

PCC Newsletter



April 2007

Next Meeting: April 18, 2007

AMA Chartered Club # 139

Visit: www.flypcc.org

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Get Well Soon, Alonzo!!!

Alonzo Richardson has been in the hospital and is now recovering at home. We all wish him well.

Note: Normally we publish the club roster in the April newsletter. However, the club will decide at the next meeting whether we should follow other clubs and no longer publish a roster to protect our members' privacy and safety. Come to the next meeting and voice your opinion and help make the decision.

President's Column

Marco Pinto

Hello everyone, I hope you have been busy on your current project, searching and preparing your next one or just flying off the saw dust of your flying model. I want to remind everyone there will be a Spring cleaning on May 6th at 9:30 am. Please, volunteer and attend this event. There are no major tasks to do just some general patching, nailing and pulling of the rug in some places as well of cleaning the area of some ingrown weeds in the main runway. If you have some fence stain you would like to dispose or donate for our workbenches, please let me know it at the meeting or give me a call. Our tables need a little protection despite the weather resistance redwood they are made of. Remember to bring the usual tools since we don't have any at the field. After the hard work -more likely easy- we will be rewarded with some hot dogs and burgers, chips and ice cold drinks. The field will be close while we are working and cleaning it but it will be open for flying after that. So, bring your tools and your airplane to our work party. As always, it will be fun, rewarding and best

of all, a fun time to share with the rest of the folks. I look forward to see you all there.

There are two more subjects I would like to discuss with you. First, your president would like to hold a "PCC Egg Dropping Cradle or Box" Contest, deadline June 20th. The details need to be defined as well as the rules but here are some initial thoughts. The cradle will have to be not part of the airplane but designed in such a way that it can be attached to a finished airplane; fastened with rubber bands to either the fuselage side or bottom or to either or both wings. It can hold from 1 to 3 eggs at once without reloading. The unit has to be removable without alteration to the model. It can be operated either mechanically by using springs and gates and gravity (preferred) or by mechanical linkage, however, this is more complicated and risky, so it is discouraged but not prohibited or remotely controlled by a separate servo via a Y-harness but using same basic 4 channels. An important characteristic: it should not adversely or negatively affect the model's flying characteristics. The wining design will be published and featured in our newsletter, plans will also be included in it and it will be featured in our web page too. So, start working in your own design and participate in this event that will be filled with all types of fun. Oh, I forgot to mention that all the designs will have to be tested and proven to work as designed at a fixture during at the June 20th meeting. It will be fun to witness all the prototypes at work. The winner will get a prize not yet determined but he/she will get all the bragging rights he/she deserves as well as the admiration of the rest of us. Hopefully, we all will benefit and build one or two units for our next fun fly which is coming very soon after the contest. You have over two months to design your prototype, test it and debug it. Entry forms and revised rules can be obtained at our next meeting or downloaded it from our web page - available after our meeting, if you want a form sent to you, send your

president a SASE. Your president would like to keep in touch with all the participants of this event during your design, build and test process to document it with a video. It will not be shared with anybody until after the contest. Please, join us and share the fun.

The second subject is a request for your current project pictures. There are many of us currently working on a build that is still on the workbench or worktable. Takes a picture submit it to your president, your newsletter editor **Paul Lum** or your web master, **Pete Johnson** so the rest of your fellow members can see what you are working on. It don't matter at what stage your project is, we just want to take a look at it. If you have any tips or tricks and would like to share it, please get in contact with the previously mentioned members.

That's all for this month. I hope I convinced you to attend our up coming work party on May 6th at 9:30, thrilled to enter the PCC Egg Dropping Cradle Design Contest and excited about sharing your build project with the rest of your friends at PCC. As always, I look forward to see you all at our meeting and at the field.

Coming out . . .

Marco

Minutes - March 21, 2007

Kirk Phaling

The third PCC meeting of 2007 was called to order by Pres. **Marco Pinto** at 7:50 P.M. There was a goodly attendance. However, there was a glitch. No Coffee-Master showed up. So, there were donuts, but no coffee to wash them down. Hope-fully, this terrible situation will have been resolved by the April meeting.

The minutes of the the Feb. meeting require a correction. It's **Claire Murphy**, no Clair Murphy as noted. Sorry about that, **Claire**. Otherwise, the minutes were approved as published. Several guests were present.

RaffleMaster **Jake Chichilitti** displayed the Raffle prizes--a Mini-Funtana X and assorted building items.

It was noted that longtime member **Alonzo Richardson** was spending some time in the Peninsula Hospital. The sec. is glad to report that **Alonzo** is home and doing fine.

COMMITTEE REPORTS:

TREASURER: This bit of vital information was dispensed by **Ellsworth Crowell**.

SAFETY: Temporary Safety Officer **Ken Martinez** noted that all seemed to be in order. However, he cautioned that members should NOT fly alone. If alone and an accident occurs, you may be in need of help. Better to be safe than sorry. Always fly with another member.

FIELD: **Marco** noted that the grass has started to grow and he will be cutting it soon.

MEMBERSHIP: PCC voted in four new members. They are: **Bill Gordon, Ray Granz, Roger Milhara, and Jim Parks**. Congrats to all.

OLD BUSINESS: WebMaster **Pete Johnson** noted that instructions are now on the web site for sending your pictures to be posted thereon. He also noted that the web cam is now starting earlier and is on DST.

NEW BUSINESS: **Marco** wants to get members more involved. He wants to get articles for the newsletter on your ideas on what and how to do things-RC related, of course. He also wants members to present how to do items at meetings.

Don't be shy. Call **Marco** or see him at meetings.

Marco also announced a Work Party for Sunday, May 6. There will be a PCC provided barbecue for the worker bees.

D.O.M.: None this month.

S.A.D.: **Jake Chichilitti** was flying his Mini-Funtana when a glitch grabbed the rx and the plane was smashed to bits by the hard earth. Note: He already has a S.A.D. patch--with stars. He declined additional stars.

SHOW & TELL: **LLOYD Murphy** traded in the Seagull Extra 300 he won last month for a Sig Kadet ARF to be used by his daughter **Claire** as a trainer. She picked the colors. It's a great looking and flying plane.

"I can never remember his name" showed his now completed Spitfire. Has an OS .91 pumped for power, Robart air retracts, is fibreglassed, & weighs 10 1/2 lbs with 1 lb., 3 oz. of lead in the nose to balance. It's camo painted and looks great.

Roger Mihara had an electric heli weighing about 15 lbs. It's set up for 3D flying. He has turned his hobby into a business. The heli can be configured to use either a video or digital stii pics. He uses it to take aerial pics of just about anything. It has a ceiling of about 450 feet and a flying time of 7 to 8 minutes.

Dan Young also had a heli, a Raptor with a Bell 222 body. It is also electric with an Actro outrunner motor on 2-5 cell li-po packs in series. Very good looking and he says it flies great.

Ray Granz had a small Great Planes ElectriFly Corsair ARF. It's his first electric. It uses a brushed 280 size gear drive motor. Has a 10 minute flight time. He likes it.

Oliver Salles showed his Mini Ultra Stik electric ARF. He likes the way it flies but is having trouble landing it. He's broken the landing gear several times.

The meeting adjourned at 8:45 P.M. and was followed by the Raffle. Winners were: **Phil Hill** got the Mini-Funtana X, **Ken Martinez** the plywood assortment, **Frank Phelps** the 30 min. epoxy, and **John Bassetto** the CA glue.

Kirk

Electric Flying

Brian Chan

Motors, the gizmo that you put a propeller on it and drag the plane around the sky...

We started with what is referred as "tin can" motors, most of the motor of this style are probably made by a company named Mabuchi. First made popular by model cars. Later the same motor had been used to power airplanes. Different sizes were adapted from industrial usage to modeling. There were many sizes, but the popular size were "550", later re-designated as Speed 600 by a German company Graupner. Then came the Speed 400... All these are brushed motor. They are called this because there are two contacts, called brushes, to transfer the electric current to the rotating winding in the motor. This type of motor is also called the in-runner. This type of motor is easy to use, the most simplest form of control is a switch or a relay. Later a variable speed controller was developed to control the motor.

The motor development path; brushed motors, brushed motor with samarium cobalt magnets, brushless motor, brushless out-runner motors then somewhere along the line, Neodymium Iron Boron (NdFeB) was introduced to make the motor even more powerful (kind of like turbo-charging). Current day, the most popular motor now is the out-runner motors for most sport usage. They are so called because the part of outside case spins with the shaft, the winding is stationary located on the inside. With the development of new magnets, the motors are more powerful now, compared to those available 15-20 years ago.

Not all motors are created equally, some manufacturers have spent their time developing the motors, some just follow suit (i.e. copy) with the same design. Most of these can be reflected by the price they are being sold. The efficiency can range from 60% to 95%.

So you ask, what is the motor I should use? I can tell you one sure thing, you get what you paid for. Sometimes, though, you can get lucky and get a low cost good motor.

In-runner are still the preferred motor of choice for the high end and competition usages, especially for electric gliders, which tend to have a smaller fuselage. Also the in-runners response to throttle changes faster, as less mass is being used in the rotating parts. Most in-runners use a gearbox to properly harness the power of the motors, because to get higher efficiency out of the motor, higher rotation speed is needed. So gearboxes are used to get the rotation speed down to most reasonable speed to spinning the propeller. On the other hand, the out-runners rotate at a much lower speed, so no gearboxes are needed. The out-runners produces higher torque at a lower rpm but due to the mass of the rotating part, it will react to throttle changes a little slower. One advantage the out-runner has over the in-runner is the lack of gearbox to product the same result, i.e. less maintenance needed for the out-runners.

Brian Chan

Next month, ESC, electronic speed control.

Editor's Column

Paul Lum

If you haven't done so, visit our website and look at all the beautiful pictures and videos that Pete Johnson, our webmaster, has posted. Sad to say but the newsletter is limited in space so we can only put a few pictures and no videos.

Thanks to Pete Johnson, Mike Peck, Bill Kuhse and Jim Park for sending in pictures and videos. Much appreciated!!

If you have pictures, submit them to Pete and he'll do is best to have them posted too. From there, they might make it into the newsletter.

Paul

Upcoming Events

April

18 Club Meeting, 7:30PM, Millbrae Library

21 BARC Pattern Contest

28 Float Plane Fly @ Lake Hennessey*

May

6 Work Party, 9:30, PCC Field

16 Club Meeting, 7:30PM, Millbrae Library

26 Float Plane Fly @ Lake Hennessey*

Pictures

You can view these in color at www.flypcc.org



Ray turning on the smoke system on his Yak. Ray risks government intervention.



Ray's Yak doing an inverted pass.



Ray Quintal's 33% Yak looks bigger than life as it flies in front of him.



Mike Klass proudly posing with his brand new 540 Edge with a ZDZ 40. He's delighted in the way it flies.



Happy Birthday Ellsworth!! Jake surprised him with a cake at the field. Yummy, yummy cake! Thanks Jake!!



New member Roger Mihara flashes a big grin after a successful flight with his 3D helicopter.



Lloyd and Clair Murphy showing Clair's Sig Kadet Trainer, which Claire helped to build. By Mike Peck



Matt Abrams with his quiver using up two tables. And he flew them all!!! The Foster City flyers were out in force.



Jim Park's 540T Edge, ready for maiden takeoff. By Jim Park



Jim Park with his quiver on a beautiful day.



Dave O'Donnell gets ready to launch his Typhoon, an electric powered foam pattern plane.



Dennis Fuente smiles while flying his small helicopter.



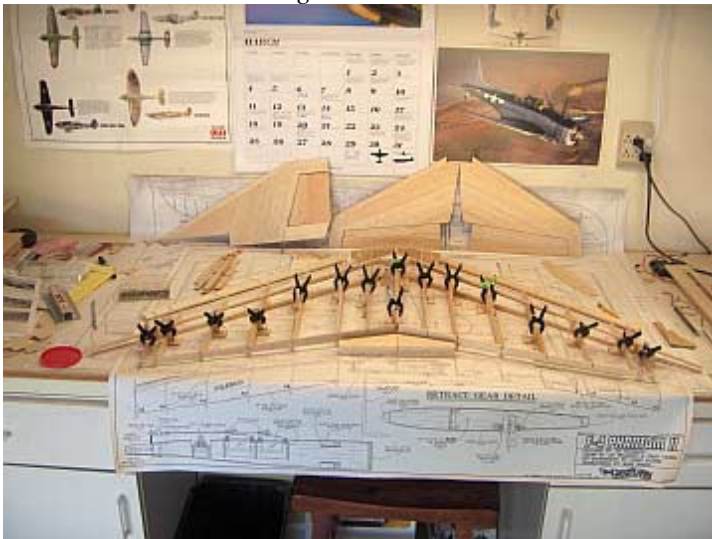
Pete Johnson launches his Easy Glider for its first flight.



At a Combat contest in Livermore, Kenny and Jake get ready for the intense competition. By Pete Johnson Love this shot.



Contestants show the variety of wings they flew for the event. Most are based on a design called a Mako.



Use your imagination. This is Mike Peck's Phantom F-4 in its earliest form. Mike enjoys building difficult planes.



Joe Erdie watches his son, Joe, pilot a Hirobo Shuttle Z helicopter.



Father, Mike Sweeney, starts Great Planes Big Stik 40 Thunder Tiger .46 engine for son, Andrew.



Albert Sadakian holds his little Y 03-A homemade electric airplane, built from paper, plastic and scavenged parts.



Harry Smith sets up his Easy Sport 60 plane, powered by a Zenoah 20ei motor.



Ken helps Jake get all three motors started on this fine scratch-built replica of a postal plane.



Seven planes and counting. Major hangar rash in Matt Abram's new car.



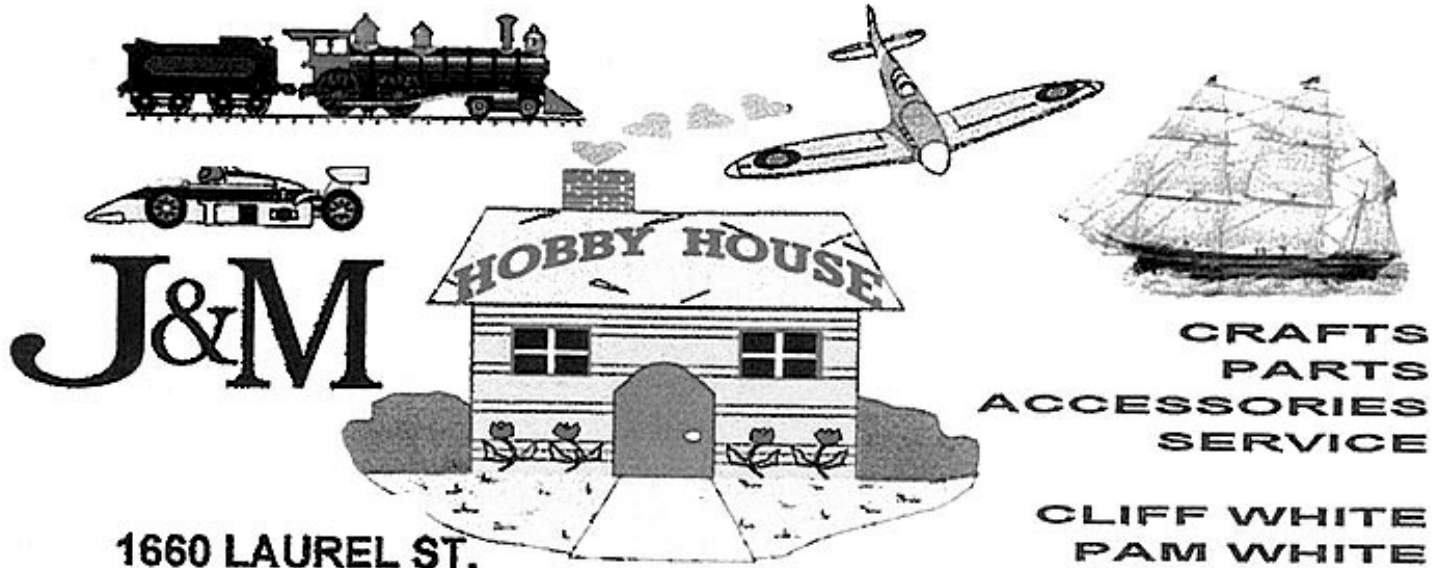
Pete caught this beautiful shot of Matt Abram's Corsair right after lift off.



Dan Young's Raptor 50SE converted to electric in a Century Bell 222 fuselage.



This odd-looking but graceful flyer is piloted by Brian Chan.



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Next Meeting: Wednesday, April 18, 2007