

January, 2007
Volume 33, Issue 1



PEAK CHARGE

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

Monthly Meeting
Aerospace Museum
Balboa Park
4th Tuesday
7:00 PM, January 23
Electroglide
Saturday
following Meeting
9:30 AM, January 27



SEFSD IMAC Clinic No. 1
12-09-06



PROBATION MEMBERS LIST
1. JACOB & EMERY BOND...
2. TONY...
3. ...
4. ...
5. ...
6. ...
7. ...
8. ...
9. ...
10. ...



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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 COVER

The cover photo is Jack Hix's Wattage Pitts Special. This 29" wing-span bipe was modified to accept an AXI 2808/20 outrunner turning an APC 8X4 prop and TruTurn spinner, two aileron servos, larger and lighter wheels and an articulated pilot's head controlled by the rudder servo. In stock form and cowl removed to accept the modified 3s1p 2000mAh Li-carbon reinforced elastic cord. Rigging is a chrome covered Scale chin scoop and dummy exhaust pipes were added and the color scheme was altered with black replacing the blue trim with white stars. black pinstripes were added bordering all the red trim



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://sefsd.org/>

Zip Code 92109

SEFSD PRECISION AEROBATICS

by Tim Attaway

Let's review briefly some of the themes we have attempted to cover so far. You probably are doing this because you enjoy a challenge. You are thinking about flying with more purpose in mind. You have obtained a straight flying aircraft to aid you in your quest. You are willing to expend a moderate amount of money and time to pursue precision aerobatics. You have devoted some effort to trimming your aircraft and it is flying reasonably straight and you are wondering what is next.

The team of Steve Nelson, Pedro Brantuas, Ray Fulks, Steve Dente and me have checked out the basics in your aircraft set-up. We assume that the aircraft is balanced and thrust lines adjusted and it is reasonably ready for the next step. Will your aircraft benefit from more advanced adjustments and radio settings that will help it roll more axially and keep it from roll coupling? We will discuss exponential

and how it can help to calm your aircraft down so that it is not so jumpy when you move the sticks. The next clinic happens on January 6th at around 11 AM (later because I am conducting a general meeting of the CVMRCC at 10 AM and so I will have to start a little later). The Team will be watching you fly THE SEQUENCE and making suggestions to help you on the SEQUENCE and on the following:

1. Axial roll quality.....(you may need differential)
2. Roll coupling.....(you may need a little mix in your radio)
3. Exploring Exponential (most likely you will want this to calm your aircraft)
4. Bonus Discussion on how to get the most out of your practice flights.

The TENTATIVE schedule for The SEFSD PRECISION AEROBATICS SERIES

Jan 6	Clinic # 2
Feb 17	SEFSD
Basic Contest # 1	
March 10	SEFSD
Basic Contest # 2	
April 14	SEFSD
Basic and Sportsman Contest # 3	
May 12	SEFSD Contest # 4
June 9 th	SEFSD Contest # 5
July 28 th	SEFSD
Contest # 6	
Aug 25 th	SEFSD
Contest # 7	
Sept 15 th	SEFSD
Contest # 8	
November 10 th	SEFSD
Contest # 9	

See you on Saturday we hope and thanks for your interest!!!

SEFSD IMAC Clinic No. 1

12-09-06

Back Cover Pictures

Goals

1. Procure a straight flying aircraft
2. Tune aircraft to maximize its potential
3. Demonstrate the skills to be developed for precision aerobatics

1. Craig checking aeleron deflection
- 2.
3. Pedro doing SPORTSMAN demonstration
4. Pedro calling for Ray Fulk's live demo. basic IMAC
5. Pedro talking with Paul
6. Planes lined up for testing
7. Pres. Steve Manganelli checking aeleron deflection
8. Ray checking CG on Jim's foamy
9. Ray and Craig's 330s
10. Ray's lie demo basic IMAC, Pedro calling
11. Ray Isands Mis Ellie
12. SEFSD IUMAC Clinic No. 1 (see print out on the left)

Action Plan

1. Brief introduction of instructors
2. Brief intro into precision flying
3. Break out to smaller groups to inspect planes
4. Initial recommendations for improvement
5. Center of gravity and surface deflection
6. Test fly aircraft on several lines
7. Assessmednt meeting: questions and answers
8. Basic sequence flown - Ray Fulks
9. Sportsman sequence flown - Pedro Brantuas
10. Final questions/Answers

Priceless Fun

by Paul Billings

For only a penny and a few minute of your time, you can do more for the future of our hobby, indeed the AMA itself, than any other effort I am aware of! A lifelong fascination with flying and things that fly is easily developed in the very young, given the proper exposure. This project is dedicated to the young—from 6 to 66 and on. Everyone gets caught up in the fun, flying this simplest of all flying machines.

What you'll need:

- the lid from a styrofoam egg carton that holds one dozen eggs.
- wing template (available on the AMA Education Department Web site at www.buildandfly.com/manager/pricepattern.pdf).
- scissors or razor knife
- pen
- penny
- white glue

Cut out the wing pattern including the hole in the center. Place the wing pattern inside the foam lid with the hole fitting over the center hump or “cargo bay.”

Trace the outline with a ball-point pen then cut along the tracing with a sharp knife or scissors. The wingtips will curve with the edges of the lid. Press a penny down into the forward part of the “cargo bay” and secure with a drop of white glue on either side and wait for the glue to dry.

That's it—grab the glider by the cargo bay and give it a good overhand toss. Adjusting the speed and angle of the toss will allow for different maneuvers. Have fun!

Plans for other styrofoam gliders can be found on AMA's Education Web site at www.buildandfly.com.



I just finished this TigerCat F7F-3 for Steve Neu. It's a fiberglass fuse and built-up wing and tail with Spring-Air retracts added plus the usual panel-lines, nomenclature etc.... Weight w/o motors or batteries is 3.4 lbs. Finish is paint and Monokote. Frank

The President's Corner

By David Fee



Happy new year, everyone! I think we would all agree that 2006 was a very good year. As we enter 2007, I'd like to take a

moment to thank everyone who helped out throughout the year. It takes the dedication and hard work of a large number of people to make SEFSD possible, and each member has the opportunity to participate and be part of making things happen. I would like to encourage everyone to think about ways in which you might like to get involved. Many of you will recognize me as the guy who writes the meeting minutes, but the New Year brings many changes. I look forward to serving the club in this new capacity, and I welcome any and all feedback along the way. I'm not the only person who got a new job this year. Steve Neu is our new Vice President, Jeff Keesaman is the new Secretary, Doug Rubin is our new Safety officer and Stelio Jackson is the newest at-large member of the Board of Directors. Steve has been our Safety officer for many years,

Jeff has been very active behind the scenes, Doug has served dutifully as our VP and Stelio continues to be the club Webmaster. Please join me in thanking these gentlemen for their service and support for SEFSD! If you need to reach any of the club officers, board members, or committee members, our contact information will be on the inside front cover of each newsletter. We are here to help, so don't hesitate to get in touch with us.

The first big news for this year is that MWE is a go! After much discussion and a false start or two, we have firm dates for this year's MWE Spring Fling. The event will be held on May 18, 19 and 20. As I mentioned earlier, it takes hard work to make things happen and had it not been for the energy and determination of Stelio Jackson, MWE would have been put on ice. We all owe him a debt of gratitude but what he could really use most is our support. Please contact him if you'd like to help but, no matter what, please come out and fly!

In other exciting news, Tim Attaway and Steve Dente have been organizing a series of Precision Aerobatics clinics and competitions. There are 8 scheduled contests, the first of which is scheduled for February 10th. I'd

really like to encourage anyone with a suitable aerobatic model to participate, because this is a really great opportunity to hone your flying skills and learn more about trimming for precision flying. Let's be honest, we could all use a little help in the precision department!

On the City front, Ray Fulks was instrumental in working with the Parks and Recreation department to obtain a new Right of Entry Permit, and at a remarkably favorable rate. Ray has also been an invaluable help time and time again in obtaining the required permits for our MWE events. Ray has also been keeping us on the radar screen with the Park Planning and Development people, with the goal of SEFSD (hopefully) winning a spot on the South Shores Master Plan. Thank you Ray! January is a time for resolutions, and mine this year is to spend more time at the flying field. I hope to see more of you around, and I really encourage all of you to get involved in one of the fun events that we have going. There's more than F5B and F5D; we've got Electroglide every month, S400 racing, AT-6 racing, and anything else we can dream up! So, get out there and “join the club.” It's a lot of fun!

The AMA Convention

by Bill Fee

As I recall, the last time I ventured up to Ontario to take in the “big show” it was raining cats and dogs. Maybe it was the year before that the builders of the model Spruce Goose and the Howard Hughes racer for the movie “The Aviator” put on a show and tell and question and answer session

about the movie, following which we took in the movie at a local (Ontario) theatre.

This year Jack His and I went up together, a little late as I recall to miss the early crowd at the ticket window. It seemed like everyone had the same

idea. The column of enthusiasts formed way out at the street, and parking was only available in the hinterlands.

Fortunately, the sun was shining, but it was cold (for southern California) and there was a chilly breeze. Several

(it seemed like) hours later, we made it into the big show.

The models on display reminded us that there are still craftsmen out there who build from scratch with pride and precision.

There were no programs presented that were of interest to us, but we were constantly running into old friends and familiar faces, and a myriad of yesterday's models that took us back to our youth.

The Neu Motor show was a center of attention. Helmut and co.

were omnipresent. The Black Sheep Squadron was as usual training



tomorrow's young pilots. Tony's brigade had everything on display

from the simplest hand launch gliders and Delta darts to a showcase of palm sized electric RC models (see pictures elsewhere in this issue).

Admission was more than the \$5.00 I remember, and there were no free passes given out at the hobby stores (that I know of), Coffee was priced like Starbucks, but I'm showing my age.

The enthusiasm of the multitudes impressed me. The show will go on. But the crowds seem to be

getting younger every year.

General Meeting Minutes

Tuesday, November 28th, 2006

by David Fee

Introduction-

Steve Manganelli and Doug Rubin were both out of town this month, so Chuck Grim brought the November meeting to order at precisely 7:05 PM. There were quite a few people in attendance this month and we had several guests with us. Andy Reynolds was a first time visitor. Tim Chapman, who has been a modeler for many years, joined the club in October. We also had guest speaker Peter Berg, Peter's son, and Gary Nealy who was here to hear Peter speak. It was a full house, for sure!

Announcements and Club Business-

Chuck announced that the Board of Directors had voted to raise the annual dues to \$45 in preparation for the anticipated increase in permit fees.

With an uncontested slate of new officers and board members, the membership approved the new officers. The position of President, however, was not filled. The BOD met on Nov. 14th and decided that the MWE-Spring Fling will go forward on May 18-20, 2007. There had been word from the City that our planned dates were already taken by another event, but Ray Fulks was contacted today and confirmed that the dates are, in fact, open. The show will go on.

Competitions/Events-

The final Electric T-6 races of 2006 were held at the Miramar flying field on Saturday, November 18th. Several pilots suffered technical difficulties, but our own Steve Neu won the unlimited event, securing his position as the undefeated champion. Like a bat outta you-know-where! As always, the Electroglide event will

be held the Saturday following the meeting. First toss is at 9:30AM.

Raffle-

This month the raffle was full of goodies including servos, motors, lots of cool modeling tools, kits and more. Have you been buying tickets? You can't win if you don't play the game!

Program-

Our program this month was one in a million. Peter Berg, who began building RC gear in Holland in 1960, was here to give a history lesson in RC for our models. He brought with him working samples of radio gear from the 60s and explained the development that went on to bring us to where we are today. Peter knew and worked with many of the pioneers, so this was quite a show.

San Diego Electroglide -- November 2 December 2006

The winners this month won big! The losers really lost!! All but three of us had our problems. I think that I must take some kind of prize by being the only one who totally demolished his plane in the Event. It went completely out of control and crashed on the runway -- fortunately not hitting anyone or any ones property. But again to praise the Hacker 20-20L, this sturdy little motor survived a power-on vertical crash to run and fly another day!

But really, cheers to the top three! Top man, Bob Stinson, truly showed the field how to stay up! He attributed his success to the deeply under cambered airfoil on his Dreamline. However, his three landings (10, 30, and 20 points) did help!! Bob Anson and Fred Daugherty also got two great landings in the scoring column as well. For the rest of us, let's rebuild, practice, and challenge the top three flyers next month.

The December Electroglide (s) will be Saturday, December 30th with the first toss at 9:30.

PS Fred Daugherty was the only person with a flyable Standard Class entry, so he is the winner by default. Hopefully we can have that class flying in December.

Don Wemple

San Diego Electroglide

Pilot	Model/Motor/batt.	Toss 1	Toss 2	Toss 3	Total
Bob Stinson	Dreamline F5J/400T brushless/800 ma Lipo	77	104	80	261
Bob Anson	Ascent II/400 XT/2cLipo	63	55	68	186
Fred Daugherty	Ascent/400T brushless/2cLipo	46	50	31	127
Don Wemple	Sky Sergio/20-20L/7cNiMh	50	0	0	50
Dick Prentice	Pulsar 2000/sp400/3c Lipo	44	0	0	44
Roger Pedersen	Sky Sergio/sp400/8cNiMh	12	22	9	43
Zeke Mazur	Allegro Lite/outrunner/9cNiMh	43	0	0	43
Larry Fitzgerald	Ascent II/E-400/2cLipo	0	30	0	30

San Diego Electroglide -- December 29 December 2006

Little lift, but really calm air, with the result that landings were particularly excellent -- the winner, Bob Anson, had 3 consecutive 20 pointers!, and Pedro, a 30, a 10 and a 20!

I learned another lesson....."Don't use tiny, super lightweight servos!". In my second flight, the elevator servo stripped its gears. Luckily, I was able to land the Bird safely. Now I have installed HS-55's -- heavier, but reliable!!

It's gratifying to see ten electrogliders take the field! Let the group grow!

The January Electroglide (s) will be Saturday, January 27th with the first toss at 9:30. If you have been in the background, now's the time to come out front and join us!

PS Fred Daugherty and I were the only ones with Standard Class entries and we duked it out to a draw. Hopefully we can have more in that class flying in January.

Don Wemple

San Diego Electroglide

Pilot	Model/Motor/batt.	Toss 1	Toss 2	Toss 3	Total
Bob Anson	Ascent II 400 XT w 2cLipo	82	72	77	231
Pedro Brantuas	Pulsar -- no data	75	25	64	154
Don Wemple	Lil Bird 2M 20/20L w 2cLipo	80	58	0	138
Roger Pedersen	Sky Sergio sp400 w 7cNiMh	47	42	25	124
Larry Fitzgerald	Ascent II E-400 w 3cLipo	49	33	40	122
Fred Daugherty	Ascent 400T brushless w 2cLipo	37	23	47	107
Stelio Jackson	E-Flight Ascent 28mm brushless 7 c NiMH	41	26	36	103
Zeke Mazur	Allegro Lite/outrunner/9cNiMh	0	38	46	84

Hi-Sky R/C Flyer, Midland, Texas Painting Foam Models

From the "Robbins Nest" by Dennis Robbins

Many people are building with foam these days, and Blucore fanfold and Depron seem to be the material of choice. One drawback to scratch building with foam is the color choices. You get to choose from either blue (Blucore) or white or gray (Depron).

Most of us like a more visible color scheme, and painting is the only way to obtain the desired look. I paint most of my aircraft, and I'd like to share my simple techniques for painting foam.

The first step is to make a paper template of the design you want. I then place this on the airplane in the desired location, and mark the corners of the template. I use some type of colored permanent marker which hopefully matches the paint color being used, and connect the dots, more or less. This gives me a border, and paint can be applied between the lines.

The paint I use is the cheap, acrylic, water-based paint found at your local craft store. These come in small plastic bottles and only cost roughly \$.75 to \$1.00. You will be amazed at the color selection.

All you need to get started is a small container to squeeze a small amount of paint into, and several sizes of inexpensive paint brushes. I also keep some craft sticks on hand for stirring the paint if needed.

To thin the paint, add water and stir away! The last thing you need to know is be patient! Let the paint dry completely and you will be rewarded with a model everyone will be envious of.

GPS and Albert Einstein

by Russell Knetzger

Some aeromodelers own hand-held GPS meters (global positioning systems) for their boats or full-scale airplanes. In remote areas they may even use them in their cars or for remote-area backpacking. Did you know the GPS technology relies upon the theories of Albert Einstein, the great physicist of the 1900s?

Last year, 2005, was the 100th anniversary of the publication written by Albert Einstein at age 26, of four astonishing technical papers, all in one miracle year, any one of which would have catapulted him to the stardom in physics that he achieved and still holds. Prior to Einstein, Sir Isaac Newton was the most revered physicist.

In his first 1905 paper, Einstein theorized why the “photo-electric effect” occurs when light hits metal—basically that photons of light are knocking surface metal electrons out of their orbits, causing an electrical current to flow. His second paper went further into the makeup of the atom. His third paper was the whop-

per: the contention in his theory of “special relativity” that produced the fourth dimension—time—along with length, width, height, and that nothing can move faster than the speed of light at 186,282 miles per second.

Einstein’s fourth paper was almost as big a whopper: the famous equation $E=mc^2$, that energy and mass are interchangeable, where e-energy released is m-mass times c-the speed of light, squared. The formula later led to the atomic bomb.

Ten years went by and in 1915 he produced his fifth major paper: “General Theory of Relativity.” Both the general and special theories hold that time is not a constant.

To celebrate these remarkable insights, the 2006 edition of the World Book Encyclopedia supplement contains this quote by Alfred J. Smuskiewicz, a freelance writer in science and medicine:

“Almost 100 years later [of the 1905 special relativity and the 1915

general relativity theories], scientists used both theories to construct the global positioning system (GPS). This worldwide network of satellites transmits radio signals to receivers around the globe. By measuring the transit times for these signals—which travel at the speed of light—GPS allows people to identify their precise position anywhere on earth.

However, due to the effects of relativity, the clocks on the satellites tick at a different rate than clocks in the receivers. Einstein’s special theory of relativity showed that moving clocks—such as those on satellites—tick at a slower rate than clocks at rest. His general theory of relativity argued that clocks closer to a massive object—like the receivers on earth—tick at a slower rate than clocks farther away.

“Because the GPS computers need extremely accurate transit times to measure precise distances, engineers designed the GPS satellites to compensate both for special and general relativity.”

Jack Hawks came by the field and donated 4 wind socks to the club.



Silent Electric Flyers of San Diego

Peak Charge



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MWE SPRING FLING 2007

Fellow club members:



The dates are fast approaching for this year's MWE Spring Fling. After several aborted tries and run-ins with the city, we have managed to secure

May 18th - 20th for our annual event. A big thanks goes to Ray Fulks for his tireless efforts, patience, and finesse in dealing with the Permits Department.

Many of you have enjoyed the spectacle known as Mid Winter Electrics and, more recently, as MWE Spring Fling. People from around the world (yes, we have had international pilots grace us with their presence and skills) attend this electric flying showcase.

Great weather, lots of airplanes, plenty of flying time, out of this world demonstrations, vendors with new products at great show prices, and scrumptious catering all converge on this date in our humble airstrip for a fun filled weekend.

Alas, however, all of this does not happen magically.

A core group of dedicated club members put a lot of effort and time in the planning stages, and in the end the call goes out for volunteers to man (or woman) the battle stations. There are numerous jobs to be filled, all necessary to make the MWE Spring Fling 2007 a success. In the coming months there will be sign up sheets passed

around, seeking you to volunteer yourself, help the club with this event and have fun at the same time.

Do you like talking to people? Working the registration booth is what you're looking for.

Do you like handling radios? Sign up to work the radio impound.

Do you like looking at different R/C products? Work the raffle ticket sales.

Are you a garment expert? We are going to be selling T-shirts.

Jack of all trades? There are several go-fer jobs, go for this, go for that...

Are you a smooth talker? You can have the coveted job of dealing with the park ranger when something goes awry.

Are you an expert in slimmer engines? Sorry, we don't have anything for you - this is an electric only event.

But you get the idea; the more people that volunteer to help with this event the better chance we all have to make it a success.

So don't be shy! Free up your schedules and mark your calendars for May 18/19/20th (with the 17th being the setup date).

Hope to see you there.

Stilianos Jackson

619-429-9042

stelioj@cox.net



Silent Electric Flyers of San Diego



Peak Charge