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







Contestants and crew at the Virgil Wilbur Contest in California this past October.

INSIDE: District Reports Suppliers/Equipment Updated Contest Calendar

Torque Roll Issue #166 February 2023

### **PRESIDENT** – Bill Bischoff

Lots has been happening at the NCLRA World Headquarters lately. Before the last newsletter, we made some changes to the bylaws and some of the event rules. More recently, we have moved the NCLRA treasury to Texas. We received much needed information and assistance from former NCLRA officers Dave McDonald and Dave Rolley with the paperwork required to open the new account.

Bill Lee was instrumental in implementing a system to notify members of expired memberships. If you're reading this, chances are you received a notice. It was very encouraging to me that over 75 people cared enough to renew within the first two days. Thanks, all! Now that Bill's system is in place, I suspect we will send out renewal notices every January.

I should also mention that the new, larger SH 15 venturis allowed in DMAA Sportsman Goodyear are available now. More complete information is elsewhere in the newsletter.

#### 2023 NATS

Control line is **Sunday, July 9- Saturday, July 15, 2023**. Note that this a week earlier than it was in 2022. This will also be the 100th anniversary of the first National Model Airplane Championships. AMA is asking each different discipline to do something to honor its history. Fortunately, we will be holding Vintage B Team Race, an event which pays tribute to AMA's first official racing event. This is all the more reason to build a Vintage BTR for this year.

### **NORTH CENTRAL** – Paul Gibeault

# Happy New Year everyone, I hope Santa brought you a bunch of enthusiasm for next year!

Hear Yea, Hear Yea! Just when I thought the subject was dead!

Further to the last NCLRA meeting at the Nats. I proposed that it was overdue to continue using unlimited fuel in Class I Mouse Race. My rationale was:

- While being an excellent power additive, propylene oxide is in fact **a rather dangerous chemical** and is **no longer sold to individuals**, because of this fact.

### **Positives:**

-Prop Oxide (when combined with high nitro) causes increased performance (at the expense of highly accelerated engine wear). i.e A loose ball-socket joint precipitating early piston failure if not watched very closely.

- Cox engines (used by 99% of the competitors) were not designed to be run on higher than 30% nitro fuel (even though they do run noticeably faster), so they

will last longer & need much less maintenance when run on a lower nitro fuel. \*\* See Cox Fuel Drawing.

- With every other C/L racing event now using a common (10%) fuel, there is no good reason anymore for CL Mouse I to run unlimited fuel.

- Unlimited fuel gives an **advantage to the fuel chemists** among us. It's past due that we offer standard commercial fuel that will work just fine for everybody & **level the fuel playing field**, in terms of fuel.

My Proposal by P. Gibeault AMA 1245990

### <u>Class I Mouse Race fuel</u> must consist of 35% nitromethane, 20% oil of which a minimum of 10% being castor oil, the balance methanol. Per centages to be measured by volume.

- It was published by 1/2A proto record holder Jim Wade that a Cox .049 needs a minimum of 4% castor for the ball joint to survive. 10% is much better and the synthetic 10% keeps the cylinder clear of varnish build up a lot longer than with an all castor blend. A Klotz tech rep told me at the 1999 Nats that a castor/synthetic oil blend is superior to just either straight castor or straight synthetic. I set the 4:22 AMA Mouse I record at that Nats that year. \* Note: Bill Wisniewski told me his ideal oil blend is 3 parts synthetic to 1 part castor oil. - 35% nitro is a **cheaper fuel** than many of us are currently running now and is much easier on those very expensive Cox glow plugs.

- Sig 35% fuel (w/ 50-50 castor/synthetic oil) falls into this category and has been proven to run just fine. Other fuel manufacturers offer the same.

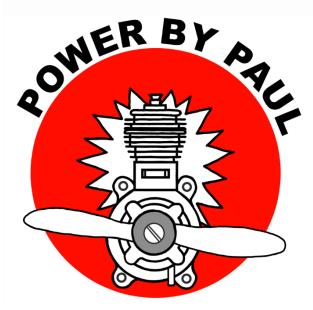
### **Negatives:**

It could be argued, since Cox made a 10% fuel, why not just go to 10%? I think the performance might drop so much that flying on 42' lines in the wind would become problematic.
Buying a gallon of 35% mouse fuel is slightly extra work for the CD.

- Engines may require some minor re-tuning to the new fuel as is always the case.

- Airplanes will be slower (but easier to fly in traffic).

- Current Mouse 1 records (24 years old) will be voided. \*\* The current record holders are OK with this.



P.S. For those who have always wondered what was in the Original Cox "Red Can" Racing Fuel? Below is the Cox factory specification sheet.

					-					DWG.	
INGRE	DIENT	To DF MIX BY VOLUME				FUEL C		CHECK- SPECIFIC GRAVITY		510	>>>> *
METHAN	METHANOL 50% .7955 .3 CASTOR OIL 16% .9635 .1			.391	15	.9281 = SPECIFIC GRAVITY @ 60° F. .9181/.1381 = ±.01 TOLERANCE			L	~	
			.9635	.173	43						
NITRO MI			.33	370	19/22 = CONVERSION TO BAUME SCALE						
E DOW LUB	DOW LUBE XA-1180-6		. 9095	.018	320	CASTOR OIL 8.0326 LB. PER GAL.					
* NOTE: DOW LUBE SHIPPED TO US UNDER LABEL "KLOT'Z KL-201"			ro us -201".	.92	BI 7	NITRO METHANE 9.487 LB. PER				AL.	
	MIXING F	ORMULA	4		P		700	GAL. OF	ALD GAL. OF	ADD10	]
			50000 FUEL			METHANOL		GAL-65%	455 GAL 50%		1
-		38 GAL CASTOR OIL (305 LB.)			RO	CASTOR OIL	120	GAL18%	164 GAL-18%	38 GAL	
ADD	168 G	168 GAL NITRO METHANE			0	NITRO METHANE	105	GAL15%	273 GAL- 30%	168 G AL	-
		GAL DOW LUBE			F	DOW LUBE	14	GAL 2%	18 GAL 2%	4 GAL	-
	46	AL. DOW									
	910 G	AL. FUEL	S. TESTING	ц	r	TOTAL	700	GAL - 100%	910 GAL100%	2.10 GAL	1
PLASH P	910 G	AL. FUEL	S. TESTING	<del>ن</del>		TOTAL 2780	*	GAL - 100%	5	2.10 GA	9/4/77
PLASH P	910 G	AL. FUEL	S. TESTING	9		TOTAL				2.10 GA	
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### **SOUTH EAST – Bob Whitney**

Happy new years to all.

I'm still getting used to my two-room condo. I have joined the wood graft group, a good bunch of guys where fancy bowls and cutting boards are the big thing. I need to be careful as all the blades used for this are meant for hard wood, but at least I have a good supply of hard maple for motor mounts. I have met a couple of the combat flyers from last years team and have been flying almost every weekend. I still haven't found any pavement around here. Not sure where I will get to fly my newest BTR. I think I have found that hot BTR motor and might need a pilot for the Nat's (hint hint Ron). I'm looking forward to the Brodak contest, I will have 3 or 4 new planes.

Here is a thought; I have been having trouble with the 4/40 blind mounting nuts spinning on me. ACE HARDWARE has 3 M/M Allen screws that are about the same size as 4/40's, But the blind nuts are about twice as big and really grab, might work better, just a thought.

Anyone doing any BTR work?

A pic below of our winter flying conditions; We are having it rough here in the land of the coconuts, try not to get jealous...



## **SOUTH CENTRAL** – Bill Bischoff

#### DMAA SPORTSMAN GOODYEAR OVERVIEW

As we enter 2023, we have a change to the Dallas Model Aircraft Association's Sportsman Goodyear rules, and we also have a new region of the country scheduling the event for their upcoming contest season. Welcome to our racing friends from the Pacific Northwest. This seems like a good time to summarize the rules and explain some of the logic behind them. While I think the rules are pretty clear (you *do* have to read them), the questions I occasionally receive may indicate otherwise. So here is the Reader's Digest condensed version, in layman's English.

The origins of this event seem to go back to 1980's Wichita, KS. It was meant to preserve the fun of Goodyear, without the high performance and cost of full-on AMA Goodyear. Engines were limited to ball bearing or plain bearing non Schnuerle designs, or plain bearing Schnuerle designs. At the time, Fox was producing their Schnuerle ported 15 in both plain and ball bearing versions. When the plain bearing version was discontinued, it was decided to allow the Fox 15 BB. Similar to the rules for Texas Quickie Rat, engines had to contain original OEM parts, but could be modified by removing material. Nothing could be added.

As for airframes, the AMA Goodyears of the day would have typically been built for Rossi or Supertigre 15's. Since the Supertigres were legal in sportsman Goodyear, and the Foxes also shared the same mounting pattern as the Rossi and ST, plenty of airplanes were hanging on garage walls, waiting to be called back into service. Most of them also had leadouts within the wing.

Over time, the Fox 15 BB emerged as the dominant engine in the event. Unfortunately, the quality of these engines became very hit-or-miss. Occasionally someone would show up with a good running Norvel BigMig 15, but mostly, interest in the event dwindled. For discussion's sake, we will call the above the "Classic Era".

In 2013, I purchased a Magnum XLS 15A engine. It was on sale, and I was curious to see how it would do as a .15 carrier engine. While breaking in the engine on the stand, I was impressed by its easy starting, power, and good manners. It never found its way onto a carrier plane, but it quickly ended up on a sport Goodyear model. Results were very positive, and some testing showed that a .250" venturi yielded performance similar to a good Fox 15. That fall, I flew traffic in a couple of local contests to get a side-by side comparison with other models. All the local elders were satisfied, and new rules were written for the 2014 contest season. This marks the start of the "Modern Era".

The "Modern Era" rules were written around the blue head Magnum 15 and its identical cousin, the ASP 15. The goal was to have performance on par with the "Classic Era" models, so they would not be rendered obsolete. We also wanted to keep the engines stock, so everybody would have the opportunity to be competitive.

Since these new engines had a completely different mounting footprint than the classic engines, it was thought that people would be building new, dedicated airplanes for them. This was the perfect time to mandate external controls. This was not done as a performance limiting measure, but simply as a way to make the event a bit simpler and more attractive to novices and casual competitors.

After a few successful years of racing under the modern rules, ASP went out of business. The SH 15 came along as the heir apparent to the ASP/ Magnum, was tested, and made legal. A couple of seasons of actual racing showed that the SH 15 wasn't quite up to the performance of the 'blue heads", so the SH venturi size was revisited and ultimately enlarged. Again, this was in an effort to keep the playing field level. One thing that differentiates the SH from the ASP and Magnum is the SH cylinder head. Unlike the others, it is a head button and clamp arrangement. Also, the head clamp is rather large and square, appearing more like a helicopter head than an aircraft head. Turning the stock head clamp down to a more suitable size (about 1 1/4") is allowed, but not required, though the original head clamp must be used.

So what we now have is an event where the Classic rules and the Modern rules co-exist side by side. Sure, we could phase out the Classic rules, since we almost never see a Classic rules entry anymore. On the other hand people still have legal (and competitive) Classic rules models, so why rule them out? Again, I emphasize that this is just a summary and not a substitute for reading the rules!

#### NEW VENTURIS FOR THE SH 15 NOW AVAILABLE

The new .266" ID venturi for the SH 15 for DMAA Sportsman Goodyear (shown below) is now available. It is physically the same as the blue .250" ID venturi for the Magnum and ASP 15, except for the bore. Also, it is anodized red for easy identification. Venturis are \$10.00 each, plus \$6.00 shipping for one or several. See the listing for "Bischoff's Racing Parts" in the back of this newsletter for ordering and payment information.



### **SOUTH WEST – Doug Mayer**

Its winter time in most of America, and here in the Southwest,.....its wintertime! We have had a very fortunate rainy season this year. Our reservoirs are re-filling, there's a ton of snow in the mountains and our vegetation is greening. We are hoping our extreme drought is over for awhile. The snow in the mountains is good for 2 reasons. In California, the mountain snowpack acts as a reservoir. As the spring and summer seasons arrive, the snowpack provides a steady flow of water into our water management system. The years with poor snowpack are very bad news because the lack of steady snowmelt contributes to our drought conditions. The second reason that all that snow in the mountains is good is because me and the boys have season passes and we snowboarding as much as we can. Unfortunately, all that awesome snowboarding becomes a major distraction to my model airplane hobby. Most guys say winter is "Building season", but I say winter is "Get nothing done season". I realize its not airplane related, but I'm sharing a picture of my Jeep at Mammoth Lakes, CA from last week. This is at the condominiums that we stayed at. Yes, that is a 15-20 foot high wall of snow. There is so much snow they use loaders, and graders and huge dump trucks to export the snow from town, out into the meadows outside of town.

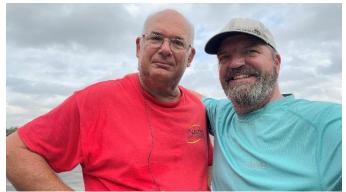
Oh yeah! Airplanes! I forgot. Well, there's not much going on here at the moment, but I've worked a deal with Les to share some photos from our Virgil Wilbur contest, (Report in last month's issue). Les didn't get my photos for that Issue, so we're going to present some photos for you this month. I hope you enjoy. Until next time, wear your sunblock and keep your lines tight.....and wear a beanie.



My Jeep Wrangler at Mammoth lakes this January.



My Wife Kris at Mammoth.



Mike Greb and Doug.



Mike Callas and Ron duly duking it out.



Lunch break at the Virgil Wilbur.



Bill Bischoff trying to trip Dave Hull.



Bill Bischoff flying my rental Barracuda Quickie rat against Dave Hull.



The Pits! Notice "Judy" in the lower right corner.



Bob Harness pitting Pete Cunhas' Sport Goodyear.



Tristan and Mason racing Mouse-1.



The Vigil Wilbur contestants were all fighting for these custom handmade trophies.



Bob Harness and Pete Cunhas came from Northern California to race Pete's very beautiful Margaret June.



Bill Cave pitting for Dave Hull.



This is my favorite photo. When Jim Holland moved to England, he sold or gave away most of his airplanes. This red and white Judy Shoestring ended up with Bill Cave, albeit, broken and un-flyable. I raced this airplane with Jim many times, and I really enjoyed this plane. I'm sure Bill pitted this plane for Jim many times as well. I knew that Bill had her and she was sad because she couldn't fly. Before the Virgil Wilbur contest, Bill told me that he was repairing Judy and was setting it up with Magnum for Sport Goodyear. Race day came, and Bill brought Judy back to the races. Unfortunately, my elbow had not recovered from surgery and I was not able to fly. Dave Hull did the pilot duties, and Bill pitted Judy to a 3<sup>rd</sup> place, just one second behind Bill Bischoff. I grabbed Bill after the race and had someone take this photo of us as a tribute to our old friend Jim Holland. I'm sure Jim was happy to see Judy racing again.

### From the workshop...

Lester Haury likes to try new things just to expand his horizons. Here is his current project, a wing for "Miss Min" and "Limitless". The wooden perimeter is cut from Home Depo poplar. The foam is 2lb density (I think). All the part cutting and carving is done on a CNC router. The wing is skinned with two layers of carbon with the weave direction staggered, vacuum bagged. The weight of the skinned wing with tip weight is 92.8 g. Besides being stiffer and stronger due to the carbon skins, this is also lighter than a typical fiberglassed balsa wing. Sorry kids, but Lester has no plans to go into the wing business. He's doing this just to see if he can. The Miss Min has a CNC carved balsa wing. It made quite a showing last season.











Mike Greb warming up his QR entry at the Virgil Wilbur.

## **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

#### April 21-23

• Jim Walker Memorial Spring Tune-Up, Jim Walker Memorial Field, East Delta Park, Portland, Oregon, Sportsman Clown Race, Northwest Sport Race, NW Super Sport Race. For information e-mail: scappod@gmail.com

#### May 26-27-28

• 50th Northwest Control-Line Regionals, Roseburg Regional Airport, Roseburg, Oregon. NW Sport Race, NW Super Sport Race, NW Clown Race, Sportsman Clown Race, new this year: DMAA Sport Goodyear.

For information e-mail: zzclspeed@aol.com

#### SOUTHEAST DISTRICT None

### MIDWEST DISTRICT

None

#### SOUTH CENTRAL DISTRICT

April 28-29-30 Spring Warm Up

Saturday: Quickie Rat, Super Slow Rat, and Sport Goodyear Sunday: Mouse 1, Clown race, and AMA Goodyear.

#### June10-11 Bob Gieseke Memorial

Saturday only: Mouse 1, Quickie Rat, Super Slow Rat, and Sport Goodyear.

#### September 2-3 Charles Ash Memorial

Saturday only: Mouse 1, Quickie Rat, Super Slow Rat, and Sport Goodyear.

#### October 13-14-15 Fall Finale

Saturday: Quickie Rat, Super Slow Rat, and Sport Goodyear Sunday: Mouse 1, Clown race, and AMA Goodyear.

At all contests, NCLRA legal Fox racers may enter Super Slow Rat. Fox 35 appropriate fuel will be provided. I hope to see many of you this year.

## SOUTHWEST DISTRICT

None

### 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)

(100 Laps) 5:17.68 Scott Matson       7.         Sr (50 Laps) 2:44.68 Dave Rolley Jr       7.         (100 Laps) 5:20.11 D.J. Parr       7.	7/15/99 /17/99 7/15/99 7/16/98 7/16/04 7/15/99
	7/11/03 7/10/09
(140 Laps) 6:08.55 Bob Fogg III Sr (70 Laps) 3:15.12 Doug Short (140 Laps) 5:40.05 Bob Fogg III Op (70 Laps) 2:39.38 Willoughby/Oge	7/16/91 6/23/92 7/11/00 7/11/95 7/15/97 7/16/91
F2C TEAM RACING Op (100 Laps) 3:42 Fisher/Wilk (200 Laps) 6:43.32 Fisher/Wilk 7	7/13/15 7/16/12
F2CN (NCLRA RULES) 100 Laps 4:14.84 Bill Lee/ Russ Green 200 Laps 8:37:10 Wallick/Brozo	7/07/11 7/15/13
(70 Laps) 3:05.73 Green/Lee 7 (35+70 Laps) 4:33.91 Green/Lee 7/	/12/05 /10/09 10/09 /10/09
	7/15/04 7/15/04
	7/11/99 7/16/02 7/10/05
NCLRA CLOWN RACE Op (7 <sup>1</sup> / <sub>2</sub> Min.) 150 Laps Bischoff/ Lee Op (15 Min.) 284 Laps Bischoff/Lee	7/15/15 7/15/15
NCLRA TEXAS QUICKIE RAT (70 Laps) 2:58:72 Bill Lee/Bill Bischoff (140 Laps) 6:07.01 John McCollum/Bill Lee	7/18/13 7/14/05

#### NCLRA SUPER SLOW RAT

(100 Laps) 5:14.30 Bill Lee/Russ Green 7/05/09

### **SUPPLIERS**

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

#### CS ENGINES AMERICA

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

#### **ELIMINATOR PROPS**

Steve Wilk 3257 Welcome Ave. N. Crystal, MN 55422 763-531-0604 e-mail swilk@cpinternet.com Online store http://eliminatorprops.com/store/

#### **STEVE EICHENBERGER**

Custom Fiberglas 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 Email: douglasmayer58@gmail.com

#### JUST ENGINES LTD

Newby Cross Farm, Newby Cross Carlisle, CUMBRIA CA5 6JP England (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 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 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

#### **NELSON COMPETITION ENGINES**

121 Pebble Creek Lane, Zelienople, PA 16063 Manufacturer of NELSON Racing Engines and parts, Nelson Glow Plugs, many other specialty engine items. (Henry Nelson) Phone: (724) 538-5282. e-mail: 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 **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 RACING PARTS AND ACCESSORIES** \$20.00

fuselage mounted FUEL SHUTOFF specify top or bottom pull, specify Goodyear (1 1/4") or Quickie Rat (1 1/2")

<b>ASP/ Magnum 15 VENTURI</b> 1/4" ID, 4mm spraybar, fits 10mm hole, blue anodized	\$10.00
SH 15 VENTURI (red) .266 ID, 4mm spraybar, fits 10mm hole.	\$10.00
RSM Supertigre style needle assembly	\$11.00
<b>Aluminum landing gear struts</b> .090" 2024-T3, drilled & tapped, with screws Edges pre-rounded.	\$12.00
<b>aluminum landing gear blanks</b> Cut to size, not drilled or bent. One pair.	\$5.00
Williams Bros. 1 1/4" wheels w/ axles	out of stock
<b>1 oz Sport Goodyear fuel tank</b> with pinch-off overflow.	\$20.00
Bellcrank button kit includes hex buttons, eyelets, screws.	\$2.00
8 oz. fuel bottle with fitting	\$10.00
<b>16 oz fuel bottle</b> specify for rubber quick fill or 1/8" tube fill.	\$15.00
Racing handle, 3" spacing metal frame, wooden grip, stainless cable (other spacing available by request).	\$25.00
<b>Globee Ni-MH conversion kit</b> includes 2.4 volt, 5000 mAh Ni-MH battery and XT30 wiring harness.	\$15.00
<b>Juice Box MkII glow plug battery</b> 2.4 volts, 5000 mAh Ni-MH battery large ammeter, adjustable output.	\$60.00
Juice Box "Racer" battery w/ arm strap	\$75.00

Perfect for racing hot glove system. Similar to Juice Box MkII, meter rotated for easy reading when mounted on your arm, case slightly thinner.

#### Clothespin style glow plug lead \$12.00

36" 16 ga silicone wire. XT60 connector fits JuiceBox MkII and Pro.

Shipping: \$12.00 per order including fuel tanks, bottles, batteries or handles.

\$6.00 per order without fuel tanks, bottles, batteries or handles. 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