .2589 ci (4.2 cc) (Run as event 312 - See NCLRA Slow Rat Rules Website below)
NCLRA F2CN – External controls requirement is waived
.35 Southwest Sport Speed – Rules at controlline.org
AMA Website: http://www.modelaircraft.org/events/rulebooks/CL%20Racing.pdf
Central Arizona Control Line Club Website: http://www.controlline.org

* All Day Needle Day – Open Flying on Friday, April 4th, for Earlybirds and those that need practice. No club officials will be present. Courtesy Rules are in effect, along with all Club, NCLRA, and AMA Safety Rules. Enjoy!
The 37th annual...

Control-Line
Northwest Regionals
Eugene, Oregon May 23-24-25, 2008

Championship Control-Line flying competition

With 42 events, the Northwest Regionals provides the largest selection of CL competition events and awards available in a single contest in North America.

You can compete in these great championship events:
- AEROBATICS — 4 PAMFA classes, Old-Time Stunt, Classic stunt and two classes of Profile Stunt!
- COMBAT — 1/2-A (high-performance), 80-mpch and Vintage Diesel!
- NAVY CARRIER — Profile, Class I, Class II, '15 and Nostalgia (Profile and Class I-II)!
- RACING — Mouse I, '15 Rat, NW Sport, NW Super Sport, NW Clown, B-Team Race, NCLRA Super Slow Rat and Quickie Rat!
- 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!
- JUNIOR/SENIOR EVENTS — Northwest Sport Race, Class I Mouse Race!

Enjoy the Regionals at Eugene Airport!
Smooth paved surface ... Ample parking ... Camping and RV space ... Rest rooms
Food concessions ... Restaurant at airport terminal ... Motels a short drive away
TROPHIES ... MERCHANDISE PRIZES ... EVENT CHAMPIONSHIP TROPHIES

Follow the signs to Eugene Airport: Take the Belt Line Road West exit from Interstate 5 (Exit 195). Take Belt Line to the Highway 99 North exit. Go north on Highway 99, turn left on Airport Road. Stay on Airport Road all the way to the flying site, on the right side of the road across from the airport terminal.

For your convenience: Advance registration!
Sign up early and purchase your T-shirts and sweatshirts in advance.
Discount for all early entry and shirt sales! Write for entry package:
John Thompson, 2456 Quince St., Eugene, OR 97404, JohnT4051@aol.com

Regionals host hotel: Quality Inn, near the Interstate 5/Belt Line Road interchange. Call (541) 726-9266 and mention the Northwest Control Line Regionals to get a special room rate.

FOR INFORMATION, CONTACT:

Contest Director John Thompson, 2456 Quince St., Eugene, OR 97404
E-mail: joht4051@aol.com, phone (541) 689-5553 (no calls before 10 a.m.)

The Northwest Regionals are brought to you in part by
Eugene Toy & Hobby, (541) 344-2117, www.eugenetoysandhobby.com
For more information and late updates, visit flyinglines.org
**Eliminator Props by Steven Wilk**
3257 Welcome Ave N
Crystal, MN 55422
763 531 0604
swilk@cpinternet.com

---

<table>
<thead>
<tr>
<th>Size</th>
<th>Weight</th>
<th>Count</th>
<th>Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>H-3</td>
<td>3 x 3</td>
<td>SB</td>
<td>$5.00</td>
</tr>
<tr>
<td>M-4p</td>
<td>2 1/2 x 4</td>
<td>SB LH</td>
<td>$6.00</td>
</tr>
<tr>
<td>F-1</td>
<td>2 1/2 x 4 1/4</td>
<td>SB</td>
<td>$7.00</td>
</tr>
<tr>
<td>F-3</td>
<td>2 1/2 x 4 1/2</td>
<td>SB</td>
<td>$8.00</td>
</tr>
<tr>
<td>F-4</td>
<td>2 1/8 x 4 1/2</td>
<td>SB</td>
<td>$9.00</td>
</tr>
<tr>
<td>SC-6</td>
<td>2 5/8 x 4 1/2</td>
<td>SB</td>
<td>$11.00</td>
</tr>
<tr>
<td>F-5</td>
<td>2 5/8 x 4 3/4</td>
<td>SB</td>
<td>$12.00</td>
</tr>
<tr>
<td>F-6</td>
<td>2 5/8 x 5</td>
<td>SB</td>
<td>$14.00</td>
</tr>
<tr>
<td>SC-7</td>
<td>2 5/8 x 5</td>
<td>SB</td>
<td>$16.00</td>
</tr>
<tr>
<td>CW</td>
<td>Counter Weight</td>
<td></td>
<td>-</td>
</tr>
</tbody>
</table>

---

<table>
<thead>
<tr>
<th>Size</th>
<th>Weight</th>
<th>Count</th>
<th>Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>C-1</td>
<td>4 1/4 x 2 1/2</td>
<td></td>
<td>$5.00</td>
</tr>
<tr>
<td>C-3</td>
<td>4 1/8 x 2 1/2</td>
<td></td>
<td>$6.00</td>
</tr>
<tr>
<td>C-4</td>
<td>4 1/8 x 2 3/4</td>
<td></td>
<td>$7.00</td>
</tr>
<tr>
<td>C-5</td>
<td>4 1/8 x 3</td>
<td></td>
<td>$8.00</td>
</tr>
<tr>
<td>C-6</td>
<td>4 1/2 x 3 1/4</td>
<td></td>
<td>$9.00</td>
</tr>
<tr>
<td>P-4</td>
<td>4 1/8 x 3 3/4</td>
<td></td>
<td>$10.00</td>
</tr>
<tr>
<td>E-1</td>
<td>4 1/4 x 4</td>
<td></td>
<td>$11.00</td>
</tr>
<tr>
<td>A-1</td>
<td>4 1/4 x 4</td>
<td></td>
<td>$12.00</td>
</tr>
<tr>
<td>E-2</td>
<td>4 1/4 x 4</td>
<td></td>
<td>$14.00</td>
</tr>
<tr>
<td>E-3</td>
<td>4 1/4 x 4 1/2</td>
<td></td>
<td>$16.00</td>
</tr>
<tr>
<td>E-5</td>
<td>4 1/4 x 4 3/4</td>
<td></td>
<td>$18.00</td>
</tr>
<tr>
<td>E-6</td>
<td>4 1/4 x 5</td>
<td></td>
<td>$20.00</td>
</tr>
<tr>
<td>E-7</td>
<td>4 1/4 x 5</td>
<td></td>
<td>$22.00</td>
</tr>
</tbody>
</table>

---

<table>
<thead>
<tr>
<th>Size</th>
<th>Weight</th>
<th>Count</th>
<th>Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>F2A-1K</td>
<td>3 x 5</td>
<td>SB</td>
<td>$15.00</td>
</tr>
<tr>
<td>F2A-2G</td>
<td>3 1/4 x 5 1/2</td>
<td>SB</td>
<td>$17.00</td>
</tr>
<tr>
<td>F2A-3P</td>
<td>3 x 6</td>
<td>SB</td>
<td>$19.00</td>
</tr>
<tr>
<td>F2A-4SC</td>
<td>2 15/16 x 6</td>
<td>SB</td>
<td>$21.00</td>
</tr>
<tr>
<td>F2A-5I</td>
<td>3 x 7</td>
<td>SB</td>
<td>$23.00</td>
</tr>
</tbody>
</table>

---

<table>
<thead>
<tr>
<th>Size</th>
<th>Weight</th>
<th>Count</th>
<th>Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>W-B</td>
<td>3 5/8 x 11</td>
<td>SB</td>
<td>$12.00</td>
</tr>
<tr>
<td>W-D</td>
<td>4 1/2 x 11 1/2</td>
<td>SB</td>
<td>$14.00</td>
</tr>
</tbody>
</table>

---

<table>
<thead>
<tr>
<th>Size</th>
<th>Weight</th>
<th>Count</th>
<th>Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>T-12</td>
<td>5 7/8 x 3</td>
<td></td>
<td>$8.00</td>
</tr>
<tr>
<td>A-2</td>
<td>5 3/4 x 3</td>
<td></td>
<td>$9.00</td>
</tr>
<tr>
<td>M-4p</td>
<td>5 x 4</td>
<td>LH</td>
<td>$10.00</td>
</tr>
<tr>
<td>F-1</td>
<td>5 1/4 x 4</td>
<td></td>
<td>$11.00</td>
</tr>
<tr>
<td>F-7</td>
<td>5 1/4 x 4 1/2</td>
<td></td>
<td>$12.00</td>
</tr>
<tr>
<td>H-2</td>
<td>5 1/4 x 4 1/4</td>
<td>C</td>
<td>$14.00</td>
</tr>
<tr>
<td>MA-1</td>
<td>5 1/2 x 4 1/2</td>
<td>C</td>
<td>$16.00</td>
</tr>
<tr>
<td>C-7</td>
<td>5 1/2 x 5 1/4</td>
<td></td>
<td>$18.00</td>
</tr>
<tr>
<td>G-8</td>
<td>5 7/8 x 6</td>
<td></td>
<td>$20.00</td>
</tr>
<tr>
<td>VS-1/A</td>
<td>5 x 6</td>
<td></td>
<td>$22.00</td>
</tr>
</tbody>
</table>

---

**F2A - A Speed**
Molded w/Counterweight for Profi

<table>
<thead>
<tr>
<th>Size</th>
<th>Weight</th>
<th>Count</th>
<th>Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>F2A-1K</td>
<td>3 x 5</td>
<td>SB</td>
<td>$15.00</td>
</tr>
<tr>
<td>F2A-2G</td>
<td>3 1/4 x 5 1/2</td>
<td>SB</td>
<td>$17.00</td>
</tr>
<tr>
<td>F2A-3P</td>
<td>3 x 6</td>
<td>SB</td>
<td>$19.00</td>
</tr>
<tr>
<td>F2A-4SC</td>
<td>2 15/16 x 6</td>
<td>SB</td>
<td>$21.00</td>
</tr>
<tr>
<td>F2A-5I</td>
<td>3 x 7</td>
<td>SB</td>
<td>$23.00</td>
</tr>
</tbody>
</table>

**Without Counterweight for Irvine**

<table>
<thead>
<tr>
<th>Size</th>
<th>Weight</th>
<th>Count</th>
<th>Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>F2A-6K</td>
<td>3 x 5</td>
<td>SB</td>
<td>$10.00</td>
</tr>
<tr>
<td>F2A-7Q</td>
<td>3 1/4 x 5 1/2</td>
<td>SB</td>
<td>$12.00</td>
</tr>
<tr>
<td>F2A-8P</td>
<td>3 x 6</td>
<td>SB</td>
<td>$14.00</td>
</tr>
<tr>
<td>F2A-9SC</td>
<td>2.93 x 6</td>
<td>SB</td>
<td>$16.00</td>
</tr>
<tr>
<td>F2A-10I</td>
<td>3 x 7</td>
<td>SB</td>
<td>$18.00</td>
</tr>
</tbody>
</table>

---

**Carbon Fiber Landing Gear**

<table>
<thead>
<tr>
<th>Size</th>
<th>Weight</th>
<th>Count</th>
<th>Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/2 A Strut</td>
<td></td>
<td></td>
<td>$2.00</td>
</tr>
<tr>
<td>1/2 A Strut (Pan Style)</td>
<td></td>
<td></td>
<td>$3.00</td>
</tr>
<tr>
<td>1 1/2 Proto 1 pc</td>
<td></td>
<td></td>
<td>$5.00</td>
</tr>
<tr>
<td>1/2 Proto 2 pc</td>
<td></td>
<td></td>
<td>$6.00</td>
</tr>
<tr>
<td>Fox - QR - SR Strut</td>
<td></td>
<td></td>
<td>$10.00</td>
</tr>
<tr>
<td>15 Rat (Invert) Strut</td>
<td></td>
<td></td>
<td>$15.00</td>
</tr>
<tr>
<td>Goodyear</td>
<td></td>
<td></td>
<td>$20.00</td>
</tr>
<tr>
<td>Stunt w/Cloth</td>
<td></td>
<td></td>
<td>$30.00</td>
</tr>
<tr>
<td>4&quot; Stunt Bell Crank</td>
<td></td>
<td></td>
<td>$15.00</td>
</tr>
</tbody>
</table>

---

**New 2007**

<table>
<thead>
<tr>
<th>Size</th>
<th>Weight</th>
<th>Count</th>
<th>Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single Blade</td>
<td>SB</td>
<td></td>
<td>$20.00</td>
</tr>
<tr>
<td>Cuff Blade</td>
<td>C</td>
<td></td>
<td>$25.00</td>
</tr>
<tr>
<td>Left Hand</td>
<td>LH</td>
<td></td>
<td>$30.00</td>
</tr>
<tr>
<td>1/2 Hub</td>
<td>1/2</td>
<td></td>
<td>$35.00</td>
</tr>
</tbody>
</table>

---

**Cash – Check Money Order Or Paypal**

**S&H**
$5 USA
$10 International

10% off all Orders Over $100

6/17/2007
NCLRA Membership Form

Name________________________________________

Street Address________________________________

City_________________ State_________________

Country_________________ ZIP________________

Phone#_______________________________________

E-Mail_______________________________________

AMA or Other National Organization #__________

Would like electronic Newsletter ONLY: ____

Send Dues & Membership Form to:      US Dues: $20
    Dave Rolley                        International: $22
    P.O. Box 468                       (Add $.75 if paying by PayPal)
    Bennett, CO 80102

(Membership Expiration date on mailing label)

Payment can be by check or Money order to the address above.

Payment by PayPal to Treasurer@NCLRA.org
**Officer's Addresses**

**President**
Bill Lee  
601 Van Zandt County Rd.4815  
Chandler, Tx 75758  
Phone 903- 852- 5599  
Email Bill@WRLee.com

**Vice- President**
Jim Ricketts Jr  
3916 East 20th Street  
Sioux Falls, SD 57103  
Email jr.siouxfalls@yahoo.com

**Secty/Treas**
Dave Rolley  
Mailing address; NCLRA  
P.O. Box 468  
Bennett, CO 80102- 0468  
Email:soar.rubber.duck@gmail.com

**Editor**
Tim Stone  
4919 Country Oaks Dr  
Johnsburg, IL 60051  
Phone 815- 344- 5728  
Email stone- tim@sbcglobal.net

**Northwest Representative**
Mike Hazel  
Po Box 126  
Mehama, Oregon 97384  
Phone: 503- 859- 2905  
ZZCLSPEED@aol.com

**Midwest Representative**
Stewart Willoughby  
95237 Aero Drive  
Naperville, Il 60564  
Phone 630- 904- 7011  
Email StooDDS@aol.com

**Northeast Representative**
Jason Allen  
1103 James St.  
Sinking Spring, PA 19608  
Email jallen@mpgis.net

**Southwest Representative**
Ron Duly  
1806 Karen St  
Burbank, Ca, 91504  
Phone 818- 843- 1748  
Email rduly@earthlink.net

**South Central Representative**
Mike Greb  
724 Pauls Lane  
Sulpher Springs, TX 75482  
Phone 903- 438- 9883  
Email m.greb2@verizon.net

**Southeast Representative**
Bob Whitney  
456 Garvey Rd. SW  
Palm Bay, Fl 32908  
Phone 321- 676- 0554  
Email F2CRACER@aol.com

**North Central Representative**
Les Akre  
13336- 129st.  
Edmonton, Alberta  
Canada T5L- 1J8  
Home 780- 454- 5723 Cell # 780- 919- 2792  
Email scaleracer@hotmail.com

Torque Roll is the official publication of the NCLRA. Published bi-monthly. All submissions are valuable & will be considered for publication subject to editing. Preferred format for publication is as a MS Word document using 10 point Times New Roman font. Any photos should be sent as a separate jpeg file, medium res. Email all as an attachment to Tim Stone at the address given on this page. While this is preferred format, we will take submissions in just about any format, they can be written, typed or mailed to Tim Stone.

Apply for membership by mailing annual dues of $20.00 to the Secretary/Treasurer at the address on this page. Make checks out to the order of “NCLRA” and be sure to provide the correct address for receiving the newsletter.

**USING PAYPAL**- To pay dues with PayPal, first log in to your Paypal account, then send dues to; Treasurer@NCLRA.org

Note that a $.75 surcharge is added for the PayPal charges.

**OR VIA THE WEB:** Membership renewal can be easily done via the NCLRA web site at  
http://www.NCLRA.org/