

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



**TO**



**Middlesex New Jersey club members proudly pose in front of their flying fields new Tower.**

**INSIDE:**  
**District Reports**  
**Contest results**  
**Suppliers/Equipment**  
**Construction Articles**  
**Updated Contest Calendar**

**Torque Roll Issue #158  
October 2021**

## PRESIDENT - Bill Bischoff

Welcome to the battery issue! This time I'll be discussing how to convert a GloBee fireplug to Ni-MH batteries, a couple of improvements to the battery system I detailed in the October 2020 *Torque Roll*, and arm-mounted version of the battery as well. Plus, there will be contest reports, and a host of other wonderful information provided by YOUR district representatives. Let's dig in...

In the news from AMA, the 2022 NATS control line events will be July 17-23. This is our "normal" time. I don't know if we will be competing with the triathletes for motel rooms, but why not book early just in case?

Also from the AMA, my Scale Racing rules proposal has passed. In case you missed it, the proposal changes the requirements regarding placement of AMA number and racing numbers to match the full-scale International Formula One requirements. The racing number must appear on both sides of the fuselage or both sides of the fin/rudder. It is no longer required (but still permitted) to appear on the inboard wing tip. Similarly, your AMA number must appear on both sides of the fuselage or fin/rudder OR on top of the outboard wing. Again, having it in multiple locations is permitted but not required. This change allows the models to be truer to scale. After all, it IS called "scale racing". These changes will also apply in DMAA Sportsman Goodyear.

Speaking of Sportsman Goodyear, have you noticed that this event has gained a lot of momentum lately? There were 17 entries at the NATS, Dayton added the August contest to their 2021 schedule, The Chicago guys have enough people flying the event that they added it to their Labor Day contest, and I can think of at least a half dozen people who will have new airplanes ready for next season. So how about you?  
Have you joined the **fun** yet?



Bill Bischoffs revised starting battery system. See page 6 for article.

## NORTH CENTRAL – Paul Gibeault

*If I had a million dollars I'd....host another **Tournament of the Millennium** and invite all my friends!  
A nostalgic trip down memory lane...*

### Flying Portuguese Style

What would you say to a friendly fellow that you've barely just met at an AMA Nationals, who wishes to invite you to his own competition? The ONLY clincher is that it happens to be in Portugal! Invited by a real Knight who's not only a modeller, but also a media celebrity akin to David Letterman (but without any of the scandal).

I'll have you (& the other foreign competitors) picked up at the Lisbon airport and whisked away to a meeting with the town mayor. Then taken to my country estate for a luncheon, he says. Swimming if you want, then taken to a FREE dorm, monastery or hotel for the contest duration. Breakfasts are included. I'll wine & dine you & transport you all back to the airport after it's over.

Will you come? “

I've previously attended several RATHER EXPENSIVE European World Championships, but NEVER has a Contest Organizer offered to pay my accommodation & meals while there. I simply HAD to see this!

The local airport is shut down for this 3-day event. Named the "Torneio Asas De Portugal Aermodellismo" (aka The Tournament of the Millennium). It has a rather nice ring to it, don't you think? Location is either warm & sunny Santarem or the UNESCO protected world heritage city of Evora. I found Evora to be fantastic. Where else does the luncheon restaurant owner give you a free bottle of wine on your way out...just because!

The Organizer, Sir Julio Isidro (known as Julio to his friends) has hosted this annual international friendship event for over 10 years. The event encompasses all disciplines: Radio Control, Control Line & even Free Flight. Julio himself is a strong C/L racer and in his 70's, puts all of us younger modellers to shame with his energy & ambition. (Behind the show curtain however Julio once told me: “ Last night I sleep like in coma ”. Referring to how tired organizing this event made him). This event is completely funded out of pocket and organized by Julio. He hires a few assistants and together with his family is able to obtain sponsorship from companies like Toyota, Black & Decker, Abreu, and Air Portugal. Julio is able to get local & foreign volunteers to CD the various events. It's a seven ring circus with 5 C/L circles & R/C flight lines all going at the same time.

**"Too much competition to be called a fun-fly but too much fun to be called a competition"** is Julio's motto. Protests as such are not allowed, as the competitors (some world class) are expected to work out their differences like sporting gentlemen together with the Event Director. It worked very well! Indeed there were crashes and “cock-ups”,

disqualifications and such, but no protests! (Isn't that right Bill?)

Julio provided fresh lab grade fuel components on site for 10 Euro's/litre. Glow & diesel fliers alike are in heaven being able to blend whatever potent mix they want all for the same price. Transporting model fuel is forbidden by air travel, so this was a real plus. (I was driving with Julio with all the fuel components in the trunk of his car. "I hope I don't get pulled over by the police, says Julio, they might think I have all the makings of a bomb here!") )

My wife Dianne liked to take it all in, so she got her CL Speed flights in early on Friday so that she was available to sleep in, spectate, or go touring as she felt like. Her gold medal in the "Ladies Event" (for best 1/2 A Speed performance) hopefully showed she has a good instructor. And YES, there was even flying awards for the Ladies. Always something for everyone here.

Not all the woman folk are as enthralled with the flying as we are, so Julio's lovely wife Sandra arranged a "Ladies Day on the town". The women got to go historical site seeing, shopping, & have luncheon with fine wine. They arrived back at the field just as us boys are finishing up. After a leisurely clean-up, it's off to a free celebration banquet featuring wonderful Portuguese entertainment, wine, cuisine & many door prizes.

Many of us compete to win, but not at all costs at *The Tournio*. The "Spirit of Friendship" is seen as a set of luggage is won by one modeller who promptly gives it to another modeller whose luggage was smashed by his airline coming over. Another door prize was a 4-day holiday at the nearby Island of Majorca. (Thank goodness I didn't win that one I thought!) It too was given away. There was a lot of cooperation at the field too. Interestingly enough, I was referred to help several fliers sort out their problems with glow engines. I'm puzzled by diesels & they're puzzled by glows. It worked out perfectly!

I've found that a few days after such an event is a good holiday when traveling this far. Julio booked us at a nice hotel in the popular Algarve Region for a few days of R&R in the sun. Sadly, there's never enough holiday time it seems and Euro's never go as far as you think, especially when you're having such a good time. I never would have thought when I became a C/L flier over 50 years ago, that I would plan holidays visiting overseas friends that I've met through Aeromodelling. I'm sure glad I did though!

As you can see this is about the **"Most Fun"** event I have ever participated in my life. I would like to thank Sir Julio for sponsoring and organizing the many Tournio's that I have been fortunate enough to attend. I would hope one day I can repay the favour.



**You know you're in for a treat when you get greeted by the City Mayor!**



**Even the bespoke banquet cake was very special.**

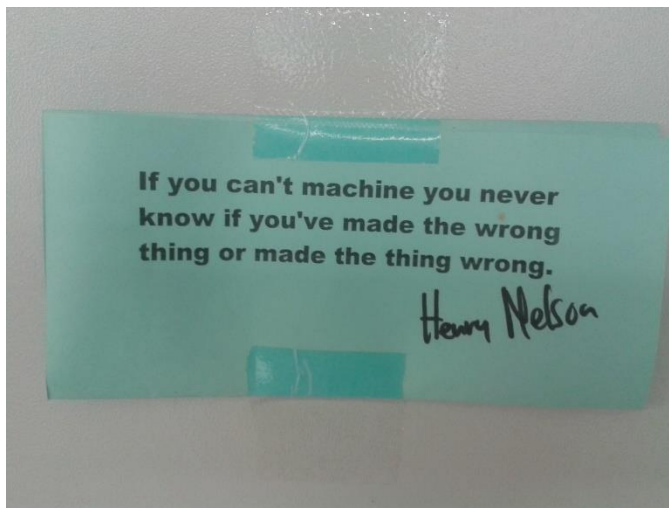


**If you know the right guy, you can get one of these sweatshirts...**





Sweatshirt often seen at European events.



A "Henryism" Found on the wall of Neil Lickfold's workshop in New Zealand.

## MIDWEST – T. J. Vieira

Greetings from Ohio, my fellow racers!

The season is wrapped up here in the Midwest (at least as far as I know!), with the Buzzards race on 10/3 having been canceled because of the weather report. Our out-of-towners coming in saw the weather report and cancelled their appearances. I don't blame them, I would have bailed too! But, as tends to happen, Sunday turned in to an o.k. day for racing! Kinda tough to race when you only have two people. Oh well, next year!

In September there was a race day in Chicagoland that was a blast! A VERY long day (about a 5.5 hour drive, left at 04:45 and pulled in to my garage at approx. 23:30), but absolutely

worth it! Dave Betz and I teamed up for their version of Fox race, as well as for his Sport Goodyear. I brought out my Nemesis as well, with Mr. Oge pitting for me. All in all, a great event! Well done, Tree Town Aeromodellers!

With the building season bearing down upon us like a freight train, I hope everyone has their projects lined up. I'm currently debating between two different models to campaign for Vintage B Team, and I think I've zeroed in on my victim for SGY. I may also retrofit a model for AMA Goodyear as well, we'll see if I manage to be productive enough this winter!

Wow.... This was a short one. Guess that happens at the end of flying season as we transition in to building season! For those of you down south, enjoy your flying all year round while the icebox gets fired up for the North!



The SGY lineup at Chicagoland.



Grandpa Timmy setting up heats.



Dave Betz needling his entry.



## SOUTHEAST – Bob Whitney

Greetings from the sunny south. Not a thing going on down here at present. I just received permission to fly at the local Harley Davidson drivers ed paved area but have no one to fly with.

I think I mentioned that BTR will be held again at the Nat's. No excuses this time; lets make it a go.



Enclosed are a couple of pictures of a Zalp F1C 2.5 glow motor (\$280). I ran it on a test stand and got 25,000 rpm on a Goodyear prop. It has low exhaust timing and is one of the easiest starting motors ever. It might be good for clown or goodyear.

Well that's it for now.

**RAD**

## SOUTH CENTRAL – Bill Bischoff

### CHARLES ASH MEMORIAL CONTEST Dallas, TX September 4

We had a hot day of racing Saturday. In fact, it was about 100 degrees hot. But they say "it's not the heat, it's the humidity". Fortunately, we had plenty of that, too. Don't worry, though. The heat and humidity were supplemented by light winds and almost no cloud cover! Needless to say, ample breaks between races and lots of liquid intake was the order of the day.

Speaking of the order of the day, we started with Mouse race. We had the local usual suspects, plus out of towners Melvin Schuette and Richard Kucejko. We only had two experienced mouse pilots on hand, so heats were flown two-up. Richard was supposed to be in the first heat, but his engine was being disagreeable, so he was rescheduled to the last heat. By the time it was his turn, Richard had decided to wave the white flag. That meant Patrick didn't have to fly a traffic heat. Melvin prevailed with 2:26.27. Close behind was Bill Lee at 2:27.58. Mike Greb finished with 2:39.42, followed by Patrick Hempel with 2:44.77. Quickie Rat had three entries and two pilots. Patrick flew for Bill Lee, I flew for Richard Kucejko, and each of us flew once for Mike Greb. Bill Lee was the clear victor with 3:12.23. Mike barely nudged ahead of Richard, 3:39.12 to 3:40.46.

After a lunch and rest break, seven racers entered the steel cage death match known as "Sportsman Goodyear". (OK, not really. There was no death, cage, carnage, pile drivers, or even broken props that I know of). There was a bit of team shuffling, with Jeff Gitchel pairing up with Mike Greb to form the Gitchel and Gravy team. I was then able to fly for Richard and Melvin, and Richard pitted my entry as well. The Hempel/Lee team retained its stock configuration. We flew one race with three entries and the other two with two entries. We had agreed to fly a final, providing the logistics could be worked out. When the heat races were completed, everyone decided that they'd had enough for the day, so finish was decided by heat times. Bill Lee was first again, with 4:12.91. Not far behind was Mike Greb, with 4:18.27. Jeff Gitchel finished in third with 4:26.79. That's right, Jeff flew the second and third place winners. Well done Jeff! Richard was a gnat's whisker ahead of Patrick, with 4:28.78 to Patrick's 4:28.96. Yours truly brought up the rear, with a 4:37.11 for me, and a 4:38.36 for Melvin.

A big thank you goes to Sandra Lee for sitting out in the sun and timing and counting laps all day. Thanks also to Dale and Linda Gleason, and all the racers who timed, counted, and started races when needed.

<b>MOUSE</b>	<b>50 laps</b>
1)Melvin Schuette	2:26.27
2)Bill Lee	2:27.58
3)Mike Greb	2:39.42
4)Patrick Hempel	2:44.77
5)Richard Kucejko	att.

## QUICKIE RAT 70 laps

- 1)Bill Lee 3:12.23
- 2)Mike Greb 3:39.12
- 3)Richard Kucejko 3:40.46

## SPORT GOODYEAR 80 laps

- 1)Bill Lee 4:12.91
- 2)Mike Greb 4:18.27
- 3)Jeff Gitchel 4:26.79
- 4)Richard Kucejko 4:28.78
- 5)Patrick Hempel 4:28.96
- 6)Bill Bischoff 4:37.11
- 7)Melvin Schuette 4:38.36

## SOUTHWEST – Doug Mayer

Breaking NEWS!!! It appears that the speed fliers of Southern California have re-initiated the contest calendar just in time to salvage the December Toys-for-Tots contest. This contest is a long-standing tradition as our December Racing contest. Entrance fee is one new, unwrapped toy in original packaging, minimum \$10.00 value, and no toy guns. The racing, speed and combat guys usually collect a good bounty to give to the local fire department to give away to needy children at Christmas Events. Usually, this is a low-stress event, and the focus is getting together one last time before a new year begins. I think this event will be welcomed by many as the first formal sanctioned contest in almost 1-1/2 years since the pandemic began in March of 2020. What I really hope this means is that we can expect to get back to a full calendar schedule for next year, 2022.

Other than this breakthrough announcement, I don't have much to report. I went to the US Free Flight Championships this September in Lost Hills, CA. with my son Tristan. We had an absolute blast, and we will also be going back in November for another Free Flight contest. I enjoy the overlap of modeling disciplines and techniques between FF and CL, and I think its good to keep Tristan involved and interested in aeromodelling. After the contest Tristan said he wanted some new gliders, but not before we finished his new Knotty Girl Sport Goodyear Racer. What? I didn't mention his new Knotty Girl yet? Look in this newsletter on page 8 for a separate construction/Build Article of a new Knotty Girl Sport Goodyear that we're building. It's an exciting short kit, laser cut parts, and a complete CNC milled wing that Bill Bischoff sent to Tristan as a gift. Until next month, Fly fast, keep your lines tight, and wear your sunblock.

## CONVERTING THE GLO BEE FIREPLUG TO NICKEL METAL HYDRIDE BATTERIES

Bill Bischoff

OK, I can hear it already. Why should I do that? Well, glad you asked. First, it's cheaper than replacing the stock lead acid cell. Second, it's about a half pound lighter, which will be appreciated if you a pit man who spends any length of time with a Fireplug strapped to your arm. Third, you can peak charge Ni-MH batteries so they will be properly fully charged without overcharging. (I personally think the stock Glo Bee

charger kills the cells prematurely.) If your GloBee Fireplug is working well, then you need not bother, but keep this in mind when you need to replace the battery!



The conversion is quite simple. Buy the conversion kit (shown above) or build the battery pack and wiring harness. The pictures below will help.



First, Remove the old battery from the GloBee. Unsolder the positive battery connector from the middle tab on the potentiometer. Remove the long screw that is the negative terminal. Remove the black wire that is both the fuse and the negative battery connector. Be aware that the battery will no longer be fused, eliminating potential fuse failures. Install the new black wire's ring terminal, and reassemble the negative terminal screw through the case and top of the unit. Trim the length of the red wire as appropriate, and solder it onto the pot where the old wire was removed. Connect the new battery pack, install it in the bottom of the case with the battery's wires facing down for best fit and routing. Reattach the bottom case, grab a plug lead and a glow plug, and operationally check your work. Don't forget to marvel at how much lighter your GloBee is now!





Since the new battery is 2.4 volts and the old battery was 2 volts, turning the adjustment up to full may possibly burn out the glow plug. Note that the Globee's case limits the pot's adjusting range to less than 180 degrees of travel, while the pot itself can rotate about 300 degrees. If you feel like the battery is too hot when turned all the way up, you can rotate the entire pot so the case acts as a stop to restrict the maximum output. Simply set the adjusting lever to where you want the maximum output to be, then rotate the pot in the case so that the adjusting lever is touching the case and can't go any further.

To charge the battery, it is easiest to disconnect it from the unit and connect it to a Ni-MH appropriate charger with a lead that matches the battery. I use XT30 connectors, and have a charge lead available for sale. I chose this connector for its small size, but others will work also.

#### STILL MORE ABOUT STARTING BATTERIES

One year ago, I described how to make a Globee-type starting battery. I learned two things from that article. One, people didn't seem interested in building their own. Two, people were definitely interested in buying them. Since the article was published, I've sold about 10-12 of these batteries, and had a couple of repeat customers after they showed them to their friends.



Now, a year later, I've come up with a clever name, Juice Box, and I've made a couple of minor improvements. The new, mkII version of the Juice Box features a 5000 mAh battery pack instead of the original 3800, the connection for the glow

plug lead is now case-mounted instead of a pigtail, and the case features reference marks for the current adjusting knob. And the price is still \$50.00 (without charger or glow plug lead). A plug lead with 36" wires and a clothespin style clip is \$10.00.





For you pitmen out there, I have also developed an arm-mounted battery called the Juice Box Racer. (Pictures shown above) Similar in concept to the Juice Box, the Racer model has the meter rotated for normal viewing while the battery is strapped on your arm. The case is also somewhat lower profile and curved to conform to the arm. An arm mount with two elastic straps with quick release buckles holds the battery comfortably and securely in place. The unit features a 2.4 volt, 5000 mAh battery, and includes a connector with 14" leads, ready for you to install your hot glove, hot thumb, or favorite glow plug connector. The price (without charger) is \$70.00. Most modern hobby battery chargers have the capability to charge 2.4 volt Ni-MH batteries, but I do have a couple of inexpensive chargers available. Contact me for details.

## Knotty Girl Short Kit – Part 1

### Short Kit by Bill Bischoff & friend Design Drawings and Construction by Douglas Mayer

If you follow this newsletter, you probably know that my big goal is trying to get my kids to build and race model airplanes. Both kids are good pilots, and have been flying for years, but I wanted to get them building as well. Knowing how to build a model is a skill that you can use the rest of your life. My son Tristan wanted a “New” airplane, so I gave him a stack of my Goodyear Airplane designs and told him to pick one. He settled on Knotty Girl. Of course, I was excited to get started, and I was telling my buddy Bill Bischoff that Tristan and I were gonna build Knotty Girl. Well, during the pandemic, not much was happening, and Bill kept bugging me, “Hey Doug, how’s that Knotty Girl coming along?” Hm...not really happening....seems more like a bucket list dream at the moment.

One day I got an unexpected box in the mail. What the heck is this? From Bill Bischoff?? I opened it and found one of the most awesome things I have ever seen. A short kit of Knotty girl with laser cut basswood, balsa wood, and plywood parts. The tail empennage parts even had little holes for threaded hinges. Also included was a stack of hardwood and spruce sticks to build the fuselage. But best of all, there was a complete wing that was already airfoiled by a CNC mill!! Awesome!



I have been drawing airplane designs for Bill Bischoff and myself over the last few years. We have some different techniques, and I show Bill's designs with his construction techniques on Knotty Girl because this airplane was drawn at his request. Bill sent the parts that match his design. Normally, I would fabricate a little differently, but since all the parts were included, I decided to build per Bill's design.

Bischoff STAB/ELEV & RUDDER - Bill prefers to make his Stab/Elev and Rudder from 1/8" basswood, with cross-grained tips. He uses old fashioned holes and strings for the hinges. When we inspected the parts, we found that the laser cutting process had left a 7-degree angle burn on the parts. Bill and I discussed this, and his friend would need to adjust the laser power settings, or the angle on the finished parts to acquire a nice true finished part. As we worked on the kit, this was the only major drawback. It definitely needed to be addressed, so I had Tristan sand all the parts on the surfaces that had glue joints. We ignored the outlines because they would get sanded round or tapered later. Once all the parts were sanded, we glued all the cross-grained tips on the elevator, stab and rudder with titebond glue. One last detail that I added to the rudder, I sandwiched soft 1/8" balsa on the outsides of the basswood fin. This allows us to completely blend and shape the fin to the fuselage later when I shape and taper the fuselage.



FUSELAGE – The fuselage was pretty straight forward. We sanded all the laser cut glue joints square, and cut all of the hardwood and basswood sticks to length. Having all of the 3/8" thick balsa parts already cut with a laser cutter was awesome. I simply cut all the correct angles on the hardwood

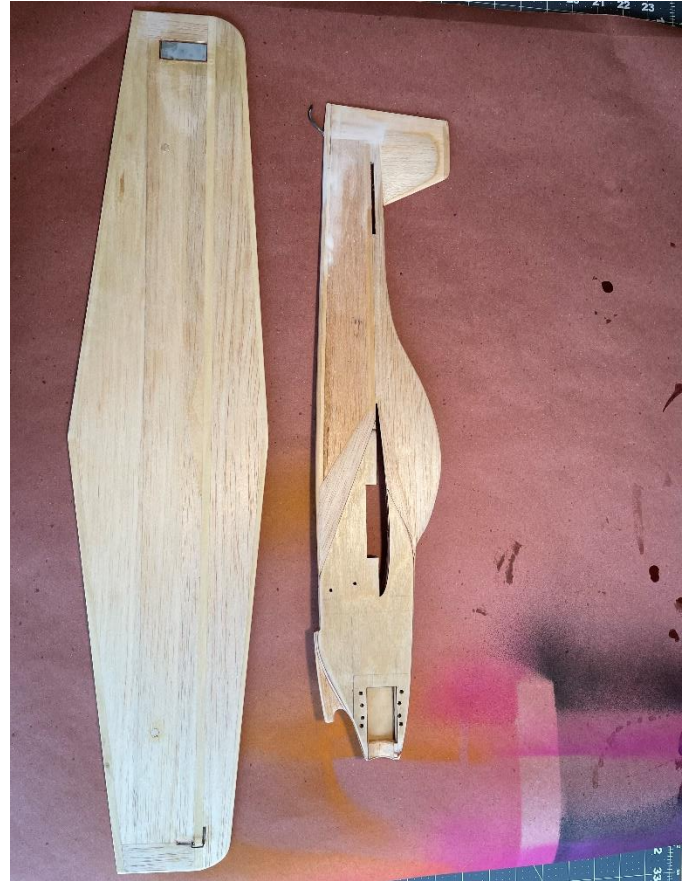


motor mounts, and started to piece together the fuselage. I glued the entire fuselage with tietebond, and pinned it down to my building board. I fabricated an aluminum motor mount with (4) countersunk 6-32 screws to mount to the fuselage. I drilled and taped 4-40 holes for a Magnum/ASP .15 hole pattern. Once all this was done, I added blind nuts to the outboard side of the fuselage PRIOR to installing the 1/16" doubler. I decided to add an extra set of 4-40 blind nuts for the motor, even though I didn't need them. I did this as a back up contingency plan in case I'm swapping motor plates, and just wanted the threaded inserts for an ASP built into the fuselage. The 1/16" plywood doublers had to be one of the coolest things I have ever seen. They were an EXACT outline of the nose from my design drawings. Glueing the doublers was a breeze because they lined up perfectly. Instant gratification! I fabricated a big fat cheek cowl, in honor of my old racing partner Mike MacCarthy. He always had the nicest looking airplanes, so I tried to make the nose of our plane look like one of his goodyears, with the goal being the ultimate in streamlining.

To finish off the fuselage, I added a 1/16" sheet of balsa behind the plywood doubler on the motor side to allow for a full transition blend to the fuselage. On the cheek side, I just transitioned the 1/16" ply doublers. Next, I shaped and tapered the entire fuselage, nose to tail. I have decided NOT to fiberglass the fuselage to save weight, and I believe it is strong enough with 2 rows of 1/4" x 3/8" spruce longerons, and hard 3/8" balsa.



WING – Of course, I saved the best for last. The wing was completely built, and already airfoiled by a CNC mill. There were 2 small holes in the wing, approximately 1/4" in dia. Bill explained that his friend did this to hold the wing in place during the milling process but has since figured out how to hold a wing without adding these holes. I cut little 1/16" circular balsa scraps and glued them into the wing with tietebond. The wing shaping from the CNC was still in rough form, so I had Tristan give the wing a finish sanding. This was very easy, and only required rounding the leading edge, and easing the wingtips a bit. He finished the wing with 400 grit to give it a nice smooth finish.



Leadout guide - I like to bend a small piece of piano wire to create a hoop for the wires. this wire gets installed flush into the bottom of the wing prior to fiberglassing. I have never had a failure with this detail...ever. Caution!! Do not make the hoop too small to accept your wires!! I did this on a mouse, and had to carve out some wood under the hoop to provide clearance. The wingtip weight was a 1/2 oz car wheel weight, recessing into balsa wood.

Fiberglassing: I had Tristan layup his first fiberglass job ever. Prior to fiberglassing, I always paint the balsa with 50/50 dope to fill the pores of the wood. I believe this keeps the wood from absorbing the epoxy, and results in a better glassing job. We give this dope job a quick sanding with 400 grit before fiberglassing. For fiberglassing, we used West System epoxy and 2 oz glass on the bottom wing surface first, and then glassed the top 2 days later. The wing is complete and ready for assembly.



Tristan helping with the layup for wing fibreglassing.

Fabrication - All of the major fabrication is complete. I must say what a joy it was to have a kit of my own design right out of a box! The precision of the parts pre-cut to shape was a real time saver, and a finished wing that just needed some touchup was an absolute bonus. Our next step is to simply glue all the major components together, and then prime and paint, and then final installation of all the components. I'll follow up this article with Part-2 to show the completion of this exciting build.

# CONTEST CALENDAR

NCLRA cannot be held responsible for errors or omissions!

This calendar is compiled from data collected at the NCLRA website [nclra.org](http://nclra.org), and other published sources. Members can log in to [NCLRA.org](http://NCLRA.org) and submit contest details.

## NORTHEAST DISTRICT

10/24 Middlesex Speed/Racing @ Mountainview park  
Middlesex NJ 40.583603, -74.497955

11/14 Middlesex Speed/Racing @ Mountainview park  
Middlesex NJ 40.583603, -74.497955

## NORTH CENTRAL DISTRICT

None

## NORTHWEST DISTRICT

None

## SOUTHEAST DISTRICT

None

## MIDWEST DISTRICT

None

## SOUTH CENTRAL DISTRICT

None

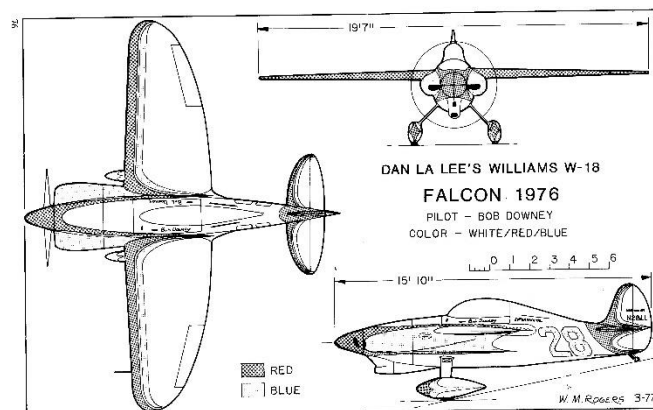
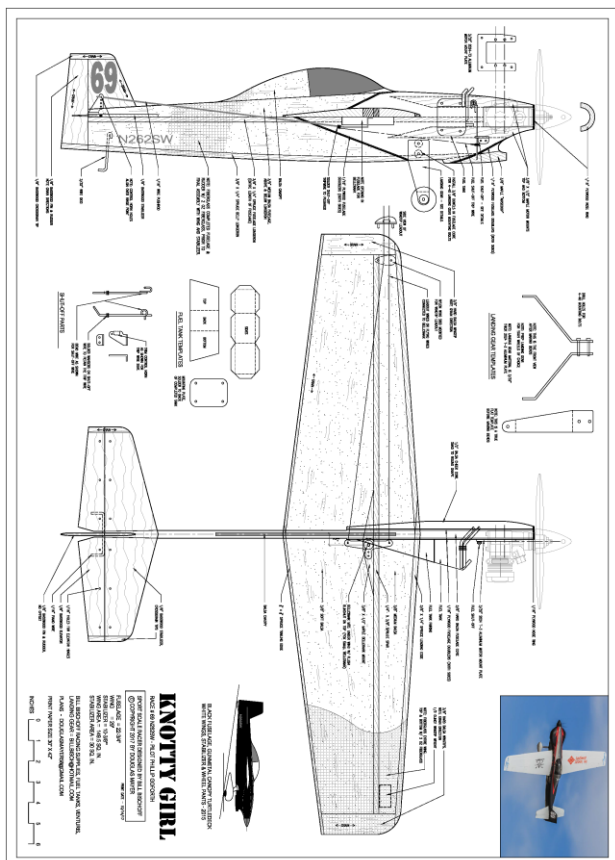
## SOUTHWEST DISTRICT

**December 4 & 5, 2021**

There will be a Toys for Tots meet this year, events include AMA, NASS, and NW speed events. Call for more details.

The entry fee is \$20 plus a new unwrapped toy.

Speed CD: [Howard Doering](mailto:Howard.Doering) h.714-638-4937 c.714-394-5304





## SUPPLIERS

### **BRODAK MANUFACTURING**

Everything c/l! 100 Park Ave, Carmichaels PA, 15320  
724-966-2726 email [flyin@brodak.com](mailto: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](mailto:williamhughes4@comcast.net) 630-736-6036

### **DARP**

969 Cedar Street Allouez, MI 49805  
DARP Speed Pans for classes including  
A, B, D, and 21 Sport. (Barry Tippet)  
e-mail: [Barry@Petrockfarm.com](mailto:Barry@Petrockfarm.com) 906-337-4533  
[www.Petrockfarm.com](http://www.Petrockfarm.com)

### **ELIMINATOR PROPS**

Steve Wilk 3257 Welcome Ave. N. Crystal, MN 55422  
763-531-0604 e-mail [swilk@cpinternet.com](mailto:swilk@cpinternet.com)  
Online store <http://elimatorprops.com/store/>

### **STEVE EICHENBERGER**

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

### **GOODYEAR PLANS- DOUG MAYER**

Douglas Mayer 5010 W. 123rd Place  
Hawthorne, CA 90250  
310-463-0525 cell  
[douglasmayer58@gmail.com](mailto:douglasmayer58@gmail.com)

### **JUST ENGINES LTD**

Newby Cross Farm, Newby Cross  
Carlisle, CUMBRIA CA5 6JP England  
Popular engines plus spares and Pipes. Irvine, Moki, Mvvs  
(<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

### **LEE MACHINE SHOP**

827 SE 43rd Street  
Topeka, Kansas 66609  
785-266-7714 - [Sales@LeeMachineShop.com](mailto:Sales@LeeMachineShop.com)  
[www.LeeMachineShop.com](http://www.LeeMachineShop.com)

### **RITCH'S BREW**

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

### **MBS MODEL SUPPLY**

Solid Wire Sets and other C/L needs Contact Melvin Schuette, 5322  
NE Early Ct, Topeka KS 66617 email: [mbschuette@cox.net](mailto:mbschuette@cox.net) or 785-  
221-7042.

### **ZZ Props**

Full line of quality Glass & Carbon Fiber props for Control Line  
Speed & Racing.  
Contact Mike Hazel at: 503-859-2905 Day Phone or 503-871-1057  
24 Hour Phone. Email: [zzclspeed@aol.com](mailto:zzclspeed@aol.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: [nelcomp101@gmail.com](mailto:nelcomp101@gmail.com)

### **MARC WARWASHANA**

Rubber fastfills, vintage Dons' racing wheels.  
11577 North Shore Dr.  
Whitmore Lake, MI 48189-9124  
Phone: 734-449-7355 E-Mail: [whellieman@gmail.com](mailto:whellieman@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](mailto:tawilk36@cpinternet.com)

### **ZALP ENGINES**

Zalp F2C&F2D engines- Bob Whitney  
456 Garvey rd sw, Palm Bay FL 32908 [f2cracer@aol.com](mailto:f2cracer@aol.com)

### **BISCHOFF'S RACING PARTS**

<b>fuselage mounted FUEL SHUTOFF</b>	<b>\$20.00</b>
specify top or bottom pull, specify Goodyear (1 1/4") or Quickie Rat (1 1/2")	
<b>ASP/ Magnum/ SH 15 VENTURI</b>	<b>\$10.00</b>
1/4" ID, 4mm spraybar, fits 10mm hole	
<b>RSM Supertigre style needle assembly</b>	<b>\$11.00</b>
<b>Aluminum landing gear struts</b>	<b>\$12.00</b>
.090" 2024-T3, drilled & tapped, with screws Edges pre-rounded.	
<b>aluminum landing gear blanks</b>	<b>\$5.00</b>
Cut to size, not drilled or bent. One pair.	
<b>1 oz Sport Goodyear fuel tank</b>	<b>\$20.00</b>
Per Margaret June plans, with pinch-off overflow.	
<b>Bellcrank button kit</b>	<b>\$2.00</b>
includes hex buttons, eyelets, screws	
<b>8 oz. fuel bottle with fitting</b>	<b>\$10.00</b>
<b>Racing handle, 3" spacing</b>	<b>\$25.00</b>
metal frame, wooden grip, stainless cable (other spacing available by request)	
<b>Globee Ni-MH conversion kit</b>	<b>\$15.00</b>
includes 2.4 volt, 5000 mAh Ni-MH battery and XT30 wiring harness	
<b>XT30 charge lead for above</b>	<b>\$5.00</b>
with banana plugs. Fits most chargers.	
<b>Juice Box MkII glow plug batter</b>	<b>\$50.00</b>
2.4 volts, 5000 mAh Ni-MH battery large ammeter, adjustable output	
<b>Clothespin style glow plug lead</b>	<b>\$10.00</b>
with 36" 16 ga silicone wire. XT60 connector fits JuiceBox MkII and Pro	
<b>Juice Box "Racer" battery w/ arm strap</b>	<b>\$70.00</b>
perfect for racing hot glove system Similar to Juice Box MkII, meter rotated for easy reading when mounted on your arm, case slightly thinner. Includes one 14" plug lead, add your own connector.	

**Shipping:** \$10.00 per order including fuel tanks, bottles, batteries or  
handles.  
\$5.00 per order without fuel tanks, bottles, batteries or handles. I accept  
paypal or personal checks.  
Paypal: [billbisch@hotmail.com](mailto:billbisch@hotmail.com)/ Mail checks to: William Bischoff, 1809  
Melody Ln, Garland TX 75042. For questions, call (972) 840-2135 or  
email [billbisch@hotmail.com](mailto:billbisch@hotmail.com)

## **Officer's Addresses**

### **President**

#### **Bill Bischoff**

1809 Melody Ln  
Garland, TX 75042  
Phone Numbers:  
972-840-2135  
972-475-5569  
Email: [billbisch@hotmail.com](mailto:billbisch@hotmail.com)

### **Vice- President**

#### **Les Akre**

13336-129st.  
Edmonton, Alberta T5L-1J8  
Canada  
Home: 780-454-5723  
Cell(or other): 780-919-2792  
E-Mail: [scaleracer@hotmail.com](mailto:scaleracer@hotmail.com)

### **Secty/Treas**

#### **Tim Stone**

4919 Country Oaks dr.  
Johnsburg, Illinois 60051  
815-861-5357  
Stone-tim@sbcglobal.net

### **Editor**

Les Akre  
13336-129st.  
Edmonton, Alberta T5L-1J8  
Canada  
Home: 780-454-5723  
Cell (or other): 780-919-2792  
E-Mail: [scaleracer@hotmail.com](mailto:scaleracer@hotmail.com)

### **North West Representative (Open)**

### **North Central Representative**

Paul Gibeault  
23 South Park Dr.  
Leduc, AB T9E 4W9  
Canada  
Cell (or other) 780-716-2950  
E-mail: [pgibeault@shaw.ca](mailto:pgibeault@shaw.ca)

### **North East Representative**

#### **Phil Valente**

1523 Ulster Way  
West Chester, PA 19380  
Home: 610-692-6469  
E-Mail: [philv5@comcast.net](mailto:philv5@comcast.net)

### **Midwest Representative**

#### **T.J. Vieira**

1909 Amelia Ct.  
Miamisburg OH 45342  
Email [schluterdude@gmail.com](mailto:schluterdude@gmail.com)  
Ph. (Cell) 585-410-0366

### **South West Representative**

#### **Douglas Mayer**

5010 W 123rd Place  
Hawthorne, CA 90250  
Phone Numbers:  
310-463-0525  
Email: [Douglasmayer58@gmail.com](mailto:Douglasmayer58@gmail.com)

### **South Central Representative**

#### **Bill Bischoff**

1809 Melody Ln  
Garland, TX 75042  
Phone Numbers:  
972-840-2135  
972-245-8379  
Email: [billbisch@hotmail.com](mailto:billbisch@hotmail.com)

### **South East Representative**

#### **Robert L Whitney**

56 Garvey Road S.W.  
Palm Bay, FL 32908  
Phone Numbers:  
321-676-0554  
321-726-2017  
Email: [f2cracer@aol.com](mailto:f2cracer@aol.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 Les Akre at the address given on this page.

### **NCLRA membership information**

Basic membership is free. Simply apply on the web site : <http://www.NCLRA.org/> You will get the Torque Roll newsletter electronically every other month. In addition, you will get voting privileges for whenever a vote by the membership is required.

### **If you would like to receive a paper newsletter**

A paper copy subscription is \$10.00 for US and non-US residents. Send payment to the Secretary/Treasurer listed above.

**USING PAYPAL**-To pay with Paypal, first log in to your Paypal account, then send the paper subscription fee to; [Treasurer@NCLRA.org](mailto:Treasurer@NCLRA.org) Note that a \$.90 (\$1.10 for foreign membership) surcharge is added for the PayPal charges.