

# PEAK CHARGE

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

SEFSD Newsletter

October 2000

Volume X Issue X

## CALENDAR

OCTOBER 2000

TUESDAY October 24, 2000  
at the Automotive Mesum

Electro Glide  
Saturday Oct 28, 2000  
9 am

## FUTURE EVENTS

MWE  
February 2001

November meeting  
Tuesday Nov. 28, 2000

No December meeting  
Christmas Dinner TBA

January meeting  
Tuesday January 23, 2001

## IT'S A NEW DAY, AT A NEW LOCATION, BUT THE SAME OLD TIME

In case you have not heard, SEFSD now is meeting on a different day and at a different location.

We will now be meeting on the fourth Tuesday of each month and are now meeting in the automotive museum, instead of the Aero Space museum. The time remains, however, unchanged at 7:00 pm.

Now, the Automotive museum is just next door to the Aero Space museum. Instead of using the side parking lot as we have been, you will enter from the main or central parking lot that is located at the front entrance of both the Aero Space and the Automotive museums. No more stairs to climb. Enter through the main entrance and then turn right.

Our next meeting will be on Tuesday, October 24, 2000. in the Automotive museum at 7:00 pm.

SEFSD was asked by the director of the Aero Space Museum to vacate the meeting room we had been using. The Aero Space museum intends to convert this meeting room into a classroom and it will not be suitable for club meetings.

See the directions on page 5 - -

# Silent Electric Flyers of San Diego

## Club Information

Web Site: <http://sefsd.org/>

### 2000 Officers:

**President**      **Wayne Walker**

284-6119      wayne.walker@daou.com

**Vice President**      **Bill Knoll**

582-2443

**Secretary**      **Cliff Vaughn**

449-6941      pcat18@concentric.net

**Treasurer**      **Mike Neale**

674-1378      MichaelWNeale@aol.com.

**Co-editors**      **Charlie White**

223-8903      charliewhite@home.com

**Bob Davis**

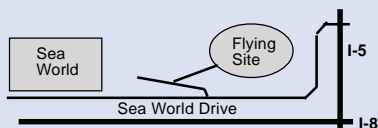
277-8034      RD5677@aol.com

**Safety**      **Steve Neu**

284-0816      SNEU@aol.com

### Flying Site

Located one half mile East of Sea  
World on Sea World Drive at  
South Shores Drive



### Membership or Subscription:

\$25 per year, \$15 for subscrip-  
tion only. \$10 for under 18 or ad-  
ditional family member. Contact  
Mike Neale at 17140 Tam  
O'Shanter Dr., Poway, CA 92064.

## 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.

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## Oct. 2000 column

### New Meeting Site and day in October

This is the first meeting at our new meeting place at the **Automotive Museum next door** to the Aerospace Museum. Remember that our are now on the **4<sup>th</sup> Tuesday night of the month** starting October 24th. **Our new meeting room is upstairs and to the LEFT as you come out of the stairwell. The entrance is on the Right side of the Main Entrance of the Auto Museum;** parking is in the central parking lot in front of the Museums. There will be **an MWE meeting at 6PM** for all those helping to put on the MWE this year; please be there so we can sort out what needs to be done.

### New Field Location at South Shores.

Bill Knoll, Bob Davis, Don Madison, Steve Belknap, and myself have made some headway on the proposal to the City Environmental Services Department to move the to the East in order to have more room for parking, pilot ready areas (Pits), runway length and width, and larger buffer zones to the jogging path. We will have more info at the meeting.

### Miramar Airshow – Great Evening show.

Four of us went to the Miramar Airshow & stayed for the Twilight show on Sat. the 14<sup>th</sup>. You should'a been there! Well worth the trip & saw all the cool military stuff, and of course the Blue Angels were great!

### Veterans Day Fly-In at the Weedwhackers Field.

Don't forget the **San Diego County Association of Model Clubs is having a Scale Fly-In** on Nov. 11<sup>th</sup>. They've asked us to bring out scale electric planes to show the un-washed how really good scale and electric go together. This is a great time to get to meet all the other clubs and we'll have an area of our own to show off our electric planes. A great chance to see some beautiful and rare scale models, especially the War Birds!

Wayne

# September Meeting Minutes

By Cliff Vaughan

The August meet had a turnout of 32 people, with one new member, Roger Willis and guest Jacques Rambaud (Jack).

Don Wemple reminder the members of the LMG contest on Saturday the 23.

Wayne Walker stressed the importance of safe flying, and that the new flight rules would be posted at the field on the pin board. I guess the number one thing to remember is that your pins on the board are to have the flyers name on them, both first and last.

Under upcoming events are the float fly at Otay Lakes on November 19 and the scale warbirds on November 11 at the Lakeside field of the weedwackers.

Next month instead of meeting at the Aerospace museum we will be meeting at the Auto museum. It will be on the fourth Tuesday of the month (October 24).

Show and tell had Don Wemple with a Neuport 12, a speed 400 with a 3.2 to 1 belt drive. Mike Morgan brought a little float plan called a poolboy designed by Ken Willard it is a conversion from gas and is setup to use a speed 280 with a flying weight of 17 oz.

The raffle was great, with great prizes. Ya Should've been there!

## September Electroglide

The thermals were only average for the day, but we still had some fun. Pete Day slammed down three good landings and one solid glide to score a 113. Next up was Mike Morgan flying his classic Sunbird. He touched down three good ones for a 112. Wayne Walker entered a Climax 400 and banged in a 78. Bill Thomas flying his Carbon Delight had some good glides but no tasty landings and totaled a 46. Cliff Vaughn was next scoring a 43. He had two good flights with his beautiful little Gnome 1.5. Bob Davis flying a SP400 had some rudder problems but still scored 27 points? Entering the last flight and flying a Dragon Fly Special Steve Belknap scored 26 big ones. That's the way I saw the September Electroglide. It's a great big sky, so come out and glide.

Pete Day and Don Wimple

## *Directions to the AeroSpace Museum*

From Interstate 5 South: Take the 10th St. exit; turn left on A St.; turn left on 12th St. (which becomes Park Blvd.); turn left at President's Way (you are now in Balboa Park); when you come to the stop sign, the museum will be to your left with parking right in front.

From Interstate 5 North: Take the B St. Pershing exit; stay on B St; turn right on 12th (which becomes Park Blvd.); turn left at President's Way (you are now in Balboa Park); when you come to the stop sign, the museum will be to your left with parking right in front.

From Interstate 8 (either direction): Take 163 South exit; take the 4th Ave./Park Blvd. exit; turn left onto President's Way (you are now in Balboa Park); when you come to the stop sign, the museum will be to your left with parking right in front.

From State Highway 163 South: Take 4th Ave./Park Blvd exit; turn left onto President's Way (you are now in Balboa Park); when you come to the stop sign, the museum will be to your left with parking right in front.

From Interstate 805: Get on I-8, I-5 or ST HWY163 and follow directions above.

From State Highway 94 West: Take the highway into downtown San Diego; turn right onto 12th St (which becomes Park Blvd.); turn left at President's Way (you are now in Balboa Park); when you come to the stop sign, the museum will be to your left with parking right in front.

From Harbor Drive (either direction): Turn east onto Laurel St.; follow it through downtown and over the Laurel St. bridge into Balboa Park; turn right and follow the road to the end of the Park until you reach the museum.

When you have finally found the museum, park anywhere in the parking lot. The Automotive museum is on the West side of the parking lot. Enter by main entrance.



## Warbird Fly-In

**November 11, Veterans Day  
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### End-to-end soldering of batteries

If you find it difficult to solder batteries end-to-end (+ to -) go to:

<http://members.home.net/solderingtips/index.html>

I have established this web site to demonstrate how simple it really is to solder batteries end-to-end when you have the correct tools - soldering tips. And remember - experiance is something you don't get until just after you need it.

Charlie White

SEFSD VIDEO LIST  
See Fred Harris, Librarian  
One month free borrow

ENDLESS LIFT II  
ELECTRIC AIR SHOW / MWE 2000  
QSSAA FLY-IN 1994 VOL I & II  
LET'S GET SERIOUS ABOUT ELECTRIC FLIGHT  
1994 KRC ELECTRIC FLY  
1996 KRC ELECTRIC FLY  
1997 KRC ELECTRIC FLY  
BUILDING WITH FOAM  
AIRBORNE VIDEO/FRED HARRIS  
F-16 FALCON  
POLYSPAN COVERING INSTRUCTION  
ELECTRIC FLIGHT & SCHNEIDER CUP  
A CELEBRATION OF EAGLES (AMA)  
AIR FORCE - TOP GUN  
VACUUM BAGGING  
DOUBLE EAGLE  
SPEEDY BEE/LAZY BEE VIDEO  
S.D. MIDWINTER ELECTRICS 2000  
BASIC CONSTRUCTION FOR BEGINNERS  
MINIMAX CONSTRUCTION  
ELECTRIFYING THE FANTASTIC  
ELECTRIC FLIGHT  
U.S.AIRCORE, BASIC BUILDING TIPS  
MONOKOTE I & II  
WAR BIRDS OVER SCHENECTADY  
DESERT STORM-"TORNADO"  
T-BIRDS  
SCHNEIDER SPORT ELECTRIC  
BYRON ORIGINALS SHOW SEASON 1985  
SPEEDY BEE/LAZY BEE VIDEO  
A-10 WART HOG  
JOE WURTZ-AIRPLANE  
GAS TO ELECTRIC CONVERSIONS  
POWER FOR ELECTRIC  
FLOAT FLYING

### SEFSD Instructors

Give these folks a call if you need the talents of a flight instructor. They are just itching to help!

Bruce Cronkhite  
619-278-6643  
Bob Davis  
619- 277-8043  
Bill Knoll  
760-966-6884  
Steve Belknap  
858-693-3739  
Steve Neu  
619-284-0816  
Pete Day  
619-274-3016  
Ron Stark  
454-4900

The below letter appeared in the San Diego Union Tribune Letters to the Editor on September 28, 2000

Let Mission Bay Park remain a people's park

The First Place my wife and I saw when we visited San Diego 23 years ago was Mission Bay Park. We were vacationing from Chicago and my wife vowed then that some day we would live in this wonderful city.

Today, we enjoy Mission Bay Park every single day, whether it's riding our bikes, walking or taking our two dogs for runs on Fiesta Island.

While the park remains a magnificent jewel in the city's crown, we see ominous signs that its management is talking a dangerous turn. More and more large tourism events are being scheduled there, with regular users being turned away.

We're not talking about the large events like OTL (over the line) and the Thunderboat races that have been here for a long time, but those like the recent electric plane show that set up tents and closed off parts of the park for sometimes more than a week. It worries us that those who control the park are more interested in scheduling events than preserving a true people's park.

TOM and JOANN SWITZER  
Mission Bay Park

This is the reply by SEFSD member John Hood to the above letter. It was published in the San Diego Union Tribune Letters to the Editor on October 5, 2000

Model plane event coming around again - In 2050

Re: "Let Mission Bay Park remain. a people's park"  
(Letters, Sept 28):

Tom and Joann Switzer complained about the Electric Flyers using Fiesta Island for the World Electric Model Aircraft Championships. They shouldn't worry. This Olympics of the model airplane world is held every two years, and San Diego is not scheduled to have a repeat for 50 years.

During last month's championships, people from 25 or more countries got their first look at our beautiful city. The organizers made every effort to inform and protect the public whom were invited to attend and witness some of the amazing high level skills both in building and flying these little machines. Space was closed off only in certain areas to protect the casual walker from strolling into the path of a model plane moving at 180 mph.

It was strictly a nonprofit event, and the city benefited only to the extent of the good publicity generated among the some 200 attendees from other countries.

The Switzers mentioned that the area was closed off for a week as if, this activity happened all the time. If they live long enough, they may find it so closed off for another week in 2050.

JOHN HOOD  
Point Loma,

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4-Star 40®

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# International Electric Fun Fly / Electric World Championships 2000

## Sunrise to Sunset Event Report

August 4, 2000

CD: Bruce DeVisser - AMA1408

The excitement level of this challenging team duration event has been described as 'watching paint dry' by some people; it is perhaps easy to understand that sentiment when compared to the speed and precision of F5B and F5D events. For anyone interested in the various technologies and the very real challenges of duration flying, it isn't watching paint dry - it is creating the paint and then applying it to the canvas in such a manner that the paint does not dry until the end of the day!

The Sunrise to Sunset Event at the 2000 IEFF / EWC 2000 will not go into the records for high attendance. Only 2 teams registered to compete, possibly due to the scheduling arrangements, but it was a real disappointment that no USA team entered. In spite of this, both the Swiss and Slovakian teams were eager to participate in the event. Assisting me in timing duties was Bob Barta, who drove from north of Los Angeles just to attend this event – thank you, Bob.

How do you start an event exactly at Sunrise? Well in our case, while still half-asleep! Plenty of light exists by the time official sunrise occurs, so no one had trouble getting their sunshades and work tables set up.

The two teams had very different approaches to the duration event. The Swiss team used a completely customized purpose-designed and built model, the Avance, which utilizes the current composite materials technology popular in Free Flight and other high performance areas, such as the kevlar and carbon fiber D-box wing structure. The power systems components are all purpose-designed and built, to the point of having on-board data collection for post-flight computer analysis and comparison of computer-predicted versus actual performance. The only major component they have the ability to change is the wing – they have a light wing for calm air, and a stronger version for windy conditions. Of course, they have multiple models for the necessary redundancy, and one of these happened to be the current world record holding model for electric flight duration, 15-plus hours. The primary Swiss team pilot during the event was Norbert Hilber, the world record duration pilot – makes sense to me!

The Slovaks used 3 off-the-shelf sport electric gliders and components from Rival Models of Slovakia, with a 4<sup>th</sup> model (designed and built by team member Kornel Nemeth) selected to cope with various weather conditions. Team member Pavol Lishak is the chief designer and proprietor of Rival, and Ed Skorepa is the USA importer for Rival.

All of the motors were Speed 400 type with gear drives, some using BEC-type speed controls. These state-of-the-art commercial sport models used wings with carbon rod spars and balsa ribs covered with film, epoxyglass fuselages, and film-covered balsa tail surfaces. Of particular interest was one of the propellers, using a core of fiberglass with a pattern of slots where material was machined out, and then covered with translucent plastic film. Another interesting detail was the motor and gearbox arrangement, with the pinion gear facing aft, and the prop shaft running forward through a bearing mounted to the brush end of the motor can. The purpose of this design is to allow an inexpensive open-frame gear drive to fit in a fuselage with a narrow cross-section, which also shifts the weight towards the CG.

Team Switzerland: Emil Hilber; Norbert Hilber; Walter Engel;  
Else Engel

Swiss Team model information:

Name: Avance

Airframe: custom design built in Russia; composite materials throughout

Motor: custom wind Maxon brushless

Speed Control: E. Hilber custom-designed and built

Gearbox: custom Maxon lightweight planetary

Prop: custom low-RPM design, hand molded carbon fiber

Other: onboard data recording module – E. Hilber custom design

Team Slovakia: Ed Skorepa; Pavol Lishak; Kornel Nemeth

Slovakian Team model information:

Rival Fred

Rival Plus



Rival Starter  
Kornel Noname

The event activities could be characterized as long periods of tranquility interrupted by moments of very animated activity – okay, a couple times it was chaotic. It was typical for the pilots to gently motor around in dead air before the thermals started breaking loose, conserving their batteries as much as possible. Once thermal activity started, the main challenge aside from staying in lift, was not to lose sight of the model. Since this is a very real possibility, there is a specified procedure regarding loss of sight by the pilot. No one lost sight of their model, but the nearest hilltop had glider-eating trees on it, and one Slovakian model fell victim to them. Fortunately, they hiked up the hill and retrieved it, and it was flying again shortly afterwards, with the pilots keeping their models slightly farther out from the hill. This was a good example of how being prepared pays off – the team members on standby were able to launch an alternate model within seconds of the active pilot announcing his plight.

Because one needs to keep a model airborne at all times, there are often anxious moments when a sudden change occurs in the currently flying model's behavior. For the Swiss, this meant the primary model apparently running out of power halfway into the expected time aloft. Just when the alternate model was to be launched, the primary model's power was determined to be okay, and the rest of the team relaxed and put the alternate model aside.

For the Slovakian team, Ed Skorepa requested a model change so many times during one of his flights that it became a sort of joke. Knowing his motor battery was almost exhausted, when he could not find lift to sustain flight he would warn the standby pilot to prepare for launch. But each time Ed would set up for an approach he would find a new thermal. Ed twice came down to 50 foot height and worked his way back to 'speck' height.

In the end, no matter how well prepared and organized you are something can go wrong. For the Swiss team this meant radio module problems when pre-launch checking the 'hot standby' model on very short notice, and having the motor controller fail at that point. Fortunately they did not have to launch due to improving lift conditions, and could prepare the backup model.

In addition to the glider in the tree incident, Team Slovakia had the misfortune of back to back battery problems. During one ill-fated flight the battery ran out prematurely, requiring an emergency launch of a replacement glider. When the second model was launched it was immediately obvious an uncharged battery had been installed in the rush to get airborne. Fortunately they were able to launch a 3<sup>rd</sup> model within 37 seconds and make their second longest flight of the day.

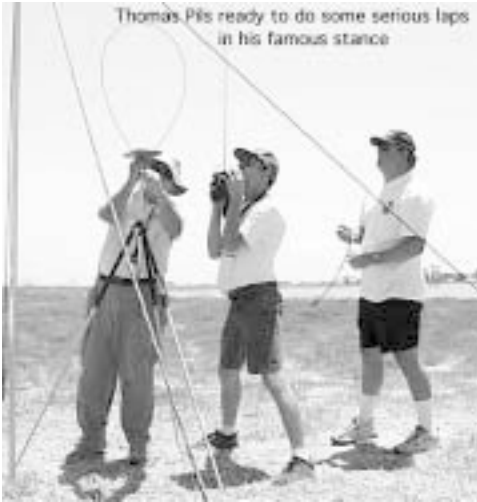
Those are typical situations that a team has to cope with. Perhaps not so typical are full-size helicopters flying through the middle of the course! Fortunately they did not fly low enough to create a collision hazard or to noticeably disturb our air.

At the end of the day the Swiss were clear winners with 4 launches compared to the Slovakian teams 10 launches plus 4 penalty launches for a total of 14. The longest flights were 4:08:25 for the Swiss, and 3:03:00 for Team Slovakia.

In conclusion, I hope interest in this event continues, and that a USA team is organized for the next World Championships. There is enough interest in California alone, based on an informal survey of several electric flyers, and while there are technical challenges, the solutions are there in several forms. In fact, it is now possible to use off-the-shelf equipment to compete in and win this event.

Please see the club web site for the final results.





Thomas Pils ready to do some serious laps in his famous stance



Florian Lang of the German FSB team



Kenichi Ueyama and Masaru Hasegawa of the Japanese FSB team



Nils Seale and Colin Seale of the United Kingdom FSB team



German FSB Team  
Norbert Hubner Wolfgang Ullrich Martin Weberstock



Canadians  
Kevin Cooper Assistant/Trainer Louis Dionne Team Manager



Mari Riederich and the Australian team



Pala's powerplant



Steve Neu & Harold Konrath talking about the mid-air Harold had with Troy Peterson that morning in a pylon race.



Another Swiss Sunrise to Sunset competition model



A Swiss world record holder for primary and secondary cells

## International Electric Fun Fly / Electric World Championships 2000

# F5B

By Tim Attaway

Being tapped to be the contest director of the F5B sailplane event was an honor and a privilege. Working alongside Ron, Wayne, Don, Chuck, Steve, Bill and Michael to prepare for the whole event was challenging but fulfilling. Venturing into uncharted waters turned us into an innovative problem solving team. I would like to thank and congratulate them for their efforts in making the Electric Flight World Championship a memorable and successful event.

The other key individuals that made my job so much easier were Keith Finkenbiner, Steve Manganelli, Brian Chan, Michael ODonnell, Nick Vanmatre, John McKinney, Hans Ritter, Gary Wood, John Hood and Armando. These gentlemen did yeoman duty and I am grateful to them.

The 14 national teams were talented, committed, focused and above all classy people through and through. I enjoyed the competitive and sportsmanlike spirit that pervaded the contest. The FAI jury was instrumental in providing a guiding hand through the 5 day, 8 round competition. Several glitches did occur in the event and they helped with fairness and wisdom to overcome the few minor issues that might have detracted from the event. Three protests were made to the jury and I felt very comfortable with their decisions.

The actual contest results found Germany and Switzerland and Italy to be the best. They had consistent distance numbers and their equipment worked flawlessly. The pilots showed steel nerves in round after round. With only one throw away score per pilot it became imperative that mistakes be kept to a minimum. Those top three teams were able to do that each day.

Thomas Pils, Steve Neu and Jerry Bridgeman all flew well but had some bad luck here and there. They lost two airplanes and Steve lost an aileron which was a zero flight. All in all it wasn't the finest hour for the USA.

Markus Moeckli and Remo Frattini had the most legs in distance at 38 however, Leodolter, Lan and Weberschock finished ahead of them because the magic numbers were 35, 36, 37 round after round. The top six scorers will illustrate how close this competition was for F5B.

1.	Urs Leodolter	Switzerland	4829
2.	Martin Weberschock	Germany	4825
3.	Florian Lang	Germany	4809
4.	Markus Moeckli	Switzerland	4808
5.	Remo Frattini	Italy	4795
6.	Thomas Pils	USA	4793
7.	Rudolf Fredenthaler	Austria	4737
8.	Norbert Huebner	Germany	4713
9.	Alessandro Mossa	Italy	4690
10.	Dieter Safarik	Austria	4620

Thirty-six points separated those places. An extra leg flown in distance here or there or a few cuts and a missed landing were huge. The Saturday final round was very suspenseful with all six pilots in it to the end.

It was a distinct pleasure to have been a part of this Electric World Championship of 2000 in San Diego.

## ***Membership Application***

NAME: Last \_\_\_\_\_ First \_\_\_\_\_ Middle Initial \_\_\_\_\_

ADDRESS: \_\_\_\_\_

CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_

PHONE: (H) \_\_\_\_\_ (W) \_\_\_\_\_

FAX: \_\_\_\_\_ E-MAIL \_\_\_\_\_

AMA NUMBER: \_\_\_\_\_ Dues Paid \_\_\_\_\_

Date of birth \_\_\_\_\_ Date \_\_\_\_\_

Note: AMA Membership ***Required***

Flying membership \$25, Newsletter Only membership \$15. Join after July \$10. Bring to club meeting or mail with copy of AMA card and check to: Mr. M. W. Neale, 17140, Tam O'Shanter Drive, POWAY, CA 92064.

SEFSD c/o Charlie White  
4420 Ladera Street  
San Diego CA 92107