SILENT ELECTRIC FLYERS SAN DIEGO

PEAK CHARGE

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

SEFSD Newsletter August 2003 Volume XIII Issue 7

calendar

Pylon Racing
2nd Saturday, 10:30 AM

Team Chaos
Beginner's Flight Instruction
3rd Saturday, 8 - 11 AM

F5B Contest
3rd Sunday, 9:00 AM
contact Steve Neu at
(619) 284-0816

Next Meeting
Aerospace Museum
Balboa Park
4th Tuesday, 7 PM

ElectroGlide
Saturday following
meeting, 9:00 AM

Membership / Subscription
$35 per year, $15 for subscription only. $10 for under 18 or additional family member. Contact Deb Holland, 9626 Capricorn Way, San Diego, CA 92126

Board of Directors
2003 Officers:

President — David Pitcairn
619-865-5929 — dtpitcairn@aol.com

Vice President — Michael Blott
858-487-6940 — mblott@san.rr.com

Treasurer — Michael Neale
858-674-1378 — michaelwneale@earthlink.net

At Large — Chuck Grim
858-274-7322 — rcelectfly@aol.com

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

At Large — David Fee
760-583-1926 — davidfee@cox.net

At Large — Tim Attaway
619-427-6392 — trattaway@cox.net

Committees

Secretary — Tom DeShon
619-258-1538 — t.deshon@ericsson.com

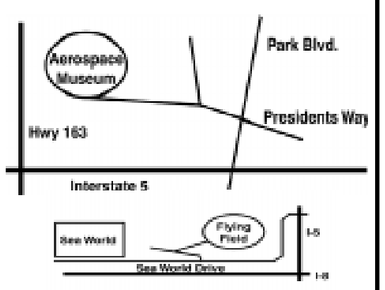
Membership — Deborah Holland
858-653-4607 — puddyluv@pacbell.net

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

Video Librarian — Uranna Greene
858-453-4249 — ugreene@san.rr.com

Raffle — Bill Everitt
760-753-1055 — Billeveritt@cs.com

Flight Insructor — Tim Gantz
619666-7996 — timg@sddn.com



Web Site: http://sefsd.org/

Mission Statement

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

The President's Message
by David Pitcairn

I hope everyone is having a great summer of flying. I know people have vacations and other events that get in the way of attending meetings but there have been some interesting meetings that a lot of the membership is missing out on. For instance, July's meeting featured David Fee's great talk on soldering basics followed up by demonstrations. Don't despair though; Tom DeShon has done a great job putting the information in the meeting minutes.

Next month the SDSU Design, Build, Fly student team will display and talk about their first place winning airplane. You read about the event in the last newsletter and now is your chance to see it up close and personal and get your questions answered. The students did an outstanding job and are justifiably proud of their accomplishment.

Thanks to all members for doing such a good job keeping the gate at the field closed. I know it is a bit of a hassle but following the city rules such as this one will ensure that the field remains available for our use. Also, it is always a good idea to periodically review the rules posted on the frequency board at the field or on the club website.

USA **F5D** *Team Trials* **September 20 - 21**

Saturday and Sunday, **August 16th and 17th** the field will be closed for the **F5B** (competition electric glider) *Team Selection* and Intergalactic competition. Anyone with an appropriate airplane is welcome to enter and can contact Chuck Grim rcelectfly@aol.com for an application. Volunteers are needed and we would appreciate all the help we can get. Spectators will be treated to skillful high-speed flying and the event will be exciting as the competitors battle it out for a coveted place on the USA Team at the World Championships in England next summer.

The plane (on the cover) is a Volster Models C130 powerred with 4 Robbe Turbo 450 motors supplied by 16 CP2400 cells. The motors are wired in series/parallel. I built the plane about 6 years ago. Flying weight is around 7 lbs.

Putting the pylon racers on top was just for fun as we were having pylon races that day. Launching the little racers is always a problem so using the C130 as the launch plane was suggested.

Chemical compatibility of common finishing materials

UNDER \ OVER	Polyurethane	Acrylic Enamel	Epoxy Enamel	Alkyd Enamel	Acrylic Lacquer	Butyrate Dope	Nitrate Dope	Aero Gloss Dope	Dupont 305	Poly Resin	Vinyl Spackle
Vinyl Spackle	C	C	C	C	C	C	C	C	C	N	C
Poly Resin	C	C	C	C	C	C	C	C	C	C	C
Dupont 305	C	C	C	C	C	C	C	N	C	N	C
Aero Gloss Dope	C	C	C	C	C	C	N	C	C	C	C
Nitrate Dope	C	C	C	C	C	C	C	C	C	C	C
Butyrate Dope	C	C	C	C	C	C	N	N	C	N	C
Acrylic Lacquer	C	C	C	C	C	N	C	N	C	N	C
Alkyd Enamel	N	N	N	C	N	N	C	N	C	N	C
Epoxy Enamel	C	C	C	C	C	N	C	N	C	N	C
Acrylic Enamel	N	C	N	C	N	N	C	N	C	N	C
Polyurethane	C	C	C	C	C	N	C	N	C	N	C

C = compatible; N = noncompatible; Source: www.modelflight.com/chemical.gif
from *News-O-Flyin'*
Desert Hawks R/C Club
Rick Giannini, editor
Lake Havasu City AZ

The Back Cover

Upper L/ Center
Inner Sanctum - the "holy of holies" - where it all happens - if you can't find the part you want, make it - if you need a "how to" problem solved (RC electric flight, that is) this is the place; note Genius (Steve Neu) at work

Upper Center
Nice hat

Upper RH & Lower LH
A jewelry store window in Vienna

Center
World champion F5B flier and Swiss airlines pilot Urs Leodotter, having lunch at Finns with the Saturday crowd

Right Center
Lunch on July 4th in Berlin

Bottom Center
Everything is under control

Bottom Right
Potsdam rickshaws

SEFSD Book and Video List

As of August 1, 2003

Book Title

Electric Motor Handbook
Entering Electrics
Foam Wings
The Quiet Revolution
Radio Control Airplane Finishing & Detailing
Radio Control Airplane Building Techniques
Radio Control Airplane Workshop Secrets

Also Available: Some back issues of S&E Modeler Magazine

Video Title

1994 KRC Electric Fly
1996 KRC Electric Fly
1997 KRC Electric Fly
1996 London Bridge Seaplane Classic
1996 NATS Highlights
2000 San Diego Midwinter Electrics
Advanced Kit Conversions
Airborne R/C Video (Fred Harris)
Airplane (Joe Wurts)
Airforce Top Gun
A Celebration of Eagles
Basic Construction for Beginners
Building with Foam
Byron Originals show season 1985
Desert Storm/ Tornado
Double Eagle
Electric Jet Factory
Electric Flight (Building & Flying)
Electric Flight & Schneider Cup
Electrifying the FANTASY (Vol. III)
F-16 Falcon
Float Flying – John Sullivan
Gas to Electric Conversions
Learn How to Build a Power Airplane
Let's Get Serious About Electric Flight
Mini-Max Power Gliders
Monokote I
Monokote A
Neat 2001+
Power for Performance Electric Flight
Schneider Sport Electric
T-Birds
U.S. Air Core Basic Building Tips
Vacuum Bagging tips
Warbirds over Schenectady
Wring it Out (Vol. 1)
Wring it Out (Vol. 2)

DVD's:

Pro Aero Tow
Secrets of Thermals
Endless Lift III
Just Want to Fly
Airshow 2 (2001 Mid-Winter Electrics)

Listed videos are available from Uranna Greene
Phone no.: (858) 543-4249 or email:
ugreene@san.rr.com



Minutes from the July Meeting

By Tom DeShon

Introduction –

The July meeting was called to order on 7/22/03 at 7:00. There was a single new member in attendance tonight. Leland Buck is transitioning from R/C cars to planes.

Old Biz –

The club's video library has been stable for quite some time now. A suggestion was made to share our video library with two other local clubs. After some discussion, it was decided that Urana Green would create a proposed "loaner" policy and the Board would review and decide if we would participate and under what conditions.

All field improvements are currently on hold.

David Pitcairn mentioned that the Museum Staff has asked that all meeting members refrain from using the museum after hours. Apparently, other groups are using the meeting room as a launch point for museum tours after hours and someone was injured in a fall. The museum is concerned about the liability and has asked all groups using these meeting rooms to cease museum tours after hours. We can still use the bathrooms and the access required to get there.

As was done in the past, the June meeting was a "swap meet". Usually no "official" business takes place at this meeting. This year was different. The lack of a full Board of Directors was slowing the progress on resolving current issues. It was decided at the May meeting that we would hold elections at the June meeting for four new Board Members. Nominations were taken and the voting ended with Chuck Grim, Steve Neu, David Fee, and Tim Attaway being elected to the Board. These people will serve this year in addition to the current President (David Pitcairn), Vice-President (Mike Blott) and Treasurer (Mike Neale).

New Biz –

Club Competition / Events –

The S400 Electroglide will take place Saturday, 7/26/03 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. Future competitions are planned for 9:30 AM on 8/30/03. For information on this event, please contact Don Wemple. There were 9 pilots/ planes competing in the June event.

The pylon racing club events are increasing in attendance. Structured classes for the races are usually divided between S400 and unlimited. For those interested in flying a foamy structure, classes are more vague, but should allow everyone interested to compete.

The selection for the USA F5B Sailplane Team competition will be held 8/16 – 8/17. These tryouts are often very interesting to watch as these planes fly much faster than those most of us fly on a regular basis. Spectators are welcome, but these trials will take priority over normal field operations. The selection for the USA F5D Pylon Team competition will be held 9/20 – 9/21. Like the sailplane competition, these trials are very interesting to watch and like the sailplane trials, first priority on these days will fall to those in competition. As with all of these events, volunteers are needed. Please see Wayne Walker if you are interested in supporting either or both of these competitions.

Membership -

New membership cards are now complete. Please see Deb Holland with any membership questions/concerns. Currently, our club has over 300 paying members. (Editor's note - according to the

mailing roster provided to me by Membership chair Deborah Holland, the number is more like 260 something - okay, so it's off by a little over 10 %, no big deal).

Club Programs -

Our club received a request for donations from the USA F3A Competition Team. A motion was made from the floor to donate $25. The motion passed and a check will be sent to this team bound for Europe.

Safety, Safety, Safety….

There has been open discussion at both the flying field and monthly meetings regarding perceived ambiguity in the field rules as they pertain to issues like maximum number of planes allowed in the air at any one time, the requirements for gate closure, and pin board protocol. The new Board is reviewing these topics and resolution should be coming at a future meeting. Although the Board meetings are held at a different location and time than the regular monthly meeting, any formal rule changes will be explained and discussed at the regular monthly meeting. It is not necessary for the general membership to attend these Board meetings.

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 Attaway, 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. If you're interested in becoming a club trainer, please talk with Tim Gantz. There is a new voice mail established for communicating between trainer and trainee. The phone number is 619-801-3591. The Flight Training Manual is still in work and should be complete and on the website by the end of June.

How To-

Tonight's "How-To" was a soldering presentation by David Fee and David Pitcairn. David F. explained the "classroom" portion of the material and David P. demonstrated actual technique with various soldering applications. During his lecture, David focused on major points that are required for a competent solder joint. He explained that using the appropriate power (wattage) for the specific application was extremely important. Too much heat and a nearby component may be harmed, while too little heat would cause a poor solder joint. David also discussed the soldering iron tips and their specific applications. The pencil tip is used on small wires and components, the chisel tip is used on larger gauge wire (power source), and the "hammer-head" tip is used to solder batteries in end-to-end configurations. He went on to suggest that 60/40 solder with rosin core seems to work best for our uses, and that surface preparation is critical to a good solder joint. David then spent some time discussing the proper procedure for applying solder. He explained that the solder should be placed opposite of the heat source on the objects being joined. The heat conducts through the metal and actually "wicks" the solder to flow towards the heat source. If the solder and heat source are applied on the same surface, the solder will stick to the iron and never migrate through the new joint. David did speak briefly about the need to "tin" new solder tips that are not pre-tinned by the manufacturer. This is accomplished by applying solder to the new tip while it is heating up for the first time. If the tip is allowed to heat to operating temperature prior to any applica-

overlook during the excitement of that first flight at the field.

I always make sure my pilot has the correct frequency pin and that all control surfaces are working properly-. Also, check the half- or full-rate switches if the radio system has those functions. You may have saved the aircraft from a crash during takeoff.

from Scale ***Dimensions*** **S**
Scale Squadron of Southern California
Sam Wright, editor
Racho Santa Margarita CA

Bill—I think it would be a good idea to reprint this in out newsletter. More people are trying lithium batteries in our club without any idea of the possible problems.

Steve

Danger - Lithium Batteries

I just lost my car (a '99 Lexus LX 470, two planes, and lots of personal stuff) to a LiPo problem.

I flew my S&B 152 with Lipos for the first time today. The LiPo vendor shall be unnamed for now. The plane augered in, I picked up the pieces and placed them on the back seat of my car, AFTER disconnecting the batteries.

I go to fly my 3D (with NiMH). 3 minutes into the flight I hear "your car is on fire". I turn around and my car is in flames, a total loss within 5 minutes by the time the fire truck came.

The only thought I have is when the plane augered in, the LiPos shorted internally. Note I carried it a hundred yards or so with no signs of a short, no heat, no problems. Once they shorted, they ignited and the car was toast.

Luckily the dog in the back jumped out when the fire started.

Gone are my car, my S&B 152, my charger (a new Schulze 636+), and my Firecat along with 4 8x1100 NiMH packs, two 3S2P LiPo packs, two 8xFAUP packs. And lots of personal stuff like a pilot's license, medical, credit cards, ... This sucks big time.

No one was hurt. Thank the powers that be.

LiPo technology is DANGEROUS. Use at your own risk.

Ken

What did you call me? Knowing your job at the flying field

By SAM WRIGHT

Recently, while flying on a bright, typical Sunday morning, I asked a good friend to call for me.

As he tailed my idling Ryan to the flightline, I entered the pilot's box and looked at him to see if it was safe to enter the taxiway. My caller looked back and released my aircraft onto the runway. I quickly moved to the taxiway, out of the way of an incoming 30% Edge 540T. That was a close call and could have been very expensive for me.

When the caller entered the station alongside me, I asked, "Why did you release my aircraft without my signal?" His response was genuine as he said, "I don't know what a caller does."

After I regained composure, I asked him to watch what I was doing. After I landed, I would give him some caller tips. I will leave that friend's name out of the story because I was embarrassed that for all the Sundays we had flown together, we all assumed everyone knew what the purpose of the caller was.

The caller is your safety observer, maneuver caller if you're competing, and air traffic controller.

The caller is your safety observer, maneuver caller if you're competing, and air traffic controller. Some are psychologists, too, or offer that comforting pat on the shoulder.

A caller will save your airplane and most likely someone else's, too. The caller knows when to give you the signal that the runway is clear to taxi out and take off. Your caller also is watching the traffic to advise you of an aircraft on a collision course with yours. This occurs much too often, particularly when the pilot is on t 1; c correct flight path for the field.

While out of town at a popular Scale funfly, I was calling for a ft-ieid, who incidentally, is a better pilot than 1 am. On the other end of the flightlinc was a pilot demonstrating the flat figure eight. For those not familiar wig h that maneuver, it is the number eight [laying on a table, and it is required as a mandatory maneuver for Scale contests. Needless to say, it breaks all of the rules of the race track pattern established for the fun-fly event, and my pilot would have hit this aircraft head on had I not alerted him to pull Lip. The aircraft executing the figure eight was, at one point, heading directly into my pilot's aircraft.

Many fields require a caller, but it is not yet an AMA requirement. However, some day it may become a necessity. Due to the blend of new pilots with expensive hardware, mid-air collisions would occur less often, and everyone would fly with more comfort.

What is a caller's job?

The caller's first responsibility is to keep you and your aircraft safe while observing the safety of others. Your caller should always observe the wind direction, field pattern, and any aircraft in your flight path. If you are practicing your Scale maneuvers, your caller will indicate these to you, preferably about three quarters through the previous maneuver. This will give the pilot time to set up for the next maneuver.

The caller also loudly announces your takeoff and landing. At some fields, particularly the 1/s Scale Fly-Ins, a good radio system is used.

If you are an experienced caller, do not hesitate to offer assistance to a pilot flying alone. At our field, we have some specific boundaries to observe in order to keep our neighbors happy!

Pilots flying the big 30%-plus aerobatic or the turbine-powered

airplanes should never fly without a caller. Most of our infractions of extending our boundaries are due to these models. This is an opportunity for the caller to help save your flying privileges.

If you have never had the opportunity to call for someone, ask any pilot to walk you through the procedure. You will feel more comfortable when you fly as well as have the confidence to call for someone else.

Most of the pilots I fly with would be eager to assist a new pilot or to teach a caller all aspects of the responsibility: This will keep the field safe, your airplanes in one piece, and pilots will feel better knowing another

set of eyes is scanning the airspace.

One other tip-the caller can note if the transmitter trims are out of whack or if the voltage has fallen below nine volts. These are simple things the pilot may

tion of solder, the tip on the iron may be damaged. A last note that seemed to come from the audience was a suggestion to place any shrink sleeving on the wires to be connected prior to soldering the ends together. It results in extra practice in de-soldering joints. This seemed to be a novel issue as no one in attendance admitted to making this mistake before.

David Pitcairn set up a soldering station and demonstrated most of what David Fee had just explained.

Overall, the combination of Davids proved to be very instructional and beneficial to those in attendance.

Show & Tell-

Mike Blott brought his new SIG Jenny to the meeting. Mike is building this as a review project for Backyard Flier Magazine. Mike was impressed with the kit and made a few tweaks of his own. The plane weighs about 12 oz "all-up", uses 6-cell Nmh pack and flies using a S180 motor with gear drive.

Daniel Belknap brought his new Zlin 326 from Hobby Lobby. Daniel reports that it flies really well on 8-1700 cells using a Mega 2210/8 motor with 9 x 6 prop.

Wayne Walker brought his new pylon racer that he describes in a class called "F5D – San Diego". The plane is an Avionic D-99 flying on an Aveox 2726-2T motor with 7-1700 cells. Wayne also mentioned that practice for the F5D Team Trials is taking place on Thursdays at 6:00 at the field.

Doug Rubin brought a few Hacker brushless motors that he showed off. One had the new composite can while the other had the original Hacker purple case.

Steve Belknap brought two new KAN batteries now available to the hobby. The first one was an AA size 1300 Nmh with an output of up to 20 amps. The

battery weighs less than an ounce and sells for $3.25. The second cell was a 2/3 AA size 650 Nmh with output up to 10 amps. These cells are available for $2.50 ea. What makes these batteries unique is their ability to function correctly while allowing a large amperage draw. These are available individually or in built up packs. Call Steve at Diversity Model Aircraft, 858-693-8188.

The meeting adjourned shortly after 9:00 PM.

An Editorial

by Bill Fee

From time to time I will print an article that will stimulate discussion; even controversy. It may well be intentional (with the hope that it will bring about resolution of a problem), but it could well be that I didn't realize that there was no concensus on the subject.

Write me an article in response; make a position statement; otherwise, I'll presume that you agree with everything I say (or reprint).

I will try to keep things positive, and NOT personal. Some things are maginal. I show up at the field occaisionally wearing a T shirt "advertising" (or at least making a visual statement) about my faith. There is no sales pitch, and the thought that someone might be offended escapes me. Yet I react adversely to "indecent exposure (admittedly a judgement call) and I am confused by why anyone would pay extra for clothing that advertises Nike or any other product (unless they <u>are</u> selling it). And I feel that political campaign slogans and position statements have no place on the "playing field".

Please use discretion .

I have always appreciated seeing one of my "pieces" published elsewhere (usually with permission). The July issue of the AMA National Newsletter (circulated to newsletter editors, the press, industry associates etc.) features an article on a Low-Cost, Post-Cure oven for composites by a David Fee, lifted from *Hangar News*, First Weed Wacker Aero Squadron, Lakeside, CA.

GPS Transmitter

by Doug Rubin

20 mile range with high gain antenna (egg beater) or 7 mile line of sight with simple dipole.

Can lock onto 20 satellites simultaniously then continuously transmit all data every second.

Awesome software and screen views for continuous display of receiving data.

At only $189. for GPS and radio they will make a killing selling these babies.

www.gpsflight.com

The County Assoc. of Model Clubs

is holding a fun fly Sept.13 @ the Chula Vista Field.Frank Gagliardi is the CD & has asked that SEFSD flyers participate.

I was asked to organize SEFSD pilots to compete against other clubs at this fun fly.Six SEFSD pilots will be chosen for our team on 9/13 @ the CV field.Candidates for our team may call me @ 619/4791321 or Braden Moore @ 619/2974174 or rwfulks@cox.net.

Prizes are worth 500$+. Tasks TBA.

Ray Fulks.

The San Diego Electroglide - June 28, 2003

by Pedro Brantuas

Contestant	Ship	Toss 1	Toss 2	Toss 3	Total
Pedro Brantaus	SunBird	20	32	8	60
Bob Anson	Ascent	0	33	19	52
Bob Stinson	Elexaco	14	12	26	52
Dick Kantner	Filip V	11	1	31	43
Ted Corbett	Skimmer	9	0	23	32
Stelio Jackson	Hawk	5	5	5	15
Steve Clem	Mmithermalair	6	5	3	14
Zeke Mazun	Own Design	8	0	0	8

The contest consists of three launches with a five minute period between each. No inter-flight battery charging is allowed. Scoring: 6 points per minute (1 point per 10 seconds). Maximum flight time : 15 minutes. Landing after 15 minutes from launch or off field loses all points for that flight. Bonus points for accurate, full-stop landings are to be measured from the nose of the aircraft — 10, 20, 30 points per flight.

With Don Wemple, our usual "Master of Ceremonies," on vacation, I was given the opportunity to take command of our Electroglide event. The Weather was not really cooperating, with low clouds, no sun and not a single thermal to be had. I thought the day would be a disaster. Surprisingly, we had a great turnout and had nine eager competitors ready to take to the sky and do battle.

The first heat was full of surprises...not all good. Our youngest competitor, Daniel Belknap had some trouble right out of the gate due to his radio getting swamped. Bob Anson had the longest flight time and a perfect approach only to be DNF'd by his mysterious off the field landing. Every part of the plane was on the field, EXCEPT the nose. I still think that Bob did this on purpose to demonstrate the rule that he clarified to us all before the contest. Tim Ardoin was on a mission to eliminate the competition as he piloted Dick Kantner's plane right over our heads and around Bob Stinson. Although Tim stated that he "meant to do that" (right Tim!) Hard hats may be one of the addenda that must be added to our Electroglide rules...thanks a lot Tim.

The Second heat was just as comical as Dick Kantner decided to give it all he had and threw his plane for a healthy toss right into the back of his head. Nice job Dick. The total flight time of 1.2 seconds has to be a club record. Dick stated later that he thought the rules were for the first plane down. (I guess that wing took more out of you than just your hat) Heat three finally turned around and was exciting to watch. After the comedy of errors that the first and second tosses had, the competitors got serious as the competition was still up for grabs. The guys to watch were Bob Stinson, Bob Anson and one of our new comers, Ted Corbett. All Three masterfully flew for over three minutes on a day with little lift. Ted was flying Hobby Lobby's Skimmer 400 that can be purchased for $27.00. The Skimmer 400 along with Diversity Model Aircraft (flydma.com) 7 cell Kan's 950 and a speed 400 make a great combination and a good competitive airplane, for those of you looking to join us.

I would like to extend special thanks to Jaime and Paul for helping with the timing and scribing of the times. Thanks, gentlemen. Also, Lee Norton for providing jokes throughout the entire duration of the event. Thanks Don for giving me the opportunity to run the show and thanks to both Don and Tom Deshon for not competing... :) Special thanks to Tim Ardoin for helping me write this final draft. Whether wanting to compete or just to watch the anarchy, the electroglide event is a great way to spend a Saturday morning.

Dear Soaring Enthusiasts

The Torrey Pines Gliderport in La Jolla has been recognized as a National Soaring Landmark by the National Soaring Museum, a San Diego City Historic Site, and is listed on the California State and Federal Registers of Historic Places. The site is considered by glider enthusiasts to be thewestern version of Kitty Hawk, North Carolina.

On August 30th, 2003, this historic site will be recognized by the Academy of Model Aeronautics as a Model Aviation Historical Landmark, the first site to receive such distinction in the United States. Radio-controlled model sailplanes have utilized this aviation facility for nearly 50 years. This dedication serves to symbolize the importance of aeromodeling as partof the rich aviation history associated with Torrey Pines, and to help ensure that radio-controlled soaring continues at this historic location for years to come.

A brief ceremony will be held at 1:00 p.m. to commemorate the placement of a marker to this effect at the gliderport. Your participation is requested. For additional details on the ceremony and history associated with this gliderport, please feel free to contact us at (858) 455-6449.

Sincerely,
Lawrence J. Fogel, Ph.D.

Gary B. Fogel, Ph.D.
Natural Selection, Inc.
3333 N. Torrey Pines Ct., Suite 200
La Jolla, CA 92037
(858) 455-6449
(858) 455-1560 fax
gfogel@natural-selection.com
www.natural-selection.com

Charles and Dorothy Graham

billchas@brawleyonline.com

On Saturday, July 19, my wife Dorothy and I visited the flying field near Sea World where we met you. You mentioned that you publish the monthly newsletter for the flying club. You had asked me for some particulars regarding the the Fixx: however, I was not able to give the info to you as I was busy working on charging my batteries.

If it's not too late, here is somespecs that you wanted. It is a Zagi Fixx with a GWS 300C "B" geared motor 4:43 to 1, 8 X 800 Nimh, Sirius GFS 10 amp ESC, HiTec 555 Rx, HiTec 55 servos. I have it underproped with an APC 8 X 6 so it only draws six amps. All up weight is 14.5 oz. My flying time is about 9 to 11 min., and I've yet to make a dead stick landing. After flying glow for twenty years I now know what the left stick is for on a three ch plane. I hope to be able to fly again this weekend at the SD field if I can break away. Hope to see you there.

Charles "Bill" Graham

A Meteorological Expedition, the Altiplane in Bolivia

Solar Powered Airplanes

by Wolfgang Shaeper (of Germany)

Dear Friends,

We have now passed two weeks at the high altitudes of the Altiplano in Bolivia. Most of you know why. For those who don't yet know, here a short summary of the background:

Like two years ago in the Himalayan Mountains, we are again on a meteorological expedition. The mission is a co-operation between the Meteorological Institute of Munich University (LMU) and the Universidad Mayor de San Andres de La Paz (UMSA). Financing sponsor is the German "Volkswagenstiftung".

Our German team consist of

· Professor Joseph Egger, LMU München, head of the German delegation
· Jochen Reuder, LMU, his chief organiser
· Jan Schween, LMU, responsible for the instrumentation
· Richard Heinrich, meteorologist
· Stephanie Meyer, student at LMU
· Martin Leeb, student at LMU
· Philip Kolb, Munich, RPV (remote piloted vehicle) pilot
· Wolfgang Schäper, Immenstaad, pilot as well

By August 31, our team will be completed by our third pilot

· Stephan Lämmlein, Markdorf.

The Bolivian side is represented by the Laboratorio de Fisica de la Atmosfera of the UMSA, headed by Professor Francesco Zaratti, joined by his researchers.

The scientific goals of the expedition are meteorological measurements in the lower atmosphere, especially

· Investigation of valley and pass winds flowing towards the Altiplano through the western and eastern cordillieras
· Measurement of ozone concentration on the Altiplano
· Investigation of solar radiation and albedo

The team used various ozone and radiation sensors, balloons and, last but not least, remote piloted vehicles being sort of model aeroplanes that carry their sensor payload up to 2000 m above ground.

So far the background.

We arrived at La Paz on July 6th (Steffi and Jochen) or 12th respectively after a 32 hours trip from Munich. Destination was La Paz' airport EL Alto at 4000 m elevation. During the first days, rest was imposed for acclimatisation. Nevertheless, Steffi and Jochen were keen enough to mount to Chacaltaya (5200 m MSL, highest skiing station in the world) for instrument calibration. It was their fourth day over here and sleep was rare the night they spent there.

The first week's main problem was to release the pre-shipped expedition baggage (477 kg) from Bolivian customs. It seemed to be a matter of a box with medicine, correctly declared for its content, not knowing that import of medicine in such quantities is forbidden in Bolivia. Finally, after one week, we received our baggage upon a special authorization from the Ministry, just in time to prepare our first campaign.

Meanwhile we had enough time to explore the city of La Paz. Its site is really remarkable. Built into a steep valley coming down from the Altiplano, there is no horizontal line anywhere. A short city walk comes close to a medium mountain tour with 300 m or more of ups and downs.

Life is busy like in any capital of the world. Nearly a quarter of the 8.2 million Bolivians is living here including the upper suburb of El Alto. Police are present everywhere at crossroads and main buildings. There have been some rumors in the past, mainly initialized by the lobby of Coca farmers which got increased power in last year's elections. The government, still being US-friendly, risks being replaced in one of the coming years.

People are extremely friendly, especially the Japanese- Bolivian family which manages our hotel. At reception or at any other time we are offered Coco tee which is not a drug, but the best remedy to overcome problems with the thin air.

The head of the institute invited us on the first

Sunday to a BBQ party where wet met all the Bolivian staff involved in our joint campaign. As football is Bolivia's national sport number one, a match between Germans and Bolivians was mandatory. The tall Germans quickly lead by 3:1, but than they had to pay tribute to the thin air and lost 3:5. Of course, a return match is scheduled, an we will be perfectly acclimatized.

Being on the Southern Hemisphere, it's currently winter in Bolivia. Night temperatures fall down to nearly zero in La Paz and to -10 to -15 degrees C on the Altiplano. Afternoon highs are comfortable 15 to 18 degrees. According to long term statistics, only one day of rain is recorded in July.

In cooperation with the institute, we planned two measurement campaigns. The first, being the smaller one, already lead us to the Cordilliera Real, limiting the Altiplano in the north-east, i.e. close to La Paz. The second campaign is planned to the western Cordilliera up to the borders with Chile and Argentina.

Transport, lodging and meals are organised by a local travel agency. We are travelling in four Jeep-like cars, just sufficient for 16 persons with 750 kg of baggage.

On July 18th we all were prepared for our first tour in the Cordilliera Real. As the weather forecast was not quite good, we chose the lower valley of the Rio de La Paz as our first measurement site. At 2500 m MSL, close to the Illimani peaking 6400 m, we encountered mild, summerly temperatures and winds of up to 15 m/s, just as we like it. We had a lot of balloon ascents, even the last two in darkness, the balloons being illuminated by small electric lamps.

There are many similarities with the Kali Gandaki Valley in Nepal where we did our investigation two years ago: a wide, stony bottom, where water is rare at this time of the year, some isolated villages, a very similar diurnal wind and, of course, many interested people, especially children, some of them staying a whole afternoon watching the airplanes.

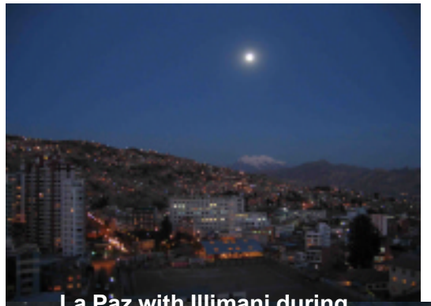
For the pilots in our team, conditions were excellent. A meadow three times the size of a football ground and best visibility in absolutely clean air. Every day a Condor passed by, but never showing interest in our planes. We encountered a little problem with the electric drives of the planes in so far as they did not stand the full duration of climb, which is 7 to 8 minutes. We currently are working hard to find a solution together with the manufacturers of the motors and the speed controllers in Germany.

Today (July 21st) we are in La Paz only for a short pass-by and will continue directly to the second measurement site which is the pass between Illimani (6400 m) and its northern neighbor Mururata (5800 m).

Philip and Wolfgang stay in La Paz for one day in order to clear the problem with the drives.

That's our report of the first 10 days in Bolivia. We will be back to La Paz in about one week before we start our big tour towards the south. Then we surely will have more news to tell.

Photos :



La Paz with Illimani during moon rise

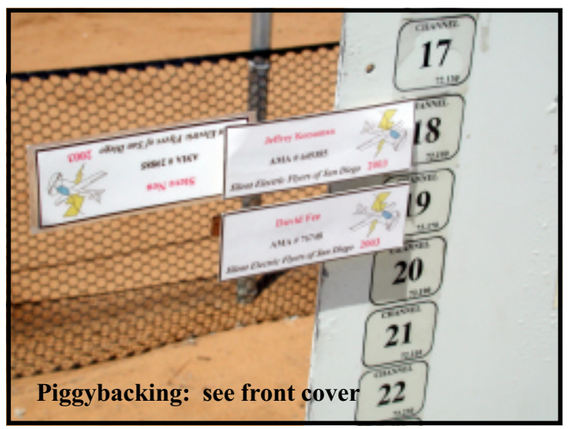
First airplane launch in the Rio de La Paz valley

Martin Leeb working on his laptop, surrounded by interested children

Rio de La Paz valley, first measurement site, photo taken from our model airplane

Philip Kolb with one of our airplanes after landing

Thank you *Lou Rosse*
for spending a day cleaning our pit area carpets



Piggybacking: see front cover

Just Watching