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Ampeer

July The EFO Officers 2004

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My Bantams
From Tom Steinhoff
STEINH1@Nationwide.com

Hi Ken,

I hope you are doing well. I thought you might be interested in some pictures of my two Bantams. The biplane has about 10 flights on it. The monoplane has not been flown yet. I took out the dihedral and added ailerons. There is no rudder servo. This will be my first aileron-equipped plane.

Thanks for all your help.

Regards,
Tom Steinhoff
Columbus, OH
(photos on next page)

Wire and Connectors Revisited
From James Frolik jdfrolik@freenet.de

Ken, your article "Wire and Connectors Revisited" brought back a very exemplifying memory that clearly exhibits the good and bad connector.

Very early in the eflight learning curve I built my Robbe Dash-7. At the time I wanted to save as much money as I could because the kits I was into were not cheap once finished and the RC components installed. A then state-of-the-art 8-cell RC2000 battery (about 7 years ago) tipped the cost to where I could afford no more, and since my battery packs typically came with cables and a connector already soldered, I just figured the connectors were good. They were Tamiya connectors.

With a fully charged RC2000 pack, static test runs of the four Speed 400/7.2v motors and Robbe 6x4 props yielded around 40 seconds of full throttle run time before the RPM became so weak the model couldn't even taxi. Thinking the battery hadn't been cycled and peak-charged correctly, I went through the discharge/charge cycle again...and again, and again, and again... Yet the most I could ever milk from the four motors was about 50 seconds -- and flyable power was only present for about 30 seconds before the RPM started sinking...fast!

I checked the charger (not a delta-



Tom's SR Batteries Bantam Biplane



Tom's aileron modified SR Bantam Monoplane

Wire and Connectors Revisited (cont.)

peak unit, but a quality reflex charger specifically for eflight). I checked the plane's wiring. I replaced the ESC (both which also had budget-wise Tamiya connectors), I changed the props from cheap and unbalanced Robbe 6x4s to Graupner Super (Gray) 6x4s, yet the short run times persisted. With each motor drawing roughly 7 to 8 amps, I figured I should have been getting between 3.5 to 4 minutes full throttle static run time. With throttle management, flight times should essentially increase to roughly 5 or 6 minutes. But something was wrong - and I wasn't going to risk a flight with only about 30 seconds of airborne power.

Then someone suggested changing the power connectors. So I "splurged" and bought a pack of 4mm gold bullet connectors to replace those Tamiya things. The result was unbelievable...and I'm not joking here.

Full-throttle static run times jumped to about 3 minutes before the power started sinking...slowly. At roughly 4 minutes (and still full throttle) the RPM was finally nearing taxi speed and about 30 seconds later the props were just trading minuscule air. Based on these times, and since actual flying encounters less prop resistance, nor is the craft always flying at full throttle, I figured a flight time of at least 5 minutes was now possible before landing.

Even today I'm still amazed at what a difference a restricted (bad quality connector) versus an unrestricted (high quality connector) flow of electricity can make. Back then I thought maybe I would get about 30 more seconds of run time with the gold connectors. But instead it increased over 300% -- and that was just for static runs! Sound unbelievable? Well, everything in my Dash-7's setup remained constant except for the power connectors. Hence I have no other excuse.

Connectors can make a BIG difference!

Regards,
James Frolik

The April and May EFO Meetings



Richard and Jim prepare to do a little flying

The April meeting was a joint venture between the EFO and our very good friends, the Michigan International Soaring Society. The weather was just about perfect for the end of April in Michigan. There were mild temperatures and mild winds.



Launching a sailplane as the Foss Family walks by

While the EFO flew their electrically powered planes, the MISS folks launched and flew their sailplanes.

Around noon, the typical field lunch of hot dogs, soda and chips was served. Everyone had a really great time. It is wonderful that clubs can get together and learn from each other, and just share some "flying" time together.

Thanks to all of our friends at MISS for providing us with a great site and a great day.

The May meeting was not quite as nice. Only a very few EFO members braved the wind, gray sky and very cool temperatures to come to the Midwest RC Society field. We did fly some, but it certainly wasn't a pleasant day.

Upcoming NEAT Fair 2004

From Tom Hunt neatfair@optonline.net

Hello Friends,

I would just like to notify you that we have opened the 2004 NEAT Fair for pre-registration of pilots and for reservations of the Friday night Kick-off dinner on the NEAT Fair website at:

www.neatfair.org

We will be updating the Vendor attendee list as they come in.

We will also post any pertinent news on the "news" section of the website.

Only 2.5 months to showtime!

Thanks,

Tom Hunt, Bob Aberle and all of SEFLI

Upcoming Prop Stoppers E-Fly

From Dave Harding davejean1@comcast.net

Ken,

Here are the details on the Propstoppers Walt Bryan Memorial Electric Fun Fly for this year. It will be held on Saturday, August 7 with the rain date on the Sunday. We are located just South of the Philadelphia International Airport.

Details are on our club web site;
www.propstoppers.org

I am the point of contact.

This year we have moved to our larger field as our customary field was a little too small for some of our visiting flyers.

Dave Harding, phone: 610-872-1457

No More Push-E Cats

I had, earlier this year, posted that one of my favorite trainers and sport electric planes was back in production. Unfortunately, the Push-E Cat has come to the end of the line. Darwin Garrison posted the following to the RC Groups Discussion:

Hi, Guys:

It's with a heavy heart that I admit that Garrison Aerodrome is now completely and totally dead. My attempt to restore the Push-E Cat to production has failed.

Several folks had sent me checks for Push-E Cats. Those checks are now on their way back to you, unopened and uncashed. My final efforts with kit making will be to fill those orders pro-bono and with extra goodies as a way of saying, "I'm sorry I wasted your time, please forgive me."

There has been some interest by a couple of manufacturers in producing the Push-E Cat. I have, however, managed to screw that up a bit as well. Hopefully I'll be able to sort through all the chaff I've made and help someone bring the kits back to production.

As part of this shutdown, I will be working with the E-Zone to publish complete construction articles for the Push-E Cat V4, the Push-E Cat A, The Twin Cat, the Manx, and the Hot Cat. These articles will include discussions of how I made tooling. Whether or not the kits return to production, perhaps some folks will still be able to enjoy the designs.

I will still be around, mostly doing articles for RC Groups and publishing new designs. Thanks to Mark Shimei, one of those designs will be an EPP replacement for the Wingo/Soarstar. The Push-E Kitten will someday appear as a plan as well.

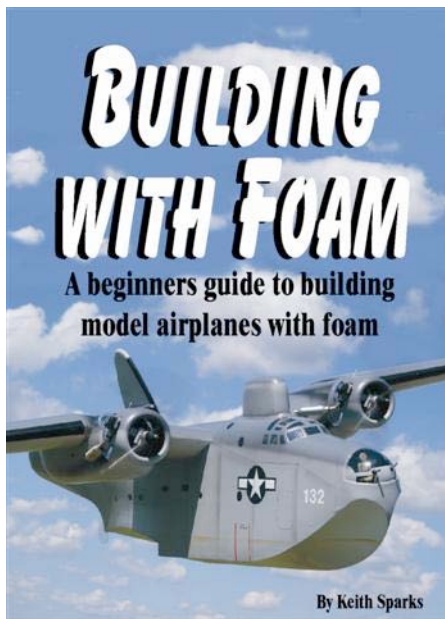
Once again, I apologize for foolishly attempting to stick my foot back in the kit manufacturing water. I look forward to moving on from this fiasco.

Best regards,

Darwin A. Garrison

Building With Foam Book

From Keith Sparks parkflyerplastics@att.net



Hi,

My name is Keith Sparks and I am a RC enthusiast like yourself.

I have been flying and designing RC planes for about 15 years now.

I have just completed a book that I think some of your club members may be interested in. It deals with building RC planes with foam. It is directed toward the novice although there are plenty of hints and tricks for the intermediate to advanced builders.

I was wondering if you could place an announcement in your club's newsletter or on your clubs web site. If you or your members go to www.parkflyerplastics.com you can see the book and the web site has links to show several of the planes that were built using this technique.

If you have any questions, comments, or suggestions please feel free to contact me at Parkflyerplastics@att.net or sparky2@att.net

Thank you very much,
Keith (Sparky) Sparks

Here is some information from his Web site:

“The book was going to be called Foamworks. Working with foam was more descriptive so I went with it. The book is the result of 15 years of mistakes and successes. Inside you will learn how to make "home made" tools such as the bow, cutting templates, and other special tools needed. Wing spans from 8 ft. to 10 inches are covered as well glow and electric powered. Different finishing types are

covered and the "rules" you need to know to attach hardware.”

Be sure to check out his Web site for plane photos and an idea about some of the techniques he uses. KM

UBA4: "The Battery Tester For All Your Batteries"

From Marc Venis marc@vencon.com

Hi Ken:

I've been serving the R/C community now for 10 years. I sell the UBA4 battery analyzer.

Although next to useless at the field (it needs a PC (yes, we've had guys use it with their notebook at the field, although I don't know why) it works great for testing receiver and flight packs, all types (NiCd, NiMH, LiPoly).

Red Scholefield has one of my battery analyzers and has a link to me on his page:
<http://www.rcbatteryclinic.com/>.

I've added a "RC Only" gateway page to my site that I'd like you to use. Vencon Technologies Inc.
<http://www.vencon.com/rc.html>

We are the manufacturer of the UBA4 (Ultimate Battery Analyzer) that connects to your PC and can analyze and cycle all of your R/C batteries.

Regards,

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www: <http://www.vencon.com>

Photo and quote from Marc's site:



“Do you want to know the condition of your battery pack? Can its performance be improved? Is your battery charger performing properly? With the UBA4 these and other questions are easily answered.”

Upcoming Voltaires Electric Fly

Presented by the Voltaires of Central NY
From Garret Wikoff wikoff@attglobal.net

The Voltaires of CNY will present their 15th annual Fun Fly on July 17 & 18, 2004. This will be an ALL Electric event held at Grenadier's Field, about 15 Miles North of Syracuse NY. Events and Prizes, Pilot's lunch provided both days. Lots of camping available but no hookups. The field will be available Friday afternoon, July 16th for campers. Check our web site www.voltaires.org for details & map.

Contact: Garret Wikoff voltweb@attglobal.net
315-695-4271.

Coldwater Meet 2004 Report

By Ken Myers

The Keith Shaw Birthday Party Electric Fly, hosted by the Balsa Butchers and Cd'ed by Dave Grife, was held the weekend of June 5 & 6.

I attended on Saturday, and the weather could not have been more perfect! The temperatures were in the low 70's, the winds low and there was plenty of sunshine. There were about 20 or so fliers in attendance, making this the perfect size meet to get in plenty of flying.

There was a good variety of aircraft present from the tiny Mico-Stick of Don Belfort's to Chris Balsers' Great Planes Gee Bee. There were several very fast and beautiful ducted-fan jets, as well as some tiny, go fast, "over-powered" jobs. There were a few of the light, 3D types as well. I was most impressed with Dave Grife's Hobby Lobby EPP Christen Eagle powered by an Astro Flight 020 geared brushless and a 3-cell TP Li-Poly pack.

In a discussion with Keith Shaw, I found that he is very taken with the Astro Flight brushless 05. He has powered his Flashback biplane with it. The Flashback features many different design elements from at least four different full-size aircraft, and is an excellent blending of them all.

With the original power system, an Aveox brushless and 12 cells, the plane weighed in at about 5.5 pounds. Today, Keith is using an Astro Flight 05

geared brushless motor, 12x8e APC prop and a Kokam 3S1P 2Ah high discharge Li-Poly pack. This pack is capable of a discharge rate up to 20C. Yes, that's 40 amps! Keith has the motor propped to draw about 35 amps maximum, but only uses that in the vertical, as the plane spends most of its time in the half-throttle range. The pack weighs in at 9 oz.

With approximately 700 sq.in. of wing area and a 52-inch span, the ready to fly weight is now about 3.5 pounds. That is almost a 2-pound reduction in weight. It is an excellent flier in Keith's hands and has turned into the plane he really wanted when he designed it.



Flashback with updated power system

Chris Balsers had his brand-new Great Planes Gee Bee ARF ready to go. Keith Shaw test flew it, and then flew it again latter in the day. It flies very well. Chris installed a Hacker C50 brushless geared motor driving a 20x13e APC prop. Power is provided to the motor by a Thunder Power 9S3P Li-Poly battery. It weighs only a few more ounces than the Great Planes advertised weight for the fuel-powered version.



Keith taking the Gee Bee for a walk



The first liftoff of Chris's Gee Bee

Upcoming E-vents

July 10-11 Mid-America Electric Flies, Northville Township, MI. Contact Ken Myers email kmyersefo@aol.com

July 17 Jersey Coast Sport Fliers Electric Fly-in, contact Rob Kallok - rob.kollok@comcast.net, Colts Neck, New Jersey - July 18 is rain date - details at jcsportfliers.org

July 17 & 18 The Voltaires of CNY will present their 15th annual Fun Fly (see details in this issue)

July 24 Loudoun County Aeromodellers Association E-Vent info at www.lcaa.org, flying field at Banshee Reeks Park in Loudoun County near Reston, VA, Brian Allen and Ron Anderson CD's

July 24-25, 2004 Boeing Electric Fly-in, Phantom Flyers R/C Club Field north of St. Charles, MO, Contest Directors Brad Young (Sat.) & Dan Able

(Sun.) Email at Efly04@phantomflyersrc.com to parking arrangements, no RV's please.

August 7 (rain date: Aug. 8) Propstoppers Walt Bryan Memorial Electric Fun Fly, South of the Philadelphia International Airport, details at the club web site; www.propstoppers.org point of contact: Dave Harding, 610-872-1457 or email: davejean1@comcast.net

August 7 - 8 Cedar Rapids (Iowa) SkyHawks Electric Fun Fly, for information visit 216.15.238.56/skyhawks/funfly

August 8 PMAC AC/DC Electric Fly-in, Pontiac Lake Rec. Area, off of White Lake, Rd. Contact Sterling Smith, 248.673.2882 or email smitty559@comcast.net

August 14 - 15 EMFSO Ontario Electric Flight Expo - York Airport, York, Ontario, Canada, performing, A casual weekend of flying, friends and fun - Camping on site is also available and is encouraged - visit www.emfso.org for details.



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The Next Meeting:

Date: Saturday & Sunday, July 10 & 11 **Time:** 8:00 a.m.

Place: Midwest R/C Society 5 Mi. Rd. Field
Mid-America Electric Flies