

Carrier Wave

Newsletter of the Phantom Flyers R/C Club

<http://phantomflyersrc.com>

CLUB OFFICERS	Work	Home
President – Ed White	232-1479	(636) 441-6431
Vice President – Frank Thomas		(636) 394-1546
Secretary – Jan Jansen	234-2459	(314) 921-9420
Treasurer – Dan Sundman	777-9204	(636) 281-0676
Safety Officer – Dave Evans		(636) 332-1980
Boeing Rec Counselor – Mitch Galatioto	234-5141	(636) 447-5484
Field Manager – By Committee		
Chief Flight Instructor - Jan Jansen	234-2459	(314) 921-9420
Activities Committee Chairperson - Dan Abel		(314) 830-0138

Board of Directors:	Work	Home	Send Membership Renewals to:
Ed White	(314) 232-1479	(636) 441-6431	Jan Jansen
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July 2007

Upcoming Events/Important Notices

18 July, Club Meeting at Field

21-22 July Electric Fly at Field

5 August, Cox Pylon and Carrier Fun Fly at Field

15 August, Club Meeting at Field

25-26 August, Pattern Contest at Field

Articles, pictures, and tech notes for publishing in the Carrier Wave are always appreciated. Please submit articles a week and a half before the meetings. Please send pictures, preferably in JPEG format, in separate files from text files. Text should be in MS Word format, simple text file format, or some format that MS Word can read. Indicate where pictures should be in the text with a note in parentheses such as (Picture ABCDC001.jpg goes here). I will integrate text and pictures in my page layout program.

Thanks,
Dave Evans



AMA Club # 393
Phantom Flyers
St. Charles, Mo RC Club



Minutes June 20, 2007

President Ed White called the meeting to order.

No new members in attendance.

Tech session this month: Brief show and tell with a COX ready-to-fly P-40 by Dan Abel.

Secretary report was approved as printed in the Carrier Wave.

Treasurer was approved as read.

Mactivities Report: There will be a plant open house possibly October 12. The club has been asked to set up a display in conjunction with the UAV program. The club will display our model aircraft, of course, while the UAV program will display the BATS vehicle

GLSMA report is published in the Carrier Wave.

Field Manager Report: The security system will be activated. Five people will have keys and know how to activate and deactivate the system. Those five people are Ed White, Bill Ahrens, Donn Albert, Mitch Galatioto, and . The number and makeup of the “key holders” will be revisited if necessary.

The club emblem needs to be repainted before it is rehung on the pavilion. Ed White’s daughter will do the work and be paid by the club.

The “out house” needs to be repainted and serviced prior to the E-Fly in July.

Safety officer report. No incidents to report. Keep up the good safety record!

Activity report: Swap meet report - there were 200 paid admissions to the meet, including all the volunteers and club members. The clubs made a profit on admission and display table sales, but lost money on food sales. The Spirits took the loss on food and donated it to a local charity. Need ideas to improve attendance before the next swap meet or ideas for a new fund raiser effort.

BBQ report - several people showed up despite intermittant rain. There was no Build-A-Plane contest nor COX pylon race due to limited attendance. Attendees enjoyed themselves. BAP will be rescheduled.

Pattern Seminar is rescheduled for July 8. No helicopter fly in this year due to poor attendance in previous years. A possible Large Aircraft Flyin in October was suggested.

Pattern Contest - Need all the volunteer help psossible, a sign up sheet will be added to the website. Letters are going out to possible contestants the week of June 25. There will be dinner for helpers and contestants.

Old Business: Thanks to Donn Albert for work on the container at the field.

No new Business.

Meeting adjourned at 7:50 pm in time for a little more flying.

Submitted by Dave Evans for Jan Jansen

Event Schedule for 2007

EVENT	2007 DATE	DAY	2007 CD
SNOW FLY	1-Jan	MON	
CLUB MTG @ SR CENTER	17-Jan	WED	CLUB PREZ
CLUB MTG @ SR CENTER	21-Feb	WED	CLUB PREZ
CLUB MTG @ SR CENTER	21-Mar	WED	CLUB PREZ
CLUB MTG @ SR CENTER	18-Apr	SAT	CLUB PREZ
PACK 30 ROCKET LAUNCH	21-Apr	WED	DAN SUNDMAN
CARRIER FUN FLY / COX PYLON	14-May	MON	JAN JANSEN
CLUB MTG-FIELD	16-May	WED	CLUB PREZ
SWAP MEET	19 May	SAT	TIM WORTKOETTER
FLOAT FLY : 9:30 AM -12	26-May	SAT	DON VETRONE
FAMILY BBQ / B-A-P / COX PYLON	10-Jun	SUN	CODY MORGAN
CLUB MTG - FIELD	20-Jun	WED	CLUB PREZ
PATTERN SEMINAR 1 PM	8-July	SUN	ED WHITE
FIELD PREP FOR ELECTRIC FLY	14-Jul	SAT	
CLUB MTG - FIELD	18-Jul	WED	CLUB PREZ
ELECTRIC FLY	21-Jul	SAT	
ELECTRIC FLY	22-Jul	SUN	
CARRIER FUN FLY / COX PYLON	5-Aug	SUN	
CLUB MEETING - FIELD	15-Aug	WED	CLUB PREZ
FIELD PREP FOR CONTEST	18-Aug	SAT	ED WHITE
PATTERN CONTEST	25-Aug	SAT	BILL AHRENS
PATTERN CONTEST	26-Aug	SUN	BILL AHRENS
CLUB MTG @ SR CENTER	19-Sep	WED	CLUB PREZ
CARRIER FUN FLY / COX PYLON	29-Sep	SAT	
CLUB MTG @ SR CENTER	17-Oct	WED	CLUB PREZ
CLUB MTG @ SR CENTER	28-Nov	WED	CLUB PREZ
CHRISTMAS DINNER	1-Dec	SAT	CLUB PREZ

Pattern Seminar

July 8, 2007

Ed White and Bill Ahrens

Ed White and Bill Ahrens, along with help, coaching, and a little heckling from others, held a seminar for prospective Pattern Contest pilots at the club flying field. Several people came for the instruction as well as some flying to hone their precision flying skills.



Attendees included experienced contest pilots as well as inexperienced pilots including your photographer/author/editor (me). The weather was quite nice though a bit warm as usual in St. Charles in the summer. Bill Ahrens provided some demonstration flights prior to the seminar.

Ed White and Bill Ahrens are shown demonstrating maneuvers with the visual aid. Bill was quick to mention that the visual aid had been converted to electric flight, as Bill has converted during the last year, so it is ultra quiet.



Tim Wortkoetter and Ed White discuss the finer points of a vertical maneuver.

After the seminar, some of the participants took to the skies for some flying. Ed and Bill provided helpful hints to those requesting help.

The seminar was a success.

Make your own battery tester for under \$10 – Ed White

In Figure 1 you see a couple battery testers that I've built recently. Plug the lead into a battery or charging jack and it shows no load voltage. Push and hold the button to show battery voltage under 0.5 amp load. All additional circuitry is contained in the meter case.

Figure 1 Battery Testing Meters



So why build your own you may ask? Because for under \$10 and about an hour of your time, you not only get a battery meter with 0.5 amp regulated load, you also get a full function digital multi-meter (the modification does not interfere with any normal functions of the meter).

Here's what you need

Digital Multi-meter	SALE PRICE at Harbor Freight	\$3.87 *
“Female” servo lead	Mark Twain	\$2.75
LM317xx Voltage regulator	Gateway Electronics	\$1.99
Push button momentary (NO)	Gateway Electronics	\$0.50
2.4 ohm, 1W Resistor	Gateway Electronics	\$0.10
4-40 ½” flat head screw	Gateway Electronics	\$0.05
	Sub-Total	\$9.26
	Sales Tax ~	\$0.72
	Grand Total	\$9.98

* The on-line sale price for the meter is currently only \$2.99. Go to this link and print out the ad for the meter

<http://www.harborfreight.com/cpi/ctaf/displayitem.taf?Itemnumber=90899>

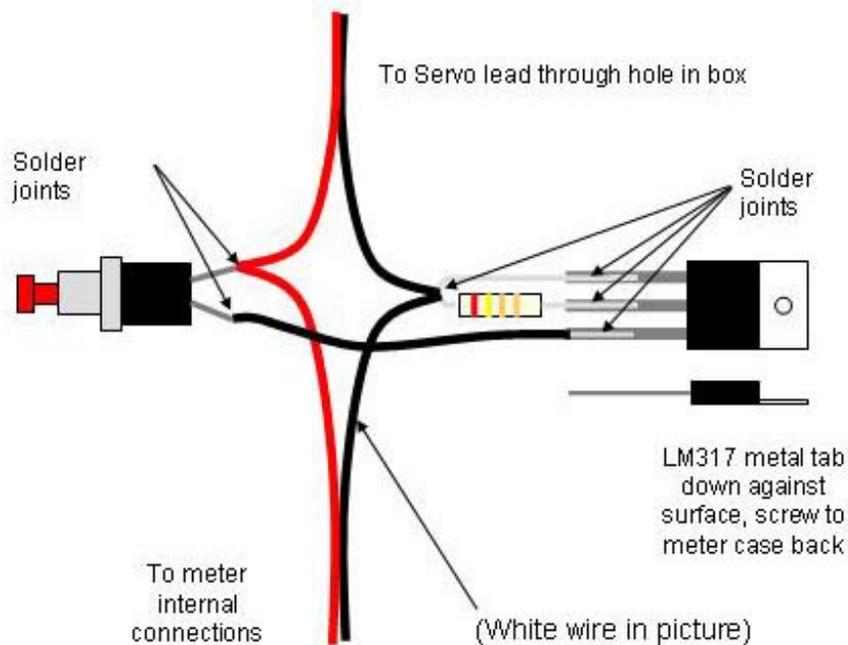
and take it to the store (West Florissant Ave at I-270). When I got to the store the price was \$3.87 and when I asked why it wasn't \$2.99, they said you needed to print out the on-line "coupon". **I'm not sure how long the meter will be on sale at this price, so I suggest you buy the meter now.** Even at \$4 it's a great buy.

The only other things you need are a soldering iron and modest soldering skills. OK you got me, you also need a 4-40 nut which might push you over \$10.

If you really don't want to hassle with going to Gateway Electronics (near Page and I-270), parts are available from Radio Shack that will work, but you'll pay about \$4 more and need to do more soldering. If you are really interested, let me know and I'll describe how to do it with Radio Shack parts. Note, Gateway has a couple versions of the LM317 voltage regulator, all versions will work equally well, ask for the cheapest of the 1.5 amp versions (aka TO-220 package).

First open the meter case. Yes, this will probably void the warranty on your \$4 meter. Drill holes for the push button switch in the front case, and for the servo lead and for 4-40 to mount the LM317 in the back case. It's easier to solder things up outside the case and then install in the case. Solder the connections as shown in Figure 2. Things get a little tight, so keep the resistor close to the LM317 and put the mounting hole as far as possible to the side and shade the hole for the switch a little lower than I did.

Figure 2. Wiring Connections



Make the internal meter connections as shown in Figure 3 (sorry, I used wire I had handy so the colors don't match up. Be careful to keep the wires out of the way of the holes where the meter probes come

through. Close it up and set the meter to 20 under DCV. Turn on the meter and plug in a battery and read the no load voltage. Push the button and read the voltage under load which will be lower, but should not drop by more than 0.5 volts. The load is only applied while the button is being pushed. For a standard 4-cell pack, if the voltage under load is 4.6 volts or lower – DON'T FLY.

Note that this is not designed to discharge a battery. For the 5 or 10 or even 30 seconds you hold the button to read under load it will be fine. But held for a long time heat will build up in the circuit inside the meter and has no where to go. Your warranty might get really voided.

Figure 3. Expanded View of Wiring Connections

