

PCC NEWSLETTER

PENINSULA CHANNEL COMMANDERS INC.



April 2016

Next Meeting:

April 20th, 2016

AMA Chartered Club # 139

Web Site: <http://flypcc.org/>

Field Phone: 650-712-4423

President	Jeff Mate	650-856-1102	stick_time2@yahoo.com
Vice President	Mike Solaegui	415-314-6261	mikes@perfectedgecutlery.com
Secretary	Dennis Lowry	415-285-4496	dennis.lowry@groupdelphi.com
Treasurer	Greg Romine	650-736-7230	gsromine@stanford.edu
Field Safety Officer / Webmaster	Matt Abrams	415-370-3323	matt@matt-abrams.com
Flight Proficiency Chairman	Ray Granz	Looking for it....	geriray15@aol.com
Editor	Brian Chan	650-867-8813	pcceditor@gmail.com

WHAT'S HAPPENING @PCC

Mowing! Those who ventured out to the field will notice the grass had been mowed by Mike Peck! Thanks Mike!

WE ARE BACK TO CHETCUTI ROOM!

PRESIDENT'S CORNER

Jeff Mate

This message comes with a request for your help. Some would call it begging, some whining, but I will try and rise above the name calling and call it engagement!

....but it's really begging.

We need help to run a successful club. Besides the Officers we need folks to step up and "chair" or host activity's throughout the year. All of us enjoy the various

events, such as BBQs, Field Work Day's, Fun Fly's and the year-end Holiday Dinner. Many of the same guys step up and manage/host these year to year.

We are always happy when guys come off the bench to help and even take over for those guys that have put in many years of service to you and me. Please consider this request when Club Events come up. Even if you don't want to Chair or Host a Club Event, we are always grateful for the help or to teach you how. Here are just a few Events coming up in April, May and June.

1. Now that Spring is here and the PCC Weather Station is calling you to the Flying Field, begging you to take a day off work, you have a PCC Club Members to thank. When you watch others fly on the Web-Cam, and you want to be there, but can't, this Web-Cam envy is sponsored by your club members. If you would like to learn how it all works and how to become a support member or offer your time, let me know and I will put you in touch with our IT Engineers.

2. **Ken Martinez** may be calling us all to a Field Maintenance Work Day now that weather is nice. Please bring your gloves, sunscreen and a good back. Ken is at a415flyboy@sbcglobal.net

3. **Brian Chan** is your Newsletter Editor and Chief Communications Officer CCO as well as a PHD (Post

Hole Digger). Brian always needs your help and support by sending him email articles and .pdf's related to RC Flight for your Newsletter. He also needs your building tips and safety articles. It's ok to plagiarize the RC World. Hey Brian, how about a PCC Club Tour of the Wind Tunnel and NASA, maybe some secret Aircraft? Brian is at pcceditor@gmail.com

(I can set up a tour for those secret projects in the wind tunnel, but you need to be blind-folded before we will let you see it! BC.)

4. Events, The Dream Machine at the HMB Airport is on Sunday April 24th. We will have Static Displays and guys flying. **Ray Squires** is the host. Please call or email Ray to offer your help. rlsquires@comcast.net or [650-575-4273](tel:650-575-4273)

<http://dreammachines.miramarevents.com/event-details/date-and-time.html>

Hiller Air Museum and Air Show. The Biggest Little Air Show. We will have a Static Display and RC Flying. This Event is hosted by **Mike Solaegui**. Mike can be reached at [415-314-6261](tel:415-314-6261) for your offer to help.

[Biggest Little Air Show - Hiller Aviation Museum](#)

I will be hosting a Youth Group on June 18th at our PCC Field. This will be 20 or more 14 to 18 year old kids that want to learn about RC Flying and how to get involved. Parents will also be present. More on this later. Contact **Jeff Mate** at stick_time2@yahoo.com or [650-856-1102](tel:650-856-1102).

Safe Landings

Jeff

Field Safety:

Warning: the grounds at the field are still pretty wet, and SOFT. Do not drive off the driveway and parking area. Stay off the green area!



MEETING MINUTES

Dennis Lowry

Meeting Minutes 3-16-2016

Call to Order: By Jeff Mate, PCC President.

New members:

We had the following new members join on 3/16.

Darrell Draper
Daniel Jadalla
Ritwic Ummalaneni

Welcome to Peninsula Channel Commanders!

The February Minutes was approved as recorded, the motion was so carried.

Membership:

We currently have 96 new and renewing members for 2016.

A Motion to replace four combo locks at our field was proposed and passed.

Jeff Mate purchased four locks that are similar to the ones we have with a 4 number combination, but more secure and don't require a key to change the combination.

Financials

The Bank Accounts are in great shape. The stated accounts were similar to the February Board Meeting.

New Business

Dream Machines

The Sunday after the next meeting, April 24th is the HMB Dream Machines. Ray Squires is your contact. Please support Ray and his efforts. He can be reached at rlsquires@comcast.net

PCC along with Ken Martinez (Carbon Ken) and President of SAM 21 (Society of Antique Modelers) has offered our PCC Field for a SAM Event April 23rd and November 5th. This is assuming that they don't use the LFE Field in Livermore CA.

Hiller Event

We should have a booth at Hiller Aviation Museum in San Carlos. Mike Solaegui has offered to host this event. Please support Mike and PCC for this event. We have been invited for many years and would like a great turnout. Mike is not a big email fan so he can be reached at [1-415-314-6261](tel:1-415-314-6261) with your offer to help.

If you want more sweets in your diet...

The Coffee and Donut service will be suspended until we have a volunteer to support it. This can change if you volunteer and want to change the meeting munchies. Mike has the 2 coffee pots and Jeff have all the coffee and extras. You just need to show up with the goodies. There is no cost, everything is reimbursed.

No Crashes or near misses.....that anyone was willing to admit.

Show and Tell.....and then we adjointed.

Raffle

Jeff won the raffle but he offered his prize to Eric to have just new members raffle, Ritwic Ummalaneni won the prize.

Cheers

The Minutes is done by a collective efforts, so no single one person is to be blamed!

UPCOMING EVENTS

April

- 2 Tomcat Spring Swap Meet, SCCMAS, Morgan Hill.
- 16 RC Country Swap Meet @ RC Country, Sacramento.
- 16,17 Los Banos Scale Fun Fly, Los Banos Creek Reservoir, Host by South Bay Soaring Society.

18 Taxes Due!

20 PCC Meeting, 7:30 p.m., Dave Chetcuti Rm, Millbrae

24 Pacific Coast Dream Machine, HMB Airport.

May

- 9 Hobby Town R/C Swap Meet, 10am-2pm, Concord. 4525 Clayton Road, Concord. 925-685-3802
- 14 Wings of History Museum Open House, 12777 Murphy Avenue, San Martin, CA
- 14-15 Scale Master 49'er Qualifier @ Woodland-Davis Aeromodelers, Woodland Davis.

18 PCC Meeting, 7:30 p.m., Dave Chetcuti Rm, Millbrae

26-29 Castle Giant Scale Fly-in. Flying starts 9:00am everyday.

30 Memorial Day.

June

15 PCC Meeting, 7:30 p.m., Dave Chetcuti Rm, Millbrae

18 PCC Youth Group event at Richardson Field.

See <http://www.ncrcs.com/> for more detailed information.

RUDDER CONTROL: WHAT TO DO WITH YOUR LEFT HAND WHILE YOU'RE FLYING

Contributed by: Jeff Mate

Students typically do little with their left hands while learning to fly. Most of the throttle control is of the on/off type—on for takeoff and flying and off for landing. I'd like to tell you why you should use both controls on the stick.

Let's start with a fun maneuver that uses both rudder and throttle. I call it the "tail wag." Start with a nice, high and straight line (as all maneuvers are started) parallel to the runway. Have the throttle set to about half. As you go past yourself (the center), smoothly raise the throttle to full and let the airplane gain speed until it gets to full speed. Now it's past you and going fast. Pull up to vertical and go straight up.

As soon as your airplane is going straight up, start moving the rudder stick side to side. Take roughly a second to do this; don't stop until the airplane slows down and almost stops. At this point, push down elevator and resume level flight. Don't forget to lower the throttle to approximately half and make your turn back. Did you see the tail wag? Wasn't that cool?

Do it again. Each pass do the same thing and have fun. Now you are making the airplane do what you want! You're using the rudder and it's a ball. Let's try something a little more complicated. If you practice these things, using the rudder will be just like using the ailerons. You'll be doing it automatically.

The flat turn

Flat turn? How does an airplane turn flat? Everyone knows an airplane has to bank to turn. My instructor told me that when I was just starting out! Relax and everything will be all right. Since you are using the rudder, you can do more things with that beautiful trainer. Let's try one.

First establish a nice high and straight line parallel to the runway. As I said before, most maneuvers start that way. Have the throttle set to approximately half again. Just before the airplane gets to the center (right in front of you), raise the throttle to full. The airplane will gain speed. As the airplane gets to the center and is going fast, slowly go to roughly half rudder (this stick movement should take about a full second). Use the rudder to turn the airplane away from the runway. If

you're going from left to right, give left rudder. If it's going from right to left, give right rudder.

As you input the rudder, the airplane will start to do two things: roll and yaw (turn). At this point you will give opposite aileron to prevent the bank (roll). If you gave right rudder, give left aileron. If you gave left rudder, give right aileron. Move the aileron stick enough to keep the wings level. Depending on the wind, you will adjust the roll correction by adding or removing aileron input.

Students do little with their left hands while learning to fly. I'd like to tell you why you should use both controls on the stick.

To reiterate: If you're going left to right at full throttle, give approximately half left rudder, and as the airplane starts to bank, use right aileron to keep the wings level. The airplane will be turning but not banking. You will only see the yaw. On aerobatic airplanes, when you give rudder, the airplane will do little or no banking.

This rolling as you give rudder is called roll coupling, and it has a lot to do with the amount of dihedral in the wing. This is not an aerodynamics column so I will not go into why. Hey, my airplane is turning without banking and I don't know what to do next? Sorry, student!

Let's get you out of the flat turn. When you have turned enough, just let the sticks (meaning both the rudder and aileron) go back to neutral. Please don't just let go of the sticks. That "boing" drives me crazy, not to mention it will quickly wear out your transmitter as it will reduce the accuracy of your stick input.

Practice this stuff and while you are practicing using the rudder don't forget to have fun. There is one danger you may run into while doing flat turns. After doing a 90° flat turn, you will no doubt want to do more. That is, you'll want to complete a flat circle. They are really great and very impressive. Do them, but beware. The flat turn is a high drag maneuver. After all, you are forcing the airplane to go sort of sidewise. This causes more drag and speed goes down, causing less lift. Also, there is even less lift because of the sidewise airflow over the wing. Less lift means you could run out of lift. Running out of lift means a stall. Now don't start worrying. You are nice and high, remember. If you do stall, release the rudder and aileron and return them to neutral, maintain full throttle and point the nose down a bit. As you gain speed, give a little up elevator and you will have full control as before.

In all, it's no big deal. Stalling is part of flying. Actually, there is no need to even go that far. With today's trainers you could do full rudder flat turns and multiple circles before you'd ever get into trouble. Okay, now let's get to the really interesting stuff. We're going to combine all you have just learned and do an amazing maneuver that you've seen and admired ever since you started coming to the field.

The stall turn

You know what to do. That's right, high, straight, half throttle and parallel to the runway. As you pass the center of the field, you will go to full throttle and maintain heading at a high rate of speed. When you come to the place where you would normally turn around you will instead give full up. Go up straight, vertically, and at full throttle. After you have gone a few airplane lengths and your airplane has slowed down, lower the throttle to roughly one-third (keep it well above idle). As your airplane slows, give full rudder and after about a second, enough opposite aileron to keep the aircraft from rolling.

If you catch it just right, your airplane will turn flat within its own wingspan. Now you will be heading straight down. Release the rudder and aileron, raise the throttle to about half, and when you have gained some speed, return to level flight by giving up elevator.

One of the things that can go wrong is the aircraft flops over on its back or front. Recovery is the same. Most likely you were going too slow before giving the rudder. Input the rudder control sooner or don't throttle down as much. If you still can't catch this maneuver, you may want to talk to your instructor about increasing the throw of the rudder. Many trainers have very little rudder throw.

You may not catch the stall turn with a first try. Try it again! Don't be afraid to go back to one of your instructors and ask for help. This can be a little tricky. You will be able to do this within a couple of tries.

If you are using a second airplane for this maneuver, you will probably have less roll coupling with the use of the rudder so be moderate with the use of the aileron corrections. At my club, we invite all soloed pilots to keep coming on training nights. There is plenty to learn after you solo. After all, we (as do most clubs) only require the most rudimentary maneuvers and takeoff and landing to solo. Most of your learning will take place after you solo.

BASIC AEROBATICS TRIMS/LOOPS

Now we're starting to look at these maneuvers on Saturday mornings, here is a supporting series of notes which explain how they should be flown.

Trim

First, a note on trimming to do this stuff. You should have statically balanced your plane, probably at the recommended CG point for fore and aft, as well as laterally. However, as you begin flying aerobatics, you'll find that you are constantly seeking better trim to make the maneuvers true. For instance, I like a plane to be balanced so that when inverted hands off, she will gently lose altitude in a shallow dive, rather than drop like a stone! This is achieved by bringing the CG aft. Beware that you don't overdo this - as you move the CG back, you WILL progressively de-stabilize the plane, raising its stall speed - which may be fine if you want to do better spins or snap rolls, but bear in mind that you have to land sometime.

Loops

Flying a good loop is a lot more than simply pulling back on the stick!

1. You must start with wings absolutely level, or when you pull up, you will fall off to one side. It is probably easier to do this into wind.
2. At full throttle, straight and level, begin to pull gently back on the elevators, the plane starts to climb. This first 45 degrees of the loop are critical as they describe the curvature and size of the whole loop.
3. As you pass through vertical into the second 45 degrees, you will need to release the up elevator and as the plane begins to become inverted, begin to introduce down elevator to keep the shape.
4. Whilst this is happening, you need to keep track of the ailerons to correct any tendency to roll, usually caused by a crosswind.
5. At the top of the loop, the plane is losing momentum - the down elevator has to be maintained, and the throttle can start to be reduced.
6. In the third quadrant, the throttle is reduced as the plane begins to pick up speed (objective is to have constant speed throughout the maneuver). I find I have to hold down elevator well past the top of the loop.
7. Passing through vertical downward, elevators are neutral and throttle is at idle. 8. In the final quadrant, up

elevator is gradually applied to end the loop at the same altitude as entry, straight and level. Throttle is reapplied to fly out as airspeed decreases.

Notes: If the plane falls off the loop on the upline, you must apply opposite rudder to bring it back. Often, this is needed near the top of the loop when inverted, when the wind has more effect on the plane as it loses momentum. Don't forget that whilst flying in the same direction (e.g. away from you), ailerons work the same way whether inverted or upright. However, when inverted, the rudder works the opposite way! (Left rudder turns an inverted plane to the right!).

TIP: Start by flying a couple of loops to get trimmed: as you pull the upline; if the plane has a tendency to fall off to one side during the loop, and you were sure you entered with wings level, try a click of trim opposite to the way the plane 'fell away'.

If like me, even with the engine mounted with right thrust, you have the rudder constantly trimmed slightly right to counteract torque, beware the downline when torque effect is nil from an idling engine, as the plane will adopt a slightly crab attitude to the right and you will need to correct the rudder.

The Figure '9' (it does not refer to the maneuver that ended on the ground!)

This is flown just like a loop - it is a 3/4 loop in fact. Key differences are that you will start with more altitude, as there needs to be a distinct downline.

Instead of applying the up elevator in the fourth quadrant, continue the vertical downline. If your plane is trimmed properly it will probably go south in a pretty straight line! However, some planes naturally try to pull out (my Pitts does) so you have to introduce down elevator to keep the vertical. Having described the down line, you'll pull up to straight and level flight to complete the maneuver.

MUST DO's: You must throttle back on downlines - pulling out suddenly at full throttle may literally rip off the wings at which point you WILL experience a sudden lack of lift!

Practice these moves so that you balance the maximum size of loops against the engine power. Make round loops not oval. Be patient and steer the plane all the way around. Actually, a good loop is a rare sight at the flying field and is one of the maneuvers that causes most trouble for aspiring SCAT / IMAC pilots.

Rolls

One of the relatively simple maneuvers, but can be made much more difficult by doing it slowly, in 'points' or on 45 degree up or downlines, for example. Here's how to fly a simple aileron roll:

1. In level flight, raise the nose slightly (about 10 degrees) then release the elevator. (Note: In competition you must enter level.)



DREAM MACHINE 2016



The **Pacific Coast Dream Machine** event will be on April 24, Saturday at Half Moon Bay Airport. The show hours will be from 10 a.m. to 4 p.m.

As it was in the years past, PCC will have a display booth at the show again this year. Last year we were part of the flight demonstration program. We flew Turbine-powered jets, Giant scale aerobatics machines. The club is looking for volunteers to bring display models and "person" the booth. You will have a chance to speak to many people from all walks of life, to share you experience in the aero-modeling activities. You will get in free and you will have time to walk around the show to enjoy the event. There are a lot of flying and display aircrafts. It is a great family event.

If you are interested in helping your club, show your crafts. If you have some old magazines and would like to give them out, bring them along to give them out (only if you want!) For more information, contact Ray Squires, rlsquires@comcast.net or call 650-575-4273.

Wings of History Air Museum

16th Annual Open House and Fly-in
Saturday, May 14, 2016
7:00am to 3:30pm



Wings of History Air Museum and San Martin Airport
Highway 101 and San Martin Ave.

Free Admission



On display: aircraft, antique cars, tractors

Free tethered hot air balloon rides
(early morning, when wind is calm)

Food available all day (8:00 to 3:30)

Radio-controlled model aircraft
demonstrations

Free Young Eagles airplane rides
for kids 8 to 17 provided by EAA Chapter 62
from 10:00 to 2:00. Rides are limited to first come-first served



Watercolor sketches by Sunita Shirodkar

A special thank-you to our event partners:



Wings of History
12777 Murphy Avenue
San Martin, CA 95046
(408) 683-2200
www.wingsofhistory.org



Wings of History Air Museum Free Open House

Saturday May 14, 2016

12777 Murphy Avenue, San Martin, California

FREE admission to the museum and displays

**Hot air balloons, from 7:00am,
weather permitting**

Continental breakfast from 8am
Airplanes of all kinds, antique, modern,
Warbirds

Young Eagles, kids 8 to 17 get a free
flight! Limited space,

Lunch, 11:00am to 2:00pm

Antique cars

Antique farm equipment, steam engines

Yard sale, bargains galore

Kids' activities: rib building, model-making,
and a maze.



Bomb's away! Ray dropped the "bomb" from his plane.



Rich is happy about Ray's landing!



Kiyoshi, pilot-in-training, with Ken.

04/03/16 10:39 / Temp 61.2° F / Wind 3.4mph / Wind Dir 270°



Ray with his plane. Anytime you can go home with the same number of pieces as you came with is good!



Next Meeting April 20th 7:30pm
Battery Bank voltage at flypcc.org/camera

We did have a few days of good weather between the storms!



Greg flying his Senorita, under overcast skies!



Here is what Kiyoshi used to power his starter, a rechargeable power tool battery with a PVC cap. Very ingenious way to use what is available.

RC FLYING AND THE LAW IN 2016

From the SVSS (Sacramento Valley Soaring Society) information central (SVSS Yahoo forum);

Since then a number of notable things have happened. As it turns out a very comprehensive article titled "[RC Flying and the Law in 2016](#)" was just published today. It is very well researched and highly recommended if you want to stay current on this important topic.

If the above link does not work, here is the url, <http://www.tested.com/tech/566982-rc-flying-and-law-2016>



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HOURS
WEEKDAYS 11AM-6PM
SAT. 9:30 AM-5:30 PM

Support your local hobby *shop!*



<http://www.flypcc.org>

Next Meeting April 20th

At The Chetcuti Room!