



Chuck Brown's
Modeltech SE5A
Astro Flight 25
15 3300 cells



Homeward Bound

PEAK CHARGE

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

Monthly Meeting
Aerospace Museum
Balboa Park
4th Tuesday
7:00 PM, August 23

Electroglide
Saturday
following Meeting
9:00 AM, August 27

2 time F1C World Champion Randy Archer and son Ryan

2005 Officers

President Steven Manganelli
619-298-7592 sefsdpres@yahoo.com

Vice President Doug Rubin
619-925-5357 dougrubin@san.rr.com

Secretary David Fee
760-583-1926 davidfee@cox.net

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

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

Safety Officer Steve Neu
619-284-0816 sneu@aol.com

Chairman of the Board David Pitcairn
619-865-5929 dtpitcairn@aol.com

Board of Directors

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619-865-5929 dtpitcairn@aol.com

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Vice President Doug Rubin
619-925-5357 dougrubin@san.rr.com

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

At Large Chuck Grim
858-274-7322 chuckgrim@mac.com

At Large Ray Fulks
619-479-1321 rfwulks@cox.net

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

Committees

Membership Sylvia Fee
760-967-7259 sylviafee@cox.net

Video/DVD/Librarian Chet Tussey
858-456-1261 ctussey@aol.com

Raffle Robert Abel
619-562-3774 Abelsantee@aol.com

Flight Instructor Pedro Brantuas
858-272-6882 pedro@san.rr.com

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.

This Month's Cover

The other day at the field I saw a familiar face in what (for him) was an unfamiliar environment. Randy Archer is a two time world champ in F1C (FAI free flight power). His normal habitat (flying, that is) is Lost Hills, getting ready to represent USA on yet another team.

But son Randy doesn't like the scream of F1C engines, so dad has become involved in RC electric, for the fun of it, and to share the experience with his son.

I have been following the Nats daily on the net, and I am encouraged by the junior level participation. Bring a young friend. Maybe David will teach me how to fly..

Bill Fee

Aerospace Museum
Monthly Meeting site



Field

AMA Charter Club 3078
web site: <http://sefsd.org/>

Flying Field GPS Coordinates
Latitude 32.7625480 Longitude 1721415
Zip Code 92109

from the Prop Masters RC Aero Club's newsletter, Warrenville IL

Notes from an e-flier by Mitch Gerdisch

Dave Masters, editor

Flying electric airplanes is just one more facet of this great hobby and more and more pilots are trying electric flight. Therefore, for those budding e-fliers, I thought I would share a few thoughts from my four years of experience in this part of the hobby.

1. Once that battery is plugged in, assume the propeller has only one goal in life and that is to hurt you. Even with throttle locks on transmitters and switches on speed controllers, once you plug that battery in, you want to make sure you keep away from the propeller.

When a gas or glow-motor driven propeller hits something it will generally stall the motor, but not without doing some damage. An electric motor will not stall; it'll just draw more current in an attempt to keep going. So, an electric driven propeller can do much more damage. Thus, it must be given your utmost respect. The switches on speed controllers are no guarantee either. I've had motors start spinning even with the speed controller switched off.

2. Use quality connectors. I see some folks using Tamiya connectors. Tamiyas are not really

suitable for RC flight since it's not a matter of if they will fail, but rather a matter of when. For small models, Dean's makes micro connectors which are well liked. For larger models, Sermos (AKA Anderson Powerpoles) or Dean's Ultra connectors are liked as well. These are just a couple of choices, but the bottom line is to use a quality connector.

3. Finding a good motor, propeller, and battery combo is a bit science and a bit art. On a glow model, you generally combine a known engine and a known propeller (eg. .40 engine with a 10 x 5 propeller or something like that). In electrics, it can be a bit more complicated since you also have to account for the number of cells, plus there are a number of motor and gearbox combinations. The easiest thing to do is simply find a combination someone else is successfully using in a similarly sized model and copy that. One source for this sort of information is the electric power systems forum like www.rcgroups.com.

I hope this helps those thinking about trying out electric flight. And, feel free to contact me at telemitch@wowwav.com if you have any follow-up questions.



San Diego Electroglide -- July 30 July 2005

Wind, wind, wind!! With the cumulus buildups in the back country, a north-northwest wind started early and stayed at 8-9 knots with gusts to 12 all during this Electroglide. To those of you flying models weighing 30 or more ounces that's no big deal. But to do dead-stick, spot landings with sub 20 ounce, motor gliders in those conditions -- ya got problems!! (At least we normal guys have problems; with Pedro, no sweat!!)

There was a time where a few of us thought that we might call the whole meet off and reschedule for next Saturday, but off we went, anyway.

I nearly lost my Sky Sergio on the first toss when the wind blew it over my head to the east, and I lost sight of it. Thanks to those club members on the ground who pointed me out to it (hurtling straight toward the ground!), I recovered, managed to sustain, but never did get back to the landing strip -- no points for toss one!

Pedro was not phased by the conditions, scoring landing points of two of his three landings. Remarkable flying with an 18 ounce, home built with no landing brakes of any kind!!

Only Jon Colton and I were on the field to fly Open ships, so we didn't! Last month there were only two of us as well. If all of you out there want to have an Open Electroglide, come on out. Otherwise we'll just have the speed 400's.

There is room for all of you to join in the fun and for those of you who choose not to, come on out on Saturday, August 27th at 9:30 for the next run at the San Diego Electroglide.

For more information, give me a call at (619) 469-5566 or an e-mail at donk126@sbcglobal.net.

Don Wemple

The July San Diego Electroglide

Pilot	Freq.	Model	Toss 1	Toss 2	Toss 3	Total
Pedro Brantuas	48	Lil Bird	58	119	42	220
Roger Pedersen	55	Pulsar	28	30	34	92
Don Wemple	43	Sky Sergio	0	89	0	89
Zeke Majur		Ascent	35	13	15	63
Fred Daughery	15	Ascent	29	25	17	71
Daniel Belknap	26	Filip V	26	2	0	28

The President's Corner

By Steve Manganelli



Greetings all. This month lets start with some kudos for a couple of folks that

really deserve it: Our editor, Mr. Bill Fee and our Raffeleer Mr. Robert Abel. Mr. Fee's cover art over the last few issues has been simply spectacular. In Mr. Fee's former avocation, he was editor of a photography oriented publication. Imagine the standard required to make an impression on dedicated amateur-professional photographers? (*Editor's correction*). Bill continues to make our little *Peak Charge* publication simply the standard by which all other R/C club publications are judged. Last month's R/C pterodactyls attacking elephants was a stroke of genius. Our capable Raffeleer Mr. Robert Abel continues to find the right combination of prizes that attract us into buying lots of tickets making the raffle self sufficient; that's what we need basically, to make the raffle a viable part of the Club Meetings.

It was also suggested I too mention Dymond Model Sports and Diversity Models whom are both gracious contributors to this undertaking by supplying us both donated and at cost merchandise. Much obliged to you folks and thank you for your service, Robert!

Next, on to a first hand account of a lithium battery fueled "car-be-que". Truck-be-que actually; happened on a Thursday about a month ago, near dusk. The trucks operator and I were North and East of the runway helping another pilot retrieve a wreck in small pieces. Suddenly, a lot of yelling and arm waving was heard from the pits which had just 5 or 6 cars. A wisp of smoke was seen coming out from under the cab door of the large 1 ton size pick up. Steve Neu quickly moved his car out the way for fear of collateral damage; mine was next to his. The owner and I ran toward the truck. All windows appeared to have an extreme black tint. One door was opened allowing a noxious black cloud to escape. Once some of the smoke exited, a small fire was seen burning on the cabin floor of the truck where there was once a charger (connected to a cigarette lighter plug) and lithium battery. The dashboard was beginning to melt into fire when Mark Ferreria using a 5 gallon container of water doused the flames. The only reason there was water on the field is because by coincidence, Mark was out to put tiles on the floor of the club trailer which required water, otherwise, no telling. By the way, thanks for that Mark! Your expert application of tiles to the floor of the club trailer will ensure it's long term service. The operator of the Truck was lucky in that the truck was still able to be driven after the fire or

perhaps really lucky in that it wasn't his truck! Believe the operator was an out of town visitor here for a few quick flights in a borrowed vehicle. Doubt any part of the trucks interior is salvageable due to the smell. If you're ever tempted to charge lithium batteries in a confined space, think again!

On to a much happier note, the fabulous Scale Electric 2005 was put on by the San Diego County Association of Model Clubs and hosted at the Palomar Flyers field in Fallbrook, August 6th and 7th. Our own Frank Gagliardi with Don Gulihier and the able scale crew from the Palomar flyers did a fine job of making everyone comfortable with some very low key rules, judging, etc. Frank had some good chow brought out by Barbequeue Pit, same outfit that fed us at last year's MWE. SEFSD contestants included myself (XB-70), Steve Neu (C-47, C-130, Mosquito and B-58), Stelio Jackson (S-3 Viking) and Ray Fulks <30% scale Extra 330 .

Chuck Grim came out to pit for Ray Fulks, and your editor Mr. Bill Fee came out to hopefully get some serious Newsletter fodder. And there was plenty of eye candy. Mr. Jim Lusker that blew us away at our last meeting with his handiwork, had 2 more museum quality models, a Blom un Voss and a _____. Only thing missing was to see either of these magnificent subjects in the

air. Looks like I made off with the plaque for Best Jet and Ray for Best Civilian subject. Ray is like a kid giddy over performance of his Beta-test Neumotor 2315 in this <whatever it is>. This beast coupled with a large Schultze "boat" controller and lots of Lipos puts him in the heady 4 KW club with this 23 # airplane.

Speaking of Neu Motors, a couple attached to Steve Neu's Mosquito decided to take a spiral dive into the jungle adjoining the field after one of the motors quit at an inopportune time. Steve was resigned to never seeing the wreckage again after the locals warned us about the plane eating jungle during the pilots meeting. Nonetheless we traipsed out into it staying one step away from the rattle snakes, tics, and whatever. Steve grabbed the transmitter and goosed the throttle which resulted in a noise out in the forest from the one good motor. A few over the riveres and through the woods later I came upon a 10 ft diameter clearing surrounded by 50 ft tall trees. In the middle of the clearing staring at us was one 99.99% intact Mosquito, the sole crash damage being a ding on one wing tip and a broken control

horn on one aileron. If it wasn't for the motor, the plane could easily have been flown again that day! That motor failure has a lesson in it for all users of brush motors. One of the large phase leads fatigued and failed as it was soldered directly to the speed control. The vibration eventually fractured the wire at the end of the tinning on the motor side. Lesson : install some flexible wire between the motor and speed control and strain relieve the speed control separately so it doesn't vibrate with the motor.

Finally, let's talk F-5B and Intergalactics. The official Contest Sanction has been received, the entry form is posted on our website and it looks like we may 5 or more out-of-towners to compete against locals and our 2004 Team Steve Neu, Jeff Keasaman and Dave Pitcairn for the (3) US National Team slots. Unlike the Team Selection program, the Intergalactics is open to all "hot liner" pilots whom want to improve their skills and there is still time to enter as you read this. Check out the PDF file on the Club Website. We've been practicing "running the gates" at an increasing frequency which

should be every weekend from now until contest weekend, Sept. 10th and 11th. I want to recognize Dick Hatch and Wayne Walker whom have already volunteered to help out : their services will be appreciated but they also need some company! It would be nice to have 5 or 6 more folks in order to spread the workload. So what do we all think? Let me know either by phone or E-mail if you can help out, or sign up at the next meeting. It at least comes with a free lunch!

Next meeting by the way will feature Steve Neu giving us a primer on F-5B Distance. We will have out the real sighting devices and timing equipment so we can do some live on stage demos and make you all into expert F-5B officials. Oh yeah, one more important thing : the field will be closed to sport flying Sept. 10th and 11th for the F-5B Intergalactics and 2006 Team Selection Contest. Repeat : **SEFSD Mission Bay Park Field closed to sport flying the weekend of Sept. 10th and 11th, 2005** . You can't fly unless a participant so come out anyway and check it out; help a little and learn a lot!

A man and his wife were having some problems at home and were giving each other the silent treatment.. The next week, the man realized that he would need his wife to wake him at 5:00 AM for an early morning business flight to Chicago. Not wanting to be the first to break the silence (AND LOSE), he wrote on a piece of paper , "Please wake me at 5:00 AM. \The next morning the man woke up, only to discover it was 9:00 AM and that he had missed his flight. Furious, he was about to go and see why his wife hadn't awakened him, when he noticed a piece of paper by the bed. The paper said, "It is 5:00 AM. Wake up."

Men are not equipped for these kinds of contests.

San Diego Electroglide and Open Electroglide for June 2005, 2 July 2005

by *Don Wemple*

Pedro Brantuas and his built-from-scratch "Lil Bird" triumphed again!just goes to show you that you don't need a lot of money to be up at the top! Then again, I guess that Pedro could fly a small barn door with a Speed 400-- keep it up for 15 minutes, land it on the spot, and come out on top! And look at Frank Smith with his "Own Dezine". He is consistant and always up there! I should add that Russ Parks, who has been on or near the top recently, would have given Pedro and Frank a time of it if Russ' Sky Sergio hadn't had a glitch and crashed on the second toss! We live to fight another day, and the July edition of the San

Diego Electroglide will be Saturday the 30th. By the way, what has happened to our entrants in the Open Electroglide? Just the two of us doesn't make much of a competition! Come on , roll out your bigger birds! The only no-no is lipos -- otherwise, no holds barred! All are welcome, so please join us -- Speed 400, Open, or both! If you choose not to join us in the flying, come out and take a look at this fun Club Event. The first toss will be at 9:30. For more information, give me a call at (619) 469-5566 or an e-mail at donk126@sbcglobal.net.

Pilot	Freq.	Model	Toss 1	Toss 2	Toss 3	Total
Pedro Brantuas	48	Lil Bird	88	100	106	272
Frank Smith	30	Own Dezine	41	96	76	203
Roger Pedersen	55	Pulsar	29	85	56	170
Bob Anson	31	Sumo	34	90	58	169
Russ Parks	26	Sky Sergio	72	40	76	
Zeke Mazur	29	Ascent	10	12	12	34
Don Wemple	43	2M Bird	27	42	45	114

Open

Pilot	Freq.	Model	Toss 1	Toss 2	Toss 3	Total
Russ Parks	26	Big Bird	83	86	66	235
Don Wemple	43	2M Bird	27	42	45	114

The Cutting Edge:

This afternoon I read an article about all the advantages of using "old fashioned" double edged razor blades for modeling; had to do with sharpness and the ability to retain an edge. To start with the stock is 3/10th as thick. It's been a long time, but I do remember the desirable differences, and several brands are available on the internet, reasonably priced. The "best" are supposed to be Merkur from Germany, and Personna, but the Wilkinson's Sword made of Sheffield steel is also highly recommended.

Attack of the Kestrel Hawk

07/20/05

By Mike DeGroot

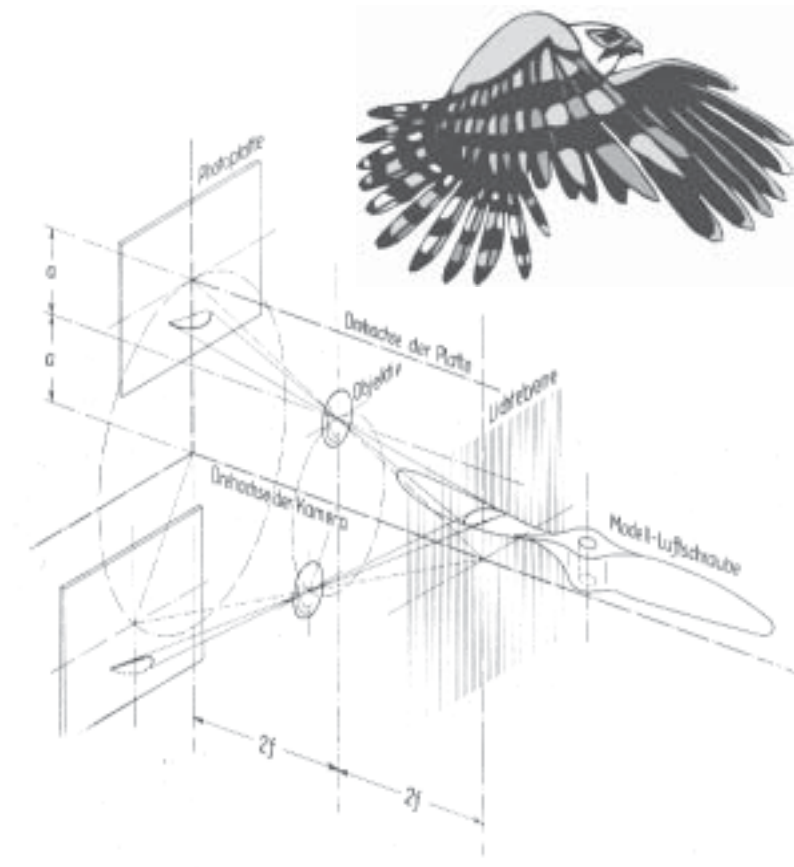


This morning, I had a little difficulty taking off, I was flying my little red plastic Citabria. It has a wingspan of about 30". Suddenly, what looked like a Kestrel Hawk, dove at my model as if to attack it. Then it turned and tried to follow the plane. I turned left, and then right, then looped. It followed, flapping violently, trying to catch the plane. At one point, the hawk flared and extended his claws, but it was just out of reach. Don kept urging me to slow down and let it catch the plane. Easy for him to say, it was my model.

Then I put the model into a vertical climb and then stalled it and it spun rapidly straight down. This seemed to discourage the Hawk and it flew off.

Shortly thereafter I landed, and the hawk returned with what I suppose was his mate. They both playfully flew off together.

Was he trying to mate with my plane? Was he trying to protect his territory from a strange "hawk"? Probably the latter, I guess. I'll never know for sure, since I didn't let him catch the plane as Don suggested.



Silent Electric Flyers of San Diego



Peak Charge

Minutes from the July Meeting

by David Fee



Introduction-

Steve Manganelli called the July meeting to order on 07/26/05 at 7:04PM. There were several newcomers in attendance this evening, including Jim Lusker, Rich Hanson and Aaron Bordage.

General Business-

Obligatory message: Please keep the gate closed when flying at the field. It is posted on the gate that it is to be kept shut at all times. The City installed the gate because they want to control traffic in the park area. It is in the club's right of entry permit that the gate is to be kept closed.

Club Competitions and Events-

Rich Hanson, AMA District 10 VP, spoke of the possibility of model aviation events being held on the Midway in San Diego Harbor. Possible activities include indoor flight on the hanger deck and catered banquets.

The S400 Electroglide will be held on Saturday, July 30th.

"Scale Electric 2005" will be hosted by the Palomar RC Fliers on August 6th and 7th.

The USA F5B Team Selection Trials and "Intergalactic F5B Competition" will be held at the SEFSD flying field on September 10th and 11th. Steve Manganelli, who is the contest director for these events, passed around a sign-up sheet for volunteers.

There will be a demonstration of electric R/C flight in September, given for the Boy Scouts of San Diego. If you are interested in participating, please contact Steve Manganelli.

MWE will be held on May 5th -7th of 2006. Volunteers are needed for all positions.

Silent Electric Flyers of San Diego

Club Raffle-

There were kits, motors, batteries, servos and other accessories offered in the raffle. This month, as decided by the board of directors, a limit of ticket sales was imposed of \$20 per person. An alternate scheme was suggested, with unlimited ticket sales but a limit of one prize to be awarded to each person. The intention of these limits is to increase everyone's chances of winning something.

Entertainment-

This month we had the pleasure of hearing from Glen Merritt of Hitec/Multiplex.

He gave an overview of the current product lines and previewed some of the new items which will be coming to market in the near future. One of the more interesting topics was the new 2.4GHz "spread spectrum" R/C systems which Hitec is developing.



Show and Tell-



Peak Charge

Steve Neu brought his Fliton Infinity 90 pattern plane that he converted to electric power. The emphasis was a lightweight system, while maintaining Steve's signature "adequate power" levels. It features an 8s Kokam 3200 mAh LiPo pack, a NeuMotors 1509/2Y/6.7:1 and a 17x10E APC propeller. Static current is around 55A and average flying times are 10-12 minutes.

Mike Blott showed the start of his new project. He is building a "formation flyer" of four FA-18's, each made from foamboard and interconnected with carbon rods. This will be part of the inSite_05 international art project. www.insite05.org



Jim Lusker stole the show with his stunning 1/8th scale HE-219 "UHU" night fighter. The model was built from Vance Moser plans, with several key weight-saving modifications. The fuselage, for example, is made from molded balsa sheets with very minimal internal structure. The aircraft was painted with latex house paint and features outstanding cockpit detailing and exterior weathering. It will be powered by two NeuMotors 1509 motors, each with its own 5s2p battery. All up weight should be around 22 pounds, which is several pounds less than the wet-powered original.



Our raffle master showed off his Slow-Stick on steroids, commenting that a little wind is no longer a problem.



Bill from Hobbytown USA brought his ShureFlite "Pete," powered by 1320 LiPos and a 400-size motor. He also showed a Tensor 3D model, which resembles a boxkite, and an Ikarus Edge 540T, featuring one of the new "Rimfire" outrunner motors.



The meeting was adjourned at approximately 8:55PM.



THIS MONTH'S SPEAKER

Doug Rubin - edited by David Fee



Our guest speaker this month will be the "Evil Doctor Franken-Neu." You may know him as the F5B-guy or perhaps as the motor-guy. Steve Neu has been active in the development of electric flight power systems since the early days; before Lithium Polymer, before brushless motors and yes, even before the venerable Astroflight cobalt motors! Steve's application of scientific testing methods has enabled him not only to maximize the performance of existing equipment but also to make substantial improvements. The entire line of NeuMotors is a direct result of Steve's commitment to high performance and maximum efficiency.

The focus of Steve's presentation will be on F5B models and their power systems. He'll discuss the history of the event and how emerging technologies have shaped F5B into what it is today. Steve will explain how the motors, propellers and batteries work in concert with the airframe and flying style to really perform in this multi-task competition event.

If these subjects are of interest and you'd like to get involved or just learn more, the USA F5B Team Selection Trials and "Intergalactic F5B Competition" will be held at the Mission Bay flying field in September. The Intergalactic event is open to all pilots and helpers are needed for the radio impound, duration timing and line judges.

The Raffle - by *Robert Abel*

The Club raffle for the August 23 meeting will have an Optic 6 with spectra module as the featured prize. I will also have a Triton charger available for you to win. These two prizes alone are worth over \$250.00. Also on the auction block will be a Wattage direct current meter, a Magnum Mini Tachometer, and an airplane kit. The club officers decided to limit the purchase of tickets to \$20.00 per person. This is fine with me. It just means I will have to limit the high

dollar prizes to one per month and have some smaller less expensive items for you. We will endeavor to keep the interest high in the raffle. The intake last month was less than the output. I have a small cushion of cash to work with. Hopefully the input will come close to expenses this month. As Always, Safe Landings, Robert Abel, Raffle Chairperson.

*On Saturday, August 6, 2005 at 10:00 am, a memorial service was held at Pacific Beach Mortuary on Cass Street, Pacific Beach, to honor and commemorate the life of **Rolph Shellhammer**, 44, who died unexpectedly of a heart attack last Monday.*

In lieu of flowers, donations can be made to the Epilepsy Association or American Heart Association.



Robert Burson won the Battery Allotment event with a AVA-E from Kennedy Composites. This aircraft has excellent thermaling capabilities.



Alex Andruikov



SECOND FIDDLE” There is an old ditty that goes:

“It needs more skill than I can tell To play the second fiddle well.”

In a similar vein, Leonard Bemstein, the late conductor of the New York Philharmonic orchestra, was once asked to name the most difficult instrument to play. Without hesitation, he replied, “The second fiddle. I can get plenty of first violinists, but to find someone who can play the second fiddle with enthusiasm - that’s a problem. Arid if we have no second fiddle, we have no harmony.”

Ray Fulks and his Miss Ellie 30% Extra BAM Motor

much more on this model, its construction and its performance in coming issues.

YOU are encouraged to enhance these pages with your latest efforts. If it’s an original design we will publish plans and specs to share with modelers everywhere, thanks to Stelio and our excellent web page. Let’s hear from you!



Two Beggars are sitting side by side on a street in Rome. One has a cross in front of him. The other one the Star of David. Many people go by and look at both beggars, but only put money into the hat of the beggar sitting behind the cross.

A priest comes by, stops and watches throngs of people giving money to the beggar behind the cross, but none give to the beggar behind the Star of David. Finally, the priest goes over to the beggar behind the Star of David and says: “My poor fellow, don’t you understand? This is a Catholic country. People aren’t going to give you money if you sit there with a Star of David in front of you, especially when you’re sitting beside a beggar who has a cross. In fact, they would probably give to him just out of spite.”

The beggar behind the ‘Star of David’ listened to the priest, turned to the other beggar with the cross and said: “Moishe, look who’s trying to teach the Goldstein brothers about marketing.”

Space Tourism

By June Campbell

If Hawaii’s too hot and Alaska’s too cold, if New York’s too crowded and Europe’s too old—then do I have a deal for you! Visit outer space while it’s still off the beaten track!

In 2001, U.S. investment manager Dennis Tito and South African venture capitalist Mark Shuttleworth became the first two space tourists. You could be the third. C’mon, I know you want to. Market research indicates that a substantial number of us would be interested in traveling to outer space—and would be willing to spend about three months’ salary to do it.

If You Go

Outer space, according to those who have been there, is fun—with the weightlessness, or zero gravity (“zero-g”) contributing considerably to the enjoyment. Tom Hanks experienced a few seconds of weightlessness while filming Apollo 13, and said he thought he would never have so much fun again.

Imagine booking into a zero-gravity hotel and floating weightlessly and gracefully through the lobby to your room. Although, over the long term, zero-g can have negative effects on the body (such as loss of bone mass), a short stay at an outer-space hotel would be completely safe, say the experts.

For those who prefer a little gravity, some space “hoteliers” might build resorts with 1/16th gravity, similar to what’s found on the moon’s surface. Given the inventiveness of free enterprise, we could expect to see space resorts catering to different gravitational tastes, just as traditional resorts cater to different tastes in ambiance and amenities.

Space travel has been around since the 1950s, but it has taken the form of government-sponsored scientific research. SpaceFuture (www.spacefuture.com), a Web site operated by the United Kingdom organization Space Future Foundation, complains that the government agencies around the world are not spending enough of our tax dollars to make space tourism affordable to the public. Therefore, they say, private

enterprise must step up to the plate.

The Space Future Foundation argues that private industry can accomplish travel to space and back at a fraction of the government’s space agencies’ costs, and that this travel can blossom into a lucrative new industry. Experts anticipate that the demand could grow easily to a million travelers a year—numbers large enough to bring down the enormous costs currently associated with a journey that’s truly “out of this world.”

Current State of the Industry

The space race is on! The question is, “Who can develop and operate a travel craft to take us to space and back safely, at a price we are willing to pay?” Many companies think they can, and are aggressively seeking investors to raise the substantial development capital they need.

In fact, so many private-sector space-travel companies are emerging, complete with elegant pamphlets and flashy Web sites, that the Space Future Foundation is already issuing warnings to the unwary investor or would-be traveler. The site identifies a number of “red flags” that, when encountered, should discourage you from reaching for the checkbook

The Industry’s History

It took us a few decades to reach this stage. People began talking about the potential for rocket travel as early as the 1960s. Since then, scientists from the U.S., Japan, the United Kingdom, and other countries have debated the possibilities and the challenges, presented papers on space travel, developed space-vehicle designs, and presented proposals. Very little came of it until recently, although in 1985, Pacific American Launch Systems (PALS) and a U.S. travel agency began promoting low-orbit space voyages aboard a still-to-be-developed spacecraft called Phoenix. The team didn’t raise enough money to develop the spacecraft, however. As early as 1993, market research began suggesting that space tourism could be a viable industry. However, in 1996, a study sponsored by major U.S. aerospace companies came to the conclusion that space tourism wasn’t feasible. Not all companies agreed with the conclusion, and some of the member companies continued exploring the potential.

Later that year, a space-tourism study

group meeting concluded that the space-tourism industry could overcome the challenges facing it within 15 years. In 1997, the National Space Society added the promotion of space tourism to its formal objectives, and later that year, astronaut Buzz Aldrin announced the establishment of the Space Tourism Society (www.spacetourismsociety.org). Then, in April 2001, Dennis Tito visited the International Space Station (ISS) as the planet’s first paying space tourist, courtesy of a joint agreement between three entities: MirCorp, a travel company called Space Adventures, and the Russian Aviation and Space Agency. Tito returned safely after 128 orbits in eight days. In April 2002, Mark Shuttleworth became the second space tourist to visit the ISS. We don’t know how much Tito and Shuttleworth paid for their journeys, but rumor has it that they paid less than the \$20 million list price. October 2004 marked another landmark event. Space company Scaled Composites (www.scaled.com), flying its SpaceShipOne rocket plane, won the coveted Ansari-X-Prize (www.xprize.org), a \$10 million prize offered to the first privately financed team to fly at least one person to an altitude of 100km twice within two weeks in the same vehicle. The incident proved that space travel by a small, private group of individuals was possible, and was not confined to the efforts of a gigantic space agency.

The Federal Aviation Administration (FAA) awarded the rocket plane’s pilot the first astronaut wings ever granted by the FAA and the Department of Transportation. Scaled Composites hopes to launch SpaceShipTwo in 2007—which the company envisions as a luxury craft holding five passengers and a pilot.

But First

Don’t start packing just yet. Before SpaceShipTwo can start losing your luggage, a few things have to happen. First, the U.S. Congress has to develop safety regulations for this new industry. Second, although SpaceShipOne has flown three times and has returned to Earth safely three times, there have been white-knuckle glitches. Ironing out the kinks is going to require considerable work and time. Business Week magazine

quoted space analyst Marco Caceres as saying the 2007 time frame is too ambitious, and the cost estimate is too low. Elsewhere, the hustle continues. A new prize is up for grabs. Nevada billionaire Robert Bigelow of Bigelow Aerospace is offering \$50 million to the first privately funded company that orbits a tourism spacecraft. The winning craft must be compatible with the inflatable space

station that Bigelow is developing. In an interesting shift from building budget hotels here on planet Earth, the billionaire now puts his hand to developing space stations that are affordable for general business ownership. In another interesting twist, Bigelow has partnered with NASA, the government organization that he formerly scorned, for aspects of this project. The signed agreements allow an ongoing exchange of personnel and

technology, the joint testing of products at NASA facilities, and the transfer of NASA patents to Bigelow. Bigelow envisions reducing the cost of a civilian space trip to between \$50,000 and \$100,000. If that's still beyond your budget, there's hope. 7-Up, along with the Ansari X-Prize Foundation, is offering you a chance to win a trip in a suborbital vehicle. Visit www.7up.com for details. The contest closes in August.

a calendar of upcoming events in and near San Diego County

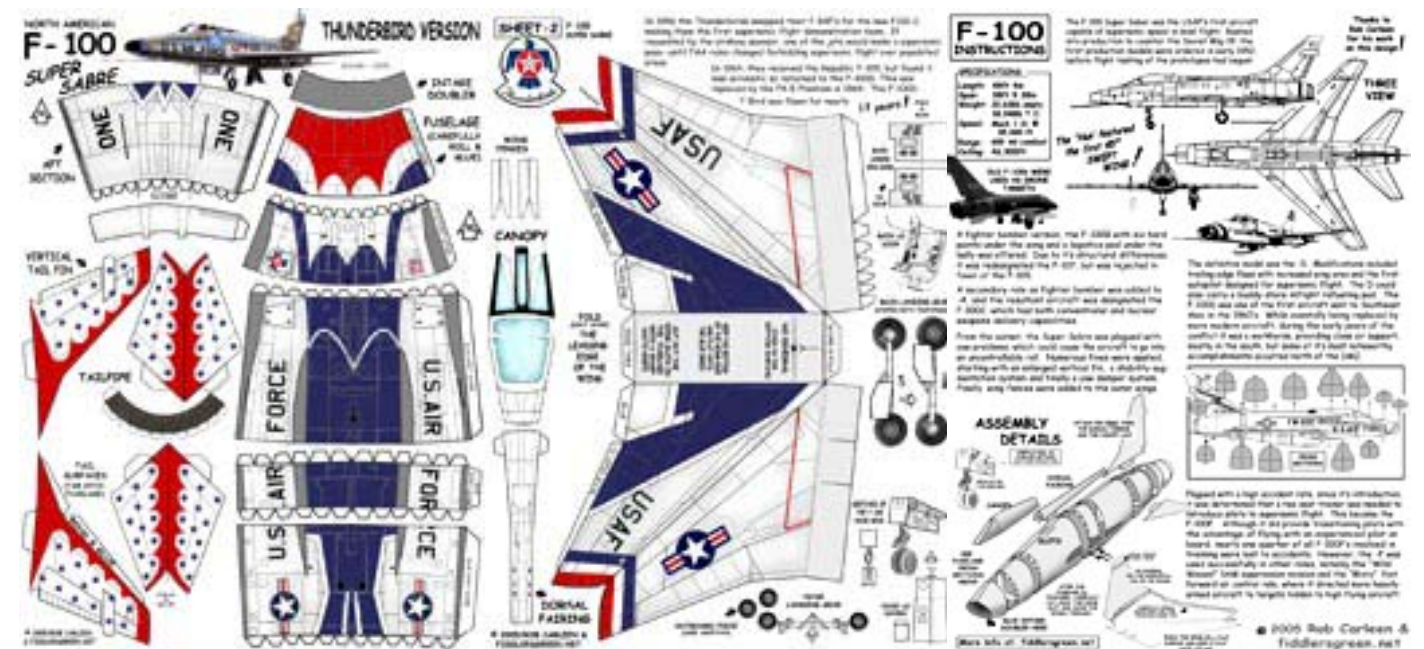
- July 29, 30, 31 Chula Vista RC Club Buzzing on the Border Heli Fun Fly (Electrics Welcome)
- August 6-7 Palomar RC Flyers Scale Electrics
- August 20 21 San Diego IMAC at Chula Vista (Electrics are welcome)
- September 10 11 USA F5B Team Trials and 3rd Intergalactic F5B SEFSD site**
- September 17-18 Riverside RC Club IMAC (Electrics Welcome)
- September 24th Border Artist Event.....INSITE 2005
- November 5 Electric IMAC at SEFSD (Precision Aerobatics)



Bob



Les Uyeda and his Percival





Another Editorial

by Bill Fee

Time flies when you're having fun, or keeping busy. Years ago, a different club, another newsletter, I used to write a "state of the club" address at the end of the year, thanking those who had contributed to made my editing and publishing efforts more informative..

This year SEFSD has had a significant "changing of the guard", and I have renewed my efforts to solicit timely inputs from board and committee members, an the general membership the membership.

Thanks to Mr. Mangenelli, we have had an informative President's message every month, even when he has been out of town on business. VP Ruben has

lined up interesting programs. Tim Attaway has provided a Calendar of Events for San Diego county. Robert Abel has enticed us with interesting previews of upcoming Raffles, and now Chet Tussey, our new Video/Librarian, is providing monthly reviews of his hidden treasures. Hidden no more; he will have them on display at upcoming meetings.

Which brings me to a positive point: meeting attendance is way up, the best in years, even though membership is down, no doubt due to the departure of many park flyers. This club has much to offer. Get involved. The 2006 elections are just around the corner. Volunteer. You can make a difference.

The Librarian

by Chet Tussey

There are about 100 video tapes and books in the SEFSD library, There are about 200/300 club members, depending on the time of year, and the turnover is about one third (new versus renew).

Some new faces are veteran flyers, returning to the wars, but many are newcomers who don't have a background in free flight or gas R/C. Actually, there is something in the collection for almost everybody.

This issue of **PEAK CHARGE** has a fairly representative list of available titles. If you see anything of interest, give me a call at 858-456-1261 and I will bring it to the field Wednesday or Saturday. *(Editor's Note: I'm trying to talk him into bringing them to the monthly meeting).*

Complication: some titles don't adequately describe what the video is about. **Solution:** I am going to review several library items each month, and there

will be a review printed in the newsletter.

"Secrets of Covering with Monokote"

- a well done professional production, applies to other covering materials as well, covering an entire airplane, curved surfaces as well as flat. Evidence at the field indicates that a lot of guidance is needed to patch up "carrier landings", and "hangar rash": lots of good tips.

"Gas to Electric Kit Conversions"

Who among us hasn't seen a magazine illustration of a beautiful young girl holding a gorgeous model of just the plane we'd like to own, only to find that the kit is for a glow engine? Furthermore, upon reading the fine print, we discover that neither the girl nor shipping is included in the price. Have faith!

This video shows step by step how to substitute balsa for plywood to save weight and end up with a good performing electric model.

SEFSD Book and Video List

Book Titles

Electric Motor Handbook
Entering Electric
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 Titles

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
Next 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 Titles:

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



Silent Electric Flyers of San Diego

Peak Charge

Silent Electric Flyers of San Diego

Peak Charge