

## St. Clair County R/C Propbusters

Model Aviation Club Goodells, Michigan - A.M.A. Charter Club#1762  
[www.SCCPROPBUSTERS.com](http://www.SCCPROPBUSTERS.com)

### Club Meetings

Second Wednesday of each month, 7:00pm at the Community Center Building, Goodells County Park. Summer- weather permitting meetings are held at the field.

### Club Breakfast

First Saturday of each month, 9:00 at Cavis Pioneer Restaurant on Lapeer rd. West of Wadhams rd. Flying afterwards

### Come and join us!

Club Meetings and Breakfast are open to everyone, if you are an experienced pilot, or just thinking about getting into R/C, Come check us out.

**The Propbusters R/C flying Club is located at the Goodells County Park**, 8345 County Park Drive, Goodells MI 48027. The flying field is just West of Castor rd. -off the parks East parking lot . *The general location of the park is South of Lapeer rd. -about 10 miles West of Port Huron.*

**42° 59' 02" N - 82° 39' 02" W**

### President

Sheila Olszewski 810-367-6367

### Vice-President

Gary Smedes 586-727-4507

### Secretary

Doug Donner  
ddonner@sccpropbusters.com

### Webmaster

Keith Graham  
keith@sccpropbusters.com

### Treasurer & Newsletter Editor

Ed Olszewski 810-367-6367  
proptreas@comcast.net

### Safety Officer Field Marshall

Mike Grant Tom Nichols

### Instructors

Ed London 810-325-1362  
Ed Olszewski 810-367-6367

### Directors

Todd Litke, Doug Donner sr.

### 2010 Membership

51

**For the Latest-Greatest Information,  
Schedule, Photos, Announcements.**

Go to :

**[WWW.SCCPROPBUSTERS.COM](http://WWW.SCCPROPBUSTERS.COM)**



Editor: Ed Olszewski

February 14, 2010

## President's Perspective

*From Sheila Olszewski*

Propbusters club membership cards have been sent out, every member should have theirs by now. If you do not, or know of someone who has not received their card yet, drop me a line, and I will figure out what has gone wrong. If you do not have your AMA membership paid up yet, be sure you get it before flying season. It is not just a club rule, flying without AMA insurance puts everyone at financial risk— including yourself.



This years budget has been approved, it seems like a lot of money, but this year, like every other we will spend almost all of the funds we bring in, and all for the benefit of our club. In fact by the time of the swap last year , if you subtract dues collected for 2010, we used most of the funds in our general account, however we did have the equipment fund in reserve. An annual Budget does not approve funds for automatic spending, but is rather a plan for how we can spend money on what we want, and still have a cash reserve for what we need. As always all spending will need to be approved at regular club meetings, or be approved by the board.

Ed London and Tom Nichols have agreed to stay on and make sure our field stays in tip top shape again this year. Your help would be greatly appreciated, it is a lot of work and a little help goes a long way. This summer when you are headed out flying, feel free to bring along a weed whacker and trim some of the fence line between flights. If you see the garbage cans more than half full, feel free to exchange them with an empty at the front gate. There is always blown debris to pick up. It is all work that simply needs to get done, and you don't need to volunteer, just lend a hand when you have a chance. If everyone does just a little, allot will get done.

We are working out the bugs e-mailing the newsletter. If you are reading this, you obviously got the newsletter. If you know of another member who is not receiving the newsletter, let us know so we can get it to them.

The Weak Signals "Toledo Show" is coming up the second weekend of April, a sure sign that spring has arrived. There are lots of new advancements in our hobby, from 2.4 gh radio systems to electric motors, to new lines of airplanes to check out. The heart of the show is the model exhibit: a very impressive display of all types of models built by AMA members, There is always a great swap upstairs with some great deals. If you have never gone, you will be impressed. Take some time and go, it is well worth the trip.

-Sheila

St. Clair County Propbusters

**Meeting Minutes**

February 10, 2010

Submitted By: Sheila Olszewski/President

The meeting was called to order at 7:04 PM by Sheila with (5) members and (0) guests present. A motion was made by Ed L/ Bill E. to accept the secretary's report as read by Gary S. motion passed. A motion was made by Gary S / Bill E. to accept the treasurer' report as read by Ed O. motion passed.

Old Business:

Membership card were discussed. Cards are printed and sent out, and all members present have received their cards.

New business:

The propbusters 2010 budget was discussed a motion was made by Bill E/ Ed L. to accept the budget as read by Ed O. motion passed.

A motion was made by Sheila to postpone the late fee until April 1,2010 because of lack of Monthly communications and the downturn of the economy. Seconded by Bill E. motion passed.

Motion to close the meeting at 7:25 made by Bill E/Gary S. motion passed.

St. Clair County Propbusters

**Financial Report Summary**

Reported: February 10, 2010

Beginning balance: \$ 2406.77

Equipment Fund: \$ 1600.87

Total: \$ 4007.64

Income:

Dues \$ 235.00

Total \$ 235.00

Expenditures:

Lease \$ 500.00

Total \$ 500.00

Ending Balance: \$ 2141.77

Equipment Fund: \$ 1600.87

Grand Total: \$ 3742.64



## Seagull Harrier 3D E-Conversion

By Ed Olszewski



Several years ago I purchased a used Seagull Models 3D Harrier 46 at a swap. It was just the airframe needing all the guts to make it fly. Flight with it's previous owner was electric powered. Although interesting, I had neither the knowledge, or the funds for making it fly electric, motors and batteries were far to expensive at the time. I was happy to install a Saito 72 four stroke, and re-convert it back to it's designed Glow power. Since then it has become one of my favorite flyers, so much so I bought a new ARF, just to have spare around in the event I had a less than desirable day at the field. The only complaint is the Saito 72 is just on the edge of the power I really wanted.

This winter I thought I would refit the old Harrier with a new Saito 82, for a kick more power. While searching the internet for a good deal on a Saito, I saw how much the electric motors and peripherals have come down in price. In showing my wife the prices, she remarked that I should put together a large electric plane. Suddenly I had an epiphany, a vision as it were.

My vision was a twin set of airplanes— both Seagull Harrier 3D's. I could keep my old plane as is with the Saito 72, and build the spare Harrier 3D with an electric power system. One nitro, one electric, a perfect match. Doing a little research, it turns out the Seagull Harrier 3D is an excellent candidate for an electric conversion, and I just happened to have an extra— it was a sign. A new search was on for an electric power plant. I was on a mission.

I figured the motor/ battery should be at least a glow 60 size equivalent to get the power I was looking for. Yet it should weigh no more than a nitro setup, as not to add to the overall wing loading. I thought this would be a tall order, but it was easy.

With some research, and the help of some friends, I found a Scorpion brand out runner motor; 4020-14/ 480 KV, that puts out 1500 watts (about 2

horse power). It should easily pull as much as a 60 size 2 stroke glow engine. At 10 ounces, it weighs about half of the weight of the Saito, that was good, it needed to offset the weight of the battery.

Next on the hit list was the battery and ESC. Some friends told me about an online store that sells hobby supplies directly from Hong Kong. I know you are thinking: "Chinese import?", Ok, where do you think most of the stuff we use comes from? Turns out, buying direct can get you supplies at 1/2 to 1/10 the price of online stores in the states. Yes sir, I am thinking the middle man is not real happy that his secret is out. The down side is the shipping is pretty hefty, but still, incredible saving can be had. For once the "global market" works in my favor.

I chose an 85 amp ESC, and a 6 cell 4000 mAh lithium polymer battery that would deliver enough juice to make the motor perform well, stay within my weight budget, and still provide enough fly time to have some fun. With the click of a mouse the parts were on their way across the ocean.

While waiting for my order to arrive, I had time to assemble the ARF. The only real modifications were to add an



entry and exit for airflow through the fuselage. This will keep the battery and ESC ventilated and cool. Holes were drilled in the firewall to provide the entrance. I had some extra time so I got a little fancy with the modifications to the air exit, and built an angled baffle to guide the air out- probably overkill. A simple main battery bracket in place of the gas tank was easy to make from hardwood square stock and light ply. The rest of the build— servos, receiver, and receiver battery were all installed just as provided instructions said, the same as if it had been a glow power plane.



(Continued on page 4)

(Continued from page 3)

A little over a week later my goodies arrived, and it was time to mount the electric power system. First I soldered the necessary plugs on all the wires. The 4 mounting holes on the firewall needed to be drilled at a different spacing to provide for the new electric motor mount. The holes were transfer drilled using the "X" motor mount bracket supplied with the motor as a template. The 4 motor standoffs were cut to length to maintain the distance from the firewall to the back of the prop mount described in the instructions. I drilled and tapped aluminum rod similar to what the motor manufacturer sells, plastic spacers from the hardware store could have also been used. From there the motor simply plugs into the ESC. Not having to deal with the throttle cable and servo made mounting the electric motor easier than mounting a glow engine.



The ESC (Electronic Speed Controller) for an electric motor, is what a throttle servo, cable and fuel line are to a glow engine—all in one nice neat, little package. It takes the receiver throttle information and regulates the flow of electricity from battery to motor. Some sticky back Velcro is all that is needed to mount the ESC. Always be sure to place it where it can get plenty of air flow for cooling.



To say the battery for this size plane is a brick, is probably an understatement, it is a 22 ounce brick. But, when you consider the weight of a glow tank—filled with fuel, it is not as bad as it seems. The battery can be moved fore and aft to balance the plane. Velcro glued to the battery tray and battery along with a couple Velcro straps will hold the battery in place during flight.



The engine cowl was the easiest I have ever mounted with no muffler, no needle valve, or fuel line holes to mess with. A much cleaner look. I added lots of airflow opening to the front, just as any other engine would require.



### Specs for the power system:

**Scorpion 4020-14 outrunner motor.** Peak power 1500 watts, or about 2 horsepower—easily as much power as a good 2 stroke glow engine. Weight: 10 ounces, Cost: \$85.00

**Turnigy 85 amp motor speed control (ESC),** the onboard "battery elimination circuit" was disabled because of the higher voltage used in the main battery, and a conventional separate receiver battery is used. ESC weight: 2 ounces, Cost: \$47.00

**Turnigy 4000mAh, 6 cell, 22 volt, 20C battery.** Weight: 22 ounces, Cost: \$43.00

The total cost for the electric power system: \$175.00, verses about \$279.00 for an equivalent 4 stroke engine. This gave me enough cash left over to buy an extra battery and a charger large enough to charge the battery in 1 hour. Surprisingly the flight weight of the electric power system is almost identical to a nitro 4 stroke engine with fuelled tank and servo. Bench testing, the motor pulls about 9 1/2 lbs, at 1200 watts, with a 15-6 APC-E prop. It would pull even more with a larger prop, but I think 9 1/2 lbs pull will do a fine job with a 6 1/2 lb plane.

Calling the build of this ARF an electric conversion is a relative term, honestly I expected allot more work. My goal was to make an electric Harrier the same as it's glow twin, with a little more power, within a reasonable budget. The flying weight plane weighs within an ounce of the original Harrier and both balance the same, and it did not bust the bank. Of course there is no difference in the actual ARF, Servos, receiver and receiver battery batteries. I will let you know how it flies in the spring.



# THOUGHTS



By Jack Delisle

So I'm setting at the keyboard and wondering what to type?

I did a very stupid, and painful thing a couple of weeks ago and I will start with that.

I was helping a couple of fellow fliers, and that was one to many as it turned out .

I had just warned the guy whose engine wasn't running right because he got too close to the spinning prop. Not ten seconds later I reached right through the prop to remove the glow lighter from the FRONT of the plane yet.



As you can see, the results were anything but pleasant because the nail was gone and the bone shattered and all that was left was some shreds of skin and bone from the first

knuckle out. The guys got the bleeding stopped and the wound bandaged and Marcel Ferland, drove me to the hospital and hung around until Nancy recovered the van from the field and came to the hospital emergency.

At one point they took me into a room and looked at the damage and said that they would have to bring in the plastic surgeon because it was beyond their capability. They put on a new bandage and sent me back to the waiting area. The new bandage was leaking pretty bad and

Marcel went up to the desk and told them so back I went to another room and they put on a new tighter one and that mostly stopped the bleeding. I should have told the first doc I was on Couminum blood thinner.

After that I was sent to another area and told to sit on a gurney until a treatment room became open. About a half hour or so later one did. By that time the plastic surgeon showed up and was ready to do his thing.

He got his "kit" ready and when he removed the bandage I started leaking again and he used a piece of small rubber tubing and tied that finger off and stopped the bleeding. Next he injected around the finger with the first poke right in the webbing between the first and second finger and saying this stuff is so powerful that it evens numbs the bones, That was true and I watched him do his stuff.

He picked out the bone fragments and cut off the sharp bone that was left to smooth it out, tried the fit of the skin that was left and cut that away to make a nice looking stub and started stitching the lap over. The very small curved needle was actually part of the "thread" if you can picture that and used a new one for each stitch. After he was done stitching he released the tourniquet and there was very little bleeding. He personally bandaged the repair. I said, "Wasn't a pretty nurse supposed to do that?" and he said you would be here a long time waiting for a nurse. The whole "operation" took maybe five minutes.

He wrote out a prescription for the most powerful pain reliever there was but told me that with the bone damaged like that it wouldn't help all that much so just hold your hand above your heart as much as possible.

He was right about that and I spent a very sleepless night and the next day and night wasn't all that bragable either. It's been two weeks

*(Continued on page 6)*

(Continued from page 5)

as I type this and I took my first shower without water proofing my hand and that was great.

In about a month the finger will look normal but without about an inch of finger missing and no nail.



So what is the news now? Nan asked me to not fly those airplanes that needed “wet” fuel and I said I would so I’m going full time into electric. The plane above is a Reactor from Tower Hobbies because it is about the right plane for all of the equipment the “godfather” of electric in our neck of the woods recommended, Ed Olszewski.

I’m still waiting for some of the gear and I haven’t even opened the box holding the Reactor. Ed tells me that he is doing an article on his electrics so I won’t go into what I will put in the plane, just know that it will be a twin of his power wise.

One of the guys said that electric airplanes have propellers too and I told him that I have been flying electrics for some time AND I have never had to adjust a carburetor on one of those yet and that’s where I have had most of my problems, adjusting the needles, eh!

I have this airplane and a 90 powered Ultra Stick and I hope to sell these before I return to



Michigan. The pictured plane has no name really so I call it the Acro 40 although it is powered by an OS 52 four cycle. One of the guys down here has a foamy electric aerobatic that looks interesting. I will see if he is interested in a trade since he hasn’t flown it because it is a lot of plane flying wise and more then he likes I think. Does that make sense?

The Ultra Stick has many flights on it and the horizontal stab has been stepped on and repaired but is a great flyer still so I might be able to move that too? Probably almost give it away?

I’m telling you this because I have a few planes in Michigan including the 84 inch wing-span Sig Spacewalker powered by a Saito twin Gold Head 300 glow that will be on the block too.



I built the Spacewalker because I have the Saito and wanted a “nice” plane to put it in. The Saito has the power of a gas 50 and will take that plane off at 1/3 throttle.

The Spacewalker has dual ignition, battery back up and all rest of the stuff to make a great airplane. The engine sold new for over \$800 and it would be nice if I got that for the whole plane but knowing how tight we modelers are.....But save some money for when I return. God willing and the creek don’t rise.

So read this article twice and decide never to go through what I did because it just ain’t very nice. Although you would be amazed what you have to do and learn how to do because you can’t use the hand you normally use. Think about that one.

Jack DeLisle

