

PCC Newsletter



January 2011

Next Meeting: January 19th, 2011

AMA Chartered Club # 139

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WHAT'S HAPPENING @ PCC

Editor

Happy New Year!! PCC Banquet

Saturday, January 22nd

No host cocktails 6 pm, Dinner at 7 pm.

Harry's Hofbrau,

1909 El Camino Real, Redwood City
(650) 366-3733

For Info, Contact Ray Squires.

**AMA & Club renewals are PAST due
NOW!**

\$85.00 before February 1st, or \$95.00 after.

When you receive your 2011 AMA card, mail a copy of it along with your \$85.00 check made out to "PCC" to:

**PCC Treasurer_
1779 Woodland Ave., Ste. #28
Palo Alto, CA 94303**

Or bring your AMA card and a check to the next PCC meeting. Dues are \$75 if paid before the New Year, \$85 if paid before February 1st.

CLEAR DA PROP!

Dennis Lowry

Well here it is January already, and where has the year gone? I mean it's 2011, and where did the decade go?

Let me remind you of the banquet on the 22nd at Harry's Hofbrau. It's great fun, and Ray Squires has a number of swell door prizes. Thanks to Ray for putting it all together.

This upcoming year portends to be another great year for the club, and I hope your participation will remain strong. Ken plans to make the runway less susceptible to crashes during take off and landing. He will do this, with your help, by pulling back the turf, and flattening the clay underpayment better than it is now. While there is no guarantee that afterward there will be less crashing, we can assure you that during the work no aircraft will be lost to the bumps.

Again this year we will host the Interim classes at Oceana High School, and your chance to increase the value of your life has presented itself. Talk to Ken, Jake, or me and get involved. Especially you young guys! The young people in our high schools need good role models, and you are it. Believe me, you will not be disappointed by helping out. It's a good thing for the club, it's a good thing for you, and it's a good thing for your employer.

I hope Jake will continue to push the indoor flying; the Lake Hennesey float fly trips will continue in the summer; and I look forward to more days of combat (I might even resurrect one of my combat beaters).

So what is the most promising thing in the coming year? You tell me. This is your club, after all. We all come out to fly, and we all build models to some extent, but activities take new imagination all the time. I enjoy a fun fly. I enjoy Bar-

B-Ques. I enjoy having the ladies out for family days. What is it you'd like this year?

Come to Harry's and tell me. I'll be there. January 22.

See you at the meeting.

Dennis

NOVEMBER MEETING MINUTES

Mike Solaegui

54 members in attendance.

One guest, David Wright.

November minutes approved.

Raffle prize from J & M Hobbies, Eflite Mini Funtana.

Committee reports, none.

Treasurer's report, income above expenses, rolled over CD.

Safety: Turbine season is open until further notice, be sure to have the pit's fire extinguisher out when turbines are being used.

Field: the field has been in very good condition in spite of heavy rain and wind.

Announcements, January 22, Hurry's Hofbrau, Xmas dinner, Tickets available at the meeting in January or at the door.

Old business, none.

New business, new members, Jean François Bobo, David Wright, Marco Chavez, Warren Olson and Brad Richter, welcome gentlemen!

Pete Johnson has asked to step down from the Web Master position, he will train a replacement over the next three months, volunteers please contact Pete directly.

Oceana High School is up again in Aril, we need small kits donated for the students to build, 21 students have already signed up.

Hits and misses, Kenny sharpens the end of piano wire to make an effective long drill bit.

Show and tells:

- Jake built a kit of the plane he learned to fly on, a Gentle Lady.
- Kenny Martinez has finished his major part of building Eddie's Yak, John Bassetto will do the final assembly and Mike Solaegui will power it up with a 110 size electric on ten cells.
- Mike Peck displayed the 84 inch wing for the tri motor "Extra Watts"
- Vidur and Mihir showed their Night Vapor.
- Matt Abrams, a kit built Hawk 1500 electric glider.

- Greg Romine, multi motor DC-3 with disarming switch.
- "Jeff" Bobo has built the 25E extra that he won as a raffle prize recently at the meeting.
- Brian Chan, as usual, has out designed us all by converting the nose of a Nieuport 28 into a removable "pod" making a very nifty battery mount.

Mike

UPCOMING EVENTS

January

1 *New Year's Day*

1 *No Flying if you don't have the 2011 AMA Card*

19 *PCC Meeting, 7:30 p.m., Dave Chetcuti Room*

22 *PCC Banquet, Harry's Hoffbrau, Redwood City.*

February

14 *Valentine's Day, don't forget to appreciate the one who let you out flying on Weekends!*

16 *PCC Meeting, 7:30 p.m., Dave Chetcuti Room*

SETTING UP MULTIPLE HITEC DIGITAL SERVOS ON A SINGLE CONTROL SURFACE

By Matt Abrams

In the old days, setting up multiple servos for a single control surface on giant scale planes was a real pain in the a--. Pre computer radios, you would have to set everything mechanically and hope that the analog servos tracked perfectly together and that the splines on the servo were also aligned. And then it was a matter of each servo having the exact same travel distance. If not, the two servos would fight each other for position (binding), eventually wearing out the servos.

With the invention of computer radios, it became easier because you could now use subtrim and end point adjustments to setting up multiple servos on one control surface. That is if you had enough channels on your receiver for each servo. If you are using matchboxes or Y-cables to gang servos, again you have to do your adjustments mechanically.

But after setting my 3D Hobby Shop 103" Extra SC up with 2 HS-7955 servos per aileron and 2 on the rudder, I learned how easy it can be to get perfectly aligned servos if you're using Hitec Digital servos. First off, you need to plug the servos into your computer using one of the Hitec servo programmers. I am using the HPP-21 that cost me \$23, but it still requires you to use your own USB cable. I have plenty of extras because it uses the same USB cable that every digital camera comes with and also the same that that comes with the Castle Link if you have programmed Castle ESC's before.

You can also buy them at electronics stores for around \$5. Setting them up is just a simple matter of downloading their free software from www.hitecrd.com, plugging the HPP programmer into your computer, plugging a receiver battery pack into the HPP programmer and plugging a Hitec Digital Servo in.

The software has two modes, Test and Program. Test allows you to plug in two servos (analog or digital) at a time and test their travel in large or very small increments. You can also test their failsafe modes if they are digitals. Programming mode is where you can make the adjustments to how the servo works. You can only program one servo at a time. The most important features here are that you can change the Center (neutral) point and the max travel for the servo. Because most servos have an odd number of splines, it's rare that a servo arm will be exactly at a 90 degree right angle from the servo. But now using a right triangle set on the top of the servo, you can adjust the center point until it's exactly at 90 degree angle. Now you know both servos on a control surface will start at the same point. Next you can adjust the throw of each servo in the programmer very precisely by making adjustments to the left and right travel. Just make sure the left and right travel number is the same for both servos. As an example if servo number one travels 192 to the left and right, make sure that servo number two also travels 192 to the left and right. This guarantees that the servos stop at the exact same point at max travel distance and will move together through the travel range. Set the arms to move the travel distance that you will need for high rates. After doing this, you can safely Y-cable the two servos to one channel and they will trim together, even at small increments.

The next step is setting up the pushrods. I do this with both servos now installed in the plane and plugged into the servo programmer. With the servo programmer in test mode, you can make sure that the servos are exactly at the 0 position and they will not move as they are powered. You can also just plug the servos into your receiver and make sure the sticks are neutral on your TX. Because the distances from the servo arm to the control horn may be different for each of the servos, my advice is to set up a pushrod for one servo only and adjust its length so that the control surface is sitting perfectly at its neutral position. Then install the second pushrod, making adjustments to its length and install it so that it doesn't cause any binding in the servos. Digital servos buzz all the time. But if the buzzing gets really loud when the second pushrod is installed, then you probably misjudged the length of the second pushrod.

FYI, there are three other features in the Hitec HPP servo programmers that I find important. One, you can reverse the direction of the servos, so you will not need servo reversing in your radio. Two, you can select High Resolution or Standard Resolution. High Resolution has smoother movement and every single step of trim will move the servo, but it has less travel distance (I think 120 degrees). The

standard resolution has the full 190 degrees of travel range, but is not quite as smooth. To tell you the truth, I can't feel the difference of either mode. And three, you can adjust the servo's deadband. The deadband reflects the time it takes for the servo to respond when stick movement is given. Because digital servos have a really tight deadband (1~3us), you may need to increase this deadband time when using multiple servos on a single control surface.

Hopefully this will help out anyone planning on building a giant scale plane in the future.

CYA BLUES

From EFLT Forum, Alex Mishkovsky

(This was written around 1999, it is still funny, but do take warning about the danger of Cyasglues)

I'm sure we've got a few of these to share....

In the midst of working on the fuselage of my 50" Lazy Bee Special, I decided I really needed that big 1 ounce bottle of Thin CA that I had on the shelf unopened for months....

New Creations "Insta-Cure Super Gold Odorless - Thin" Circa KRC '97.... A good vintage....

Since other glue joints were "setting" and I needed a quick solution, haste and waste were my partners.

A quick, yet miserly snip removed the dispenser top tip, and then another quick snip off the roll of Teflon capillary tube yielded about 3 inches.... now a quick angle cut with the Exacto on the tube end and I push it into the dispenser nozzle tip... ought to work.... quick application (less than 60 seconds for idea to execution!) and Hey... What's this? I didn't squeeze that hard! More stuff dripped than the expected drop..... Okay... What going on? Leakage around the nozzle/capillary tube interface.... Jam the tubing in harder.... Yipes!!!! as I "jam", I squeeze (accident!).... both of my hands are soaked! Nobody else home, MaMa!!!ouch, ouch, OUCHHHH! this stuff gets hot!

What to do????

Help! I'm thtuck to the keyboarddddddddddd.....(kidding, I'm all better now.)

Man, this stuff is "wicked"! (as in capillary wick)... I can't touch anything! Wait a minute... here's a paper towel... oops, I'm now a Bounty Towel/CA/Skin composite! I can't move most of my fingers! Solution: Bear the pain, discomfort, and humiliation as a MAN! Gosh Darn It! (Expletive Language edited for content) May be it's a good thing the old lady isn't home 'cause she'd be rolling around on the floor snorting with laughter!... OKAY, OUCH! Calm down, okay... sit back down into my chair (roll around deskchair)... BANG! ...on my A**.... the chair moved! A Nice Karate chop with my now mostly rigid right hand onto a box of small parts as I go down

to break my "fall".... parts a flying everywhere! I pick myself off the old indoor/outdoor carpet with some additional backside pain and a couple of "fuzzy hands".

Standing still for a couple of minutes works! Everything finally hardens, the hairs on the backs of my hands hurt as the "Epilady CA" treatment seems to be at work... but I make my way into the kids bathroom upstairs, and open with my "claw hands" and teeth... my daughter's finger nail polish remover (acetone). Darn near a full bottle! I'm in luck! A few head reeling minutes later (couldn't turn on the bathroom fan), I free my hands from the grip of the paper towel, carpet lint, and other attachments... and thanks to the acetone "buzz", I realize that after this experience, I'm older, but not necessarily wiser....

Back on the work bench... the drizzle of CA works magic with the tools, scraps, and other doodads on the building board. I could hang this thing up without putting anything away. Neat! More work with the tiny bottle of CA "whacker", peeling, scraping, etc... frees all of my stuff. Wait... whats this? My chest itches! pulling my tee shirt away! Yeeeowch! chest hairs and "stuff" bonded to the tee-shirt!

Aaaaaaargh.... I need a nipple donor.....

Now for the obligatory EFLT particulars...

Clancy Lazy Bee 50" Special, Servo per Aileron, Astro 035G on 6 (maybe seven cells), some Sanyo 1700's from a Thunder Tiger "Windstar EP" , MA Wood Electric 10x8, Castle Creations "Griffon" Digital ESC, Hitec 535 Rx servos...

Should be done in a week or two! Can't wait... back to work! That CA accelerator does stink! Phew!

Regards,
Alex Mishkovskyyyyyyyyyyyyyyyyyy



Guess who's in charge here...



One of the local resident at Richardson Field.



Martin's GP RV4, 70" span, RCGF 26 c.c. gas engine.



Mike P's Ex-Extra.



Club project: Eddie's YAK.



Martin's and Jake's toy.



Jake's Gentle Lady. Of course it has no plastic covering.



Mike S's Extra-Watt.



December general meeting.



Brian's Nieuport 28 arf from Maxford Model.

****More photos are available on the [PCC Website](#).**



Peninsula Channel Commanders

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

Next Meeting: Wednesday, January 19th, 2011, 7:30 p.m.

Holiday Party, January 22nd, Harry's Hofbrau, Redwood City. Ho Host Bar 6 p.m., Dinner 7:00 p.m.

J&M

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