

DEAK CHARGE

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

SEFSD Newsletter

December 2002

Volume XII Issue 12

calendar

Next Meeting
Aerospace Museum
Balboa Park

January 28, 7 PM

Schedule of Events

Team Chaos

Beginners Flight Instruction Saturday January 18, 8-11 AM

F₅B

Sunday, December 19, 9 AM

ElectroGlide

Saturday, January 24, 9 AM



Silent Electric Flyers of San Diego Club Information

Web Site: http://sefsd.org/

2002 Officers:

President Bill Knoll 760-966-6884 stinkbugworks@hotmail.com 760-741-3570 billnoll@masson-assoc.com

Vice President Tom DeShon 258-1538 EWUTODE@am1.ericsson.se

Secretary TBD

Treasurer Mike Neale 858-674-1378 MNeale@enerdyne.com

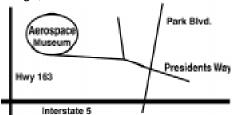
Editor Bill Fee 760-967-7259 dwfee@cox.net

Safety Steve Neu 619-284-0816 SNEU@aol.com

Membership Dennis Collins 858-569-5015 dennisc@pobox.com

Monthly Meeting

Held on the fourth Tuesday of each month (no meeting in December) at 7:00 PM. Meeting room is at the San Diego Aerospace Museum, San Diego, CA.



Flying Site

Located one half mile East of Sea World on Sea World Drive.



Membership / Subscription:

\$35 per year for membership. \$15 for subscription only. \$10 for under 18 or additional family member. Contact Dennis Collins, 1851 Corte Orchidia, Carlsbad, CA 92009

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.

PREZ SEZ



Well, here we are at the end of the year. How time flies when you are having fun! In

retrospect, there have been a number of interesting developments in our hobby. Probably the most notable is the explosion of 3-D type airplanes. Much of this is due to the efforts of some of the early pioneers like Gary Wright. Lightweight power systems that turn huge propellers with minimal pitch provide the thrust-to-weight ratios necessary for such aircraft. Several manufacturers are now marketing 3-D "ARF" airplanes. Another area of rapidly growing technology is the slowflyer/ parkflyer type aircraft. New battery and motor technology is making both these burgeoning niches possible. Nickelmetal-hydride batteries are now capable of being charged

and discharged at high rates, and still provide the capacity we need for our applications. Lithium-Ion batteries are now available for the smaller, lighter aircraft. Brushless motors have now become affordable and in many cases are less expensive than the older brushed motors. High-speed or high-torque versions are available. Sensored controllers are a thing of the past and the new sensorless controllers are small, lightweight, and affordable. Electric is here to stay and many of the old "Non-Believers" (a.k.a. the "Gas Guys") are showing an interest in electrics. Electrics now can have the speed, power, and duration of just about any piston-powered airplane out there. There are many new jets available in either built-up or composite construction and some new allcomposite fans coming out of Eastern Europe. This is one area I personally would like to see continue to grow.

Our membership continues to grow, but at a "modest" rate. Membership remains at about 250 members.

Some new faces come and some old ones go. I miss the antics of Larry Brown, Ray Selzer, and Bruce Cronkhite. Harold Reed stops by from time to time to say hello, but does not fly much any more.

Planning work is underway for the MWE '03, and there may be some possibility of enlarging the field for this event. It's too bad that we do not have a good friend on the City Council to help us. I do plan to contact Kevin Faulconer to help represent us to the California Coastal Commission People (CCCP) if our field relocation requires CCCP approval.

SEFSD now has a newsletter that we can all take pride in. Many thanks to Bill Fee and David Fee for this publication.

The field has a new look with the installation of the safety fence and I wish to re-thank all those people that were responsible for its construction. Good job, guys (and gals!). Speaking of the ladies, we now have several women pilots among our ranks. Things just keep getting better all the time!

So, what is my vision of the future? It's so bright, I have to wear shades!!!! We are still trying to get the City and the CCCP to approve our field expansion, but that will continue to take an inordinate amount of time. I heard that it now takes longer to get the permits to build a house than it did to win World War II. Reloca-

tion of our field could be another Viet Nam (although I would prefer Gulf War I).

We will try to have some "special" events throughout the year like Jet Day at the Bay and some aerobatic events along with the way. We will no doubt have the usual F5B practice sessions, maybe more pylon racing and who knows what else. I encourage any of you who are interested to arrange any special events that might suit your particular fancy or area of interest.

Lastly, I want to again urge all of you to get involved in the club. This is **YOUR** club. It will only be as good as **YOU** make it. We have the lowest dues of any club in the area, and as a result, we depend on the time and generosity of those who are willing to help in order to accomplish our goals. I always see the same faces when we are trying to arrange an event or accomplish some field improvement. Get involved! It's fun, and you get to hang out with a great group of guys and gals.

Raffle Prizes

for the Jan SEFSD meeting

Raven 68" sailplane ARF Skimmer ARC Sailplane Complete 600 power system Pr. Mini servos

In this Corner

An Editorial by Bill Fee

"If man was meant to fly he would have been born with wings." Dad didn't originate the phrase; railroading was his life, and he was eighty years of age



before we ever got him to "go up in one of those contraptions." I was equally sure that an airplane was intended to have two wings. That's what the Wright brothers had decided. And didn't the Baron himself decide that if two wings were good, wouldn't three be even better? It never crossed my mind that I had never seen a two winged bird (discounting the left and right panel argument put up by my wife).

A few weeks ago at the field I was impressed by the appearance and performance of two biplanes built and flown by Bud Elliot. This month's cover features a simulated dog fight between his overmatched Stearman and a Folker DVII. Forget the fact that these aircraft were separated by several generations and two world wars and imagine the Stearman to be a Sopwith Camel with a member of the Luftwaffe in hot pursuit.

Bud encouraged my fantasy by removing the propellors and propping up the aircraft with foam blocks to simulate banking. The horizon line, blue sky and clouds were provided by our F5 team and the Swiss Alps.

Off in the distance, just above the horizon, are five electric models making like the Blue angels, while up above, Santa with sled and reindeer reminds us of the reason for the season.



Cover Model Descriptions

Bud Elliot's -

Kyosho PT17 Stearman, Phasor 45/3 70 amp Escw 12 cells -2400 Nicad, & BEC. 14/10 custom laminated prop,

7 min. performance Global Folker DVIIwith Maxim motor geared 3:1 and speed controller with BEC on 16 NMHD 3000 10 min. performance

New Member

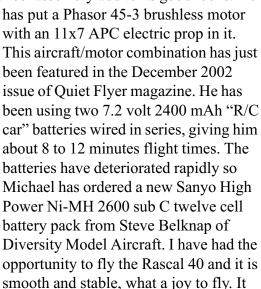
Michael McGinnis

This month we welcome Michael McGinnis to the SEFSD. Michael started in model flying with glow

powered aircraft in the sixties while in high school. He flew U-control, mostly with .049 sized engines. After a tour of duty in Vietnam in 1970, Michael returned to San Diego and briefly flew a Carl Goldberg Gentle Lady glider at Torrey Pines. Raising a family kept him busy, as did his career in electrical engineering. He is currently working at the Naval Labs in Point Loma designing antennas. Michael is also a ham radio operator (his call sign is N6TYF), which allows him to fly on the ham bands. Michael, while out driving one day, passed by the 2002 Mid-Winter

electric meet. He stopped in to see what was going on and became instantly hooked. He started with a Hanger Nine Aspire two-meter sailplane powered by a 550 sized motor. He also has a geared 400 Dragonfly, a Miss 2 by Scorpio with a Phasor 15-4 and a Vicky flying a twin geared 400 from Helmut at Dymond Modelsports. Michael is currently enjoying his Sig ARF Rascal 40 which he picked up shortly after starting in electrics, but didn't get it flying until recently. It has a 72 inch wing and was designed for a 40 sized glow engine. It is beautifully covered in white and

transparent red covering. Wheel pants and a scale steerable tail wheel assembly add to its good looks. He



flies as good as it looks, an unbeatable combination. This is Michael's first aileron aircraft and he is having no trouble adapting to ailerons. Welcome to the club, Michael. - Bob Anderson

Dennis Collins (Membership) is moving, please mail dues to: 1581 Corte Orchidia Carlsbad, CA 92009

Minutes from the November Meeting

By Vice President Tom DeShon



Introduction -

The November meeting was called to order on 11/26/02. There was the usual contingent of visitors/new members. In attendance were new members Adam and John Rolf who fly a Sukhoi and helicopter. Also attending was Larry Ewing, a

new pilot.

Old Biz -

The club's video library has been stable for

quite some time now. As always, donations are accepted and videos of more current topics/events would be greatly appreciated. Please see Urana Green with questions and suggestions.

The newsletter will now be compiled and distributed by Bill Fee. Another new development is that the newsletter is now published in color. Bill is still looking for club members to

submit articles related to the hobby. Topics may include articles on construction, assembly review, flight review, or specific "how-to" topics. The club is also entertaining the idea of accepting advertisements to defray the cost of publishing the newsletter. Anyone



interested in advertising in the newsletter should contact Bill Fee directly. Please forward any text or graphic submissions to dwfee@cox.net.

New Biz -

Club Competition / Events —

S400 Electroglide will take place Saturday, 11/30 at 9:30 AM unless weather precludes. In that case, the event would move to the following weekend. This event always occurs on the Saturday following the monthly meeting. All entrants, please note that the general rules have changed recently. The motor and battery requirements have been expanded. In the past, battery packs were limited to 7 cells. That has increased to 8 cells. Also, the S400 motors had to be 6.0v or 7.2v versions. Beginning last month, competitors may use S400 4.8v motors. All Junior pilots, 17 years old and under, are able to fly any configuration of plane regardless of motor size or cell count. Future

competitions are planned for 9:30 AM on 12/28. For information on this event, please contact Don Wemple.

Lastly, the November meeting was moved back to the Aerospace Museum. Parking can be found in the rear of the building, and the meeting area is upstairs.

Awards -

None at the November

meeting.

Membership –

New membership cards are currently in the design phase. Dennis is working on these and will discuss more at the next meeting.

Club Programs -

The 2003 MWE is currently in the planning stages. This year, the event will run from 2/14/03 - 2/17/03. Cost is \$15/day or \$25 for all three days. The committee is looking for volunteers, as usual. Wayne Walker has volunteered to



be Contest Director (CD) of the event. Anyone interested in volunteering should contact Wayne, Bill Knoll, Bill Everett, or Chuck Grimm. This year's schedule of events are:

Saturday – Sky Scooter, All Up – Last Down. Sunday – Limbo Combat Monday – S400 Pylon Racing

Also included will be demonstrations of helicopters, 3-D aerobatics, ducted fans, F5B, and F5D airplanes. Prizes will be awarded to competitors and "incentives" are being suggested for all volunteers. Sponsors have been contacted and "promotional flyers" have been distributed to the local hobby stores. Sponsor support and the number of vendors at the event are expected to

Construction / Development -

be just as extensive as last year.

The club is currently in need of a trailer to store club equipment. The existing trailer is degrading and a replacement 6 X 8 (or 4 X 8) enclosed trailer would be perfect. All of the F5-B timing equipment as well as the pylon and landing zone markers are all stored in this trailer. Donations would be preferable, but a low-priced trailer would also be considered. In addition, the club is also looking for a permanent site to store the equipment trailer. The storage may be outdoors and must accommodate the above-sized trailer. The storage site must be within a few miles of the flying field. The trailer and storage space both need to be in place by February in support of the MWE. Any members with information/ideas about a new trailer and storage location are encouraged to discuss with club officers.

Wayne Walker is attempting to get financial support from Hitec, the radio manufacturer. Each year, Hitec donates money to deserving clubs in support of flying fields, etc. Wayne is initiating the application and will keep us posted on his progress.

Other Events -

Jet Day #2. On Saturday, December 14th, the club will again host children from one of the local centers. The focus on this day should be jets and other interesting planes. The goal is to give these kids a day at the field where they can experience the R/C hobby and learn something about electric flight. As last time, there will be a radio impound and stricter flying regula-

tions on this day. Volunteers are again needed to staff these positions.

Special Presentations / Internal Events-

It's time again for the election of club officers. Nominees were suggested during the meeting. Those nominated were essentially the same officers as those that served last year. The only change was a switch between Mike Blott and Tom DeShon. Mike will be the new V.P. (President in charge of Vice and meeting entertainment) and Tom will be the new Secretary and compile meeting minutes for the newsletter. All nominations carried and the list of club officers will be published in the next newsletter.

There was lengthy discussion about the current club membership dues. With the increase in cost of the current newsletter and conference room at the Aerospace Museum, it appears that the club may need to adjust the membership dues. Based on income from membership dues alone, the club would require an additional \$10 from each member to break even at the end of the year. The discussion at the meeting generally supported the increase in dues to accommodate the new location and newsletter. Apparently, most of the other clubs in town charge much more than our annual \$25. Suggestions were made regarding those who could not afford a \$10 increase. There will be many "volunteers" needed to man the occasional club events as well as the yearly MWE. These "volunteers" may receive credit towards club dues for assisting in these events. According to the club bylaws, the final decision will be made by the club officers. Anyone with a strong opinion either way is encouraged to discuss these with club officers before any decisions are final.

Safety, Safety, Safety....

There was an in-depth discussion relative to frequency pin policy at this month's meeting. The old "rules" have been revised and updated in accordance with increased activity at the flying field on weekends. As our club has grown, and weekend flying has become more congested, the risk to members and visitors has become more apparent. On non-crowded weekdays, etc., customary pilot etiquette will apply. The impact of these subtle changes is as much about common courtesy as it is about general safety.

First, all frequency pins should have the

pilot's name and frequency clearly written on the pin itself. Please don't use nicknames or other likenesses. Having correct names on the pins (while on the board) make it much easier for pilots with frequency conflicts to find the other fliers on their frequency.

Second, frequency pins should only be placed on the pin board when the pilot is ready to begin flying and removed immediately afterward. There will be circumstances where this may not prove practical. For instance, on those planes without an on/off switch, the transmitter must be energized during the placement and removal of the battery. The club officers understand that these situations do exist and ask that everyone minimize the time required for airplane prep and setup.

Third, due to the increasing volume of planes/pilots on the weekend, the club is asking that all members restrict their flight times to 10 minutes or less. The intent of this policy is to keep the immediate flying area as uncrowded as possible and to allow all pilots a chance to fly their planes. With the introduction of park fliers and their associated long endurance times, there has been a noticeable increase in traffic immediately above the flight line. As always there will be exceptions. Pilots thermalling gliders at a reasonably high altitude and flying away from the immediate flight line will be allowed to continue their flights as they are not involved in the congestion immediately above the flight line.

Lastly, please remember that the club does not want to create more "rules" than are absolutely necessary. As such, there is no mandated maximum number of pilots permitted to fly at any one time. This flexibility does, however come with an associated risk. The potential for having your receiver swamped with errant signals increases as the number of pilots expand on the flight line. These frequency "hits" are even more apparent if you fly directly in front of other pilots who are standing on the flight line. Over time, this courtesy (or discourtesy) tends to be self-correcting as abusers tend to crash more frequently and are unable to fly.

The Training Program-

Flight Training has been going very well recently. In addition to the ongoing beginner instruction on weekends, there is now aerobatic training for those

interested. The trainer, Tim Adaway, is available at the field on Wednesdays at 10:00 AM. Reservations or a formal sign-up is not required. General flying assistance is available at the club on most weekends from 8:00-10:00. As always, the club is looking for new volunteers. This task is very time-consuming for one or two people, often preventing them from flying their own planes. If the club had "staff" of trainers we could balance the load among more people lessening the burden on those few. If you're interested in becoming a club trainer, please talk with Bill Knoll.

How To-

There was no specific "How To" in tonight's meeting.

Show & Tell-

Stolio Jackson brought his modified Multiplex Twin Star. Stolio has added landing gear and a tail wheel for ground steering. He flies his Twin Star on 8 cells and uses 2-S400 motors.

Mike Holland brought his new FEB (Fast Electric Boat). It started life as a Graupner Silver Bullet that sold for about \$90. Mike added a cobalt 035 motor and 8 cells. The boat now pushes 40 mph. These electric boats are running on Lake Murray the second Sunday afternoon in December. Please contact Mike or Bill Knoll for more information.

Steve Neu brought his new Avionic 99 world class pylon racer. The plane weighs about 20 oz, flies using 7 cells and an Aveox 1010/2Y motor and has thrust equal to its weight.

Mike Blott brought his newest "sign" plane. This plane is a stop sign that looks exactly like the stop signs at traffic intersections. Mike uses ultralight GWS equipment and says that the sign flies well.

The meeting adjourned shortly after 9:30 PM.





Join us at the West Coasts largest Electric Airplane event in warm, sunny San Diego, California and enjoy up to 4 days of Electric Airplane Flying at our beautiful Mission Bay site. This is a great family vacation destination, just minutes from the world famous San Diego Zoo, Balboa Park, Sea World and other parks and attractions.

Our new format will include fewer events and demos with more "open flying."

Events

Check website for schedule

- Sat. Sky Scooter "all-up, last down"
- Sun. Dr. Jet's Dreaded Limbo Combat
- Sun., Mon. \$400 Pylon Racing 1/2A course

Demos

Manufactures "noon time" demos will include

- Helicopters
- 3D Aerobatics
- Ducted Fans
- F5B and F5D

Prizes

Hitec sponsored \$1500 pilots raffle PLUS \$2000 open "buy a ticket" raffle

Vendors

Come and see your favorite R/C electric equipment suppliers.

For information on events, schedules, accommodations and for pre-registration form, see www.sefsd.org or contact Bill Everitt at:

Phone (760) 753-1055 Fax (760) 633-2271

Email billeveritt@cs.com

or Glen at (858) 748-6948 x310



President's Day Weekend Friday thru Monday Feb. 14, 15, 16 & 17, 2003

Where

Silent Electric Flyers flying field directly east of the Sea World parking lot. See the web site for detailed directions.

How Much

\$15 a day or \$25 for all 3 days



SPECIAL THANKS TO:







AERO ARROW

BY JACK HIX

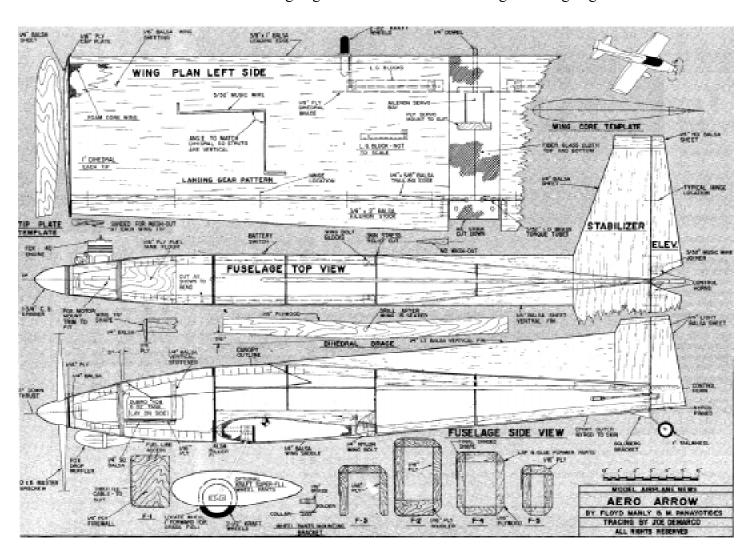


This plane was originally designed as a .40 size gas plane with a 52" wingspan. I found these plans in an old issue of MAN. (I've attached a file of the original plans called *Aero Arrow.jpg*)



My electric powered version has a 42" span with about 325 sq, in. Power will be a Jeti Phasor 15-4 on 8 or 10 cells. It's pretty well framed out and weighs 11.5 oz. uncovered.

I did make a few modifications to the original plan form. The original had a constant cord wing with fixed gear and wheel pants. I opted for a swept leading edge and retracts. I used a straight trailing edge on the elevator so it



would match the wing shape. I also increased the elevator and rudder area.

The original, when viewed from the top, had a sharp break in the fuselage at the trailing edge of the wing. The fuselage sides were straight from this break to the rudder post. On mine it's a smooth curve. There's also a chin scoop to keep the speed control cool.

The pictures on the right (previous page) show the intended color scheme. This will be metallic gold and black Monokote.

Oh, by the way, it's the plane I used on the event logo.

Jack Hix



Jack Hix and his TEAM VERTIGO

Wattage Extra 330 ARF

Motor: AstroFlight 020 brushless

MAT Belt Drive, 3.3:1

Batteries: 8 - 1300 nicads





EXAMPLE MEMBERSHIP CARD



your new membership card will be in the form of a "frequency pin" identification. Upon receipt it is to be attached to your pin that you normally affix to the field frequency board. Attachment can be made using servo tape etc.

This is not an option, the card will be required to fly at our field. Please attach the card to your frequency pin immediately upon receipt.

The Back Cover

Left

- 1. seen in Switzerland by an American F5 team member
- 2. cover picture planes as photographed by the editor
- 3. Adam Smith with his Dymond APEX with RAVEN wing for aelerons
- 4A. John Blaine and his FERICA
- 4B. Frank Gagliardi

Right

- 5. a TERRY, soaring above the clouds (I wish) by David Fee, for the editor
- 6. Mike Morgan's BUCKNER 1b
- 7A the MAN (Mike)
- 7B anybody know the owner of this air plane?
- F5 competitors admire biplanes too

Member Classifieds

Limited to 100 words or 10 lines of 12 point type, INCLUDING SUBJECT, NAME AND ADDRESS, PHONE NUMBER AND/OR E-MAIL ADDRESS.

Copy must be received by the 2nd weekend of the month for inclusion. The advertisement will be repeated in three consecutive issues, unless the Editor is informed otherwise.

Motors for Sale: Astro15 like new, used 5 times. Aveox 1412/3Y new in box, Aveox F12 new in box with Aveox controler 1260

Endoplasma and gear box for E3d. E-Mail me if you are interested. Doug Rubin, docrubin@san.rr.com

The Christmas Party

from a newcomer's perspective

The Fees (Sylvia, David and Yours Truly) did not know what to expect. The location was new to us. My only past experience on the island resulted from a wrong turn going to or coming from the airport. And of course there would be a room full of strangers, "insiders," movers and shakers. Hopefully, David and I would meet a few friends from the field, and Sylvia would make like she was a wife in the Microhenrys.

Well, that's not the way it was. David knew "everyone." I met people who knew me from my picture on the editor's page. Sometimes I knew their name (but not their face) from the committee they chaired. Of course, electric flight was the common bond.

When dinner was served we sat with the Wemples. Don chairs the ElectoGlide activity. We discussed ways and means of encouraging participation. Peak Charge and the editor's job were reviewed over prime rib. The meal was capped off with a raffle drawing. David and I both won exciting (and useful) raffle prizes.

An hour after the meeting room cleared, the Fees were still out in the lobby kicking around ideas with Mike Blott. Next year I hope to meet you and yours at the party. Come to think of it; why should we wait so long? See you at the field.

Bill Fee



February Speaker

Richard Cantor will talk on carbon fiber history and construction.

Michael Blott, D.C.

