OFFICIAL NEWSLETTER OF SANDERSON FIELD R.C. FLYERS SH€LTON, WA SANDERSON FIELD

APRIL 2012 VOLUMEXV ISSUE IV

New meeting room not ready!

R.C. NEWS



### CLUB MEETING

This month the meeting will be held on Thursday April 26th. Doors open at 6:00 p.m..

### at PUD #3 2621 E Johns Prairie Road, Shelton, WA

Minutes were read and accepted as read.

Treasurers report was read and accepted as read.

Tom Strom talked about the start stands presented to the board by Dick Robb. 4 Stands will cost around \$200. The Idea of the stands are that they are a start/ setup stand only, when you want to fly set your plane on the stand and start it, not to be construed as "this is my stand, I got here first" The plans will be distributed to the club members. One modification talked about was to put some 4" PVC pipe in the ground and make the front legs long enough to set down in the holes. That way they would stay put but be removable for mowing. Dick Robb motioned to build 6 start stands to start with, motion carried.

The Forest festival parade date has been set for June 4th. We have got our application in and it has been accepted. Dick Robb

mentioned the Fire Truck hitch, I will email Bob Treinen to find out. The new signs are made and the one at Sanderson field is up. The Hunters farm signs are not up yet.



Props are already buying 48 cases and if you are interested in getting a better price let us know. We will

get an even better price if we can get an order of 100 cases. It can be any nitro % but only by the case. We have about 30 days before we must order so don't wait.

The PUD is in the process of moving, stay tuned.

Royce Tivel motioned to have the club buy stamps and envelopes for the treasurer as most people who mail in their dues don't send a self addressed stamped envelope. Motion carried.

Darcy Niebling suggested we have field opening fly-in at Hunters in July or August once the new field is in better shape.

We still need to build a little, removable foot bridge so we can cross the ditch at Hunters.

Dick mentioned the scholarship and said he would ask Gordie Osberg about it.

Meeting adjourned 7:40

### **News on FAA rules**

In a Valentine of sorts for the hobby of model aviation, President Obama signed a new FAA Reauthorization Bill on February 14 that included a provision to protect model aviation under the auspices of a "community-based organization" from federal regulations. "This is a great victory for AMA members," said AMA president Bob Brown, "and we will continue to fight for the entire aeromodeling community should restrictions ever be proposed."

# Converting a Telemaster Electro V2 ARF ínto a - TeleDuck

by Royce Tivel

For some time, I have been a member of the local float club but have not had a float-equipped plane to fly. Not long ago, I purchased a Telemaster Electro V2 ARF from Hobby Lobby and began the project of converting it to a floatready version--a TeleDuck. The project began before Hobby Lobby released their new Deluxe Telemaster 40 ALL Laser Cut Kit, which has provisions for floats and other features I decided to build into the Electro V2 ARF. The project breaks down into the following major sections:

1. Selecting and Testing a New Power System,

2. Installing the motor,

3. Modifying the wing and fuselage for a bolt-on attachment,

4. Building a rear strong point for the floats,

5. Constructing a removable ventral fin,

6. Custom building float attachment gear, and

7. Acquiring, finishing, and attaching the floats.

This article includes sections 1-5; a future article will cover the floats and their attachment, sections 6 and 7, in detail.

#### 1. Selecting a New Power System

After discussing the project with club member Richard (Dick) Robb, an Alaska float-flying veteran with many years of experience, and also Jason Cole from Hobby Lobby, I decided to use the following components for the power system:

eRC .46 Size Brushless Outrunner, 600Kv motor, eRC 65A Brushless Programmable ESC w/SBEC, POWERWING 4-Cell 14.8V

4500mAh 20C LiPo Pack,

E-flite EC3 Device Connectors, and

13X8 prop.

The eRC .46 motor should have plenty of power for the 38" floats I plan to use. An inexpensive eRC Electronic Programmer completed my power system purchases: the programmer makes checking or configuring the ESC settings easy.

Before installing the motor, and after soldering the battery connectors to the ESC and LIPO, I mounted the motor and components to a simple test stand, along with the radio receiver. After hooking everything up and binding my transmitter to the receiver, I slowly increased the throttle. Nothing happened! I then read the instructions for the ESC, especially the section, "POWERING UP THE ESC FOR THE FIRST TIME & SETTING THE AUTOMATIC THROTTLE CALIBRATION." After following the instructions--everything worked as expected. Whew!

### 2. Installing the Motor

Due to the increased diameter of the eRC .46, the blind nuts pre-installed in the firewall for the stock AXI Gold 2826/12 Outrunner Motor were not usable for the eRC mounting plate. In order to remove the blind nuts, I cut away the balsa cover over the plywood motor mount. A hot knife helped with this as it easily cut through the adhesive holding the balsa to the fuselage. I then removed the blind nuts and filled their holes with hardwood dowels.

The metal mounting plate for the eRC motor is a very tight fit within the firewall space and the mounting holes are not well positioned for reusing blind nuts. Although new holes might have made the eRC motor mounting plate usable, I manufactured a custom plate. Another club member, Bob Beatty, helped me fabricate the mounting plate. After drawing a template for the plate, we cut a new plate out of a small piece of aluminum and used a drill press to accu-



rately drill the holes. Rather than try to use blind nuts again, I used lock nuts to hold the mo-

tor to the firewall (with a drop of thread locker as extra insurance). Before the final motor installation, I painted the new motor plate flat black.

I re-glued the balsa cover over the motor mount after waterproofing the wood inside the "cowl" with a coat of red paint. Should I have to remove the motor at a later date, I will need to cut a small access hole in the balsa cover in order to remove the lock nuts.

## TeleDuck (continued)

Note: the new Deluxe Telemaster 40 kit includes a completely redesigned plywood motor mount that makes motor installation easier--and recommends the use of the eRC .46 for the kit.



#### 3. Bolt on Wing

The next part of the project was to modify the wing for bolt-on attachment. To do this, I first cut a new wing-root rib out of 1/4" plywood. The rib was designed to have a lower "tongue" that slips into a corresponding slotted 1/4" plywood former epoxied to the fuselage: the tongue/slot arrangement holds the wing leading edge in place. Club member Dick Robb helped me cut out and shape the new root rib and to drill out the

### **D**UES ARE \$100.

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

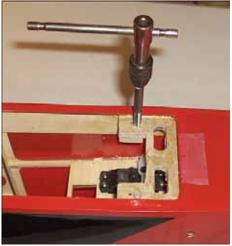
lightening holes: a fully equipped shop along with the skill to use the tools comes in handy for a project of this kind--thanks, Dick. I then epoxied the new root rib to one of the ARF wing halves. When the epoxy dried, I epoxied the two wing halves together. I used lots of blue tape to hold the joints together while the epoxy dried.

In order to hold the trailing edge of the wing in place, I first constructed a plate out of two pieces of 1/4" plywood and epoxied this to the fuselage. Portions of the pieces were cut away to lighten the



assembly and to provide access to the servo mounting screws underneath the plate. I used two narrow 3/32" x 1/4" hardwood strips on the top of the plate to space the plate slightly below the top of the wing cradle: this allows the wing to fit flush in the wing cradle when the wing bolts are tightened, in spite of the wing dihedral. Before I epoxied the plate to the fuselage, I epoxied a 1/8" x 1" hardwood strip to each fuselage side and just below the top of the wing cradle. These strips not only reinforced the cradle area, but also provided additional gluing surface for the plate. I also epoxied a 1/16" plywood reinforcing plate to the top of the trailing edge where the wing bolts were to be used.

With the wing positioned onto the fuselage and securely held in place with blue tape, I drilled two holes through the reinforcing plate, the wing, and the hold-down plate. I was careful to angle the



### CLUB OFFICERS

President		
Vice President		
Treasurer	. Charles Kentfield	(360)866-9473
Secretary	.Bob Beatty	(360)426-5601
Safety Officer	. John Tupper	(360)426-6383

### BOARD MEMBERS

Board Member		(206)246-4258
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
Board Member Board Member Board Member Alt Board Member	Stacy Myers Bob Beatty Burt Daggett Bob Mason	(360)426-9367 (360)426-5601 (360)427-6653 (360)426-9256

## TeleDuck (continued)

holes so that the bolt heads would snug down evenly against the reinforcing plate and conform to the slope of the wing trailing edge. I used a #7 drill for this as this is the proper size for the 1/4-20NC tap I used for the bolt holes in the mounting plate. After the mounting-plate bolt holes were tapped, I coated them with thin CA to harden the threads.

I then enlarged the holes through the wing reinforcing plate and wing so that the 1/4-20 mounting bolts would fit easily through the wing and into the threads of the hold-down plate. The bolts and root rib hold the wing securely in place for repeated--and accurate--wing positioning. Note: the new Deluxe Telemaster 40 kit provides for a bolt-on wing.

### 4. Rear Strong Point

The rear strong point is located just in front of former F4 (below the wing-mounting plate). It is made out of a 1/4" piece of plywood and has blind nuts installed for the future float-attachment gear. The strong point is reinforced with 1/2" triangle stock epoxied to the underside of the plywood and to the fuselage side. A thin piece of plywood was glued to the top of the strong point so that it would fit



flush with the bottom of the fuselage. Also, strips cut from 1/8" x 1" hardwood were used to reinforce the fuselage side and also to provide additional thickness for the blind nuts. Note: the new Deluxe Telemaster 40 kit includes an optional float strong point.

### 5. Ventral Fin

The ventral fin was constructed so that its area is approximately 15% of the total vertical stabilizer/rudder area. The fin, made out of 1/32" plywood, is mounted between two lengths of 1/4" triangle stock. The triangle stock and fin are glued to a 1/32" plate with CA. The entire assembly is very light and will be held to the bottom of the fuselage with three small screws. Note: the new Deluxe Telemaster 40 kit does not in-



clude a ventral fin on the fuselage: a fin is attached to the top of each of the floats that Hobby Lobby has announced for the kit.

Stay Tuned for Part 2....

This ends Part 1 of the Telemaster float project. Part 2 will describe the float attachments and the floats, themselves. Note: the Hobby Lobby float kit for the new Deluxe Telemaster 40 kit will use the same hardware for the rear float attachment as is used for the main landing gear.

### Tips & Tricks

#### **Airplane Cleaner**

5 cups hot water 1/2 cup ammonia 1 cup rubbing alcohol 1 oz. of Dawn dish detergent Mix all the ingredients in a clean milk jug; pour enough into a small spray bottle for field use. This solution cuts through the old buildup on the underside of your airplane, and leaves it squeeky clean.

Caution: Dawn seems to be the only dish detergent that cuts through the oils and does not leave a residue on the model. —From the Utah Valley Aeromodelers, Lehi UT

### Trick to using Robart pin hinges

I was installing Robart pin hinges on my T-34 Mentor. I can never get both sides perfect ... no matter how carefully I measure, so I came up with a neat trick to make them perfect.

On the stabilizer (in this case three hinges on each side) I mark out where I want the holes, then I clipped off 1/4 inch of T-Pin tip and, using pliers, push the short pin into the stabilizer where I marked. I left about 1 /8 inch or less sticking out (either end works, but I pushed the pointed end into the stabilizer). Next I made sure the elevator was perfectly aligned with the stabilizer then pressed the two together. The pins left a mark on the elevator (or rudder) where to drill the holes. I guess you could use the same method with CA hinges. -Dave Raczka, Brauer's Aviators, Pendelton, New York

						🔺 Today 🕨
	Mon 2 PIC Breakfast et Casino	EPRCF Board meeting	Wed 4	Thu 5	78.6	5.c
8			î	12	18	
			Closed runway	BFHCF meeting get kay	O Closed runway	Closed runway SFRCF SWAP Meet
10	16	12	16	19	20	1
22	-23	24	25	20	21	© Closed rumway
28	30	SFRCF Board meeting	2	3	4	
	a 10 22	RC Breakfast et Casino       8     9       10     16       22     23	Inc Breakfast of Casino     Inc Breakfast of Casino       Inc	PC Breakhast et Casino     DEPRCP Bourd meening       1     1       1     1       1     1       1     1       1     1       1     1       1     1       1     1       2     2       2     2       2     2       3     1	RC Breaktest at Casino     BEPRCF Board meeting     11     11     12       0     0     10     11     0 BFRCF meeting get Kay     12       15     16     17     18     19     19       22     23     24     25     25     25       23     30     1     2     3	RC Breaktast at Casivo     SPRCF Board meeting     III     IIII     IIII     IIII     IIII     IIII     IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII

We have a few closures 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 2011

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

April 14th18th annual Swap meet 9:00 to N	oon
May 12thClub fly-in	
June 4thForest Festival parade	
June 16thClub fly-in	
June 30th-Jul 1stPylon Race	
July 14thClub fly-in	
August 4thClub fly-in	
August 18th-19thPylon Race	
September 22ndClub fly-in	

It's time for 2012 dues, dues are \$100.00

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