From: National Control Line Racing Association
Bill Bischoff 1809 Melody Ln.
Garland, TX 75042

TO

Sandra Lee
September 10, 1943 - November 3, 2025
Always there for others.

INSIDE:
District Reports
Sandra Lee Memoriam
Contest Reports
Suppliers/Equipment
Updated Contest Calendar

Torque Roll Issue #182
December 2025

PRESIDENT – Bill Bischoff

2026 NATS
It's never too soon to talk about the NATS. The schedule I have requested for racing at the 2026 Nats is as follows. Monday, July 6 will be Mouse and Vintage B Team Race. Tuesday, July 7 is AMA Slow Rat, AMA Goodyear, and Super Sport Goodyear. Like 2025, the Super Sports will be racing along with the AMA Goodyears, but there will be separate awards for each event. Yes, you can enter both! Wednesday, July 8 is Quickie Rat and DMAA Sport Goodyear. Do we want to run Gold, Silver, and Bronze in Sport Goodyear? What does anybody think? Thursday, July 9 will be Clown and Super Slow Rat, and our meeting and pizza party will be Thursday evening.
This schedule is not official until it's blessed by AMA, but I don't anticipate any changes at this point.
Speed is supposed to be moving in next door, which should be more convenient for everyone. Perhaps this will boost entries for both groups.

FORA Junior .15 NEWS
The NCLRA still has Fora Junior 15 engines for Sportsman Goodyear available. We have been able to obtain nine more engines. The price will be slightly higher, as our cost was slightly higher. They will be $160 shipped in the US. Please contact me for international shipping costs.
It is my understanding that there are no more of these currently available, and may not be for some time. If you are interested in obtaining one, do it now. Please email me before sending payment to be sure there are some engines left. You may buy no more than two engines.
By Paypal, please send payment to *billbisch@hotmail.com*, and select the "send money to friends and family" option to save NCLRA the fees. By check, make payable to NCLRA, and send to Bill Bischoff, 1809 Melody Ln, Garland TX 75042.
I have learned that Foras have come with different size venturis at different times. The newest batch have 1/8" venturis, whereas all the others that I have seen have venturis with a nominal 4mm bore. We have been conducting most of our tests with a 4mm venturi, and at the NATS, we told people they could drill their venturis out to 4mm (5/32") diameter if they were smaller. This will be the rule for 2026. I will drill the venturi for you if you request it.
For experimenters, we also have 4 Nelson head buttons available for $5 each. They will not be legal for Sport Goodyear.

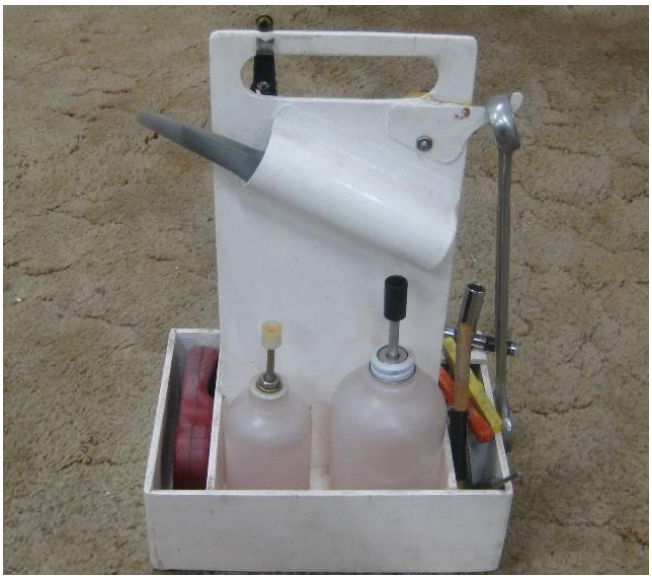
UPDATED SPORTSMAN GOODYEAR RULES
The Sportsman Goodyear rules have been updated to include the Fora Junior 15 engine. A copy of the rules appears in this newsletter.

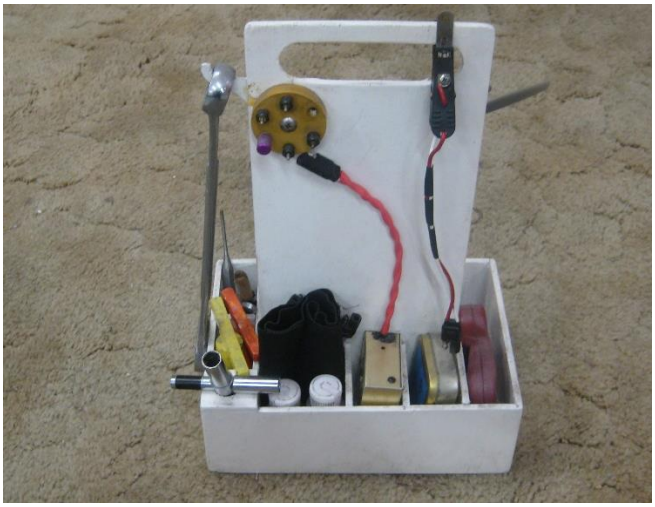
CONTROL LINE RACING CONTEST BOARD NEWS
Steve Wilk has stepped down as AMA's CL Racing Contest Board Chairman. Steve suggested me as the new Chairman, and I have been voted in by the Board and approved by the AMA President.

NORTH WEST – Leighton Mangels

'Tis the season. The holiday season, not the racing season. Usually this is the time of the year that new planes are being built or old ones refurbished in prep for the '26 season. While the planes and motors are the stars of the show it takes a certain amount of pit equipment to support them while racing so, I thought I'd show what my partner and I have been using for several years and find very handy (Pictures Below).
I imagine every team that's been at it for a while has some sort of carrier at the ready during the races to support the effort and this is what we've been using and find it to be just right. Hopefully the pictures of both sides are pretty much self-explanatory. I made this from some 3/16 plywood, epoxy and 'glass cloth to hold it together and painted it with Klass Kote epoxy. It's about 9.5" long, 6.5" wide and 14.5" high. It holds spare props, glow plugs, glow igniter, fuel bottles, tach, tools, and a few other odds and ends. Other than a plane and lines this is all we need to go racing. It's small, light, and a true grab and go box. It's outlived several race planes and I expect it will for many seasons to come. Happy Holidays to all and to all a good pit stop.

Leighton Mangels





NORTH CENTRAL – Paul Gibeault

This is the hardest column I've had to write so bear with me.

It is with great sadness when I heard about the recent demise of Sandra Lee, beloved wife of Bill Lee. I was lucky to be able to know and socialize with Sanda over the many years at championships all over the world.

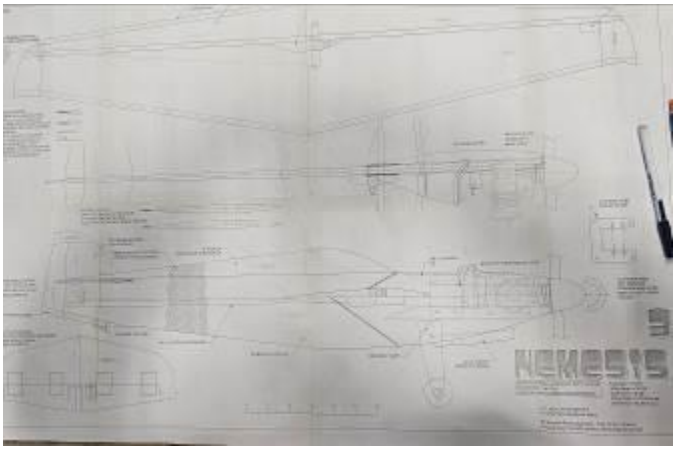
After seeing an Italian flier's wife sporting engine component jewellery. Not to be outdone, I made these highly polished special lightweight Cox .049 aluminum (piston/rod) earrings for Sandra to wear. She made them look good!

Of the many competitions, one in Portugal was most memorable. After a day's flying, I was in a lot of pain that evening & reached out to Sanda (being a trained nurse) for some medication. I swear one of her suitcases looked like a well stocked pharmacy. I don't know what she gave me, but I slept really well & was 100% pain free the next day. Better living through pharmaceuticals, I guess… 😊 Sadly, it won't be the same anymore. I'll miss Sandra (and her special suitcase) a lot.

(Below) Sadly, these are the only photos of Sandra I can find. We were blessed to have Bill & Sandra Lee's family come out to work at the Muncie world championships.

It was always calming at the racing circle seeing Sandra holding a stopwatch. I'd often give her a bribe…er I mean gift of Canadian maple syrup early on (before the racing started), but somehow it never seemed to help my scores any... 😊

My New Goodyear for 2026



Nemesis 3, 1/8th Scale Racer plan by Gerry Van Dyk (Wetaskiwin, AB)

Here's the initial fuselage & wing Lay up. Note the Full Length hardwood Spars on both fuselage & wing.

Top views of my new Nemesis. This one will be Profi Jr. powered.

After seeing too many broken G/Y fuselages, Gerry wisely laid in carbon reinforcing on both sides of the fuselage (in addition to a hardwood spar).

New design Van Dyk carbon L.G. made from 10 layers of 5 oz carbon cloth & West Systems epoxy, vacuum bagged. A wooden mold is made from MDF. Wheels are a new low drag design by Bill Bischoff. (Supplier of fabulous G/Y components to the masses.)

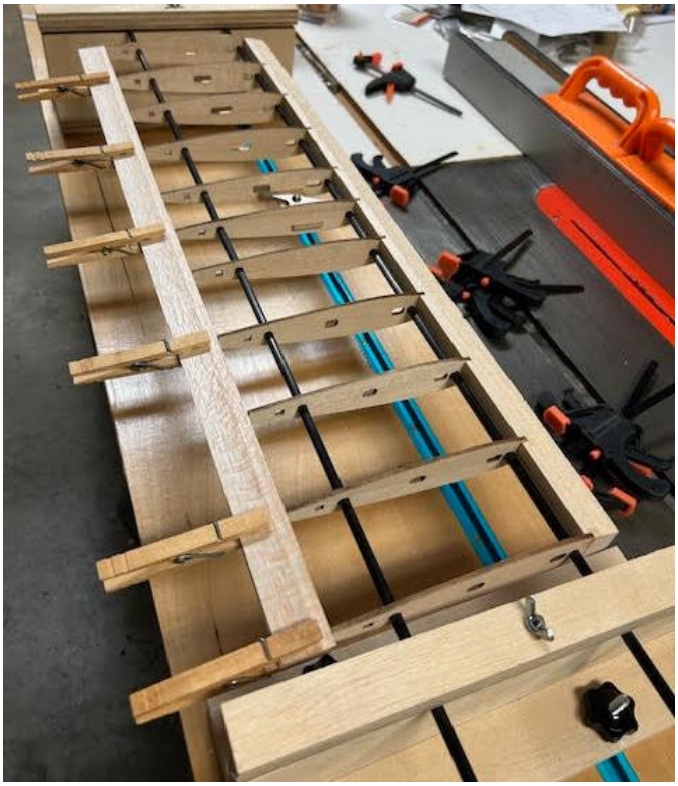
For sale:
One Globee Fireplug, $50 plus post.
Contact information on back page.

MIDWEST – T.J. Vieira

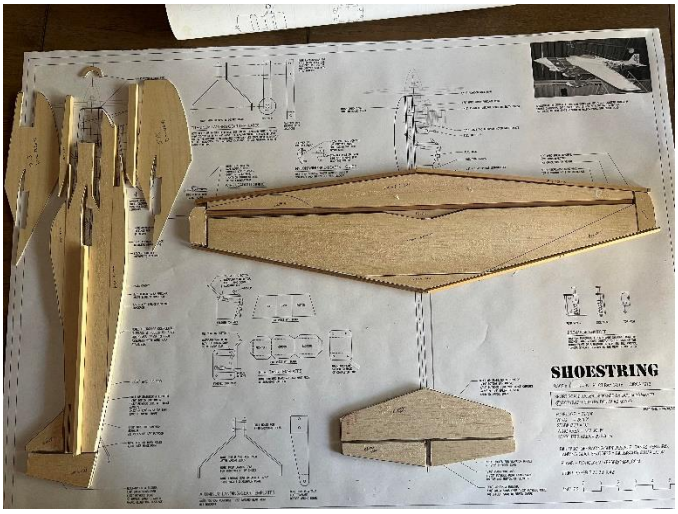
Hello Racers!

The Midwest is quiet, but we have exciting news out of Cleveland!

I have been speaking with Chuck Cline, and the North Coast club is firing up a Clown class! It appears that they will run rules like Brodak to allow some amount of portability, but they are still ironing out the details. One of their members recently purchased a laser cutter and has been itching to burn some wood with it. More to come from those guys…



My efforts to get a league started at my workplace is going "so-so". I have cut one kit of Doug Meyer's Shoestring, and I am still waiting on the other team to decide which model they wish to run, or if they want to try and run one from scratch. Speaking of starting from scratch…



I have been diligently working on my Vintage B racer, and boy, let me tell you, starting from nothing never ceases to amaze! I began with donated three views and documentation compliments of Bob Heywood but quickly started banging my head against the wall when my numbers wouldn't number. The reference material was an issue of Air Trails in which they published profile and three views, but when it was time to put pencil to paper and start drawing formers, nothing lined up. Not just a little, but by a lot! I thought I was having issues with high school level math but after consulting some nice scale prints I had, I concluded that the staff in charge of making those views fit took some liberties in how they squished the images around to get them to fit on the page. Hopefully by the next issue I will have something to show! I have two weeks off from work coming up, and the list of unimportant things (read "not modeling related") is short. So that means time to make some sawdust!

One last thing. Dayton would absolutely love to host a race next year. If there is interest, please contact me and we'll see what sort of date we can work out. Dayton is currently balancing on the precipice as far as membership is concerned, so if you wanted to make it a family trip so that there would be plenty of timers available…well…awesome! As always, there would be excellent food to be enjoyed after the race if that helps to sweeten the participation pot.

SOUTH CENTRAL – Bill Bischoff

Dallas Fall Finale results October 4/5
Turnout was disappointingly low. We didn't have enough pilots to run three-up races, but we did have plenty of time to fly one heat and one final, unless we didn't want to (Mouse).

Quickie Rat	70	140
1)Mike Greb	3:30.05	6:57.45
2)Kelly Hite	3:30.99	7:11.21

3)Bill Bischoff	3:16.47	7:46.27
4)Richard Kucejko	33 laps	39 laps

Super Slow Rat	100
1)Bill Bischoff	5:18.77
2)Kelly Hite	5:57.23
3)Mike Greb	6:06.59
4)Richard Kucejko	96 laps

Sport Goodyear	80	160
1)Kelly Hite	3:57.60	8:06.84
2)Lester Haury	4:05.53	8:25.12
3)Patrick Hempel	4:09.34	9:02.41
4)Bill Bischoff	77 laps	9:13.82
5)Mike Greb	4:05.40	9:39.47
6)Richard Kucejko	4:34.79	42 laps

Mouse	50
1)Mike Greb	2:45.04
2)Kelly Hite	3:20.99

2025 SPORTSMAN GOODYEAR TOP 20 (80 laps)

1)Bill Lee	3:55.68
2)Kelly Hite	3:57.60
3)Bill Bischoff	4:01.04
4)Bill Bischoff	4:04.34
5)Mike Greb	4:05.40
6)Lester Haury	4:05.53
7)Kelly Hite	4:06.18
8)Patrick Hempel	4:06.54
9)Mike Greb	4:06.92
10)Mike Greb	4:07.26
11)Patrick Hempel	4:09.34
12)Mike Greb	4:09.65
13)Richard Kucejko	4:12.66
14)Bill Lee	4:15.34
15)Patrick Hempel	4:16.23
16)Bill Bischoff	4:16.71
17)Alex Elbert	4:19.12
18)Alex Topunov	4:20.84
19)Richard Kucejko	4:29.62
20)Chuck Barnes sr.	4:31.62

DMAA SPORTSMAN GOODYEAR RACING RULES REVISED NOVEMBER 2025 (changes in red)

OBJECTIVE: Sportsman Goodyear racing is intended to be a low-key sport racing event which can be enjoyed by both novices and experienced racers. By disallowing expensive, high performance racing engines, both cost and performance are kept down to a level which all modelers can manage.

APPLICABILITY: All AMA general and CL general rules, the AMA Unified Control Line Racing Rules, and rules for event #317 Control Line Scale Racing shall apply unless modified below. In the case of a dispute, the event director shall have the final decision.

ENTRIES: Once a contestant has used an aircraft or engine in the event, that aircraft or engine may not be used by another contestant in the same event.

CONTROL LINE SPECIFICATIONS: Models must employ two multi-strand lines of at least .015" diameter. Four-strand, brass plated lines of nominal .0145" diameter, such as those marketed by "controlineparts.com", are specifically disallowed. Line length shall be 52' 6" +/- 6", measured from the grip portion of the handle to the center line of the fuselage. Pull test is 25 pounds.

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RACES: Heat races shall be 80 laps, with a minimum of one required pit stop. Feature races shall be 160 laps, with a minimum of three required pit stops. Races should run three-up whenever possible.

FIELD LAYOUT: The inner circle shall have a radius of 58'. The outer circle shall have a radius of 68'.

MODEL SPECIFICATIONS: Per Control Line Scale Racing. The builder of the model rule shall not apply. Only one fuel tank is allowed, with a maximum capacity of one fluid ounce. The fill, vent, and pickup tubes shall have a maximum outside diameter of 1/8". Quick fills are prohibited. Fuel shutoffs are permissible. Hot glove or hot thumb electrical contacts shall not be permitted. Additional model specifications are listed below.

LEADOUTS: Models must employ leadouts between the bellcrank and the flying lines, with the leadout-to-line connection external to the wingtip. Solid music wire leadouts shall be no smaller than .032" nominal diameter. Flexible cable leadouts shall be no smaller than .027" nominal diameter.

PROPELLER SPECIFICATIONS: Only commercially available wood or injection molded plastic propellers are permitted. Props may be modified. Composite propellers (carbon or glass fibers with synthetic resins) are not allowed.

ENGINE SPECIFICATIONS: Non-schneurle ported engines may be of plain bearing or ball bearing construction. Schneurle ported engines must be of plain bearing construction only,except as noted below. The Fox 15BB schneurle engine is specifically permitted, and is subject to the same rules as the plain bearing Fox 15 schneurle engine. Plain bearing conversions of ball bearing engines are specifically prohibited.

The following major components of the engine must have been produced by the original manufacturer for the specific engine in quantities of at least 1000: the complete crankcase including front and rear ends, or upper and lower portions as applicable, the crankshaft, cylinder and piston. Engine parts may be modified by removing material only, except that cylinder plating is permissible. Non-stock cylinder heads or head buttons may be employed, however glow engines must use a 1/4-32 thread glow plug if the stock cylinder head or glow head is not used.

ENGINE SPECIFICATIONS FOR MAGNUM/ASP/SH/ FORA Junior ENGINES ONLY: These rules supersede the above specifications only for the specific engines listed**.**

The Magnum XLS 15A and ASP S15A engines are identical other than the name on the crankcase. They are characterized by schneurle porting, ABC piston/ cylinder metallurgy, dual ball bearings, and a 4 bolt blue anodized cylinder head.
The SH 15 engine is made in Taiwan, ROC. It is a front intake, side exhaust engine with schneurle porting, ABC metallurgy, dual ball bearings, and a cast helicopter-type head clamp with separate head button. The Fora Junior 15 engine is made in Ukraine. It is of front intake, side exhaust configuration with a bolt-on upper crankcase and a screw-in backplate. It has a black plastic sprinkler type venturi. It can be of AAC or ABC metallurgy. Both are permitted. The stock head button for a 1/4-32 glow plug must be used.

Engines must be of stock configuration only. No material may be added or removed (except through normal wear and use), except the engine mounting holes may be enlarged or elongated **,** and cylinder head shims may be added or removed. No non-stock parts may be substituted except for the glow plug, venturi, needle valve assembly, ball bearings, head shims, gaskets, screws, prop drive washer, front prop washer, and prop nut. On the SH 15 (only), the stock head clamp may be cut down to a more appropriate size, but must still be used.

Engines shall be equipped with a venturi and spraybar meeting the following specifications. For Magnum and ASP engines, the venturi shall have an inside circular bore of no more than 0.251". For SH engines, the venturi shall have an inside circular bore of no more than 0.267". The venturi shall maintain this diameter for at least .155" at the throat of the venturi where the spraybar is located. The spraybar assembly shall be located precisely through the center of the venturi bore, and shall have a constant circular cross section of at least .153" diameter for the portion of the spraybar in the throat of the venturi. For the Fora Junior engine only, the stock spray bar and venturi shall be maintained. The venturi may be drilled out to an inside circular bore of no more than .157"(#22 drill).

MODEL SPECIFICATIONS FOR MAGNUM/ASP/*SH/ FORA Junior* ENGINES ONLY: The entire control system must be exposed and external to normal aircraft contours. The leadout guide(s) may be inset into the wing, but shall cover no more than 1/2" of the leadouts. The bellcrank may pass through the fuselage but must be visible and not fully enclosed. The pushrod and elevator control horn shall not be recessed or enclosed in the fuselage. Fuel shutoff linkages are exempt from any of the above regulations.

SOUTHWEST – Doug Mayer

A Tale of 2 contests.

The Virgil Wilbur: October 11 & 12, 2025 has been a huge success for the last 5 years. (or in fact, the last 30 years…….The VW used to be stunt, combat, speed and racing). In the last 5 years, all the other events have dropped out except for racing. I have personally decided to keep the contest going as an informal 2-day event, (Racing Only) and not a fully sanctioned event. Similar to last year, the contest is the weekend following the Fall Finale contest in Dallas. Sometimes we can get folks who attend the Dallas contest to join us the following weekend in LA. In the past, we've had Les Akre, Mike Hazel & Paul Gibeault. Unfortunately, this year was an anomaly, and the contest turned out to be a total dud. Ron Duly affectionately named the contest, "The Non-test".

The main combatants at the 2025 Virgil Wilbur. L-R The Mayers, Tristan and Doug, and the B&G team Bill Bischoff, Mike Greb with their SSR entries.

The only saving grace was the fact that Bill Bischoff and Mike Greb decided to road trip to LA and they joined us for the weekend. The only local racers were myself and my son Tristan. So, the weekend was just me & Tristan vs Bill & Mike. The turnout was so low that at times, we barely had enough timers. Ron Duly was our Stalwart CD and go-to guy both days. He started every race and timed every race. On Saturday, we recruited John Wright to time a few heats, and a local stunt flier Steve for a few heats. On Sunday, we were fortunate enough that Dave Braun showed up and helped Ron with the timing all day.
I'm not going to go through a big description, except for 2 notes.

Formula Unlimited: It has been years since we have raced FU. Most of the local guys threw in the towel many years ago because they are heavy and they pull really hard. I'm the only guy who will still bring a FU to fly once in a while. Tristan is no longer a little kid. He's 6'-1" and bigger than me or Bill, and he's young and strong. We gave Tristan a chance to fly Formula Unlimited for the first time, and he enjoyed the big heavy pull. I flew a warm-up heat, and I must say that I could feel it in my back. We left the timed races to Tristan, and he flew some 1-up races to log some times for the record books.

AMA Slowrat: We rarely get a chance to fly AMA Slowrat, so Bill made sure to bring his Slowrat all the way from Texas. The idea was for Bill and me to race together in the circle like old times. The only problem was that we only had 1 pitman, (That would be Mr. Mike Greb). AND…..we only had 5

people! We concocted a race where we would have staggered starts, and Mike would pit for both me and Bill. Tristan and Ron managed the stopwatches. Surprisingly, it went pretty well, albeit a bit unconventional with a staggered start and a staggered finish. Despite all that, Bill and I enjoyed quite a number of laps racing 2-up against each other, so we can mark it up as a success.

Bill and Doug took the opportunity to air out the Slow Rats at this contest, see text for details.

You can look at the times for the rest of the races, and use your imagination. I initially was pretty bummed about the low turnout, but in the end I have to admit it was fun racing with my son and my friends and we had a good time.

The pit line-up including Quickie Rats, and Goodyears.

Quickie Rat	70	140
Mike Greb	3:22.05	7:08.07
Doug Mayer	3:25.19	9:29.53
Tristan Mayer	4:11.56	
Bill Bischoff	4:52.32	

Sport GY	80	160
Mike Greb	4:09.65	8:29.03
Bill Bischoff	4:16.71	9:18.99
Tristan Mayer	47 laps	9:28.53
Doug Mayer	5:06.65	12:21.52

Bill and Tristan duking it out in the Sport Goodyear Heats.

Ron Duly and Bill Bischoff just before the start of the Slow Rat heat.

Mouse	50	100
Mike Greb	2:37.76	5:23.39
Doug Mayer	3:07.91	6:21.32

Formula Unlimited	70	140
Tristan Mayer	3:48.96	7:34.41
3:40.50 7:34.60		

Super Slow Rat	100
Mike Greb	6:18.59
Bill Bischoff	6:24.95
Tristan Mayer	6:36.18
Doug Mayer	6:43.27

AMA Slow Rat	70
Bill Bischoff	3:32.72
Doug Mayer	3:45.80

(45 sec. staggered start. Mike pitted both planes during the race)

The Toys for Tots – December 07, 2025
by guest editor Bill Bischoff & Douglas Mayer

This contest was a welcome change from October. 8 contestants came in pre-formed teams, so personnel shuffling was kept to a minimum. There were always enough people around so there was no need to scrounge for timers. Coincidentally, there were two Doug and Bill teams.

Motley Crew #1. Trivia Question: Can you spot the Non-Californian in this Photo? Answer at the end of the report.

Mouse racing actually took place on Saturday by chance. Long-lost Scott Dinger captured the win, when Bob Harness failed to finish after a hard landing at lap 97. This is all second hand information, as we weren't even at the field yet when it happened. The guys were hanging out practicing, and our CD Ron Duly was on hand so the guys ran a race, and we just called it official and put it in the records. Not having to fly Mouse on Sunday also saved us some time for the other events.

Toys for Tots pit row.

Motley Crew #2. Bill Cave, Doug Haas, Bill Bischoff and Doug Mayer in what appears to be a 4-up selfie.

Sunday began with Sport Goodyear. Surprisingly, there were three different types of engines being used. Besides the usual ASP/Magnum, there were three SH 15's, and one Fora Junior 15. Even more surprisingly, the top three included one example of each. The Mayer/ Bischoff entry took the win with a Fora. Take note of this engine, folks. They are going to be the new standard! They are currently available from NCLRA. Twenty have been sold already, so they should start showing up in numbers next season.

Super Slow Rat was next. Bill Cave flew a Mayer designed Retro Baby model that looked quite fast, and ultimately won.

Mike Callas took second place, a scant.13/100's seconds behind Bill. Even more heartbreaking was that Mike ran out of fuel on lap 99, and glided across the finish line! Doug Mayer was hampered by a weak battery, causing difficult starts. Unfortunately, Doug Haas' entry succumbed to a slack takeoff, and crashed.

Some 2-up action in Sport Goodyear.

The last event was Quickie Rat, won by the Mayer/Bischoff team through perseverance and determination. Doug's entry was also victim of the same week starting battery that plagued him in SuperSlow Rat. A battery swap returned things to normal, netting him a more typical time for the model. Bill Bischoff's entry was actually one of Doug's airplanes that had been gifted to the Mayer team by none other than Bill Bischoff! So Bill got to race his old airplane! The plane had undergone a Saturday night engine swap, and the first race began without a test flight on the substitute engine. We ran lean a few times, but settled into a good needle setting after a full ½ turn to richen up the mix. Our second heat was the game changer and we took away the win. It is interesting to note that Doug & Bill tested a box full of K&B 40's on Saturday, and swapped out the motor that was on the Formula Unlimited that Tristan ran in October. We had to swap out the venture to make it quickie rat legal, but it turned out to be the best of the whole bunch. Unfortunately, Bob Harness was bitten by the gremlins when his elevator came loose and the plane pancaked into the tarmac. Its never fun to see the carnage of a perfectly good airplane.

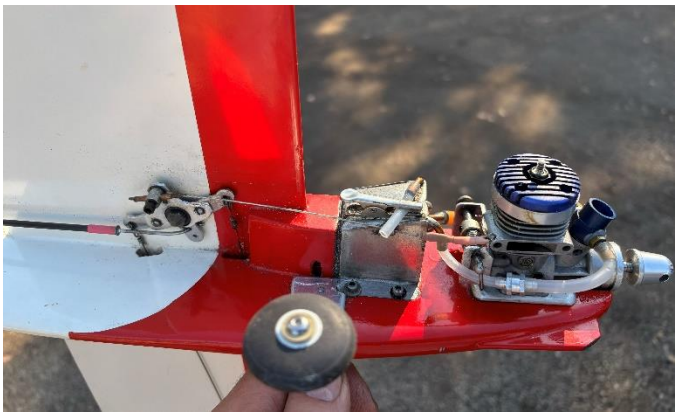
We want to thank everyone who made the effort to join us for the weekend, especially the out-of-towners Mike Hazel, Bill Cave, Doug Haas & Bill Bischoff. We also want to thank everyone for their generosity in bringing new unwrapped toys for the kids. Cheers to All, have a Happy Holiday season, and we'll see you in 2026. Keep your lines tight and wear your sunblock.

The answer to the trivia question is 3rd from left, Mike Hazel.

<u>MOUSE-1</u>		
Scott Dinger / Meadows	4:37.52	11:08.71
Bob Harness / Harness	3:50.53	97 laps
<u>DMAA Sport Goodyear:</u>		
Doug Mayer / Bill Bischoff	4:23.06	4:09.72
Bob Harness / Mike Callas	4:39.50	4:13.93
Bill Bischoff / Doug Mayer	4:30.95	4:17.46
Mike Callas / Bob Harness	4:23.83	4:39.84
Bill Cave / Doug Haas	4:51.25	4:35.77
Doug Hass / Bill Cave	5:54.07	4:42.27
Mike Hazel / Bill Bischoff	4:51.87	5:18.46
Ron Duly / Doug Mayer	4:55.86	5:01.99
<u>Super Slow Rat</u>		
Bill Cave / Doug Haas	5:47.31	
Mike Callas / Bob Harness	5:47.44	
Doug Mayer / Bill Bischoff	86 laps	
Doug Hass / Bill Cave	42 laps	
<u>Quickie Rat</u>		
Bill Bischoff / Doug Mayer	4:20.97	3:17.18
Doug Mayer / Bill Bischoff	4:48.72	3:28.52
Bob Harness / Mike Callas	41 laps	3:28.92
Bill Cave / Doug Haas	64 laps	DNF

DID YOU KNOW?

The NCLRA is truly an international organization. A review of the current roster shows that we have members in 12 different countries, and I am glad to have every one of them. In alphabetical order, we have members from Australia, Bermuda, Canada, Cuba, Denmark, Germany, Italy, New Zealand, South Africa, Sweden, United Kingdom, and United States. Even with the currency exchange rates in other countries, NCLRA membership is a great deal!



Business end of Ron Duly's Lil' Rebel Sport Goodyear entry.

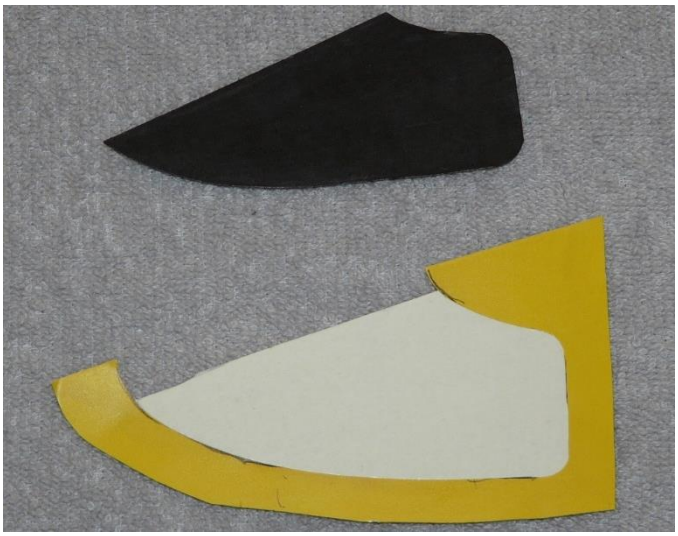
EASY CANOPY MASKING

Bill Bischoff

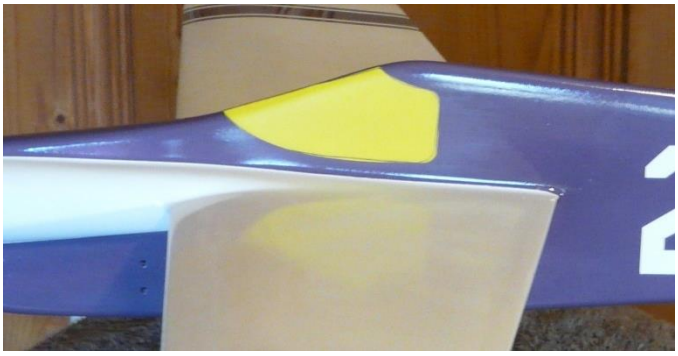
You know what I hate about masking and painting canopies on profile airplanes? 1) when the left side and the right side are not lined up properly 2) When the left side and the right side are different shapes or sizes, and 3) when the fine line masking tape puckers around tight curves and the paint bleeds under the tape.

The answer is to use low-tack vinyl to make paint masks instead of tape. First, you need a template for the shape of the canopy. I cut mine out of poster board. In **photo 1**, my template is colored black with a sharpie marker. If you know what color your canopy will be painted, you might as well make your template that color, so you can see how it looks when you hold it position on the plane. If you're not happy with the appearance, trim it as required with scissors, or cut out new ones until you're happy.

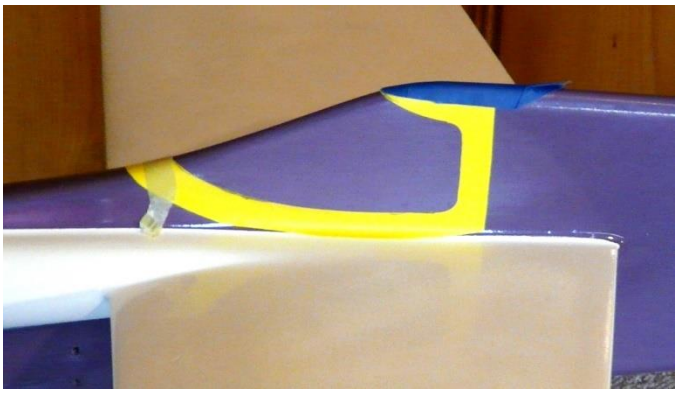
Once you've got your template, you can either visit your local sign shop or fire up your Cricut cutter, upload the canopy outline, and cut out left and right mirror images from **low-tack** vinyl. About 1/2" of border around the canopy outline is good, and no transfer or overlay tape is needed. If you've got some scraps of low-tack vinyl and a sharp X-Acto knife, you can also cut them by hand.



Depending on how well the paint on the fuselage laid down, you may want to wet sand the canopy area with some 600-1000 grit before actually painting the canopy. Peel the canopy shaped vinyl out of the middle of one of the masks, and stick it in place.



Don't worry if you didn't get it positioned perfectly, just lift it off and try again. Once it's where you want it, do the same on the other side. Do a good job so both sides line up with each other. Then, position the outer parts of the masks so they fit perfectly around the canopy piece. Trim the forward edge of the masks to give a smooth transition around front of the canopy. A little bit of additional tape may be helpful to keep everything stuck down. Finally, peel the canopy shaped masks away, and you should be left with a smooth, flat, perfectly positioned masked perimeter for painting your canopy.



Of course, you'll probably want to mask off the rest of the plane to avoid overspray. On Goodyear sized models, I fit the entire airplane inside a lawn and leaf trash bag, tape the bag shut, and cut out to expose the canopy area. I use blue painter's tape to seal the opening in the bag around the canopy. Finished canopy shown in **photo 4 below**. Try this once. It's easier to do than it is to describe.

INTERCHANGEABLE ENGINE MOUNTS FOR SPORT GOODYEAR

Bill Bischoff

The introduction of the Fora Junior 15 in DMAA Sportsman Goodyear adds a new, modern engine to the event. 20 have been sold through NCLRA, but I believe that so far, I am the only person to have entered one in a contest. I am inclined to think that the reason is that they don't fit on existing airplanes with Magnum or ASP engines. If you are lucky enough to have an airplane with

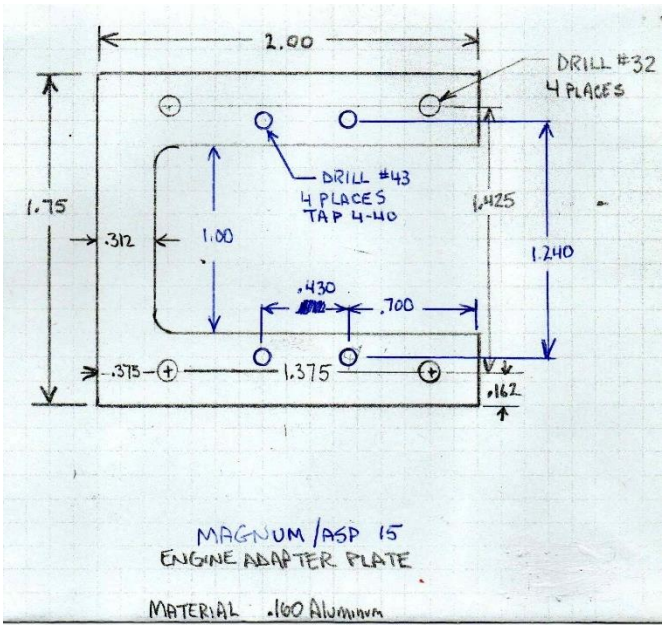
external controls that already has interchangeable engine mounts, or was built for a Fox 15BB or a Supertigre G15, you're all set, but otherwise, you will need to modify your airplane or build a new one.

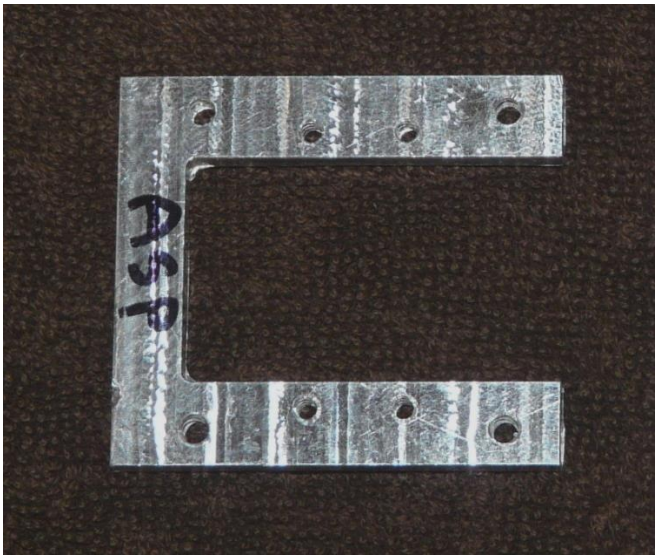
If for whatever reason you don't want to build a dedicated airplane for the Fora, build one with interchangeable mount plates. Make one mount to fit the Fora, and another for the Magnum/ ASP. The different plates should attach to the airplane with the same mounting pattern. A photo of the different plates, along with dimensioned drawings, is included in this newsletter. Although you can make plates to whatever outline and size you want, it might be handy someday if your plates match other peoples' plates.

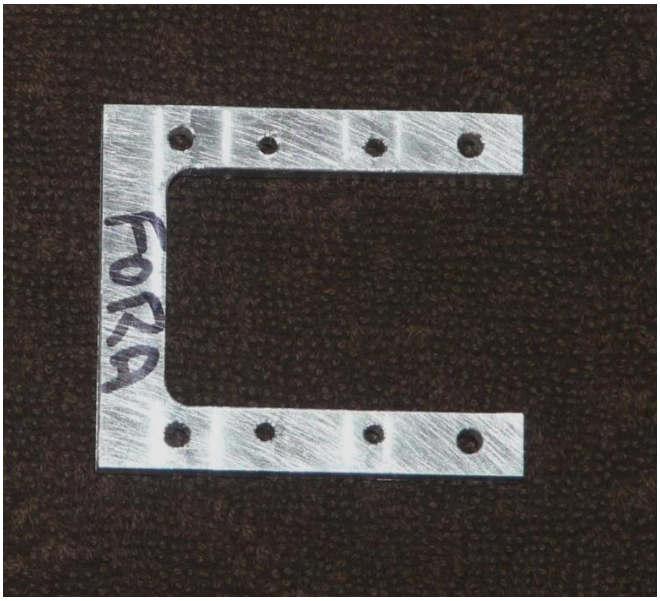
The plates are tapped 4-40 for mounting the engine. The bolts should protrude only very slightly from the back of the plate when the engine is installed. Shallow dimples should be drilled in the airplane for bolt clearance. You don't want the bolts to bottom out against the fuselage before the engine is tight.

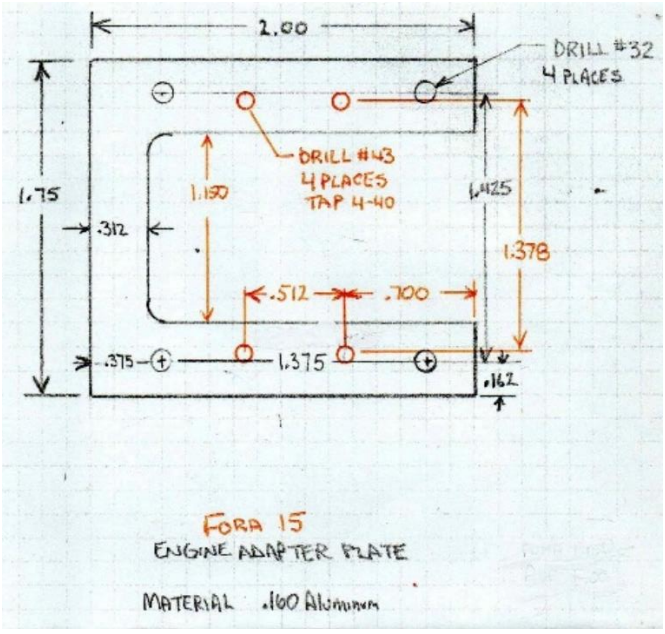
The bolts to attach the plate to the fuselage can screw into the fuselage in standard fashion, or can be permanently installed from the inboard side of the fuselage, and the plate secured to the protruding "studs" with 4-40 lock nuts on the outboard side.

OK, here's the rub. I'd love to be able to sell these plate to whoever wants them. Trouble is, I no longer have access to a mill, and would need someone to make them. Most everybody will know someone who could make them one set, but most people aren't willing to make *everybody* a set. If somebody is looking for a side hustle, here's a chance to earn well below minimum wage making engine plates! Sell them yourelf, and keep all the money.









In loving
memory of

SANDRA LEE

September 10, 1943 - November 3, 2025

CONTEST CALENDAR

NCLRA cannot be held responsible for errors or omissions! This calendar is compiled from data collected at the NCLRA website nclra.org. and other published sources. Members can log in to NCLRA.org and submit contest details.

NORTHEAST DISTRICT
None

NORTH CENTRAL DISTRICT
None

NORTHWEST DISTRICT
None

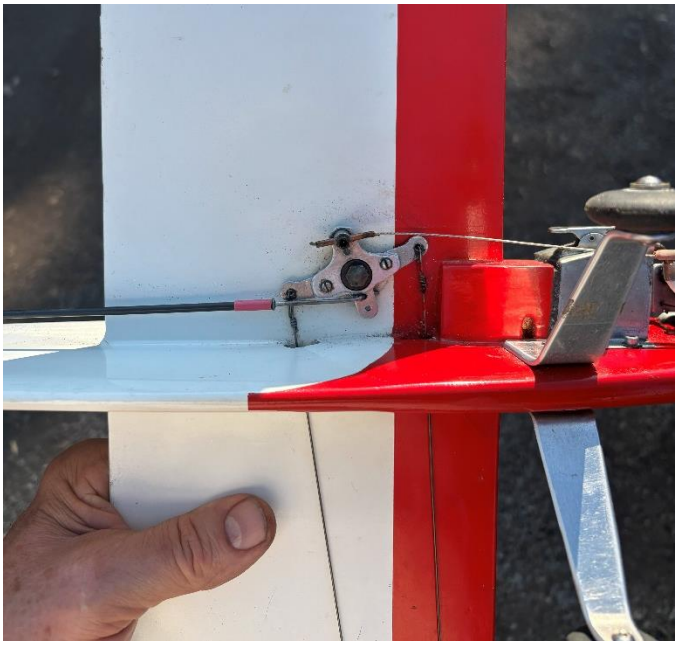
SOUTHEAST DISTRICT
None

MIDWEST DISTRICT
None

SOUTH CENTRAL DISTRICT

None

SOUTHWEST DISTRICT
None



Another pic or Ron Duly's Lil' Rebel Sport Goodyear showing the control system.

NATIONAL RECORDS

SLOW RAT (.25 engine)
Op (70 laps) 3:01.52 Jim Gall/ Les Akre 7/04/11
(140 laps) 6:17.59 Russ Green/ Bill Lee 7/07/09
(no Jr or Sr record)

½ A MOUSE 1
Jr (50 Laps) 2:37.57 Scott Matson 7/15/99
(100 Laps) 5:17.68 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) 6:18.13 Whitney/Hallas 7/10/09

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) 3:42 Fisher/Wilk 7/13/15
(200 Laps) 6:43.32 Fisher/Wilk 7/16/12

F2CN (NCLRA RULES)
100 Laps 4:14.84 Bill Lee/ Russ Green 7/07/11
200 Laps 8:37:10 Wallick/Brozo 7/15/13

NCLRA 'B" TEAM RACING
Op (35 Laps) 1:24.34 Burke/Duly 7/12/05
(70 Laps) 3:05.73 Green/Lee 7/10/09
(35+70 Laps) 4:33.91 Green/Lee 7/10/09
(140 Laps) 6:08.80 Green/Lee 7/10/09

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 RACE
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 RACE
Op (7 ½ Min.) 150 Laps Bischoff/ Lee 7/15/15
Op (15 Min.) 284 Laps Bischoff/Lee 7/15/15

NCLRA TEXAS QUICKIE RAT
(70 Laps) 2:58:72 Bill Lee/Bill Bischoff 7/18/13
(140 Laps) 6:07.01 John McCollum/Bill Lee 7/14/05

NCLRA SUPER SLOW RAT
(100 Laps) 5:14.30 Bill Lee/Russ Green 7/05/0

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