



# The Flightline



Volume 35, Issue 9

Newsletter of the Propstoppers RC Club

AMA 1042

September 2005

## *Editorial; Club Matters Update*

The first issue that confronts us this month is the meeting place. In the past, Treasurer Al Gurewicz made the arrangements for the rental of the Marple Newtown Library meeting room. He did this at the beginning of the year and we were blessed with a place to meet without any worries. Well, last week I wondered if Al and Jim Barrow had made the connection on this little detail of club management and I learned that it had fallen through the crack. Jim jumped on the problem and found that the appropriate people at Marple Newtown Library were away and would not return until the following week. Meanwhile two other elements entered the process, first, Dick Seiwel had been suggesting that it would be politic to arrange to meet somewhere within the Middletown Township facilities thus making us an all Middletown club. The second was the urgent need to decide where to meet on 6<sup>th</sup> September as the newsletter deadline was fast approaching.

Discussing these matters with a number of the club board led to the decision to hold the September meeting at Christian Academy Field and work the other issues for the October meeting. So, be warned, we are holding the September meeting at the field at 7 pm sharp. The latter because we have a good deal to discuss and it gets dark by 8 pm, even on a clear evening.

### *Agenda for September 6<sup>th</sup> Meeting Christian Academy Field 7:00 pm*

- ? Approval of August meeting minutes
- ? Membership Report
- ? Finance Report
- ? Meeting Place Discussion / Decision
- ? Flying Field Status and Issues
- ? Indoor Fun Fly Plans
- ? Flying if it is not too dark!

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Meanwhile, following the Thursday evening fun fly Dick Seiwel, junior member Matt Everett and I visited the Middletown Library to examine the meeting room there.

If you believe in omens then we should just decide to meet there as who greeted us but Sally Burkam, pioneer model helicopter modeler, John Burkam's wife. The meeting room is in the basement of the library, which is just behind Weather's Dodge on Rt. 452, close by Granite Run Mall.

Now the good news is it is that is free for our use but the potentially bad news is that it is not available on Tuesdays. Our meetings would have to be moved to Wednesdays and this is something we must evaluate via vote of a quorum of paid-up members at the September meeting.

Meanwhile, Jim Burrows is investigating the availability of our old Marple Newtown meeting place; however, we were paying quite a steep rent for that room; about \$400 per year. And this is an issue.

Now another piece of good news is that good things happen to people who wait, and in our case Middletown Township has approved our use of their part of Sleighton Farms as we described it in a prior newsletter. This approval includes the flying of gas/glow planes on Saturdays although they have not yet defined the operating hours.

So, once again we are blessed with two fields and the good news is both are currently available to us at no direct cost. All we have to do is mow them and keep them in good order. Now for the hard part; we started the year with 64 members, 58 of whom were senior dues paying members. So far this year a large part of this membership has been missing from any club endeavor, be they meetings, events or just plain flying. So, Ray Wopatek brought the list up to date and the result is we have 50 members total, with 46 dues paying seniors. At this level and a \$60 membership we may not be able to afford two fields. In this light the free use of the Middletown Library room takes on a new significance. Maybe we need a free meeting room just to make ends meet.

The board have examined this issue and concluded that, of course, we need to tighten our belts and take as many free opportunities as possible. We should also cut back on any avoidable expenses, or shift the costs to those who benefit. Then there is the concern that we have not seen the bottom of our membership decline, so maybe we need to budget our operation with a few less members paying dues.

But the real issue is, even if we can afford two fields should we. There are two factors in addition to the costs, first we have experienced the fickle nature of field retention and having one in play and one in the wings gives us some insurance, particularly as both fields are destined to go to other applications eventually. The second issue is that a healthy club is equal parts active flyers and comradarie. Our experience with two fields and relatively few members is that nobody knows which field to use on a given day. Often there are only a few members, worse, when you want to fly you don't know where to go to be with other flyers.

So I urge you to attend the September meeting to discuss these issues and help provide a sound path forward. If you can't come, then please call President Steve Boyajian or Vice President Dick Seiwel and express your opinions.

**Dave Harding**



## Calendar of Events

### Club Meetings

Regular Meeting 7:00 pm  
Tuesday 6<sup>th</sup> September 2005  
Christian Academy Field

Tuesday Breakfast Meeting  
The Country Deli, Rt. 352 Glenn Mills  
9 till 10 am. Just show up.  
Flying afterwards, weather permitting

### Events

#### Regular Club Flying

At Christian Academy  
Monday through Friday after School till dusk  
Saturday 10 am till dusk  
Sunday, after Church; 12 pm till dusk

Thursday evenings, at CA field.

Note; Flying must be done in accordance with the agreement forged by Vice President Dick Seiwell Specifically, only electric powered airplanes. Beginners using due caution and respecting club rules may fly GWS Slow Stick without instructors.

### Minutes of the Propstoppers Monthly Meeting August 2<sup>nd</sup> at the Christian Academy Field

President Steve Boyajian presiding.

Vice President Dick Seiwell called the meeting to order at 7:00 PM In the absence of the membership chair, a count showed 17 members & 5 spectators.

#### Old Business:

Dick Seiwell spoke about the flight demo held for the Middletown officers. He says we are now awaiting their decision.

#### New Business:

Dick Seiwell proposed putting up a sun shelter to provide shade at the field. This was proposed as a club project and approved. Dick Seiwell will finalize the design around the existing backstop. He will lead the construction with volunteer help from the membership.

The meeting was adjourned at 7:30 p.m. when several of the members enjoyed a session of evening flying.

*Dick Bartkowski*



### 2005 Walt Bryan Memorial Electric Fun Fly

What do you do on a 96 degree, sunny, humid, Pennsylvania Saturday? Have fun flying at the annual Walt Bryan event. Although there were fewer flyers than in prior years and the field uncertainty issues caused us to waive invitations to outside flyers who have added so much to prior years events, we nevertheless had fun.



*Ed Goretzka with his 150% 1939 Joe Eglin Elf, powered by an AXI motor on 10 NiCad cells. The model includes real Trexler inflatable wheels. With extra dihedral on the top wing it now flies fine on rudder and elevator.*

### Propstoppers RC Club of Delaware County, Pennsylvania. Club Officers

President Steve Boyajian  
(610)-399-6709 [shlmmail@yahoo.com](mailto:shlmmail@yahoo.com)

Vice President Dick Seiwell  
(610) 566-2698 [reslawns@verizon.net](mailto:reslawns@verizon.net)

Secretary Richard Bartkowski  
(610) 566-3950 [rbartkowski@comcast.net](mailto:rbartkowski@comcast.net)

Treasurer Jim Barrow  
(610)-430-3856 [jabarrow@comcast.net](mailto:jabarrow@comcast.net)

Membership Chairman Ray Wopatek  
(610) 626-0732 [ravwop@juno.com](mailto:ravwop@juno.com)

Field Marshall Al Tamburro [kaosal@webtv.net](mailto:kaosal@webtv.net)  
(610) 353-0556

Newsletter Editor Dave Harding  
(610)-872-1457 [davejean1@comcast.net](mailto:davejean1@comcast.net)

Webmaster Bob Kuhn  
(610) 361-0999 [kuhnr1606@kuhnfamilv.com](mailto:kuhnr1606@kuhnfamilv.com)

Propstoppers Web Site; [www.propstoppers.org](http://www.propstoppers.org)  
Check the web site for back issues of the newsletter, pictures of club events and the calendar of future events.

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*The usual rail birds at the Walt Bryan Memorial Electric Fun Fly were reasonably comfortable under canopy row.*

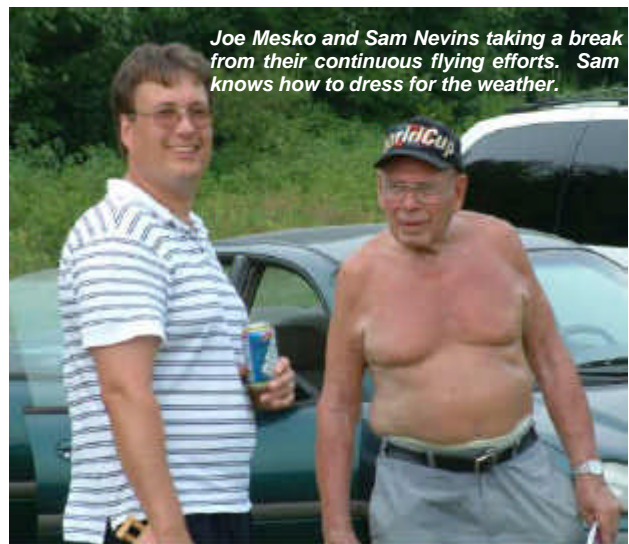
Most of or customary group of Christian Academy electric flyers showed up and flew their usual models, although there were some new ones, or re-treaded ones.

Ed Goretzka brought two of his old timers including his re-vamped 150% Joe Elgin Elf biplane, now with enough dihedral on the top wing too. This model had proved a handful in prior test flights at Moore field. Control was non-existent at low speed; full rudder in either direction produced nothing. However, how with some useful dihedral the model flies quiet well with rudder only. Lots power with an AXI. Good job Ed.

Ed also brought a "bitsa" using wing and tail from his Newtimer ARF, together with a Record Hound fuselage. When Ed presented me with this model for evaluation I found the CG to be way too far aft, so we immediately went to work finding a way to install a heavier battery pack I just happened to have with me. The final step before flight was to plug in the battery, whereupon Ed said "oh no, I only brought it to show". "I haven't finished it yet, there is no speed controller fitted".

Sam Nevins brought out a variety of models including his twin-motor modified Sig from four years ago. This model was very successful from its first flight, on the snow at Dallett field. Sam was disappointed with the low duration, only two and a half minutes so he must have put it away for a rainy day, as they say. Well, the rainy day was here and Sam fitted the same model with a five cell in series LiPoly battery. I asked him if it could handle the current and he said that since they were 2000 mah cells they should. As I was busy flying another model at the time I was not able to follow up on this conversation and shortly thereafter, while I was flying, Sam took off with a roar of twin Astro Cobalts, leading quickly into a series of consecutive loops. Plenty of power here, but when Sam landed he found that the LiPoly cells were incredibly hot and probably ruined.

The lesson here is that there are a number of attributes which describe the properties of batteries and they must **all** suit the application. While LiPoly batteries have incredible energy density; energy per ounce, they have relatively poor capability to handle high currents.



*Joe Mesko and Sam Nevins taking a break from their continuous flying efforts. Sam knows how to dress for the weather.*

It is this latter factor which is paramount in selection of a LiPoly pack for your application. This property is usually expressed in terms of  $n \times C$ , where C is the capacity of the cell in Amp Hours (milliamp hours ? 1000) and n is the multiple. Early cells could only produce about 3C and recent cells about 10C, we are now seeing up to 20C but only for special cells. So if Sam was using 2000 mah cells and they were fairly recent he could only expect to pull  $10 \times 2 = 20$  amps. If his model flew previously for only  $2 \frac{1}{2}$  minutes on, lets say 2400 mah NiCad cells then he was pulling about 60 amps from both motors! No wonder he suffered a meltdown. This problem is overcome with modern LiPoly batteries by using cells in parallel as well as series. Sam should have used a five-series, three-parallel pack to handle the current;  $3 \times 20$  amps = 60 amps, but then it would have been three times the already high price.

Joe Mesko continues to amaze us with his blue foamy aerobat, powered by a Hacker outrunner brushless motor. Joe got the plan of the internet; www.foamy models.com, or something like that.

*Joe Mesko's 3D Foamy with Hacker outrunner brushless is a bit heavier than the plan but that means it flies great in light winds.*



I flew my recently re-vamped Hanger 9 Cub/NE-1, now with a bigger Aveox motor and 24 Kan 3000 mah NiMh cells. It flies great with plenty of power, but it is a bit of a handful to land on the Christian Academy field as it weighs in the region of ten pounds.

*Editor, Dave Harding with his Hanger 9 Cub/NE-1. Now powered by a big Aveox brushless on 24 x 3000 mah NiMh cells it flies great, but is a handful to land in the Christian Academy field.*



Refreshments were provided by the club picnic team who used some of the remaining food from that event. Yes, it was properly stored. Although it was hot, really hot, the food was consumed in the usual rapid fashion.

The big Subaru canopy again did outstanding duty and was probably the biggest factor in making what might have been an untenable furnace into a somewhat pleasant experience. There was a breeze all day and that made the difference.

Later in the day the SAM 76 element among us flew

their SAM Electric Texaco Postal competitive flights. The way this works is any club can assemble a team of three or more competitors who agree to fly their flights on a particular day, of their choosing, between June and September. They then post the results and the organizer scores them all at the end of the period.

SAM 27 in Napa California is the "host" who have established the event and the rules, etc.

The Electric Texaco event is for Old Timer models using no more than an 8 ounce battery and a minimum wing loading of 8 ounces per square foot. The objective is to stay up as long as possible. The motor may be run at any time and any power level; indeed it may be shut off while the model flies in thermals or just descends.

Our team started out as me, Dick Bartkowski and Mick Harris, all of whom have competitive models. Dick was the first to fly and put in a personal best of something over 54 minutes.

Mick was up next but his model was out of trim and he lost it as it approached the far tree line. Scratch one competitor. So I pressed my grandson Tony into flying my old Miss America, a model that has seen better days but flies well, albeit not at the top level. Tony did great but at about 15 minutes the motor stopped and he landed. Afterwards we discovered that there was plenty of energy left in the battery and we presumed that the shut-down was caused by a glitch. Had we known this he could have re-cycled the throttle and continued, but he had enough of the slow stuff.

Next I flew my Champs winning model and with the aid of some thermals I also put in a personal best of 99 minutes and change. I wish I had known the time while flying as I probably could have stretched it to 100 minutes.

Meanwhile we sought another flyer to put in a third good flight and Paul Grothman agreed to fly the Miss America, although floating around, high in the sky is not his kind of flying. Nevertheless he gave it his best and flew a 24 minute flight. Again, in hindsight, had we taken more time in charging this sensitive battery we would have stored enough energy to fly for 45 minutes or more. Nevertheless, our team has set the mark for others to follow. Watch this space for the final scores. Oh yes, the rules require the winning club to run the event next year.

This long endurance flying put the cap on the fun fly as we stayed till after 3:30 at which time we shared the field with a church group running a paint ball competition.

*Mick Harris talks with guest and fellow KRC club member Dave Garbern. Dave is a regular at our electric fun flys and usually brings an interesting foamy to fly.*



**Dave Harding**



*The high-time SAM 76 Electric Texaco Postal Competition flyers with their models. Paul Grothman on the left with Miss America, and you know the other characters.*



*Dave Harding's #3 grandson, "good hands" Tony Harding flying in the Texaco Contest. This is the style of winners but we gave Tony sub-par equipment on this day. He was hoping that he would hold a Litestick pylon race like we did at Moore.*



*Well, yes, it is a bit like watching paint dry, ceiling paint actually. However, this may be the World Champions at work. We will find out at the end of September when the SAM 27 Electric Texaco Postal contest closes. Those wily Californians are waiting for the good thermal weather while we tougher Easterners did it the hard way on the hottest day of the year. Dick Bartkowski times while Paul Grothman and Dave Harding fly.*



## Club Relations with Community Could Help Save Flying Site

by Jay Mealy

As the population and land value rise, all AMA chartered clubs are faced with the possibility of losing the use of their current flying site. Regardless of the type of use arrangement the club may have with the landowner, and even if the club owns the site, there is no guarantee that the site will not disappear.

In some instances, no matter what the club may attempt in order to save its site it ends in disappointment. Usually attempts to salvage a site occur after the fact, and fall into the "too little, too late" category. That is why it is important for a club to begin working diligently at keeping its site from its very beginning—or as soon as possible.

There are many suggestions I share with clubs to accomplish such a challenging task. I will share them in future editions of the AMA INSIDER (this is the AMA's newsletter, it is available on their web site; Ed.), but the one concept that has proven to be worthwhile in saving flying sites is community involvement in a non-modeling activity.

You may be asking "Why?" Well, to be blunt, not everyone perceives model airplanes and their operation as the greatest thing since sliced bread, to use an old cliché. I have been involved in site situations where a non-modeling neighbor has a complaint about a club's presence. He/She then takes that complaint to non-modeling city officials, other neighbors, zoning commissions, etc. When that person succeeds in his or her attempts to shut down the clubs' operations, the club is left wondering what happened.

Almost every club I have contact with describes its community involvement as presenting the benefits of model aviation to senior groups, scouting organizations, having an annual open house, etc.—all aviation activities. We all agree that these events only attract those who have some level of interest in aviation to begin with. This is not to say that those are not good activities, but if that is all the club is doing, it is missing a larger portion of their community's citizens. This is the portion that could pose potential threat to the club's existence. These are the people who have to be shown the benefits the club offers its community in non-modeling ways.

The truth is that it is easier to do away with a club that is just a group of people flying their model airplanes. It is much more difficult to evict a club that has the reputation of supporting its community in other ways.

Here are some ideas about how to support your whole community:

- ? Find the community's favorite charity and contribute to it annually either financially or through volunteer efforts.
- ? Whatever the contribution ends up being, make sure the local newspaper has photos, captions, and stories. This is often done best by the club and then presented to the paper. If you do the reporters' work for them they will usually run the story. The importance of this activity is not based on how much you are giving but that you are giving.
- ? Adopt a section of highway to maintain as part of the nation's Adopt-A-Highway program. This is a good way to get your name posted and in front of a large number of your neighbors who will tend to associate your club with that program.
- ? Become involved at some level with organizations such as the Ronald McDonald House, Meals on Wheels,

hospital volunteer opportunities, etc. Again, make sure, through the club's public relations director, the local media knows about these activities.

The few ideas shared here have been proven successful and I am hopeful that you are already thinking of ways you might accomplish this in your own community. It only takes a little effort on the club's part and they can go a long way in preserving your flying privileges.

## Reversed Controls - A Sure Crash

By Dick Bartkowski

*Editor's Note; This article was originally published in 2001, but given some recent events it seems like it is time to repeat it.*

Already this spring I've seen four crashes caused by reversed controls. The surprising fact is that none of these were picked up with a thorough look into the set up.

According to one of our popular magazines, reversed controls are the most common reason for an unexplained plane crash.

What is the typical scenario? It involves a new plane, a repaired plane, a new transmitter, receiver servo or just something we forgot. This scene is typical. You begin a flight when suddenly the plane turns downward into the ground before you can do anything about. You often hear someone say, I lost it. It happened so quickly, that you can't really tell what caused the problem. You sometimes think it was just a wind gust or receiver glitch. So what is the problem, why does it happen and what can we do about it?

Control reversal, what is it? It is a situation where plane responds in the opposite way to the control you put in the transmitter. You pull up but the plane goes down. You push the stick right but the plane turns left. This is not a problem that shows up in the middle of a flight. It happens right at the beginning when you go to take off or hand launch. The plane starts to turn and immediately crashes into the ground.

The reasons this happens are simple. At the beginning of every flight, we have to make small corrections. The plane makes a small move right, left, up or down. We put in the correcting move through the transmitter, only instead of correcting the problem, the problem gets worse. By reflex, we push harder and in an instant we have a crash. Whenever you see this problem, check for control reversal. If you don't, it will happen again.

So, how do the controls end up backwards? There are several common easy to understand reasons. When we first set up the servos on a new model it is easy to get the control wrong. Sometimes, we are just looking at the model from the wrong direction. This can also happen if we change servos. I was surprised to find that different brands of servo respond in opposite directions to the same input. So, if you replace the servo and are very careful to get the controls in the same direction you can still end up with a backwards control.

In easier way to have controls reversed it is via the transmitter. Our transmitters all have control reversing switches. Normally, these are set correctly when we first set up our model.

Sometimes, we can have a second model on the same transmitter that uses the different reversal pattern. Sometimes, we reverse a channel to use the transmitter on a different model and forget to switch back. These are common situations and account for the four crashes I've seen this year. It is really easy to forget that this transmitter was set up for a different model.

How we avoid this? You have to do a control check at the beginning of every flying session. The last newsletter pointed out the flight check that should be made when you get to the field. The two things that I think are important are a quick range check and a control check. Actually, these are done together. With the antenna down, just walk back from the model and test all the controls: elevator, rudder and aileron. **Look carefully to make sure that they are actually going in the direction you want.** It is really easy to get it wrong. As you move the sticks, say to yourself "left, right, up, down". Watch the controls and make sure they are responding in the correct direction. This can save your plane.

Dick



The key to making this your favorite charger is in the understanding of the menu and how to use it.

The little three button symbols  $\uparrow \downarrow \leftarrow \rightarrow$  indicate the button to push to move up, down or laterally through the menu items. At the top level you simply attach the charger to a 12 volt source then connect your NiCad battery and push charge.

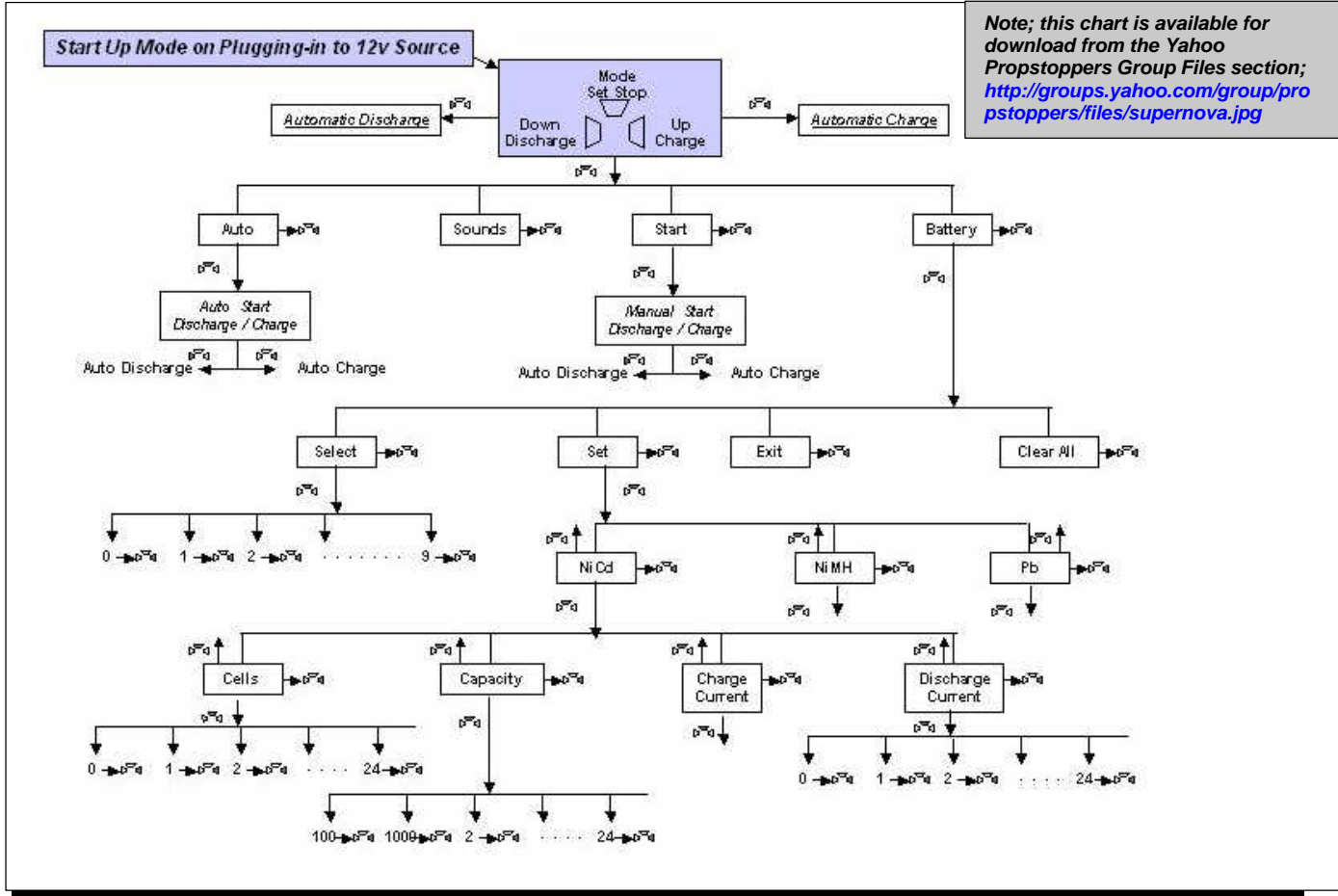
The Supernova is smart enough to figure out just how to charge your battery the fastest way without damaging it. Now, if you don't want it charged that way, or you are using NiMh cells you need to probe deeper into the operation via the menu.

*Continued on page 8*

### The Supernova Charger

A few years ago the first affordable smart battery charger hit the market and was popular for several years. Although it is a very capable unit the instructions were so poor that many people gave up on it, or only used the fully automatic mode. The latter was bad if you use NiMh batteries as the automatic mode could do harm to these cells by overcharging them.

*Note; this chart is available for download from the Yahoo Propstoppers Group Files section; <http://groups.yahoo.com/group/propstoppers/files/supernova.jpg>*



Dave Harding – Editor  
 4948 Jefferson Drive  
 Brookhaven, Pa. 19015  
 610-872-1457

# Propstoppers R.C. M.A.C



*Ed Goretzka with his "Bitsa" at the Walt Bryan Memorial Electric Fun Fly. The model uses the wing and tail from his Newtimer ARF. Ed. constructed a mating fuselage from the Record Hound Old Timer model design. With the really short nose it is a challenge to balance, even with a heavy battery.*

**The Supernova Charger, continued from page 7**

Pushing the Mode, Set, Stop button, the one at the top, moves you into the first menu and the first item within it;



Pushing the Up/Charge button on the right moves you through this menu from Auto, Sound, Start, Battery and back to Auto.



Selecting one of these with the Mode/Set/Stop button moves you either down into each of those menus or in the case of Auto, back to the initial menu. Here we see what you get when you select the Battery menu. Pushing Mode will move you to the Select menu where you select a previously programmed battery.



Moving over to Set allows you to set a new battery in memory. Here we select the battery shown as #7

A 24 cell 3000 NiMh pack, the one I use in my Hanger 9 Cub.



Had we moved to the Set menu we could have set a new battery in memory and established the preferred charge and discharge currents.

Basically, you need to play with your charger having the menu chart in front of you. Try it, you will learn your way around quickly.

**Dave Harding**

**September Regular Meeting Tuesday 6<sup>th</sup>**

**At the Christian Academy Field**

**We will not be at the Marple Newtown**

**Library for this meeting.**

**Join us at 4:30 for flying.**

**Business meeting starts at 7 pm sharp as there is a good deal of business to discuss. See the Agenda on page 1 so you are prepared to get involved in the necessary decisions.**