

PEAK CHARGE

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

SEFSD Newsletter

January 2001

Volume XI Issue I

CALENDAR

January 2001

January meeting
Tuesday January 23, 2001

See article on page 7

FUTURE EVENTS

MWE

February 16, 17, 18, 19 2001

February meeting
Tuesday February 27, 2001

March meeting
Tuesday March 27, 2001

Raffle prizes for Jan.

Hitech 7 Channel radio.
Folke Wulf 190 ARF
Some other goodies

It will happen, rain nor shine and you are needed to support your club's biggest activity of the year. This thing that makes MWE succeed is the volunteer effort of individual club members. We all have comments outside of our hobby and a voluntary comment does not mean an all day or multiple days, just some time, any time during the MWE days.

For example, help us set up tents, tables, chairs, mark the field. Or spend a few hour with the transmitter impound. If these don't excite you, try traffic direction, participant check in. Best of all we will need much help taking down the tents, tables after everyone has gone home. There is something for everyone.

Soo - - let's just do it!



Silent Electric Flyers of San Diego

Club Information

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

2000 Officers

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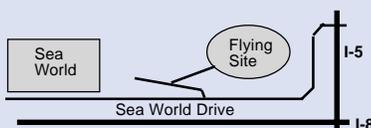
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South Shores Drive



Membership or Subscription

\$25 per year, \$15 for subscrip-
tion only. \$10 for under 18 or ad-
ditional family member. Mail to
the Subscription Secretary: Dennis
Collins, 5150 Corte Playa Catalina,
San Diego, CA 92124.

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.

President's Corner

Radio Interference at the Field

During the last month or so, some things have come up that deserve our attention.

- 1. Never take a pin off the Frequency Board** unless you have the person's permission to do so, or have asked every one at the field if the pin belongs to them. We've way too many instances of **pins being taken down while someone was flying!** This must stop! Please pass this on to anyone that you teach to fly also. This is way too serious to be ignored, and I and the other officers will take drastic actions when necessary.
- 2. Reports of Interference** while flying have been reported and so far the following has been found. An F5B plane had a **bad receiver battery**, a speed 400 sport plane flew close and in **front of 3 radio transmitters**, one of which was a Multiplex type believed to have Dirty RFI, a Zagi went in a spiral, this is called the **"Zagi Death Spiral"** and is normal when they are operated too enthusiastically, two planes went in while far out and low, probably loss of signal, or stall-spin while low, but could have been RFI, unknown at this time. Remember to only have **5 planes in the air at one time**, and use the **far side of the runway for landing** and flybys. The **normal flight pattern** is right handed and to the West.
- 3. The Best way** to manage your transmitters is to have one pin for each with your name & freq. # on in, and **take it down when not being used**, that way you know when it's on the board or not. This also lets others on that channel have a chance to use it without having to run up & down the flight line to clear the channel. **Take your pins home with you** or Bill will put them down below **"In the Dog House!"** There are new pins and a pen on the back of the board, feel free to use them as needed.

Don't forget that January is the month to **renew memberships**, those that earned it will receive free membership. Dennis & Michael will have the cards at the meeting, you bring your AMA cards and a check!

The Annual Christmas Party **at Tom Ham's Lighthouse** was a huge success! The door prizes of a fully built **glider with motor and speed controller**; a brand new **computer radio from Hitec RCD** and a **1010-2Y**
continued on page 9

December Meeting Minutes

By Tom DeShon

Introduction –

The November meeting of the SEFSD started promptly at 7:10. Forty-five members were present and most chairs were full. A few visitors were recognized; Balin Butler and Ron, Malorie, and Erica (new Sky Scooter) we are visiting for the first time; while Rex Harris is a regular member visiting from Salt Lake City.

Old Biz –

The proposal for the new flying field is in work. Negotiations regarding adjustments to the current plan are ongoing with the city. At this time, the city will not contribute financial support. Open tasks include the grading of a new landing strip, movement of the existing mulch, and the purchase of picnic benches and sun shades.

The Fifth Annual Christmas Dinner will be at Tom Ham's Lighthouse restaurant on 12/3/00. Cocktail hour begins at 6:00 pm in the Mission Room on the 2nd floor.

Bill Knoll gave us an update from the recent Jet Rally (11/17 – 11/19) in Phoenix. He commented that most in attendance were very impressed with the performance of electric jets, including his A-4 and Steve Neu's F-16. The next rally will be held in Tucson on 3/18 – 3/19. Anyone interested in attending should contact Wayne or Bill for additional info.

Mention was also made in reference to the Sepulveda Fun Fly. Once again, SEFSD was well represented at the November event.

Lastly, the Otay Float Fly was regarded as an electric success with representation from at least four club pilots. Bill Allen flew his Sig Kadet LT-25, Bill Knoll flew his new Grumman, Jeff Keesaman flew his Mite, and Ray Fulks, his HE 8-31. For the most part, the electrics flew without incident. One of the more exciting events occurred during the flight of a nitro powered Spruce Goose. The eight engine plane had a wingspan approaching 16 feet. It required two pilots; one as an "engineer" controlling the operation of the eight engines, the other utilized a second transmitter operating the standard flying controls. The "Goose" lifted off the water with ease and made two graceful passes. On the upwind leg of the third pass, it was obvious to the assembled crowd that the ailerons were fluttering excessively. We learned later that this flutter was so extreme that it permanently damaged both quarter-scale size servos controlling the ailerons. At this point the plane was in serious trouble and the pilots were losing the ability to maintain level flight. The "engineer" controlling the throttles used engine power to compensate for the lack of ailerons and was able to turn the plane around by increasing the power to the left engines, while reducing it to the right. The plane made a slow right hand u-turn and quickly lost altitude resulting in a controlled crash/landing. The outboard engine on the right wing tip was submerged during the landing and stalled. The plane was able to idle back to shore using 7 engines. Damage (other than the aileron servos) seemed restricted to the landing pods, and some covering lost due to the twisting stress on the fuselage during the landing.

New Biz –

SEFSD will host a Fun Fly on New Year's day, 1/1/01. There will be no meeting or newsletter in December. The next SEFSD meeting will be 1/23/01 at 7:00 in the Automobile Museum at Balboa Park.

There will be a swap meet at the Morley Field flying site on 12/2/00 beginning at 7:30 AM. Lee Norton has more details.

The next "Electroglide" will be 12/2/00, and will commence shortly after 9:00AM. The next practice for F-5B is Sunday, 12/17. Steve Neu has more info.

Work is continuing on the preparation for the 2001 MWE. Significantly larger crowds are expected this year. Exact location of the flying site is still TBD due to weather considerations. The daily flying schedule is in work and the dinner party is scheduled to be a Mexican Fiesta.

New officers were elected for next year. Elections may be too strong a reference here. Volunteerism is closer to the reality. The officers for 2001 are: President, Wayne Walker; Vice President, Bill Knoll; Treasurer, Mike Neale; Minutes Secretary, Tom DeShon; Subscription Secretary, Dennis Collins; Newsletter Editor, Charlie White, Safety Officer, Steve Neu; Chief Flight Instructor, Bill Knoll, and Raffle Master, Bill Everett.

Safety, Safety, Safety....

The field will be chalked on a regular basis. The double chalk line at the edge of carpet is the spectator line. Only pilots may move forward toward the runway site. A single chalk line on the edge of the runway will serve as the border for pilots.

Discussion ensued regarding radio interference and it was suggested that the cause may be the grouping of pilots in a small area. The proposed solution is to create "pilot boxes" along the runway area. These will be limited to five stations spread evenly throughout the length of the flight line.

Also mentioned were "fly-bys." Wayne suggested that all pilots stay on the far side of the runway when completing these maneuvers as it is less of an interruption to those attempting to land.

The Training Program-

Chief Flight Instructor, Bill Knoll is available most weekends from 8 –10AM. He suggests that you bring your own plane. The club does sponsor a training Dragonfly that may be available for a limited time for introductory flights. The club is considering the purchase of a computer flight simulator that may be loaned to members.

How To-

Wayne Walker and Bob Kreitzer completed a thorough demonstration on epoxy tips and techniques. Some of the general suggestions were: 1) Restrict the use of 5-minute epoxy in structural applications. This epoxy does not maintain its structural integrity over long periods of time. 2) Direct sunlight may degrade the standard properties of some epoxies. 3) Mixing is critical, ratios must be accurate. 4) Heat may be used to accelerate curing time; cold to achieve the opposite. 5) Use gloves when completing the application of epoxy; prolonged direct exposure may cause long term health problems. 6) Avoid the use of solvents to clean up epoxy on skin afterwards; soap and water works best. 7) Surface prep is best accomplished by cleaning with solvent first, sanding for surface tension afterwards. And 8) When adding fillers (microballoons, etc) always mix the epoxy first, then add filler material.

While this demonstration was somewhat abbreviated, Wayne will email any interested party a soft copy of the 18 page booklet "Wayne's Cookbook for Model Builders; Epoxy Tips and Techniques."

Show & Tell-

Bill Knoll brought his “work in progress” Schreiner & Savex F86-F jet. It will use a Scheubeler DS51 fan, Plettenberg motor (220/30/A4/S/P4), and 21 cells. When complete it will weigh close to eight lbs and be finished in Japanese flight demo colors. Bill Thomas brought a hand launch glider he has converted to motorized flight using twin K&A micro fans.

The meeting adjourned around 9:30 PM.

San Diego Electroglide
results for December 2, 2000

1. Michael Morgan	flying a Sunbird	159
2. Don Wemple	flying a Modified Flick	157
3. Bill Knoll	flying an Impuls	153
4. Bill Thomas	flying a Carbon Delight	151
5. Tom DeShon	flying a Sunbird	109

Longer flights dominated this Electroglide. Yes, there were actually THERMALS! In the past, making it in the spot landing area was the critical thing with its 20 additional points. But this time the conditions allowed flights of up to 12 minutes, and with 6 points per minute, this added up, and more than equalled the bonus for the spot landings. We actually had 4 separate tosses, but voted only to count the three best flights. One of the advantages of this type of club contest is that we can make minor modifications to the rules at each meeting with the approval of all pilots.

The next Electroglide, as usual, will be the Saturday following the General Meeting of the SEFSD, January 27th beginning at 0900 PST. (If the weather does not allow a meeting on the scheduled day, it will be slipped to the following Saturday.)

In case you haven't been following the evolution of this club contest, here are the ultrasimple rules:

1. Speed 400, 6 volt motor
2. No more than 7 cells

The scoring: after a simultaneous launch of all ships and motor shut-off at the CD's command, 6 points per minute with a bonus of 20 points for landing within the 30 foot marked area of the field. No points if the landing is not back at the field. Three or four tosses makes up the contest for that day.

Come join us!
Don Wemple and Pete Day

For Sale:

Graupner Electro-Uhu -- empty ship \$100, or with everything but receiver and battery \$200

Goldberg Electra -- empty ship but with servos installed and connected \$125, or with everything but receiver and battery \$200

Modified Flick -- ready to fly in the SD Electroglide -- it finished 2nd in December -- \$250

for details contact Don Wemple (619) 469-5566

hitec



San Diego Mid-Winter Electrics

Presented by
the Silent Electric Flyers of San Diego, Hitec RCD and Model Airplane News

Come to warm, sunny San Diego, California for 4 days of Electric aircraft flying at beautiful Mission Bay. What a great family vacation destination, just minutes from the world famous San Diego Zoo, Balboa Park, Sea World, San Diego Aerospace Museum and world class shopping malls.

Events and Demonstrations

Check website for schedule

- Scale Event
- Funtec Sky Scooter Pylon Racing
- Funtec Sky Scooter All-up, Last down
- Show us yer Sky Scooter contest
- Speed 400 Pylon Racing, 7 cell
- Electric Sailplane Limited Run Motor Event
- Killer Kombat: Mad Dogs, Zagis, etc.
- FSB 7-10, 27 cell Sailplanes
- FSD 7 cell Pylon
- Aerobatics
- Electric Ducted Fan Jets
- Electric Helicopters
- Lots of Open Flying



When

President's Day Weekend
Friday thru Monday
Feb. 16, 17, 18 & 19, 2001
Open Flying on Monday
No Events
Mexican Fiesta Dinner
Saturday Night

How Much

\$15 a day or
\$25 for all 3 days
Mexican Fiesta Dinner \$15



Prizes

Come and join us for the best electric event on the West Coast, featuring over \$3,000 in raffle prizes.

Supplier Booths

R/C Direct, Hobby People, Dymond Modelsport, Electric Jet Factory, Cavozos Sailplane Design, Hobby Club, Diversity Model Aircraft, Leisure Electronics of Downey, EMS/Jomar, Peak Electronics, and more.

For information on events, schedules, accommodations and for pre-registration form, see www.sefsd.org

or contact **Bill Everitt** at:

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SPECIAL THANKS TO:

Model Airplane

Indoor Flying

Fri. & Sun. 2PM - 7PM
Courtesy of CAF



CAF Air Group One
World War II Flying Museum
www.cafairgroup1.org



January Meeting Program

"Let's break something", says Bill Knoll Vice President in charge of club meeting entertainment.

"You know, show us how you do Non-Destructive Inspection (NDI) on full scale jet aircraft composite components."

O.K I said, but I don't see how entertaining looking at X-rays and C-scan plots will be.

X-ray and an acoustic water jet method we call C-scan are non-destructive methods used to detect delaminations, corrosion, and other honeycomb and honeycomb bonding degradation inside Aluminum skin/Aluminum honeycomb and Carbon Graphite skin/Aluminum honeycomb composite panels. Degradation caused by corrosion and handling are common place occurrences on F/A-18 Hornet and F-14 Tomcat control surfaces. How we detect it and how we treat it will be the first topic discussed at the meeting. The theory is, detecting the degradation and correcting it before the thing comes apart in the air is desirable. Testing used airplane parts to failure is exciting but generally not advantageous, hence "Non-Destructive Inspection". Following that discussion, we will throw caution to the winds and do as the boss says : "break something"!

Aluminum and Nomex honeycomb is wonderful stuff to play with. The density of aluminum core is on par with the lightest balsa available and nomex is even lighter. Squeeze it in your fingers and you know it will poke hexagons into your skin before it gives. The question is, how can we work it into our hobby? Can hobby type tools viably work with aluminum and/or nomex honeycomb? If we decide it works, can we afford it? Where can we buy it? Can these materials be assembled using hobby type composite fabrication techniques?

These questions will be answered between now and the meeting and presented for your information and/or amusement. These semi-scientific tests of hobby tools/fabrication techniques on aluminum/nomex honeycomb will be used to fabricate some simple I- beams using these exotic materials for shear webs and some I-beams from everyday modeler materials such as balsa wood and spruce. I will measure, weigh and analyze everything prior our January meeting and but save the fun part for the masses : testing the samples to ultimate failure! At the risk of flying shards of spruce and carbon fiber, **come on out to the meeting!**

YOU GUYS REALLY MISSED IT - - -

On Saturday January 13, 2001, myself and five other club members visited the TRACON center located across the street from MCAS Mira Mar. This was a 2.5 hour tour of real time air traffic control.

Tracon controls ALL air traffic below 16k feet from Santa Barbara to Mexico and east Phoenix.

We were there watching over the shoulders of the controllers as they directing air traffic to and from all airport within their boundaries. This means we watched aircraft inbound to LAX, aircraft departing San Diego, aircraft arriving from New Zealand, and somebody just boring holes in the sky because the day was so clear. We could hear the conversations between the aircraft and controller, and watch the radar display as the aircraft were maneuvered by the controllers.

Each aircraft is displayed on a large circular radar screen with the airline name, the flight number, the aircraft speed, altitude, and destination. Until you have been there it is difficult the appreciate the complexity of the air traffic control system. This system can display all aircraft in the air over the continual USA at anyone time or it can display only those aircraft en route to San Diego or any other distinction. What is impressive is that from this rather obscure building next to MCAS the air traffic all about us is under constant surveillance and subject to management of the controllers. And this goes on 24 hours a day, 7 days a week, and all 365 days a year.

The controllers describe their job as the world's best and biggest video game - you should have been there. Charlie White



There is this fellow by the name of Frank Smith and his models show what can be done with a creative imagination and some building skill, show here holding his aerial photo plane. Below are two shots of our Mission Bay Park flying site taken by Frank's aerial camera.



Camera ports were cut into the fuselage for either a directly down shot or an oblique shot to the right.

Using a modified Gentle Lady wing and a fuselage of his own design, with the camera inserted into the fuselage just under the wing. The camera is actuated by a servo attached to the camera body.

A picture is worth - - -



To the right is a "real" Draygon Fly. Design and built by Frank, this model uses ailerons on the "rear" wing, has a green "body", yellow wings, and a clear rudder and elevator. There are three pairs of land gear that simulate the six legs of the dragon fly. Frank flies this plane with a Master Airscrew 05 with a 3:1 gear; a 12x8 prop and 6 1500 cells. Very creative.



RACING NEU(S) by Steve Neu

Last F5B bash of the year!

SEFSD held its monthly F5B practice/contest December 21st. It was the best attended to date with 11 pilots flying.

Planes used ranged from the popular Smart to the high-powered 27 cell Verminators. In 7 cell class Bill Knoll beat all the others with 21 laps with David Pitcarin close behind with 19 laps. The 10-cell group was topped by Wayne (Crash) Walker flying 22 laps followed by Mike Morgan and his mighty Ariane V10. Thomas Pils got top laps with 36 flying his Verminator followed by Steve Neu at 35 laps flying a Russian Avionic 99 in the open class.

George Joy showed up to fly S400 racers but ended helping run the F5B practice by spending most of the afternoon pushing buttons at base B. Steve Mangaelli ran Base A's button pushing duties. Many thanks for their help!

The New Year brings changed rules for F5B. We will start the year by using the new flight format, which includes a longer distance task (200 seconds vs. 180 seconds), a longer duration task (10 min vs. 5 min) and smaller landing circles. We will not enforce the new minimum weight rule for the open class until more legal planes are available.

S400 Pylon races

SEFSD resumed the S400 races and the December races were well attended with 8 pilots flying planes that ranged from Skats to Zagies. We grouped the pilots into similar skill and aircraft performance groups. Steve Neu, Steve Belknap and George Joy were in the "expert" class and had a great time with several very close races. In fact the first round was determined to be a tie as no one could tell which plane passed the finish first between the 2 Steves!

The novice group included Bill Knoll, Wayne(Crash) Walker, and David Pitcarin. Bill pulled out a 1st for this class followed by Wayne.

The Zagi class (really they have very little class!) included Troy Peterson, Bob Mosley and Jeff (no cut) Keesman. In the end Jeff took the checkered flag for this group.

Every one had a great time—the next race will be the 21st of January—bring and fly anything powered by a S400 motor—we will find a place for you!

Aveox motor and controller were well received should be flying this month. Next year's will be even better!!

The MWE is just around the corner! We'll have reports on progress & problems at the meeting, and those that volunteered to set up and take down tents, please let Charlie or Jeff or myself know, we need to keep in touch on this.

The main topic at the meeting this month will be **"Breaking Strength of Wings & Other things that go Bump"**. Also the XB-57N will be shown as well as some other interesting things.

See you then, and fly safely,
Wayne

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 **Subscription Secretary: Dennis Collins, 5150 Corte Playa Catalina, San Diego, CA 92124.** Do not mail your application or subscription to the SEFSD newsletter.

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

