

PCC Newsletter



June/July 2012

Next Meeting:

June 20th, 2012

AMA Chartered Club # 139

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WHAT'S HAPPENING @PCC



Hiller Museum Accepts Ellsworth's Corsair.

Jake Chichilitti

One Thursday May 17th Ellsworth and I met with Katie McGee the Registrar at the Hiller Museum. The purpose of

our visit was to take Ellsworth's Corsair to the museum and see if they would accept it for display.

Ellsworth built the Corsair back in 1982 and entered it in the PCC Scale Contest that year. He flew it and won first place at the contest. He still has the trophy which he is holding in the photo. It has been hanging in his study for all these years and a few weeks ago we took it down and dusted it off. There was a lot, I mean a lot of dust on it. It was in very good condition with only some minor damage to the vertical fin which I fixed and repainted. Otherwise it was in good to go. It has a custom K&B .60 mounted in the cowl, but no servos or any radio gear. I think Ellsworth would have like to see it fly again, but I think we did the right thing and take it to Hiller.

There was no doubt that Katie was impressed with the model and more so because it is an exact scale model of "Pappy Boyington's" Corsair. I hope the museum finds a place to hang it where everyone can see it.

Good Job Ellsworth!

Jake



HILLER AVIATION MUSEUM
Where Inspiration Takes Flight

601 Skyway Road
San Carlos, CA 94070



What's this?

The **field charging station** is up and running. The charging station is next to the shed, a black/white checkered working bench (you can't miss it, even if you try!!)

There are two all threaded rods; top rod is Positive and bottom is Negative. To use it, you will need to get the key (red plastic) from the frequency pin box. Insert key and rotate key to engage the power source, which consist of 6 deep cycle batteries. The batteries are fed by a 100W solar panel. Make sure you remove the key when you are done, for safety reason. Be care when you using the charging station, it has a lot of power backing it and the batteries also power the field camera.



Two power terminals separated by two PVC pipes. Insert key into the black hole marked by the yellow arrow in the photo above.



Another what's it.

UPCOMING EVENTS

June

- 2 **Newsletter material submission dateline**
- 20 **PCC Meeting, 7:30 p.m., Dave Chetcuti Rm, Millbrae**
- 17 **Father's Day**
- 23 **Warbird Fly-In, SCCMAS, Morgan Hill**

July

- 4 **Independence Day.**
- 7.8 **SCCMAS Annual Airshow. Tomcats field. Morgan Hill.**
- 18 **PCC Meeting, 7:30 p.m., Dave Chetcuti Rm, Millbrae**
- 28 **Warbirds By the Bay, SACRC, Union City.**
info: http://www.sacrc.org/pdf_files/flyers/warbirds.pdf
- 29 **August newsletter material submission dateline**

August

- 4 **SCCMAS Summer RC swap meet. Morgan Hill**
- 15 **PCC Meeting, 7:30 p.m., Dave Chetcuti Rm, Millbrae**
- 18 **LFE Fun Fly @ Livermore Flying Electrons (LFE)**
Info: <http://LFERC.com>
- 24 **All Scale Fun-Fly @ Salinas Area Modelers, Chualar**
- 26 **September newsletter material submission dateline**

September

- 3 **Labor Day**
- 3 **Fun-Fly @Salinas Area Modelers, Chualar**
Info: Rick Maida 408-778-6885
- 8 **Swap Meet, Sacramento Area Modelers**
Info: morc9988@yahoo.com
- 15 **Warbirds Over Livermore @ Livermore Flying Electrons**
- 19 **PCC Meeting, 7:30 p.m., Dave Chetcuti Rm, Millbrae**
- 22 **Waldo Pepper's Flying Circus WWI and Golden Age**
SACRC, Info: jeff.whitney@sbcglobal.net
- 22 **SCCMAS Fun-Fly.**

There WILL NOT be a newsletter in July, I will be out of town and will not be back in time to generate one. July meeting will be on the 18th.

Brian

MEETING MINUTES

Mike Soleagui

Due to Dennis's absence at the May meeting, Mike stood in to take the meeting notes.

May 16

- 31 members in attendance.
- Guest, Mike Grans.
- Raffle prize will be from J & M hobby in the future
- Membership is at 110 and growing.
- **Safety report**, we need to avoid flying directly west at the pits.
- Field maintenance, never been better.
- Flight proficiency, a motion was passed to require new members to not only pass the solo level but also the A level.

PREZ SAZ

Mike Solaegui

The charging station is up and running thanks to Steve Williams and Darwin Allen, there is a red plastic key in the frequency cabinet that powers up the outside load bars.

Our field co-tenant, Mr Marsh does not want us to mow past the east edge of the runway. I spoke with John Giusti and his position is that he doesn't want to be involved in conflict between his two tenants.

Carnage Sunday, June 10th, nine planes down, several large reputations soiled.

RECEIVER PACKS & BEC/REGULATORS

Matt Abrams

When it comes down to choosing the receiver battery pack that's right for you, there are 4 main choices, NiMH, LiFe/A123, Li-ion and Lipo. Each has benefits and drawbacks that I'll go over.

I'll start with my least favorite, but one that has been in use for many years, the NiMH pack. If you make your own packs from loose cells, you can build a NiMH pack for inexpensive. But most of the NiMH packs that I see at the hobby stores are fairly expensive for outdated technology. I understand many flyers have used them for years, as they were the only thing available and are comfortable working with them. NiMH's have two other advantages, a fully charged 5 cell pack is around 6v, which most servos are made for and they are a low fire risk if they get into a crash.

I have a few issues with NiMH packs. First is that they have memory and must be fully charged and discharged each cycle

to maintain a long lifespan. With modern fast chargers, you can set them to cycle the battery on the charge cycle. If you charge the battery without fully discharging it, the battery will eventually hold less of a charge. Another issue is the fact that NiMH packs often "false peak" while charging. The voltage of the pack with the load of the charger shows that it's full, but when you take it off of the charger, it is only 60-80% full, sometime less. This requires you to start the charge over again, sometimes 2-3 times. NiMH packs also lose about 10% of their charge every week they sit, even if not being used. My final issue, is that as the packs get older, they show as fully charged, but the voltage will drop off very quickly, which will cause total loss of control on your plane. If you use NiMH packs, I don't recommend using the newer Eneloop NiMH packs. Eneloop packs have less memory issues and can hold their voltage, even when sitting for many months, but they can only be discharged at a very low rate. This makes them great for a TX pack, but not for the RX.

LiFe/A123 battery packs also work well for an RX pack. They charge up to 6.6 volts, but that number drops when under load and as they discharge, so many guys have had luck using them unregulated with 6v (none HV) servos. There is some buyer beware here though as different 6v servos have different tolerances for being used at a higher voltage. They do work well with a regulator, but if you're getting a regulator, you might as well get a lipo, you can get 5 GensAce 2s 2200 packs for the price of 1 2300 A123 pack. LiFe packs also tend to be hard to check the remaining voltage as the voltage number your watt (or multi) meter tells you doesn't actually tell you how much is left to discharge. You can see how much they have been discharged by checking how many milliamps are charged back in to the battery when they are finished charging. LiFe batteries have a hard drop off when they get near their low voltage and will cut off your RX with little warning. The two big advantages of A123/LiFe packs is that they can be changed quickly (12-15 minutes) and aren't a fire risk in a crash. They come in various sizes, but tend to be heavier than Lipo/Li-Ion packs. The best type of LiFe packs are the one that use the A123 brand of cells. Fromco and Chief Aircraft both have various sized A123 batteries in stock.

Many giant scale guys swear by Lithium Ion packs for large planes. Supposedly they don't have as many voltage spikes as Lipos while discharging, which is better for the receiver. But a regulator would smooth all of the voltage spikes out anyway, so I really haven't heard one good example of why Li-Io packs are better than lipos. They just cost a lot more and are more of a pain to charge. They might have a slightly lower fire risk in a crash, but will still burn if broken open or over charged. I also don't think Li-ion batteries can be fast charged, but I could be wrong.

My personal favorite type of battery for receivers is the pack we all know and love, the Lipo. I use Lipo's to power the receiver in every single one of my planes, from foamies

(using a BEC) to my giant 125" Extreme Flight Extra using 2x 2s 4000mah Lipo packs regulated. Lipos are the cheapest option of the bunch by far and a 2s 2200 lipo can be had for \$8 from places like Hobbyartz or Hobbyking. Lipos are very easy to check the voltage with a watt or multi meter and they have a linear discharge rate. It's also technology **you** probably understand if you already fly electric planes. For some of my larger planes I am using High Voltage servos, so I can run a 2s Lipo directly to the receiver without the use of a regulator. Most newer lipos can be charged at least at 2C and some as high as 8C, meaning charge times can be really short. Often times, the time the charger spends balancing a pack can be as long as it took to charge it. The big drawback of lipos is that they can catch fire if the pack is punctured during a crash or if they are overcharged. But with a newer, balancing charger, overcharging is pretty rare.

BEC's and Regulators

I wanted to quickly go over BEC's and Regulators. For all intensive purposes, they are the same. Both take a higher incoming voltage and drop it down to a lower, servo friendly voltage. BEC's (*battery eliminating circuit*) are most often used when talking about an electric plane setup. BEC's can be built into ESC's so that they can power the receiver directly from the main flight battery. BEC's can also be standalone units that are wired from the main battery pack to power the receiver. For gas/glow plane setups, the same device is called a regulator, for regulating the receiver packs voltage. The main difference between regulators and BEC's is that many of the standalone BEC's are able to handle a higher incoming voltage from big flight battery pack, where regulators are setup for a lower incoming voltage of a receiver pack. There are many brands of BEC's and regulator out there, but I like to recommend Castle Creation or Dimension Engineering BEC's and Fromco and Smartfly regulators.

Here is what I personally do for my planes. For my electric 50" and under planes I usually go with an ESC that has a large built in BEC like the castle ICE or Extreme Flight Airboss esc's. For electric planes 51-60", I like the smaller Castle Creation BEC (10A). For electric planes 61-75" I like the Castle BEC PRO (20A). For gas/glow planes in the 50-70" range, I like a 2s 1500mah lipo pack with a smartfly regulator. For 50CC gas planes I use a single 2s 2200 lipo with Fromco Sahara regulator (although a redundant setup here is fine). On my 100cc and up planes I use 2x 2s 2200-5000mah packs and 2 Fromco Sahara regulators for redundancy.

Matt

TICK, TICK, TICK.....

WATCH OUT FOR THEM!

WHAT'S IT REVEALED....



It is Matt's new toy, a DJI Hexacopter. Six arms, six motors, six propellers. The arms form a 22" diameter frame, support six motors spinning six 10" propellers. It has 3 gyros to stabilize it and also has a GPS receiver to provide information for the hexacopter to return home automatically.



2012 CASTLE IMAA MINI-FEST

Brian Chan

Memorial Day weekend, again with fellow club members, heading to Castle Airport (formerly Castle AFB) in Atwater, California for our annual pilgrimage to the IMAA Mini-Fest.

The event was as popular as ever, attracting many modelers and non-modelers alike. We arrived at the airfield mid-morning after a short 90 miles car ride. The flying already started, this is a four-day event. As usual, the parking area was full of RV's and trailers full of airplanes. Mind you, these are not small airplanes; IMAA requirement is radio controlled model aircraft with minimum wingspans of eighty (80) inches for monoplanes and sixty (60) inches for multi-wing aircraft. Ducted Fan and Turbine aircraft with one hundred forty (140) inches combined length and width, measured from wing tip to wing tip at the widest point perpendicular to the fuselage and added to the length of the fuselage. Scale aircrafts has to be minimum ¼ scale of the original airplane.

We found a spot along the flight display and parked there to watch the flying. We all wandered up and down the flight line to take photos of the planes on display. Many also are for sale. One can really get a good deal on planes there. There were a few (not as many as years before) venders selling their wares. I have picked up a few goodies for a very good show price. We also ran into a few familiar faces from the Bay Area local clubs. There must be about 200+ planes there, some were placed at the flight line for people to look at and some were back in the pits when the owners and their RV's.

The weather was great and the flying are plentiful. The highlight of the day was witnessing a flight of a full size DC-4. The DC-4 took off right in front of us, did 3 low passes on the runway. The low passes were about 30 feet or less off the deck!!! There was also an Epic Victory (probably ¼ scale) jet performing some really low level passes. I will let the photos do the rest.



A shiny B-29 flying overhead.



A full sized DC-4 on a low pass over the runway



Flight line at the Castle IMAA Mini Fest.



The orange/blue beast is a American Airline Curtiss Condor.



More fancy toys on the flight line.

JEAN-FRANCOIS BOBO



Jeff (as he was known to us when he flew with us in 2010/2011) placed third, flying his P-51 Mustang, in the French Scale Championship 2012. He is part of the French F4C team and will be competing in the *World Championship for Scale Model Aircraft F4C* in Spain this summer. Jake had accompanying him to the 2011 Top Gun competition which he placed 7th overall. Jake will be joining Jeff in Spain.



Jeff's P-51 Mustang.

TICK SEASON IS HERE

Not too long ago, they were gone. Now they are back, check your body for ticks after you retrieved your off-field landing airplanes.

A friendly reminder from the Officers of PCC!

AIRSPEED, ALTITUDE, AND BRAINS

Here is a quick and helpful hint I hope no one ever needs. I misjudged my aircraft's fuel supply one afternoon. The dead-stick landing was short of any runway. That old saying that it takes two out of the three—airspeed, altitude, and brains— to make a good landing was painfully (thorns and 9-foot high sticker bushes) reaffirmed in my mind that day. My new airplane fell considerably short of the runway, almost in the trees.

After donning jungle combat gear, which had been stored in the trunk of my car, probably as a result of some negative thinking about interactions between the surrounding trees and my recently acquired flying abilities, I headed out empty handed. Another member arrived at that time and volunteered to help.

As we headed out he asked why I wasn't carrying my transmitter. I asked, "Isn't it a bit late to use that piece of gear?" In a fatherly fashion, he told me if I hadn't knocked the battery out of the airplane, I probably could move the servos and aircraft surfaces to generate enough noise to allow us to home in on my airplane. "Why didn't you think of that?" I said to myself.

Well, you can guess the rest of the tale. Everything worked out perfectly. In fact, based on the location of the airplane, really buried in the densest bushes and heaviest underbrush, we would still be looking for it if not for the racket it was making as I did my stick shaking.

from the newsletter of the Woodland Aero Modelers

Ken Long, editor

Bolingbrook IL

EDDIE A AND HIS "PRIMO BRANCO"

Here is a video of Eddie taking his P-51D "Primo Branco" out for a little exercise over Half moon Bay.

Video link at: <http://vimeo.com/40056011>

ARTICLES SUBMISSION

Warm up your fingers, get a cup of tea or coffee, plop yourself in front of the keyboard. Assemble the letters into words, form a paragraph or two. Or snap some photos (hey, someone once said "a picture is worth a thousand words!") then send them to pcceditor@gmail.com and I will put them in the fabulous newsletter of PCC for the World to admire.



A Me-262 from Collings Foundation at Moffett Field.



A beautiful Fokker D-VII at Castle.



Someone is having some fun with a pilot at Castle.



Ken, Jake and Rico at Castle.



Contest Director Jake at Schmidt Ranch SAM contest.

More photos at <http://www.flypcc.org/coppermine/>



A 1:4 Epic Victory Jet (Turbine powered) at Castle.

More photos at <http://www.flypcc.org/coppermine/>



Peninsula Channel Commanders

113 Starlite Drive,
San Mateo, Ca 94402
<http://flypcc.org>

Next Meeting: Wednesday, June 20th, 2012, 7:30 p.m.

J&M

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