Small Battery Connectors
From: Ned Watts nedwatts@mac.com

What do you recommend for small 700mAh battery connectors? I use power poles for the bigger stuff. My set up here is a 2S Li-Poly drawing probably 6-7 amps max. I have some 1.8 mm bullet connectors that physically look about the size that I need. This is going in the E-flite L-4 Grasshopper.

I use APP on everything so that I don't have to make up different charge leads for my CellPro 10S. For smaller applications I cut the housing of the APP. There is a mark on the housing that I use as the cut line. I only have one small Li-Poly. It is a TP 240mAh two cell. I've attached a photo. You can use bullets or Deans or whatever you like. I just like keeping my stuff the same. Personal preference.

Those are the standard size, 30-amp connectors. I double the wire on itself before crimping. The 15-amp size might be better. KM

Hobby Lobby eRC P-51 Mustang Battery Polarity Reversal Warning
From Pete Foss

For those of you who don't know, the current batch of eRC P-51 Mustangs from Hobby Lobby have an issue with the battery polarity. They use the same connector as the single cell Horizon batteries but the polarity is backwards.

They have come up with a set of adapters so you can use Horizon batteries and chargers if you want. Jason Cole posted about it here on rcgroups.com http://www.rcgroups.com/forums/showpost.php?p=13781366&postcount=162

The battery adapters will be free, according to Jason's post.
A Bristol, A Cub and An Eyeball  
Along with some Bits & Pieces  
From Walt Thyng thyng@att.net

May 4, 2009

Hi Ken,

I just uploaded the final photos of the EyeBall build to RC Universe. I'm also including some EyeBall shots as I don't know if you can upload them from RCU. I'm not sure how much bandwidth I've used so if you want more for the Ampeer let me know.

Walt's Eureka Models Eyeball Build Link:  
http://www.rcuniverse.com/forum/m_8478975/mpage_1/key_Eyeball/tm.htm

I flew the Balsa USA Bristol M1a yesterday. It is a great WWI flier; far more aerobatic that I had expected: loops, split esses, immelmanns, stall turns and even quite good rolls. Very slow landing speed, but a bear to handle both on landing and takeoff on a hard surface runway (hey, it's a WWI airplane). It is very wind sensitive on the ground and in air (see comment above) (-: I couldn't stall it, so it's probably nose heavy, but I added 2 oz of insurance to the nose for the first flight. Power as I have it set-up is adequate, but I could use a little more as most of the time I'm at full throttle (on the other hand they were test flights and it was windy).  
Set-up: Aveox 36-38-3 geared 2.5:1, 6 A123s, APC18x8E with a Great Planes Silver Series 65-amp ESC. You can see it gets plenty of cooling air. The weight is 8 lbs.

I am particularly pleased with my steerable tailskid with a hidden wheel. I thought it would do better on our asphalt runway.
The covering is Solartex brushed with latex and shot all over with Krylon matte finish. The decals are from Major Models. None of the wires and cables are functional, they are all because I can't fly a "naked" WWI bird (-: 

I've also attached a couple of shots of the Cub (how many do you need? It's a Cub!). Note the engine cylinders on both sides. I built the right side bank from balsa scrap. This is a BITSA; bits of a partial kit and two wrecks all given to me by others. Power is a Maxx 5XXX motor on 6 A123s with an APC 18x10E prop. It's not the best use for the motor, but it's what I had and it flies the Cub very well at 1/2 throttle.

Bits & Pieces

Walt: May 17 - Maidened the EyeBall today. How'd it go --how about five flights?! Flew like an EyeBall. All I needed was to balance the CG with the control throws. Landings are a breeze, but take-offs require some finesse. She does every maneuver I know very well. I even got in a couple of reasonable knife-edges. The Hacker B50-16 XL with a 12x6 prop flew it very well giving me seven minutes on a 6S “A123” 2300mAh pack. I put 2.07Ah back in after the flight.

Repairing Li-Poly Packs

Walt: I was going through some damaged Li-Poly packs and was frustrated by having to throw away two good cells because one cell of a 3 cell pack was bad. One way around it is to electrically isolate the bad cell and use it as a two-cell pack, but the bad cell is dead weight.

I have read of the frustrations others and myself have had trying to separate pre-built packs. About that time I knocked over a can of WD40 that was on my workbench; that, in turn reminded me that WD40 is an excellent solvent for removing tape residue. I sprayed down the gap between two cells; waited a few minutes, then used an old business card to work the cells apart. Worked like a dream with no damage to the good cells. I saved eight cells this way. Giving me 2 three cell packs and one two cell pack.

The other thing I did was to snip of the leads on the dead cell so as to preserve the soldered area. I could then build new packs without learning how to solder aluminum.

A Motor/Battery Conundrum

Walt: Here's something for you to think about. I've been flying the Eyeball with a Hacker B50-16XL, APC 12x8E prop and 6 “A123” 2300mAh cells; pulling a little over 40 amps. I wanted a little more guts, so I decided to try brand-new 6S Turnigy 2600mAh 40C Li-Poly (2 three cell packs in series). It pulled 123 amps! It took an APC 10x5E prop to get the amps down to 63. When I checked against the A123s, just 34 amps.

Is this because of lower resistance in the Li-Poly battery?
Ken: The numbers make no sense to me. It just won't happen, all else being equal. Having all the numbers, volts, amps and rpm would be helpful.

What gearbox ratio are you using? That makes no difference in the numbers, just curious.

Walt: I'm going test everything again this week. I agree the numbers make no sense, however E-calc (I still can't get the hang of DC) does suggest that the B50-16XL works best with a gearbox rather than direct drive. I'll let you know what I find out.

Hope you didn't tear the rotator cuff in a bike accident. It's a toughie from which to recover. (Dang, I did. KM)

I've got about 2,000 miles on the hack even while flying more than I ever have in a season.

PT-17 (and 13 and 18)
From Weldon Smith weldon-smith@sbcglobal.net

I read your notes on the Stearman in the latest Ampeer and was surprised that no one (including you) seemed to know that the Stearman had a lifting tail. Maybe the manufacturer changed the prototype's stabilizer to a lifting section to overcome the same problem that the RC Groups contributors had.

Incidentally, the "Stearman" was really a Boeing. (Boeing Model 75 KM) In the front cockpit, on the instrument panel, was a placard that said so. I can't remember the exact wording but it called the plane a Boeing Kaydet.

Though they were manufactured by Boeing, the design was Stearman's from the period before Boeing bought the Stearman plant in Wichita. The original Army Air Force designation was PT-13. (!!) It was powered by a Lycoming 9 cylinder radial and was the smoothest of the family. I guess that Lycoming could not keep up with Boeing's production, so the Army, needing trainers, must have insisted on some of the airframes using the Continental 7 cylinder, and the PT-17 was born. This became the most numerous model, but there was also a PT-18, with a Jacobs radial, the "Shaky Jake". All were built by Boeing, but forever known as Stearmans.

Some Answers and Suggestions for Phil Alvirez Regarding His AR6000 Question in the January Ampeer

In the article “Spektrum AR6000 Report & Question” in the January 2010 Ampeer, reader Phil Alvirez noted that his Spektrum AR6000 receivers had been very good overall, but he had a problem with one where he lost control of the plane at the Mid-Am. The “problem” persisted until the receiver was replaced. He now uses that receiver only for bench testing. He wondered if anyone else ever had a problem like this.

Several Ampeer readers responded. KM

From Joe Hass: On the receiver problem...

I quickly wrote about the problems one writer had with a single Spektrum receiver. The theme that I hope I conveyed was that he should slowly and deliberately go through the whole rebinding process. Familiarity breeds contempt, and when it comes to binding any of the 2.4 systems this can be painfully true. Chris and I have more than once sped through the process and then had strange things happen. I have watched others have problems too when they went too fast. I think that what is actually happening is that switches are not left off long enough to allow system voltage to actually go to zero. Thus quickly powering back up causes strange things. That's my opinion anyway. All I know is that when I have redone the binding process slowly and deliberately the problems disappeared.

Quickly turning the transmitter or aircraft on and off can also cause strange things to happen. We had one situation where one elevator, on a two elevator aircraft, began slowly oscillating up and down after the aircraft was turned on and off quickly. All of the "experts" could not figure out what was going on. This was an aircraft that flew extensively for a year. Everything was powered down for a count of 10, then turned back on. Problem gone.
Horizon has a great source of tips on Spektrum 2.4. Go to www.spektrumrc.com. Select "Spektrum Community". Then select "Installation Best Practices". This is a treasure trove of information. Make sure you select each subtopic to see everything. It is extensive!

Also

Chris and I were talking shop. He reminded me, and this problem is covered in detail at the Spektrum website. He also noted that the LED on the receiver can tell you volumes about what is going on with the receiver during use. The key is to NOT TURN OFF RECEIVER POWER UNTIL YOU LOOK AT THE LED. If the LED is flashing something has happened. The website gives the details.

Chris also reminded me that on very rare occasions there is a bad one.

And from Derek Brook in Germany

This is just to let you know I had a problem with one this summer. I had a problem and lost control of the model and put it into the ground, but without damage.

After checking it out I found it had lost it's bind to the transmitter and would not bind anymore. I then contacted Horizon and they told me to return it to be checked out and within about 2 weeks they sent me a new one. Which was good of them!

Phil it looks like if you send it in to Horizon Hobby, you might be able to have a “flying” receiver once again, rather than a bench tester. KM

Thanks to the Folks That Make Indoor Flying Possible at the Ultimate Indoor Soccer Arenas

From Joe Hass joehass@gmail.com

I am writing to thank you for all your complimentary comments about our indoor flying at Ultimate Soccer Arenas. I must emphasize that, while the Skymasters have taken the lead on this project, it simply would not be possible without the sponsorship support of the Romeo Skyhawks, the Radio Control Club of Detroit, the Greater Detroit Soaring and Hiking Society and our local hobby shops including Flight Line, Prop Shop, RC Hobbies and Nankin Hobbies. We have also received sponsorship from airlandseahobby.com and Ready to Fly Planes. Hobby Lobby, Hobbico and Horizon help too. These folks all deserve the thanks of the modeling community.

Then there are the modelers themselves. On December 8 those flying at Ultimate donated over 40 gifts and $600.00 to the Children's Holiday Wish Program to help needy children have a better holiday. On December 15 we broke a record with 94 pilots flying (remember this is on a Tuesday beginning at 11 AM).

By the way, as planned I did not run for reelection as president of the Skymasters. With Chris graduating this year, my plate was getting full. Plus I sincerely believe that there should be a change from time to time. David Wendt is the new president. The Skymasters are in very capable hands. I will continue in a Public Relations / Promotional role.

I hope you can share this with your readers.

Joe Hass
Skymasters

Thanks Joe for the reminder that this great endeavor is the result of efforts and finances by a lot of folks. Congratulations to everyone of the supporters for providing so a great facility to the modelers here in southeastern Michigan. KM

A note from Ken:

On my last venture to the Ultimate Indoor Soccer Arenas, I was flying my Myers’ Modifly. I was having lots of fun with it when Joe came over with a very unique project. It was a small, RC version of a free flight plane called the Stringless Wonder. Joe was having a lot of fun explaining all the details in greater than necessary detail to anyone who would listen. Gotta love the tongue-in-cheek. All kidding aside, it worked and looked unique in the arena.
After I got home, I sent an email to Joe asking for some of the details. He sent the following in response:

I am working on an article for Model Aviation.
I flew the 150% version of the Stringless Wonder on December 29. It flies better than the smaller one, probably because of a little more power and a little less down thrust. I actually looped it as well.

Jim Young's son Tim flew the pants off the bigger one. I only had three batteries. Couldn't keep the batteries charged with all the flying the young man was doing.

Jim will do the drawings for it.

Joe

Vic Walpole

I received a forward from Rod Clark regarding Vic Walpole. Vic recently passed. Some Ampeer readers will not be familiar with this name, but Vic was a true electric flight pioneer. He did not invent electric flight, design great e-planes or other notable things like that, but he was a fantastic promoter of the then “new” propulsion system!

Life is odd, even on its best days. Just days after I received the email, I received a package from Dr. John Mountjoy of Winston-Salem, NC. (John was a pioneer electric columnist, along with Charlie Spear.) The package contained photos taken from the mid to late 80’s at events like the Mid-Am and KRC. The third photo I looked at was one of Vic! Wow.

Here is John Higgins, EMFSO secretary’s email regarding Vic and the Electric Model Flyers of Southern Ontario. KM

The Board of EMFSO regrets to inform you of the death of Vic Walpole. On behalf of the membership we offer our sincere condolences to his family and the many friends he made in RC hobby. Vic was a pioneer of electric flight and a founding member of EMFSO. His membership number is "1".

For those of us who did not know Vic, I have copied, below, a history of EMFSO that shows the prominent part he played in the foundation of this branch of the hobby. We newcomers to electric aviation owe a deep expression of gratitude to pioneers like Vic whose contribution to the hobby will never be fully measured.

Jack Higgins, Secretary

A Brief History of the EMFSO

By Stan Shaw

In the spring of 1985, at the suggestion of Vic Walpole, who was actively promoting electric-powered model flying, a meeting was organized at Doug Forrester's home. Stan Shaw, Bud Wallace and Jack Linghorne also attended. After discussions of the need for an electric flyers group and the need for an executive, the group decided on Stan Shaw as President, Doug Forrester as Vice-President, Jack Linghorne as Treasurer and Vic Walpole as Secretary. Vic also appointed Steve Lentzer as Editor. The membership fee was set at ten dollars and the group was to be called the "Electric Model Flyers of Southern Ontario".

There was so much to learn about electric motors, speed controllers and batteries that we decided to publish a newsletter to keep members up to date on what was happening in electric flying and to promote electric flight.

In the summer of 1985 the group held their first Electric Fun-fly on June 22-23 thanks to the hospitality
of the Southern Ontario Glider Group Inc. and the efforts of Bud Wallace and Stan Shaw who were on the executive of SOGGI. Their field was just outside of Rockton, Ontario. It attracted eleven flyers with sixteen models on display, five of which were flown in high winds. Doug Forrester of Richmond Hill ran an ongoing clinic on both days answering a lot of questions and generally being very busy. Jack, Bud and Stan helped with the event but Vic did most of the registrations in spite of the poor weather. Because of the event being "blown and rained" out, a second Fun-fly was scheduled on October 27, again at the SOGGI field.

The lack of a permanent flying site would be an ongoing problem but the club was able to utilize a number of flying sites thanks to the hospitality and interest of the respective clubs. The clubs saw these special events as an opportunity to raise additional funds and thus continued to offer their fields for the fun-flies.

To give you an idea of how busy Vic was that year, he visited Steve Lentzer in Sarnia during July. During the visit Vic brought his "Electricus" model that he flew and after he got it to normal launch height for a glider he gave the transmitter over to Steve who put in a forty-minute flight! He also mentioned Fred Freeman from Hamilton who was flying an "OHM BRU" and Walter Bek who was flying a "Sky Knight" It seemed that Vic, Doug, Bud, Stan, Walter and Ernie Houslander from down Grimsby way were going to attend the KRC meet in the USA.

Early in September, Vic went to the K/W Scale Fun-fly and saw Steve Gray fly his Beaver on floats. Steve had the design featured as a construction article in Model Builder magazine. On the Labour Day weekend, Vic went to the Oshawa R/C club glider sod farm to witness Doug Forrester's first flight of his new 112-inch span glider "Electric Circus". Vic flew his Sagitta with a Keller 50/24 cobalt motor with a Geist 13x6 prop on 14 sub-c cells.

Later in October the Second Electric Fun Fly was a success with about 30 pilots showing up in spite of the cool and windy weather. Later in November the club attended the Fall Hobby Show at the International Center and put on a great display of electric powered models that attracted a lot of interest and encouraged more future flyers to try electrics. A lot of credit goes to Vic Walpole and Doug Forrester for organizing and looking after the display along with the executive and several members.

During the first year Bud Wallace had built an Electricus and an Ultra Mk IV for Stan Shaw. Both models utilized Astro 05 Geared motors on seven cells. Jack Linghorne had converted an Olympic II with a geared motor for the fun-flies.

The second issue of the Electric Model Flyer was a sixteen-page issue put out by Vic, Doug and Steve. It showed a membership list of 32 members as of January 1, 1986. That was an amazing growth rate considering the club was in existence less than a year. It also announced the first Electric Flight Symposium to be held on March 15th, 1986. The idea of holding the Symposium was Doug's and it turned out to be a major success. Doug and Vic were the speakers at that first meeting. It also marked our first annual general meeting that would be held at the Albion Public library, Rexdale, Ontario, for the next thirteen years! The Symposium would be the highlight of the year along with our annual fun-fly. Attendance grew to over sixty members and guests by the second year. The second issue of the Electric Model Flyer also displayed a new logo designed by Vic Walpole. It showed a front view of an airplane head-on with a lightning bolt as a propeller. The radial motor consisted of five battery cells showing + and - at each end. The whole design was enclosed by a egg shaped circumference that bordered the words "Electric Model Flyers of Southern Ontario" Later the design would be made into a decal showing a red lightning bolt and motor, dark blue plane and dark blue border and letters. A very attractive design that members enthusiastically displayed on their models and field boxes, etc. During 1986 submissions were made to the Model Aeronautics Association of Canada to start a new committee to represent the electric flyers. Bud Wallace was appointed Committee Chairman in 1987 and together with Stan Shaw preceded to develop new rules for electric competition as well as promote trials for F.A.I. F3E World Championship contest. Vic Walpole had attended the first W/C in 86' and he was actively promoting interest in the category with limited success. The high cost of the models and electric motors together with the demanding practice required for the tasks limited the appeal for the general members. It was amazing to see how quickly F3E had developed in Europe and the USA. Bud Wallace served as Electric Committee Chairman until 1992 when Stuart Pierce took over the chairman's position.

By 1987 Vic Walpole had managed to get Fred Freeman and Albert Fund to act as regional editors. Vic continued writing the newsletter on his trusty computer. He had changed over from his electronic typewriter to make his life easier! What he didn't plan on was being driven crazy by a erratic disk drive for over two months!

I believe that by 1988 Vic Walpole had taken over as editor and secretary of EMFSO. Steve Lentzner became a regional reporter along with Art Lane of London and Barry Fletcher and Al Cordy of Oshawa. Steve Gray was the Vice-President that year. That year saw the first attempt to hold a Canadian Nationals Electric Championship at the Beverly Community Centre, near Rockton, Ontario. Only four people showed up to fly so the executive decided to have a fun-fly instead! On the
other hand the annual EMFSO fun-fly at the Beverly Community Center, near Rockton, Ontario attracted twenty-seven pilots that registered 50 planes. Again the wind picked up to stop flying by 2 pm., when Stan passed out the goodies. A number of Americans attended; Ken Myers, Keith Shaw and Jack Laird came from Michigan. Ken Myers wrote in his UFO (Pre-EFO days KM) newsletter about the event: "Even though it was winded out, we all had a great time with some super people. I know that I am planning on returning next year. Why don't more of you join us? It's not far. It's great fun. It's near some nice attractions and would be fun for the whole family."

Vic Walpole also visited the Clarence Soaring Society's electric fun-fly in Clarence, NY. The Heroine R/C Club sponsored an electric fun-fly CD'd by Stuart Pierce who had three planes on deck, all of which he flew much better than could Vic that day! There were about twenty-five planes at that event. Jack, Doug, Bud and Stan attended as well as a number of guests. Vic managed to get to the W/C in St. Louis, USA, along with KRC and an Old Timers fun-fly. It was a very busy year for all the electric flyers, especially for the executive of EMFSO. Art Lane held the second annual Snow Fly in London, Ontario on Feb. 14, 1988. There were some ten pilots including Keith Walker, Vic Walpole, Bud Wallace and Stan Shaw who braved the cool winds to show the gassies what good electrics could do even better in the cold weather!

Barry Fletcher started "Our Neck of the Woods" series featuring a Monocupe 110 and the DH Beaver in the second issue of the "Electric Model Flyer". He described the Easybuilt kit of the Beaver as a "very pleasant and scale-like (flyer) with a wide speed range and S.T.O.L. performance. This kit is excellent for a builder with a little imagination". Sharing reviews of kits and scratch built models would become one of the most attractive feature of the EMFSO newsletter.

Many thanks to the keen and enthusiastic author-modellers who contributed to the wonderful success of the newsletter with their news, views and reviews over the past sixteen years. Many thanks to the editors, Vic Walpole, Steve Lentzner, Doug Forrester, Rob Campbell, Keith Walker and Al MacDonald who have done a marvelous job maintaining the standard of the newsletter over the past years and contributing to the continued success of the "Electric Model Flyer" newsletter.

Enjoy the building weather and I hope to see you at some of the Fun-Flys!

Vic was a true gentleman, promoted this hobby tirelessly and will be missed. You can visit the EMFSO site at http://www.emfso.org/

We are a sum of our experiences and friendships.
Thank you Vic for being a friend! KM

The January EFO Meeting

Because of the poor driving conditions on January 7, the meeting was pushed back a week to January 14. Bill Brown was the gracious host. Thank you Bill! And thanks for all the good snacks.

Bill started the meeting by sharing photos of his Honor Flight trip to Washington, D.C. On the trip, he even wore his WWII uniform, and was one of only two folks to do so. We owe Bill, and all the WWII veterans, more than we can ever say with just thanks. We all salute you folks!

Most of the “gang” had arrived by 7:30 and we were looking forward to sharing our models and questions.

Roger Wilfong lead off the show and tell with his new Mini Telemaster. He purchased off of ebay. He got a very good price on it and it included both the 3-channel and 4-channel wings. He has powered it with a 250 watts in power system using a 3S “A123” 2300mAh battery pack and brushless outrunner.

Jim Young had two planes to share with us. He brought in his Gloster Meteor. This version is quite a larger, twin ducted. He has a build thread on RC Groups where you can check in on his progress.

He is also working on a new version of his Hughes H-1. The power system in this new version should motivate it quite a bit faster.

Bill Brown shared several of his new planes with us, including the Jenny that he got for Christmas. It is ready to fly now.

Bill also had a question that none of us could figure out. How the heck do you use the Sig CG balancer tool. We played with it for a long time but could not come up with a definitive answer.

Ken Myers showed off the progress on his conversion of the E-flite PT-17 ARF to the Super Stearman N56772. It is coming along very slowly, but is looking pretty good.

As usual, there was a lot of good “plane” talk at the meeting.

Again, thanks Bill for being such a great host. Please remember that the EFO 2010 dues are due.

Hope to see you all at the February meeting at Jim Young’s house.
Upcoming E-vents


**February 4, Thursday** EFO monthly meeting at Jim Young’s house. His address is: 9356 Wendover Ct., Brighton, MI 48116 and phone number is 810 231-1684. The meeting starts at 7:30 p.m. Everyone is welcome! Bring your latest project(s) to share.

**February 15 Monday, President’s Day Indoor Flying!** - Ultimate Soccer Arena, 867 South Blvd, Pontiac, MI - 11:00 AM
Located just west of Opdyke, on the north side of South Blvd - a 365 ft by 260 ft facility with ceilings from 45 to 75 ft available for indoor flying from 11:00 a.m. to 1:00 p.m. Ample room for concurrent flying of 3D, Heli, and Sport. Temperature controlled, well lit. Restaurant on site. This will be another 'normal' session - Use your 'punch card' or Gold card for Admission. Five sessions $30 - Season "Gold" Pass $100 - Single Session $15 View Additional Event Information [http://www.skymasters.org/events/indoor/](http://www.skymasters.org/events/indoor/)

2010 EFO Dues
A Notice from Ken Myers
The dues for EFO membership remain at $20. Once again, if you join or rejoin the Midwest RC Society for 2010, I will pay your EFO dues into our EFO treasury. Anyway you want to look at it, you can save $20 in 2010 by joining Midwest.

Two of the planes at the January 2010 EFO Meeting

---

The Ampeer/Ken Myers
1911 Bradshaw Ct.
Commerce Twp., MI 48390
http://homepage.mac.com/kmyersefo

---

The Next Monthly Meeting:
**Date:** Thursday, February 4, 2010 **Time:** 7:30 p.m.
**Place:** Jim Young’s House