



# PEAK CHARGE

*Dedicated to the promotion of electric propulsion  
in all types of aeromodeling*

*July, 2006  
Volume xiv, Issue 7*

Monthly Meeting  
Aerospace Museum

Balboa Park

4th Tuesday

7:00 PM, July 25

Electroglide

Saturday

following Meeting

9:30 AM, July 29



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**Mission Statement**

The objective of the Silent Electric Flyers of San Diego is to promote and further the technology of electric powered R/C aeromodeling; encourage competition in Electric Soaring, Pylon Racing, FAI-F5B/D, Scale, Old Timer, and Pattern Electric categories by hosting major Industry-sponsored events and sanctioning "Fun-Fly" types of contests; provide forums for the exchange of technical information, instruction and experience; and participate in demonstrations of electric propulsion in area-wide model aviation events.

**The President's Corner***By Steve Manganelli*

Let's start with some thank you's for our able Raffler Mr. Robert Abel and the vendors that support him in that endeavor. John Weaver of Discount Hobby Warehouse is a generous sponsor contributing the Spectrum radio that fetched so many raffle tickets in the June raffle. Helmut Goestl routinely contributes merchandise at cost (or less) and Steve Belkap, proprietor of Diversity Models and distributor of Neumotors has contributed many Neumotors to our raffle. Thanks Steve, John and Helmut. Steve Neu himself proprietor of Neumotors is known to sneak a specimen out of the shelves in the back when he speaks to a club, such as ours as he did last month. . Thanks for your contributions, Steve.

Next, on to F-5B and the very rapidly approaching World Championships in Romania this coming August 7th. I recently had the privilege of getting inside the head of Thomas Pils in

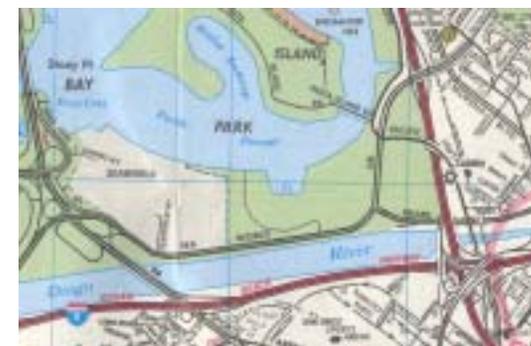
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**Aerospace Museum  
Monthly Meeting site****Field**

Flying Field GPS Coordinates

AMA Charter Club 3078 Latitude 32.7626416 N Longitude 117.2143138 W

web site: <http://sfsd.org/>

Zip Code 92109

helping construct (4) wings of his all molded Verminator design for the U.S. F-5B Team of Pils, Neu and Keesaman. The mold was to be available for just one month; each wing requires (5) operations where either epoxy or paint has to cure. (2) of the 5 steps involved vacuum bagging the mold and between each step was a hand sanding, fitting and trimming operation. A molded Verminator wing is quite a work of art. David Fee, Jeff Keesaman, Steve Neu and myself were the artists. By the time you read this, the Contest will be perhaps a week and a half away. You may or may not see a final practice session before they pack it all up in boxes and head for Romania, Good Luck Gents!

Next, our event of the summer season is Jim Bonnardel's Open House for the Watts Up Flyers computer group. This friendly competition takes place on July 22<sup>nd</sup>. This issue may or may not get to you in time to participate but if so, I highly recommend it.

Can we have an issue without coverage of an AT-6 race? Heck no, or maybe He\_\_ no. My Purgatory racing team had its due...again. With Steve Neu at the controls, red #666 whipped up on poor Frank Gagliardi, the only other unlimited entry turning up at the Santee Weedwackers venue this past July 1<sup>st</sup>. It was certainly hot enough to feel like we were in Hades as it was 81 degrees at 9:00 A.M. and 100 by

the time we had (2) two heat rounds under our belt at about 11:30. The stock class included Frank G, Dave Katagiri, and (3) of the LA contingent. Not sure who the winner was in this class but Frank G. was at least one of the survivors in this demolition derby. Heat number 2 at about 100 degrees did in at least 3 of the 4 contestants that took off. Before I editorialize about speeding up the stock class a bit, I must comment on the "100% return of entry fees in prize money" promised by fast talking CD Frank Gagliardi. By my calculation, unlimited class should have had \$10 in entry fees contributed, thus \$10 in potential prize money, but somehow, the winners share turned out to be measly \$4, only \$1 shy of the Purgatory Team's entry fee...hmmm. You suppose Frank has a future in the gambling business where they have 40% payout of "loosest slots"? The devil made me do it, Frank, sorry.

Now back to speeding up stock class : with the mean air density being pretty low in Santee this past July 1, the stock class with the 8 round cells and especially the "long can" speed 400 is just not a viable racing aircraft. The key to successful racing is for the model to fly well enough to concentrate on guiding it around the course, not trying just to avoid snap rolling into the ground as befell several of the contestants. We believe a small specified weight brushless outrunner and associated brushless speed control

adding maybe 20 to 25% power to the prop as compared with the long can speed 400 would make a huge difference in stock class performance and not increase the cost that much. If you're already involved in stock class, no need to panic yet, all this is still cast firmly in jello and subject to change at the discretion of the contestants. One thing that is to change is the venue of the next race scheduled for 19 August at the Miramar field: it will be at our field instead probably just to beat the heat!

Also want to thank Don Gulihur for taking on the last run of discount race aircraft kits from House of Balsa. Should remind everyone that these discounted kits are to energize the racing class; if you just want to build one to sport fly they are widely available through normal retail channels for just few \$ more.

Finally, last month I planted the seeds of succession and discussed transition from "techno-geek society" to "people club". It was suggested I outline the duties of the President and a few other officers so you could check yourself for a fit. Lets start at the top with President. The President is the club spokesperson, the mouthpiece for matters external to the club. You get to conduct the monthly members meeting; lead the monthly Board of Directors Meeting (or cancel it if you feel it is unnecessary), write a monthly message for Peak Charge

(needn't be as verbose as mine if you<sup>3</sup> don't want to) and the rest you delegate! Since you're the focal point for the club, you'll get some Emails and phonecalls from nice folks that find us from surfing the net. Don't worry, it's not bad stuff, it's usually Boy Scout groups, School groups etc. wanting demos or visits from us to their organizations or other Modeler groups wanting to know some of our organizational secrets! My intention is to pass on [SEFSDPRES@yahoo.com](mailto:SEFSDPRES@yahoo.com) to the next President for continuity's sake. Obviously if you're employed and you travel 2 weeks out of the Month, this might not be the job for you.

Board meetings are currently held on the first Tuesday of the Month and of course the members meeting on the 4<sup>th</sup> Tuesday. Our bylaws limit any individual from serving more than 2 consecutive terms as President and the outgoing President serves as Chairman of the Board of Directors for a year after his Presidency. So there you go. If perchance you are out of town on a meeting night, you delegate the conduct of that to the Vice President.

The Vice President coordinates all Club social events, lines up the speakers for the Membership Meetings, and plans the Holiday Party. Doug Rubin has done a fine job as VP over the past year and a half, but Doug was somewhat reluctant to serve again this year due to his other commitments

and I'm sure is more than willing to be deposed. There is not otherwise a term limit on any job except President. Flying events are for the most part planned by individuals who make their proposals at the Board of Directors Meetings.

The Secretary attends Membership meetings and Board of Directors Meetings in order to take minutes of same and

submit to Peak Charge Editor in time for publication. That simple. You probably need a computer and Internet in order to transmit copy, but that's about it. Again, you can't travel 2 weeks out of every month to do this job either. There are a couple other cake jobs I'll talk about next month. So for now, be safe, use sunscreen at the field and stay hydrated.

### San Diego Electroglide -- June 1 July 2006

On what was most certainly the most beautiful day of this summer, we had a well attended Club contest -- 10 contestants in the regular Electroglide and 4 in the new Standard Class. The sky was clear of clouds, but with some of the pilots using more powerful motors that the speed 400, the 60 second motor run got them so high that they were lost from sight. One ended up in Mission Bay! My sympathy is with the pilot because earlier in the week when I was test flying my new Lil Bird 2m, I lost sight of it on the face of a puffy cumulus. It ended up crashed in the pines east of the Sea World parking lot. I spent the whole week gluing it back together!

Notice that we are not adhering to all the specific rules for both classes -- note the asterisks! We do want to gather more pilots for this kind of a fun Club contest, so come on out and fly what you've got!

The July Electroglides will be Saturday, July 29th -- first toss, 9:30

#### The June San Diego Electroglide

Pilot	Model	Toss 1	Toss 2	Toss 3	Total
*Robert Stinson	Dreamline F5J	62	82	70	216
Don Wemple	Lil Bird 2m	44	59	47	150
*Fred Daugherty	Ascent	35	21	37	103
*Larry Fitzgerald	Ascent II	64	34	0	98
Bob Anson	Ascent	26	52	14	92
*Zeke Mazur	Allegro-Lite	0	31	15	46
Lucas Worthen	Easy-Glider	0	39	36	75
*George Sullivan	Unknown Flyer	23	30	18	71

\* Indicates that the ship is not in compliance with the rules. e.g., a more powerful motor than the speed 400 Mabuchi, or Lipo batteries, or both.

#### The June Standard Class Electroglide

Pilot	Toss 1	Toss 2	Toss 3	Total
*George Sullivan	49	45	57	151
Lucas Worthen	45	41	32	118
*Jim Shadwick	24	24	25	73
Don Wemple	55	0	0	55

\* Indicates that the Multiplex EasyGlider is not in compliance with the rules. eg. a more powerful motor than the speed 400 Mabuchi, or Lipo batteries, or both.

**The July AT-6 Race** was not a good yardstick for measuring the overall interest in the program. (Read the President's message). With a little "tweaking" of the rules as they exist we can have a fun event. The August 19<sup>th</sup> race will be held at the SEFSD field because it offers the best layout, the best location and the best support by a great bunch of enthusiasts.

We, the AT-6 drivers have been invited to put on some demo' races at the Palomar Electric Scale event on Aug 5<sup>th</sup> and 6<sup>th</sup>. I hope that and the race on the 19<sup>th</sup> will generate more interest. We will see. *Frank*

[www.billhempel.com/video/whknife.wmv](http://www.billhempel.com/video/whknife.wmv)



### Tricky Decals

*Jon Joyce, editor. by Dawson Gillaspay*  
Lewes RC Club, Lewes DE

Have you ever wanted to place a graphic or numbers on your model but find cutting them out of MonoKote is just too much effort? Try tracing paper available at craft or office supply stores. Here's how to do it with a computer and scanner. Scan your artwork and save it. Print it on thin tracing paper.

Cut it out and stick it on your plane by spraying the back of the tracing with adhesive. If you like to fly in the rain, you can waterproof the finished product by spraying it with clear spray paint before you place it on your plane.

Unlike a commercial decal with a totally clear background, the tracing paper will be barely visible, but it's not that noticeable.

# SEFSD GENERAL MEETING MINUTES

Date: Tuesday, June 27, 2006, by: *David Fee*



## Introduction-

Steve Manganelli brought the meeting to order at 7:05 PM. Attendance was a little lighter this month, so perhaps people are enjoying the longer evenings down at the flying field.

## Announcements and Club Business-

It was announced that former club members Ken Trainor and Rex Morton had passed away recently.

## Competitions/Events-

The recent Flying Cirkus event at the Chula Vista field was a "smashing success." There were a total of 9 crashes, 6 of which being on Saturday. Not bad, considering the crazy maneuvers being flown.

The next AT-6 races are Saturday at the Weedwackers field. Start time is 9AM. Twelve new kits have arrived from HOB, so contact Frank Gagliardi ASAP to collect yours. At this race, the course will be extended to 400' from 350', and the \$5 entry fee will go towards a prize.

The Watt-Flyer Fly-In will be held at the Mission Bay field on July 22. Contact Jim Bonnardell for more information.

As always, Electroglide will be held the Saturday following the meeting.

Don't forget the San Diego County Association of Model Clubs swap meet July 8th, 0700 \$9/table for sellers. No charge for buyers. BYOT (bring your own table). Same location... Vet hospital parking lot.

## Safety, Safety, Safety...

Please, make sure your models are in safe operating condition. While flying, keep all models away from the foot path and Sea World Drive.



## Show & Tell-

Pedro brought his new Extra 300 with HS-65 servos (available in karbonite and metal gears)

And an FMA receiver. He used a NeuMotors 1905 (1902 would be better) ORK motor, Castle 45A ESC, and a 3S 2100 lipoly battery. It has a 35oz AUW (would be less with a smaller ORK). With this setup, he easily gets 9 minute flights. The ARF is from Extreme Flight RC and retails for about \$159.

## Program-

Our very own Steve Neu gave a brief presentation on brushless motor technology, then entertained questions



from the floor. He highlighted his new ORK 19-series 24-slot, 8-pole motors. These are high torque motors intended for direct drive in planes or geared in helicopters. Steve's motors have Si-steel laminations which are stamped in India, while the stator stacking and winding is done in Mexico. The neodymium magnets are made in China but motor design, development, assembly and testing (and repair) are all done in Rancho Bernardo, CA.

## Raffle-

The raffle sported a heap of goodies including the following: Spektrum DX-6 radio from Discount Hobbies, a jigsaw, calipers, emery boards, a brushless motor from Steve Neu and a set of 28" floats.

The meeting was adjourned at 8:20PM.

## The July Program

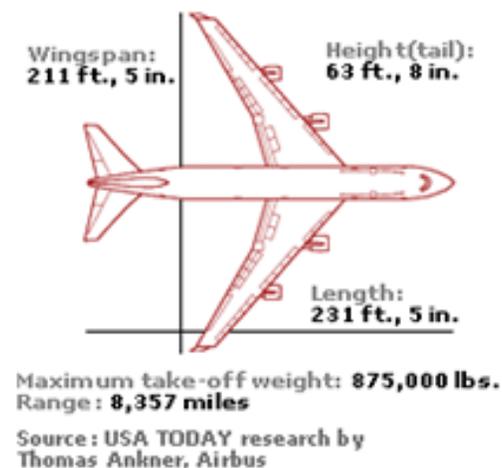
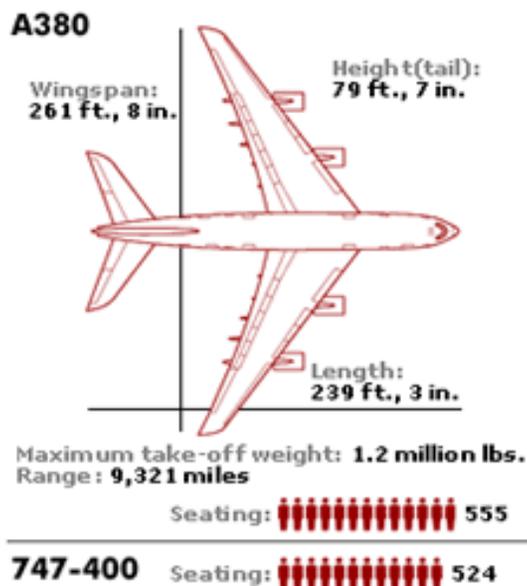
*by Steve Manganelli*

Steve Manganelli will give a presentation on the use of analagous parts on full scale aircraft (i.e. servos, control horns, "wing bolts" etc.)

## The Raffle

by Robert Abel

A great big thanks to all those of you who bought tickets at the last meeting in June. We broke even! The July raffle will be full of surprises, simply because I don't know what we will have as of now. One of the prizes will be an inferred thermometer.



## An Editorial

by Bill Fee

There's an old axiom "if it ain't broke, don't fix it". On the other hand, every once in a while it just might be time for a face lift, something to catch someone's attention.

Did you even notice that this month's issue is printed horizontally, instead of vertical? There's more than one good reason for at least exploring the change. If your reaction is too negative (I am accustomed to stony silence) I'll revert to my old format.

First, airplane pictures are normally horizontal, as are groups of playmates (flying friends that is). Second, shorter columns are easier to read for those with a short attention span. Typically, I hope to project a better visual impact (ie: this month's cover).

Change of subject: I get at least one call a week from someone who has crashed a plane and wants to know if we have a flight instructor in the club. I always pass on Pedro's phone number and e-mail address, but I never get any feedback. Of course, the information is listed under committees in Peak Charge, and on our web site, but perhaps we could have a small notice on the pin board or something.

*"The flying-proficiency committee established guidelines and standards for instructor pilots who were training novice pilots. Member identification is necessary in larger clubs, so the Rockwall Sport Flyers began to issue photo ID cards. In addition to the individual's name, the card shows if he or she is an instructor, a qualified pilot, or a student." ...copied from the acting Executive Director's message in the July issue of Model Aviation.*

We wouldn't want to offend anybody, but on the job (hobby that is) training could be kind of a safety measure. As for picture IDs; I volunteered early on, but I can't even get people to wear their field ID badges when they aren't on the pin board.

## YOU DO BUILD METRIC, DON'T YOU?

With the proliferation of ARF's out there, most come from a "METRIC" country. So my question is do you build it with the metric measurements or do you try to do it the hard way and convert everything to US Standard inches? Building in metric is easy and very accurate.

"I don't know how to build in metric you are saying". Hogwash, you've been using the metric system since you first went to school when you were a child, you just don't realize it! So a premise on metric is in order: Thus, now think on this: TEN Pennies make a Dime, = 1/10 of a Dollar: TEN DIMES make a Dollar. 1/5 = 5 pennies or 1/20 th of a dollar. The metric system is based on units of measurements of "10" So 1 centimeter = 1/10 of the whole. 10 of them little lines equal 1 centimeter, 10 centimeters = 1. All based on groups of 10.

You don't have to convert anything, just read the scale / ruler. So 10 centimeters is a unit of 1 or the whole. 10 centimeters = 1 Dollar or 10 dimes which is the whole, which = 1. Now before all the math whizzes out there start in on me, this is a simplification, not a math lecture. I just wanted to show you that you really do know how to use the metric system. 1 = 1.00, 1/2 = .500, 1/4 = .250, 1/8 = .125. , simple math add / subtract to get the decimal. You use these numbers to get an answer on a calculator because it is based on,,,,,you guessed it "10", the metric system. Point is, don't try to convert into inches the measurements in the instruction manual, simply use the metric ruler and measure it directly, it will be more accurate and less stressful. Uhaaaaaa, You do know how to count to 10, don't you.....Just joshing you. Safe Landings, *Robert.*

## It's Up to Us

*by Dave Brown*, AMA President

**By now most of you have seen the press articles about the Federal Aviation Administration (FAA) stepping in and stopping the California police units from using this new Mini Unmanned Aerial Vehicle (UAV).** Based upon the E-mail I have received, there seems to be much concern among modelers that this will result in our “right” to fly RC models being taken away. Right now, there is no indication that the FAA wants to curtail our “normal” RC model-airplane activity.

That noted, when one of these situations comes up where a device that looks like a model airplane is used in a “commercial” manner or activity, it brings attention to the fine line we must walk between our “normal” RC modeling activity and the type of activity that the government has an interest in controlling.

While the FAA’s concern right now is commercial use of unmanned aircraft, other government agencies have an interest in activities that are “unusual” in the sense that they do not represent the mainstream sport/hobby of model aviation. Each of these situations which brings attention to these “unique” uses for RC devices seems to bring a new twist to the puzzle. In the latest instance, the American Civil Liberties Union (ACLU) has questioned the use of these drones by the

police to invade people’s privacy. While these devices would have no more capability than a normal police helicopter, the assertion adds another complexity to the issue. I suspect most of us have heard the old fables about the RC model equipped with a camera and flown over a nudist colony. It was a great tale and conjured up much imagination, but in today’s world, such fables would have a negative effect on our “right” to continue enjoying our hobby. It’s a different world than it was 40 years ago.

Technology has made many more things possible, and at the same time, society has become more sensitive to the issues that those capabilities bring to the forefront. The survival of our hobby will depend on our ability to walk the fine line between reason and capability in an ever-changing world.

The FAA’s concern is the commercial application of this technology, but there are governmental and nongovernmental agencies with other areas of concern. Obviously, the homeland security people have their focus, as does the US Customs Service, the police, the military, and now the ACLU. I’m sure there are many other agencies out there with concerns. Even the Environmental Protection Agency (EPA) and the US Fish & Wildlife Service have voiced some interest. It’s a crazy world out there,

and we need to be smart in how we conduct our activities in order to avoid the pitfalls that could put our sport/hobby in jeopardy.

I do not believe that the FAA has any intention to take over direct regulation of model airplane flying in this country, but they do have a job to do and they will do it. Part of that task seems to be regulating the commercial use of unmanned aircraft—including those that bear an uncanny resemblance to model airplanes.

How can we help ourselves avoid becoming involved in the FAA’s regulatory net? It’s actually fairly simple. We need to steer clear of doing anything that has the appearance of being a commercial activity. I realize that some see using a model airplane to tow advertising banners as a neat opportunity to support their hobby, but that activity could put our sport/hobby in jeopardy. Equipping a model airplane with a camera, and taking aerial photographs may be fun, and may not be a problem if it doesn’t raise any privacy-invasion issues, but the temptation to sell photographs made in this manner could bring about unwanted attention and possible regulation.

We need to be smart and avoid any activity which could bring about unwanted questions. If we do so, we

should have no problem, and if we do become a challenged activity, we will have a track record to use as evidence in the ensuing battle(s) we might need to wage. On the other hand, we can be foolish and invite those challenges by allowing those unusual activities to pick a fight in which we might not prevail since it will involve an adversary that is much more powerful than ourselves. It’s up to us. Do we really want to pick that fight?

**Sometimes the best battle you ever waged was the one you avoided.**

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### Hair Spray as Cheap Lacquer

*by David Miller*

Modelers are always on the lookout for mainstream products with modeling applications. Buy a can of Aquanet hair spray. There’s nothing like it for preparing a balsa surface for Mylar, tissue, or paint. Aquanet is a high-grade lacquer with some smellum mixed in. The big-hair crowd puts tough demands on the product, so the good people at Aquanet pack in a ton of propellant to lay it on thick for just the right effect. The scent dissipates in short order, and you’re left with a fine coat of sludge that both fills pores like spackle and raises errant fuzz like Viagra. A few quick strokes of 600 wet/dry sand paper and you’re done. For really smooth painted finishes, like Design Master and Krylon, repeat the process as required, using multiple coats and higher grades of W/D. But not to worry, Aquanet is cheap!

