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







Nine-year-old Tristan Mayer with his new Fox Racer, refurbished by his father from a derelict Goldberg Shoestring. See article inside. INSIDE: District Reports Contest results Suppliers/Equipment Updated Contest Calendar

**Torque Roll Issue #142 February 2019** 

# **PRESIDENT - Bill Bischoff**

I hope everyone had an enjoyable and safe holiday season. I know it's deep into building season for many of you, so let's see what you're working on. Send Les a picture or two and a few sentences about your latest project. We'd all like to see it. Below is the NATS schedule I have submitted to AMA. I tried to accommodate the entrants that I knew of that would have potential conflicts in speed and carrier. Hopefully, I didn't inadvertently create any problems for anyone.

Monday 7/15/19: F2C team race, Mouse I Tuesday 7/16/19: AMA slow rat, AMA Goodyear Wednesday 7/17/19: Quickie Rat, super slow rat/Fox race Thursday, 7/18/19: Clown race, sportsman Goodyear Speaking of schedules, now is the time to send in your 2019 contest schedules.

**District Rep. elections** are held in odd numbered years. Nominations run from March 1 to April 30. Current rep's may run again, as there are no term limits. Challengers are also welcome (often by the incumbents). So if you want to have a go, then by all means, go for it. Nominees will be listed in the June *Torque Roll*. Check the NCLRA bylaws at nclra.org for a description of the Rep's duties. Send your nominations to Les Akre. Also, before nominating someone other than yourself, please get their consent!

NCLRA Hall of Fame nominations are also until April 30. A full description of the process is on the web site under "NCLRA Awards".

# **NORTHEAST - Phil Valente**

# 10-14-2018 Middlesex Results

## SPORTSMAN CLOWN

7.5 minutes not to exceed	140 laps
1. Tom Schaefer	138
2. Al Ferraro	136
3. Dave Edwards	134
4. Jim Vigani	130
5. Ernie Evon	
CLOWN SPEED	MPH
1. Dave Edwards	89.93
FOX 35 SPEED	MPH
1.Al Ferraro	
2.Tom Schaefer	110.49
3. Jim Vigani	106.19
4. Dave Edwards	89.90
PERKY SPEED	MPH
1. Jim Vigani	114.8
2. Al Ferraro	113.06
3. Tom Schaefer	111.31
4. Ernie Evon	91.80
5. Dave Edwards	87.00

# 11-4-2018 South Jersey Contest Results

PERKY SPEED	MPH
1. Tom Schaefer	122.241
2. Jim Vigani	117.390
3. Dave Edwards	94.958
4. Ernie Evon	91.39

#### FOX 35 SPEED

1. Al Ferraro	111.59
2. Tom Schaefer	109.52
3. Jim Vigani	
4. Dave Edwards	NT

# **SOUTH CENTRAL - Bill Bischoff**

Between the wind, the rain, and the cold, there hasn't been too much flying lately. We did have one nice Sunday afternoon when I tried out some of Bob Whitney's props on my Clown racer. Compared to my best prop, Bob's best prop added 5 laps and shaved off 6/10 sec for 7 laps. Not too shabby! The DMAA's 2019 schedule has been set and is substantially the same as 2018. One difference is that we are now allowing NCLRA legal Fox race entries to compete head to head in Super Slow Rat at all contests.

Our upcoming President's Day contest is also a fun fly, and with that in mind, we are having some "novelty" events for Sportsman Goodyear airplanes. These events are described below. Why not try them at one of your contests or fun-flys?

#### Saturday Sportsman Goodyear fun events.

**Speed:** timed for eight laps from a flying start. Fly from the pylon if you can. It's good practice! Four attempts for three official flights. Single fastest flight wins.

**Pit stop speed:** flight is timed for eight laps. After timing starts, pilot will land model for a pit stop. Model will take off again, and timing will stop after completion of eighth lap. Four attempts for three official times. Single fastest time wins.

**Relay race:** mechanic preps, starts, adjusts, and stops model. He removes the propeller and gives it to the pilot. The pilot takes his position in the circle. Upon the starting signal, the pilot runs to the mechanic and hands him the prop. While the mechanic installs the prop, the pilot runs back to the center. The mechanic will start the plane, and the pilot will fly one lap. Four attempts for three times. Single fastest time wins.

It may seem like a long way off right now, but why not consider attending the Dallas Spring Warm Up in April. Seven racing events to choose from, plus any speed event(s) you want to fly. There's even combat this year! Bob Oge, Tim and Al Stone from Illinois are planning to show up, as is Charlie Johnson. Doug "wet socks" Mayer may show up, possibly with his son Tristan! This could become the "Cabin Fever" of the new millennium.

# SHOELACE FOX RACER – 2018 By Douglas Mayer

# **REFURBISH OR BUILD A NEW AIRPLANE??**

So, you're probably wondering (relative to airplanes) what the heck is a shoelace? A shoelace is a small shoestring. Really? Heck, I don't know, but it's my story and I'm sticking to it. So, why a shoelace, or a small shoestring? What's the point? Well, this article is simply about my refurbishing an old Shoestring that I named the "Shoelace".

Before I continue, my good friend Bill Bischoff asked me, "Is it really worth it to refurbish an old airplane instead of building a new one?" Thinking that was is a valid question, I quickly said, "Yes, I have refurbished a number of airplanes". Our racing planes take a beating, and time is a factor for wear & tear, especially on the finishes. The real question is this; "Is the airframe and the structure still structurally sound and worth salvaging?" The amount of effort that can go into the construction of a new model, verses refinishing, repainting and installing new components on an existing model can definitely favor the re-furbish project. In the case of the shoestring, the airframe was in pretty good shape, and it would be a lot less effort to create the Shoelace, than it would have been to build a whole new airplane.

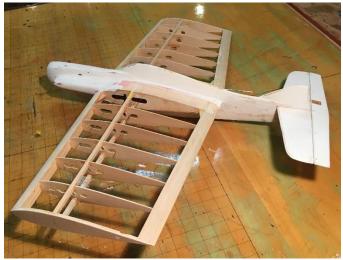
A bit of history is due. My son Tristan has been getting more and more involved with racing, and he saw my old beat up shoestring up in the roof rafters. He asked me, "Dad, what's that big old yellow airplane? Can I fly it?" Well, I must say that I thought it was ambitious for a 9-year-old kid to want to fly a big airplane, but I remember my childhood and remembered how bad I wanted to fly a "BIG" airplane. Well, you only live once, and who knows how long I can hold his attention, so I took the old beater out of the roof rafters and showed it to him. It was truly a dis-graceful mess. I had my doubts, but I told him, "Tristan, you can fly this plane, but its gonna take a bit of work.



The Shoestring before refurbishing.

**The Shoestring:** It's the classic Carl Goldberg Stunt Model with the 400+ sq. in. wing. My old buddy Mike MacCarthy originally built the plane as a Formula Unlimited Racer with a HB .40, race ready with shut-off and 2 oz. tank. When Mike retired, he gave it to Jim Holland, (another race partner of mine). When Jim moved to England, he paid me a visit and sold me a few good planes, gave me a few airplanes, and then of course, there was this old tired Shoestring. This thing was so beat up and old, (probably 20 years of service), broken, spent, exhausted...Oh the drama!! Anyway, Jim told me that if I didn't take it, it was going in the trash can, so I put it in the rafters, and there it sat for years!!

**The Shoelace:** Clearly, I couldn't refurbish the plane back to a Formula Unlimited and Give it to Tristan, not to mention that we don't fly Formula Unlimited anyway, so I decided to transform the plane into a reasonable Fox Racer. I had 3 or 4 Fox .35's in a box, so it would take a minimum investment to get him air born on a Fox Racer. The plane was in bad condition, so a complete overhaul was in order. I evaluated the old Shoestring and determined what design modifications would need to be done to make it into a reasonable Fox racer.



Shortened wing and Fuselage, new tail section as well.

**WING:** The wing is the most important element on any airplane, so I started here first. The wing covering was brittle and full of weird patches, so I removed all the old wing covering. The wing is 400+ sq. inches, so I did a calculation to see how close I could get to 300 sq. inches. I determined that I could remove the entire curved built-up wing tips, and the next rib bay and I was still around 320 sq. inches. If I removed another rib bay, it would have created a bunch of work to get back to 300 sq. in., so I decided to just leave the wingtips square, and I just removed the wingtips and one bay, and then made a 1/8" thick rib to make a good solid wingtip at the last exposed rib. A 320 sq. in wing was much better than a huge 400+ sq. in. monster.

**STABILIZER, ELEVATOR & RUDDER:** The stab, elevator and rudder were all broken multiple times and glued back together, and simply just garbage, so I removed them all and threw them in the trash. I built a new stab and rudder based on my current Fox Racer [Retro Baby]. The original shoestring stab and elevator were very large to work with the 400 sq. in wing and perform stunts. For racing this isn't necessary, so the new tail empennages are smaller. The other thing I did was shorten the fuselage by 2" and move the new rudder forward of the fuselage and the elevator line. This allowed me to have a one-piece elevator, and not fit it thru a hole in the rudder. This just simplifies construction a lot. The rudder is small, and I simply made a shape that I thought "looked fast". I fiber glassed the entire rear end of the fuselage and rudder in one action. Then I cut the stabilizer slot in the fuselage. I fiber glassed the 1/8" stabilizer and elevator. I usually use blind embedded hinges, but for quickness and ease of construction, I used threaded hinges. After all the work was done, I glued the completed assembly into the fuselage slot.

MOTOR MOUNT and BUSINESS END: The original Shoestring was set up for a .40 sized HB motor. The nose had 6-32 blind nuts, so I used these bolt holes to mount a new 3/16" aluminum motor mounting plate. The plate was cut out, drilled and tapped to receive the Fox .35. I was able to straddle the front 6-32 mounting bolts with the new Fox.35 mounting bolts. I had to grind about 1/4" of wood off the nose, and reshape the nose so it would not protrude past the Fox .35 thrust washer and prop assembly. After getting the motor mounted, I dug thru my box of old fuel tanks. I found an old Fox Race tank and cleaned it up a bit and flushed it out to get rid of any crud. I did not install a shut off on this plane. For now, Tristan is just running out the fuel tank, and has not learned to shut off a race plane yet. I don't want to complicate things too much as we are working on building confidence, and he doesn't need to crash while learning to shut off.

**LANDING GEAR:** The existing landing gear was pretty good. Mike had made a set of Titanium Gear and used some 1-1/2" wheels. I found that the center of gravity was questionable and adjusted the gear to move the wheels forward about ½" so the plane wouldn't tip over on its nose. I have no idea how he flew this plane with a HB .40 on the nose??? Never-the-less, its adjusted quite nicely to fly with the Fox .35 on the nose. It takes off well, and lands very smooth.



The business end got a redo as well.

**<u>FINISH</u>**: The finishing stage is probably the most important part of a refurbish project, and likely the reason that a refurbish job was justified in the first place. After many years, even the best epoxy and fiberglass finishes can crack, and craze and this creates a slow demise to the airframe. Soon, fuel and oil begin to

penetrate thru the finish into the wood airframe. Whenever I refurbish a plane, there are inevitably areas where the fuel has soaked into the wood. In the case of the shoestring, I sanded all the weird crazed and cracked paint on the fuselage, but I had to completely strip off all the paint around the nose and fuel tank. I have found that the best way to remedy fuel-soaked wood is a combination of washing with Acetone, and lots of sanding. Eventually, you will get a sense that most of the fuel is gone and the wood will be able to receive new finishes. In some cases, you may have to remove some wood and replace it, but this is usually not necessary. After I stripped and sanded the airframe, I painted the entire plane with a new coat of epoxy primer. I sanded this layer, then painted the red and yellow finish coats with Ultra Poxy paint. After all the painting was done, I monokoted the wings in RED because that's what I had in the shop. I added some numbers and stickers and voila', I have a new airplane!!! By the way, the numbers came from the local Jet Ski shop, they are simply "License Numbers", but they are perfect for our big airplanes, and they look great!



The complete, newly refinished model.



An overhead view of parts cutoff and replaced.

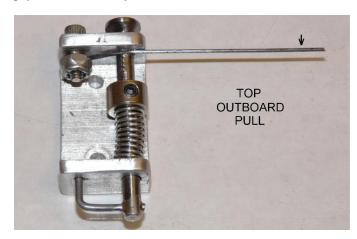
**FLIGHT:** I rebuilt the leadouts and set up the plane with a new set of .015 braided lines. Tristan and I took Shoelace out for a test hop and she flew very nice. No bad habits, she flew nice and steady. The elevator had plenty of control but wasn't touchy. I'd say it was just right in the comfort zone. She didn't quite feel like a competitive SSR or Fox racer, but she also didn't feel like a big old shoestring either. I think it will be the perfect training airplane for my son.

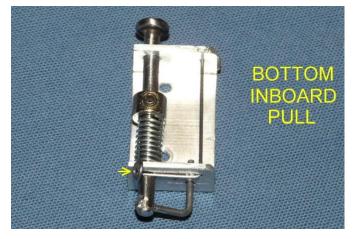
# ASP/ MAGNUM 15 FUEL SHUTOFF By Bill Bischoff

This shutoff mounts to the back of the engine. It can be made to pull from the top or bottom, with the cable next to the fuselage or on the outboard side of the shutoff. The frame is made from a 3/4" wide section of 1 1/4" square

aluminum tubing with a 1/16" wall. The square is cut into two "C" shaped channels, each 1/2" deep, plus a couple small strips of scrap. This will make two shutoffs. The plunger is made from a 3" 10d common nail. I stole this really clever idea from John McCollum. The design is straight forward, and the pictures should tell you everything you need to know. The dimensions are not super critical. Use the engine's backplate as a template to lay out the mounting holes, and the rest, if it works, then it must be right!

If you don't wish to build one of these yourself, I am offering them for sale for \$20.00 each. Just specify if you want top or bottom pull, inboard side or outboard side. Shipping and payment info is in my advert elsewhere in this issue.







# **CONTEST CALENDAR**

NOTE! Confirm all contest details with Contest Director!

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

Middlesex Modelers Of New Jersey 2019 Schedule May 5 Sportsman Clown Racing, Foxberg, Perky, Fox Speed (CD Ernie Evon)

#### June 2

Sportsman Clown Racing, Foxberg, Perky, Fox Speed (CD Tom Schaefer) October 13 Sportsman Clown Racing, Foxberg, Perky, Fox Speed (CD Al Ferraro)

## South Jersey Aeromodelers 2019 Schedule

#### April 21

Sportsman Clown Racing, Foxberg, Perky, Fox Speed (CD Phil Valente) November 3 Sportsman Clown Racing, Foxberg, Perky, Fox Speed (CD Phil Valente)

November 17

Sportsman Clown Racing, Foxberg, Perky, Fox Speed (CD Phil Valente)

#### NORTH CENTRAL DISTRICT None

# NORTHWEST DISTRICT

## **April 12-14**

Updated! Jim Walker Memorial Spring Tune-Up, Jim Walker Memorial Field, East Delta Park, Portland, Ore. Racing Friday Only

Friday: Clown, Sportsman Clown, Northwest Sport and Northwest Super Sport Racing,

**Download a flyer** with all the details or <u>email for information</u>.

#### May 24-26

Northwest Control-Line Regionals, Roseburg Regional Airport, Roseburg, Ore.

Friday: Speed, Carrier, Old-Time Stunt, Beginner-Intermediate Precision Aerobatics, 15 Fast Combat.

Saturday: Speed, Carrier, Classic Stunt, Profile Stunt, Scale, highperformance 1/2-A Combat, 80mph Combat.

Sunday: Carrier; Advanced-Expert Precision Aerobatics; AMA Fast Combat, Racing.

Download a flyer with all the details or email for information. Download a discount advance entry form and an award sponsorship form.

Lodging: The Hampton Inn near the flying site is the Regionals host hotel. For a special room rate, book online at the Regionals hotel registration website or call 1-800-HILTONS and mention the Northwest Regionals. Reserve by May 9 to be assured of the special rate.

#### June 29

Salem Speed & Racing Tune-Up, Bill Riegel Model Airpark, Salem, Ore., for Racing, Speed and Navy Carrrier events. Sponsored by Western Oregon Control-line Flyers. Details tentative. Email for information

#### Oct. 5-6

Fall Follies, Bill Riegel Model Airpark, Salem, Ore. Aerobatics, Racing and Combat. Sponsored by Western Oregon Control-line Flyers. Details tentative. Email for information.

# MIDWEST DISTRICT

#### July 14-20

93rd Annual National Aeromodeling Championships AMA Contest site, Muncie In. Monday 7/15/19: F2C team race, Mouse I

Tuesday 7/16/19: AMA slow rat, AMA Goodyear Wednesday 7/17/19: Quickie Rat, super slow rat/Fox race Thursday, 7/18/19: Clown race, sportsman Goodyear

#### SOUTHEAST DISTRICT None

# SOUTH CENTRAL DISTRICT

#### 2019 DALLAS RACING CONTEST SCHEDULE

#### Feb 16, 17

Sport Goodyear fun events Saturday, Sport Goodyear racing Sunday. See flyer in this issue.

#### Apr 28, 29

Sat. Quickie Rat, Super Slow Rat/Fox race, Sportsman Goodyear Sun. Clown race, AMA GY, Mouse I, Fox-Goldberg racing.

#### June 8

Quickie Rat, SSR/Fox Race, Sport Goodyear, Mouse I, Fox-Goldberg racing. All racing Saturday only.

Aug 31 same events as June 8

Oct 12, 13 same as Apr 28, 29

All events at Dallas Hobby Park. Contact Bill Bischoff for more information (billbisch@hotmail.com)

# PRESIDENT'S DAY CONTEST



February 16 - 17

Sponsored by Dallas Model Aircraft Association



#### Profile Stunt - Saturday

Sportsman Goodyear Fun Events

See DMAA website for event schedule and rules

#### Classic Stunt - Sunday

Sportsman Goodyear Racing

Air to Air Combat

Appearance Points for Classic, not Profile

Air to Air Combat rules posted at: www.DMAA-1902.org

Pilots Meeting all events at 9:00

Contact Information: Mike Scott

E-mail address: Mikescott15@gmail.com

214.478.6263

# SOUTHWEST DISTRICT

None Available for this issue

# **SUPPLIERS**

#### **BRODAK MANUFACTURING**

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#### JIM DUNKIN

Engine reference books 816-229-9671 dunkin@discovernet.com

## ELIMINATOR PROPS

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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

## 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: <u>nelcomp101@gmail.com</u>

## 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

# **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

#### BISCHOFF'S SPORTSMAN GOODYEAR RACING PARTS

NEW! Sport Goodyear FUEL SHUTOFF	\$20.00	
Mounts to the back of ASP/ Magnum engine		
Specify top/bottom, inboard/outboard pull		
Includes longer backplate screws. (see article in this issue)		
ASP/ Magnum 15 VENTURI	\$10.00	
1/4" ID, 4mm spraybar, fits 10mm hole		
RSM Supertigre style needle assembly	\$10.00	
Aluminum landing gear struts	\$12.00	
.090" 2024-T3, drilled & tapped, with screws		
Edges pre-rounded.		
wheels and axles	\$6.00	
1 1/4" Williams Bros. wheels, 1/4" axles		
1/4" axles w/o wheels	\$2.00	
With hardware- requires 1/4" hole in wheels		
1 oz fuel tank per Margaret June plans	\$20.00	
bellcrank button kit	\$2.00	
includes hex buttons, eyelets, screws		
fuel shutoff trigger wire	\$1.00	
per Margaret June article		
fuel bottle with fill fitting 8 oz.	\$10.00	
16 oz.	\$11.00	
Deluxe fuel bottle w/spring valve 8 oz.	\$14.00	
16 oz.	\$15.00	
racing handle, 3" spacing	\$25.00	
metal frame wooden grin stainless cable		

metal frame, wooden grip, stainless cable (other spacing available by request)

Shipping: \$7.00 per order including fuel tanks or bottles / \$4.00 per order without fuel tanks, bottles. I accept paypal or personal checks. Paypal: 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

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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 : <u>http://www.NCLRA.org/\_</u>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.

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Note that a \$.90 (\$1.10 for foreign membership) surcharge is added for the PayPal charges.