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

ETTER OF D R.C. FLYERS APRIL 2013 VOLUMEXVI ISSUE IV SANDERSON FIELD

R.C. NEWS



## SFRCF Swap meet April 13th

## CLUB MEETING

This months meeting will be held on Thursday Apr 11th.

at PUD #3 2621 E Johns PrairieRoad, Shelton, WA

Minutes were read and accepted as read.

Treasurers report was read and accepted as read.

The upcoming swap meet was discussed, we will have doughnuts and coffee for donations and also a 50/50 raffle. Tom Jr. and Dave Fisher will sell tickets for the raffle.

Dick Robb and Dave Fisher had a field charger donated at Monroe that will be raffled at the next meeting.

The scale flyer has been created and distributed. It has also been listed on the NorthWest Scale Aero-Modellers web site. Bob Treinen offered to bring his trailer for the Fun scale event.

The indoor flying is hitting a snag in that the school district is

requiring insurance but can't tell us how much or what kind. Tom Jr. has talked to someone in the school district who may be able to clarify. As the size of the airplanes we intend to fly indoors are very unlikely to cause any damage Tom feels certain they just don't understand. We still have a reservation for March 22nd but no insurance, stay tuned!

We have purchased a mower and trailer for Hunters and they are at Bob Andrew's house. If you want to use it, give Bob a call the day before and he will make it available (360-427-9177). Bob Beatty will transfer the trailer title into the club's name. The question of winter storage was brought up, Ken Nelson offered his shop while he was gone, the details will be worked out.

A committee was set up for the multi club swap meet consisting of Tom jr., Dick Robb and Dave Fisher. The new building at the Puyallup fair grounds is being checked into. Dick Robb also mentioned the cottage industry guys that have had to spend big dollars to get a booth might be interested in tables instead. Tom Strom mentioned that we still a couple of dx 6 or better transmitters for the two trainers that are set up on Spektrum. Burt offered his dx 6 for club use, so we are still looking for 1.

Tom Strom told Troy Lanning that the club has outfitted a trainer ready to fly, with two transmitters to give to his kids. The donations come from Tim and Tom Strom, Dick Robb, Tom Martin at RC hobbies in Lacy and the Sanderson Field RC flyers. Tom asked Troy if he could bring the kid to the next meeting for a presentation, he said he could.

We went out and sprayed about 23 gallons of round up on the runway at Sanderson field after the grass dies we will need a work party to get rid of the dead grass. Tom Strom suggested we check the independent parking lot guys and check with the port.

The parade is coming up, Burt says the trailer is ready to go. The parade is on June 1st. The question of helicopter pilot certification came up, Jay Lowe will check on what's is required.

Tom Strom showed the Tri-Squire he built for Darcy Niebeling.

Meeting adjourned 8:10

#### Preventing covering from peeling up

If you are having problems with your model's covering peeling up at the edges and it will not iron down, CA glue can fix it.

I use a regular super glue dispenser to wick CA like a pen along the overlapping MonoKote joint to seal it permanently. After the glue has dried, I wipe off the CA haze with a damp cloth and I am finished.

Done carefully, this works great and even glow fuel will not peel it up. This can also be used to spot the corners of the lettering any pin striping. If you make a mistake you can clean it up with acetone on most nonfabric coverings.

Always wear safety glasses when using CA glue as it can easily splash or flick into your eyes

(source: www.rcdon.com/ html/hints\_and\_ tips1.html).

# How to iron MonoKote into tight spaces

I used to have a lot of trouble ironing MonoKote into cockpits and other small places where a standard iron will not fit.

You can buy a tiny iron called a trim sealing tool. I had one of these for a short time, but the temperature control was inaccurate, and the shape was not very helpful, so I got rid of it.

A better solution to this problem is a butter knife. Heat it on your iron for about 30 seconds and use it like an iron. It could also be heated with a heat gun, but take a bit longer. Heat is transferred a lot better by contact with the metal iron.

The knife will fit into tiny spaces where an iron won't, and it will reach a lot farther than the trim irons that you find in the hobby store. You can try the same trick with a spoon for ironing fillets and other concave surfaces. Spoons have to be heated with a heat gun rather than an iron.

(source: www.balsaworkbench.com/wpcontent/uploads/2013/02/knifeheat1.jpg).

## \$\$ For Sale \$\$

Contact A.J. Saeger 360-349-6803

Edge 540 with saito 120, hitec servos ready to fly just add receiver or will sell with seven channel futaba receiver great flying seagull model. 250.00\$



Jack Sallade (jack@flyrc.info), www.flyrc. info

When setting up our model aircraft we often make decisions on which servo arm or control horn to use on a given flight surface. Of course the torque and speed rating of the servo comes into play as well but I'd like to discuss the linkage geometry so you can understand what effect these decisions have on how the airplane flies. Here's the basic idea.

When you choose equal length, standard, one-inch control horns and servo arms and use the outermost holes to attach the linkage you are getting exactly what the manufacturer advertised. A 10° rotation of the servo arm will also rotate the control surface 10° and will do so while applying (as needed) the specified torque. Let's use a Hitec 425 operating at 4.8V as an example.

This servo produces 46 oz/in of torque. This would be an appropriate choice for a standard 40-size trainer. Using the standard arm and horn, this should give adequate service in this application. But what if you now move on to something a bit more interesting? The manual calls for these same servos on your new midwing, semi-aerobatic aircraft, but because of the way the pushrod guides are routed, it appears that you are going to need a two- inch servo arm. (Okay my example is a bit extreme but work with me here!)

Are your servos still okay for this airplane? You didn't change anything important right? The answers are maybe and you definitely did!

In reality the servo horn and control linkage are levers and, like any lever, increasing or decreasing the length of that lever on one side of the pivot point will affect the amount of force being applied as well as changing the amount of travel. Force and distance of travel are essentially a tradeoff for one another.

In the case of the servo arm, lengthening it will effectively lessen the amount of force the servo is applying to the surface while increasing the surface travel. Looked at in reverse, the surface is "pressing against the servo" the same amount, but you've given it a longer lever to push on, increasing the force needed from the servo to push back against it. Shortening the arm will effectively increase the force applied while decreasing the available travel. The exact opposite applies to the control horn attached to the surface. In our example we made the servo

arm twice as long so we decreased our force applied from 46 to 23 oz/in while doubling the travel. This is a simple ratio of control horn over servo arm length 1/2 times the amount of torque produced by the servo. Note that because this is a ratio, if we use any equal length horn and arm we have actually changed nothing. Getting back to our example, you may have just created a big issue.

Not only have you now drastically cut the amount of torque available, but making the control surface move that much farther only increases the amount of wind resistance that surface is likely encountering. That first high-speed dive and attempted pull out could be the last for that aircraft. Once enough air is flowing against the surface at a great enough angle to need more than the available torque, the servo will simply stall and the surface may even blow back as the forces grow.

Without an understanding of the linkage geometry the following is likely to be heard soon after: "I pulled and it just didn't respond!? It must have been a radio problem!"

In part two, I'll discuss some ways to use this knowledge to do more than just avoid disaster!

#### Keep your pilot in your plane

Des Moines Modelaires, Ankeny IA, Ray Pick, editor

Have you ever seen someone's pilot-figure rolling around in the canopy? Not very cool especially if the pilot is an F-15 figure. Try this idea to make sure your pilot doesn't eject too soon. Since most pilot figures are hollow, enlarge the rubber hole in the bottom of your figure. Make it about 1/4-inch to 3/8inch wide. Go down to your favorite hardware store and purchase some drywall holehanger screws.

Get the ½ inch or ¾ inch thick size. Which size to use will depend on your cockpit size and the thickness of your pilot's rubber base.

Now drill a hole in the cockpit floor (where your pilot will sit.) The cockpit hole needs to line up with the hole in the bottom of

Dues are \$75 if paid before Jan 1st, \$100 Thereafter.

IF YOU PAY BY MAIL SEND YOUR DUES, PROOF OF 2012 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

your figure.

Now glue your pilot down and take the drywall screw and push it up through the bottom of the cockpit floor. Put the base of your figure on top of the drywall screw and tighten the screw. As the screw is tightened, the casing's external fingers will collapse or spread out inside your figure securely attaching your pilot to the cockpit floor. Now if your airplane crashes, at least you know your pilot will still be securely attached!

#### Using nylon wing bolts

from the Woodland Aero Modelers, Woodbridge IL by Dino Vlahakis, editor

Here is a neat little tip for those nylon wing bolts. Usually they come withround, slotted heads. They work, but your screwdriver has a good chance of going through your wing after it slips during installation. Take a 7/16-inch hex nut, and run it all the way under the round head on the screw. Now you can sand the nylon bolt to match the hex pattern on the nut.

When the nut is removed, the nylon wing bolt will be transformed into a hex bolt that can be easily tightened with your four-way glow plug wrench.

I would not waste my life in friction when it could be turned into momentum.

Frances Willard (1839-1898), educator

### CLUB OFFICERS

President	. Tom Strom	. (360)350-0181
Vice President		
Treasurer		
Secretary	.Bob Beatty	. (360)426-5601
Safety Officer		

### BOARD MEMBERS

. Tom Strom	(360)350-0181
.Jody Diaz	(360)427-6102
.Stacy Myers	(360)426-9367
.Bob Beatty	(360)426-5601
.Burt Daggett	(360)427-6653
.Bob Mason	(360)426-9256
. Chuck Kentfield	(360)866-9473
	. Jody Diaz .Stacy Myers .Bob Beatty .Burt Daggett .Bob Mason

### April 2013

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
31 Non profitg for RC Club	1 9:00 AM RC Breakfast	2 SFRCF Board meeting	3	4	5	6
7	8	9	10	11 SFRCF Club meeting	12	13 Runway closed Club Swap Meet
14	15	16	17	18	19	20
21	22	23	24	25	26	27 Runway closed
28 Runway closed	29	30	parade application	2	3	4

One closure this month, the calendar could change. Check the website before heading to Sanderson field <u>http://sfrcf.quintex.com/event/events.html</u>

# Club Scheduled Events for 2012

Event dates in black are scheduled. Events in gray are complete.

The new contract allows us to schedule non-exclusive days again, however if the car clubs don't go to the new track we may not keep many.

January 1st 9:00 am	First fly of the year - Sanderson field - Locks will be changed!
April 13th	Club Swap meet Shelton High School Sub 9-12
June 1st	Forest Festival Parade
July 13th	Fun Scale Fly-in
Aug 24th-25th	North South Shoot out - Pylon race
December 12th	

#### dues are \$100.00 on January 1st and after

Check out our web site at <u>http://sfrcf.quintex.com</u>