

THUNDERBOLT

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June 2007

RIBCRACKERS MODEL AIRPLANE CLUB

President's Message - Warren Wells

May has been a busy month for our club so far. The weekend of the 12th we finished 2 club projects. On Saturday a group of us put up our old frequency field box at the 7 mile field and on Sunday another group of club members completed tree and bush trimming work at Ray field. After they finished the trimming work, Alex, the work detail leader, actually convinced the group to rake the entire runway area of grass clippings. He did hear a few choice comments from the group when he suggested the idea (he would have heard some from me as well had I

been there) but he managed to prevail and the field looks great as a result. Great job guys! On another note, 2 members of the Midwest club, Bruce Ferns and George Harm have been going all out to make us feel welcome at the 7 mile field. They have arranged to have the field mowed every 5 days right now and have instructed the mowers to lower their mowing decks as far as possible. Our club had our scheduled fun fly there on Saturday the 19th. About 10 of us showed up for the event, but were soon rained out. We did manage to



get in 10 or 12 practice flights with various airplanes ranging from 30 to 60 size, both electric and glow powered. Everyone in attendance that day agreed the field and over flight area are great. Again, my thanks go out to Bruce

(Continued on page 3)

Editor's Note Pad - Gerald Klose

Even though the Memorial weekend started out miserable, Monday was absolutely perfect. After getting rained out on my first visit to the 7 mile field for the fun-fly I decided to try again. It was about as perfect a day as you could ask for: A clear, azure blue sky with very little wind. I expected to have to wait for my turn to fly but no one else was there. I flew each of

(Continued on page 2)

Inside this issue:

President's Message	1
Editor's Note Pad	1
A123 M1 discussion	2
Meeting Minutes	3
Upcoming Events	4

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A123-M1 and the LipoDapter - Roger Wilfong

At the fun-fly I saw Roger with the new A123-M1 batteries and a handy charging adapter so I asked him about them and this is the response that I received:

The LiPoDapter+ (aka the 'Dapter) adapter will work with either A123-M1 cells or regular LiPo cells and allows either to be charged from any LiPo or NiCd/NiMH charger. It's available from SLK Electronics (the people who publish E-Calc).

< <http://www.slkelectronics.com/lipodapter/index.htm> >

Basically, here is how it works...

Lithium chemistry batteries require a different charger than nickel chemistry batteries. Modern nickel chemistry chargers are all constant (adjustable) current, peak detecting chargers. They make use of the fact that the terminal voltage on nickel batteries continues to go up until the cells are fully charged and then the voltage begins to drop. The chargers detect this drop in voltage to terminate the charge.

Lithium batteries and chargers work differently. These chargers have two phases; constant current and constant voltage. Phase 1, constant current, applies a constant current to the pack until the terminal voltage reaches 4.2 volts per cell (it's lower on A123-M1 cells). Once the terminal voltage reaches 4.2 volts per cell, phase 2, constant voltage, starts. In this phase, the output voltage of the charger is clamped to 4.2 volts and the current begins to drop. Full charge is reached when the current drops to a small level. However, the battery is 80% charged at the end of phase 1.

Phase 1 of the lithium charger is the same as the constant current portion of a nickel charger. The 'Dapter makes use of this to control the phase 1 charge rate on the lithium battery. However, instead of switching to phase 2, it simply monitors the voltage and once it reaches terminal voltage, it terminates the charge by disconnecting the battery from the charger. This only puts an 80% charge into the pack. The thing is, that first 80% only takes 1/3-1/2 the time it takes to charge all the way to 100%. So, while you don't get a full charge, you get 80% in half the time. So you have a choice; you can spend

(Continued on page 4)

Editor's Notepad- *continued from page 1*

the planes that I brought and had a great time. I was even able to get the kids to try flying the Tiger 60. They did pretty well but don't seem to have much interest. Where did I go wrong? The best part was when the field had a squadron of 7 warbirds fly over the field twice. I think at least some of them were AT-6's. I was kinda busy trying not to lose my transparent blue plane against the blue sky so I am not 100% sure. My only complaint for the day was that the field hadn't been mowed in a while and I had a hard time getting the plane off the ground. (yes, 3" wheels, thank you very much). Apparently we are very spoiled at Ray field. It still feels weird to drive up someone's drive to get to the field, though. I would suggest that we find an alternative as soon as possible. The pop-up canopy that I won last year at the picnic has now had a chance to keep me dry last weekend during the fun-fly and in the shade this weekend. The kids are getting pretty good at setting it up now. All in all it was a great day at a pretty good field. I hope to see you out there at the new field soon!

May Meeting Minutes - Dennis Robbins

Ribcrackers May Meeting Minutes – May 7, 2007

The meeting started early this evening, at 7:28 pm. The April meeting minutes were accepted as published in the May Thunderbolt.

Treasurer's Report – the club is remains solvent. See R. Wilfong for details. Roger noted that he had paid the Midwest RC Club for use of the 7 Mile Road field, so please try to take advantage of a 2nd flying location. Warren noted that the club's May 19th Fun Fly will take place at the 7 Mile Road field, so we're hoping lots of members show up. The address is: 7621 7 Mile Road and don't forget that Channels 36 & 56 are "off-limits".

Newsletter – nothing new to report.

New /Old Issues – Hank Wojac agreed to design and assemble a flyer promoting the Ribcrackers. While at Ray, a spotter is mandatory, so please make sure you have someone watching for you.

Model of the Month – Lots of models this month:

- ✦ Roger Wilfong brought a "re-built / re-kitted" Rascal 40 ARF. Wings were found at a swap meet, the fuse was built from enlarged plans and a power pack was added. Pink and white and "pretty".
- ✦ Gerald Klose brought in a recovered 40 Star 60. Nicely covered in white with blue and yellow trim. Power is a Saito 100.
- ✦ Tom Bacsanyi brought in a "re-engineered" World Models (?) P-38. Tom outdid even himself by adding upgrades that included dual Gunther 30 motors with 3:1 belt drives, a home-made retract system, ECU for motor control, 13 servos and 35' of wire to control this war-bird. Very cool.

Dennis Robbins brought a GWS foam F4UCorsair ARF which was obtained during the Ribcracker Swap Meet. Power is the stock 370 geared brushed motor. Neat looking little plane.

Winner – and most deserving – Tom Bacsanyi!

Raffle – Big night – 2 HUGE winners – 1) Fox 40 BB engine 2) Great Planes Sportster Bipe 40. Lots of smaller prizes too!

The meeting adjourned a little after 8:00 pm.

Respectfully submitted – Dennis Robbins

(Continued from page 1)

and George from Midwest for their help in getting it ready for us. They actually had the field mowed the day before knowing about our fun fly on Saturday. To all the naysayers out there about the 7 mile field, the members that showed up on Saturday and flew had nothing but good things to say about the condition of the field.

As I said before, with continued use and maintenance the 7 mile field will only get better.

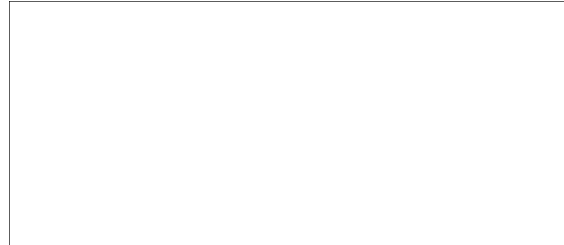
Hope to see you out there. Happy and safe modeling.



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We're on the web!

<http://www.ribcrackers.org>



\$100 on a new LiPo or A123-M1 charger (they're different and currently there are no LiPo AND A123-M1 chargers) and wait an hour to get a 100% charge on the pack, or you can get a \$40 Dapter and use an existing nickel charger to charge either LiPo OR A123-M1 batteries to 80% in a half hour. With LiPo packs, you're still limited to 1C charging rate. With A123-M1 packs, you can charge at up to 4C.

Horizon Hobby is the sole distributor for the A123 cells and sells them for \$20.00 each or you can get a Dewalt replacement battery pack for a little over \$100. You get 10 cells which you can make into your own packs. This new technology is very attractive: Cheaper (depending on source), safer (less likely to burst into flames), higher charge rate, and more resilient. *editor*

Upcoming Events

<u>Date</u>	<u>Event</u>	<u>Location</u>	<u>Contact</u>
June 4	Club meeting	Ray Field	Warren Wells 248-437-2694
June 23	Fun-fly/picnic	Ray Field	Warren Wells 248-437-2694
July 2nd	Club Meeting	Ray Field	Warren Wells 248-437-2694