OFFICIAL NEWSLETTER OF SANDERSON FIELD R.C. FLYERS SHELTON, WA

# SANDERSON FIELD

SHUTERSON FRE

R.C. NEWS



SFRCF Swap Meet April 17th

### CLUB MEETING

This months meeting will be held on Thursday April 8th from 7:00 p.m. Doors open shortly after 6:00 pm.

#### *at PUD #3*

At 3rd & Cota

February minutes were read and accepted as read.

Treasurers report was read and accepted as read.

#### Old business:

Dick Robb said he would have a list of events around the northwest soon, a new organization has been formed and they are gathering that info. Check our web site's Other Events page.

Burt Daggett and Eric Oberg talked to Mr. Reynolds about the possible flying field on his farm. Prior to this talk they were under the impression he wouldn't want much for allowing us to fly there but he said he wanted \$700 a year. Burt thought he wouldn't go below \$600. Dick Robb motioned to write him a thanks but no thanks note and drop the idea.

Eric asked for volunteers to write

the letter and got none, he volunteered to write it.

New Business:

Bob Andrew said we need a work party at Hunters. He will call around when they are going to go.

Gordon Osberg noted the field there is in good shape right now.



The wire fence has been moved and is a bear to open and close. He talked to Mr. Hunter and was informed they will do something about it. Dick suggested someone carry a 4' piece of rope to assist in closing the gate.

Gordon Osberg has gotten the applicants for our scholarship (93 of them). There is one that for sure meets our qualifications and one other possible. The scholarship committee will continue to work on them. The High School wants one of the club to be present at the awards ceremony (in May). Eric said he would go if needs be. McMinnville swap meet is the 13th.

APRIL 2010

VOLUME XIII ISSUE IV

Our Swap Meet is April 17th.

Club fees are all paid and insurance forms distributed except for Hunter Farms.

Meeting adjourned 7:30

Dick Robb, Dave Fisher and I drove down to the McMinnville swap meet last month. It seems to be growing, the building is fairly large and there were only a few empty tables.

There were some good deals to be had, Dick picked up a kit (I don't remember the model) that was originally \$350 for only \$100 and a 4-stroke motor for a good price.

About the Calendar on the last page.

TEXT in red = no fly days Weekend days have the whole box in red but if there is no text there are no restrictions.

## Programing the speed controller

#### by Royce Tivel

Programming Your E-flite ESC

I recently replaced my E-flite Apprentice motor and, when I tested the power system with my DX5 radio, the motor would not run. I discovered that I forgot to set the throttle trim to zero: for safety reasons, the controller will not "arm" unless the throttle and throttle trim are zeroed out. After setting the throttle control and throttle trim to zero, I was able to run the motor. As a last step, I rebound the receiver with the throttle set to zero.

Binding the receiver with the throttle and trim set to zero will insure that the motor will not spin up unexpectedly.What this means is that if the receiver loses the transmitter signal, the throttle will failsafe to the throttle level set in the transmitter when the receiver was bound. This can pose

DUES ARE \$100.

If you pay by mail send your dues, your old key, proof of 2009 AMA membership and a SELF ADDRESSED STAMPED ENVELOPE to the Treasurer:

> CHUCK KENTFIELD 3122 Madrona Beach Rd. Olympia WA 98502

Make checks payable to SFRCF

a safety risk. If, for example, the transmitter is turned off at the end of a flight before the receiver--and the receiver was bound with some throttle input--the motor could spin up unexpectedly. Therefore, it is best to bind the receiver with zero throttle input and, as an additional safety measure, power down the receiver before turning off the transmitter.

While I was at it, I decided to check the controller settings. The Apprentice uses an E-flite 30-Amp Pro Switch-Mode BEC Brushless ESC. After looking at the "manual" for the unit, I was almost discouraged from even trying to program the controller: the instructions seemed overwhelmingly complex. The ESC is programmed manually through a series of beeps and transmitter throttle control movements. movements that have to be made within 5 seconds or the program moves on to the next option. After a lot of tries, I figured out the programming and thought I had made all selections correctly--but later, when I used E-flite's software to verify the settings, I found that I had still not manually set all of the options correctly.

Horizon sells programming software on a CD along with a PC cable (E-flite EFLARS232 - about \$20 with shipping). The software works with E-flite's 30, 40 and 60 amp Pro Switch-Mode ESCs. The PC cable has a DB9 RS232 connector on one end and a connector for the controller data cable on the other end. To use the

Page 2

software, the cable is first plugged into the computer and controller and then the battery is connected to the controller. The software shows a green link light when the PC connection is made to the controller. There are "buttons" on the software display to reset the settings to default, read the ESC, and update the ESC.

My first read of the controller showed me that some settings needed to be changed. First I called Horizon to verify what the settings should be for the Apprentice. Horizon instructed me to set all options to defaults (I hit the default button on the display to set all options to default) and to change the voltage cutoff option to the 3cell low voltage cutoff. The default for the low voltage cutoff is 74% of the LiPo voltage. Horizon opted not to use this because there is the possibility of losing the LiPo battery protection if the LiPo is not fully charged when it is plugged in. Selecting the 3-cell option insures that the low voltage cutoff will always be 9.2V.

If you use any of the supported E-flite BEC/ESCs, I can highly recommend purchasing the software and cable to both program your controller or to verify that the correct settings have been programmed. If you purchased an E-flite plane, the controller manual and any changes from the default settings should be included. Here is a link to the software/cable:

http://www.horizonhobby. com/Products/Default. aspx?ProdID=EFLARS232

## Securing an Exhaust deflector

#### By Noal Hunt

The newer breed of engines are great at retaining the fuel and oil in the engine, discharging it only from the exhaust outlet. Unfortunately, that outlet often discharges onto a fuselage side, or a wing surface, and so we still need to clean the aircraft at the end of the day's flying. Such was the case with my Norvel .40. I tried the standard silicone exhaust deflectors a couple of times and they did keep the airplane clean, but only for a flight or two. Then the airplane would land with the deflector missing and sludge on the fuselage and wing. Chances of finding the deflectors? Zero!

I devised a neat, simple, inexpensive, solution that works. And it will work on any muffler that has a smooth muffler outlet. (Some of the manufacturers are now including a zip-tie groove in the outlet that serves the same purpose.) I have since flown the Norvel with the same deflector for more than 50 flights. So I modified a few more mufflers and took pictures as I did so.

Step One: What you'll need:

• Appropriate size silicone exhaust deflector for your muffler, and zip-ties.

• JB Weld.

• Isopropyl alcohol and masking tape.

• Paper towels.

• Short length of 16 or 18gauge solid copper bell wire.

• Side cutters.

Step Two: Thoroughly clean the muffler outlet using a clean piece

of paper towel and isopropyl alcohol. Do this three or four times to ensure all the oil is removed. Step Three: Wrap the copper wire around the muffler outlet about twice to get a consistent radius for at least one turn. Remove from the outlet and decrease the radius slightly for a snug fit on the outlet. (Or you can wind it around something that has a slightly smaller diameter-I used an Exacto knife handle.) Cut the ends so you have just one coil and the ends butt against each other. If it does not come out just right, repeat until you get a good fitting copper "o-ring."





(Pictures One and Two.) Step Four: Cut a thin strip of masking tape and apply it to the muffler outlet, leaving only about 1/4 inch of the outlet unmasked. Include a fold-over at the masking tape's free



PAGE 3

end, to facilitate easy removal. Step Five: Mix some JB Weld on a clean piece of disposable card. Apply a thin layer to the 1/4 inch of exposed muffler outlet. Slide the copper o-ring onto the outlet and center (about 1/8 inch from the end). Apply more JB Weld to the



outside of the o-ring. Using a clean piece of paper towel,



wipe away most of the JB Weld. Step Six: Carefully remove the masking tape while the JB Weld is still wet. This is where the fold-over will help. (Picture Six.) Allow the JB Weld to cure per the instructions. It is not like 30-minute epoxy; I give it 24 hours. Step Seven: Install the silicone exhaust deflector on the muffler outlet and retain it in place with the zip-tie on the "north side" of the

new copper o-ring.



## Helpful Hints

#### Helpful Hint #1

• Rust-O-Leum paint is available at most any hardware store at very reasonable prices in both bulk and spray cans. The paint is fuel proof and makes an excellent finishing material.

#### Helpful Hint #2

• Alliance brand rubber bands are the preferred brand for wing hold downs and other model applications. They do not deteriorate as rapidly as American brands (and others). Try them!

#### Helpful Hint #3

• Two liter Coke bottles have a black plastic reinforcement on the bottom of the bottle. This reinforcement piece makes an excellent radial engine cowling for your next project.

#### Helpful Hint #4

• Trying to repair oil soaked wood can be very frustrating. Try using the product K2R Spot Remover in spray can, available in any super market in the laundry section, to get the oil out of the balsa wood. It works great. Heavily saturated sections may take several applications.

#### Helpful Hint #5

• According to the Model Doctor, oil soaked balsa can be successfully glued with thin CA. It anyone is an expert at gluing oil soaked wood, it would be him.

#### Helpful Hint #6

• An easy way to secure Nyrod or Golden-rod type push rods to the sides of the fuselage is to use small pieces of light fabric. Take a strip of the fabric and lay over the outer case of the push rod and press against the surface to which you wish to attach the push rod casing. Flow thin CA on to the fabric to bond the fabric to the surface. Oh yea, unless you also want to be bonded to the airframe, use a piece of Saran Wrap between your fingers and the fabric.

#### Helpful Hint #7

• If you are having trouble with your engine back firing and kicking off the propeller or spinner, try cutting a washer out of emery cloth. Put this emery cloth washer behind the propeller or spinner back plate, and tighten the propeller nut normally. This solves the problem even for cantankerous four-cycle engines.

#### Helpful Hint #8

• When cutting Monokote type covering material, try a Farber-Castell Uni-Ball pen to mark the covering where you want your cuts. These type of pens will actually write on the covering and the marks will wash off with a damp cloth.

#### CLUB OFFICERS

Vice President Treasurer Secretary	Eric Oberg Burt Daggett Charles Kentfield Bob Beatty John Tupper	(360)427-6653 (360)866-9473 (360)426-5601
Safety Officer	John Tupper	. (360)426-6383

#### BOARD MEMBERS

Board Member	Eric Oberg	(360)789-6011
Board Member	Jody Diaz	(360)427-6102
Board Member	Stacy Myers	(360)426-9367
Board Member	Bob Beatty	(360)426-5601
Board Member	Burt Daggett	(360)427-6653
Alt Board Member	Bob Mason	(360)426-9256
Alt Board Member	Chuck Kentfield	(360)866-9473

	▲ ◇ ► April 2010					
Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	
			1	2	3 WWSCC - Sports cars	
5 7:00p	6 RC Board meeting	7	8 6:00p SFRCF Regular meeting	9	10 WWSCC - Sports cars	
12	13	14	15	16	SFRCF Swap meet	
19	20	21	22	23	24	
26	27	28	29	30		
	5 <sub>7:00</sub> , 12 19	5 7:00p RC Board meeting 12 13 19 20	5 7:00p RC Board meeting 7   12 13 14   19 20 21	Image: Second section Image: Second second section Image: Second	5 7:00p RC Board meeting 7 6:00p SFRCF Regular meeting 9   12 13 14 15 16   19 20 21 22 23	

This month we have 4 closures, so far...Be sure to check the Events page on the Web Site. <u>http://sfrcf.quintex.com/Events.html</u>

Pill

Event dates in black or red are scheduled. Events in gray are proposed.

## Club Scheduled Events for 2009

January 1st	First fly of the year
	Pylon Race - Come out and help officiate
April 17th	Sanderson Field RC flyers annual swap meet 9:00 to 12:00 SHS Sub
May 23rd	Pylon Race - Come out and help officiate
May 15th	Fly-In - 9:00 a.m. to ?????
June 5th	Forest festival Parade float
June 12th	Public Fly-In 9:00 a.m. to ?????
June 26th-27th	Pylon Race - Locked
July 17th	Scale fly-in/Public/potluck BBQ - 9:00 a.m. to ?????
August 14th	Fly-In 9:00 am to ????
August 21st-22nd	Pylon Race North vs South- Locked
1	Fly-In 9:00 a.m. to ????
October 9th	Fly-In 9:00 a.m. to ????
December 9th	Christmas Party 6:00 p.m. to 9:00 p.m. (potluck)

It's time for 2010 dues, dues are \$100.00

Check out our web site at <a href="http://sfrcf.quintex.com">http://sfrcf.quintex.com</a>