

Hot Air



Message from the President

June 2014

I am constantly impressed with the variety of unique model aircraft projects our members are involved in. Last month's meeting was a perfect example.

Jerry Lake, our club VP, has always had a soft spot for well made internal combustion engines. He has a small mill and lathe in his shop and has been learning the intricacies of machining a running IC engine. Jerry has brought some of his projects to our meetings. Recently he ran across an engine that he just had to buy and ended up buying a plane that would accommodate it. The pictures in this Newsletter show the aircraft that Jerry should have flown by now. This is an impressive aircraft. Not only for its size and propulsion, but also the electronics Jerry has incorporated. The pictures don't do it justice.

Lonnie Cope has always been involved in stick-and-tissue rubber-powered free flight. He did a beautiful job with the biplane he brought to the meeting. The kit was a donation at a previous club meeting. Lonnie is a great builder and is a good source of information on how to build and trim these models for flight. Look him up if you are interested.

Bob Okita has been heavy into quad copters for a while now and has brought several of his projects to our meetings for show and tell. Bob's latest copter is a micro quad that is fully down-linked to the transmitter to display camera imagery and copter's vital signs. The radio and copter with camera, ready-to-fly is about \$180. Quite an impressive package in such a small copter. Bob flew it at the meeting and we were all impressed with the copter's stability and the quality of the imagery. Pretty impressive stuff! If you have

a project you are putting together, bring it to the meeting and share it with everyone. We would all enjoy seeing what you are up to.

Next Meeting

**Wednesday,
June 4th
7:30 pm**

**La Romeria Park
19501 Inglewood Ave**

I received a couple of inquiries regarding our flying at Entradero. Both conversations involved aircraft flying over residential houses. Please remember that we are supposed to fly over the undeveloped areas at Entradero, only, and stay 100 feet within the outer fence line. When guys are flying, help spot their plane's location and nicely let them know if they are outside the allowed flying area. Obviously, no one should be overflying a house.

The Torrance city personnel are aware that we are issued badges for flying at Entradero. This was news to the Park personnel. They may start checking for badges at Entradero. Please be courteous with all City personnel and show them your badge upon request. If you have not received your 2014 badge, have your old one available or an e-mail that shows your membership is valid.

Upcoming Fun-Flys

**Del Cerro
Entradero**

**June 7th
June 20th**

The Del Cerro Fun Fly will be this coming Saturday, June 7th. The fun starts around noon. The Entradero Fun-Fly will be on Friday, June 20th. Flying starts anytime after 8:00 AM. Our monthly meeting will be at La Romeria Park this Wednesday, June 4th at 7:30 PM.

See you at the fields or the meeting. If you attend the meeting, bring something for show and tell!

- Jeff



The Thermal Hunters of De Portola - from Steve Kratz

I've flown at Del Cerro with the PSF gang for several years now and in addition to enjoying the flying, I have always enjoyed the camaraderie of the DC regulars. Saturdays are usually a 50/50 mix of flying and chatting about a wide range of topics. Depending on the conditions, sometimes the chatting is the high point of the day rather than the flying.

One of the common topics discussed are the points standings for the twice-weekly SULA-sanctioned thermal duration contests held at De Portola Park in Torrance. This year-long battle for thermal supremacy is discussed, debated and scrutinized with a level of interest usually reserved for global politics.

I found all the talk about time max's, landing points and flying techniques of great interest and decided to attend one of these contests to see what thermal flying was all about. Since they are held on Tuesday and Thursday mornings, I would have to wait until one of my rare days off from work coincided with a contest date. Finally, earlier this year, that's exactly what happened and I found myself at De Portola with the only plane I own that has a tow hook, ready to try my luck at flying a thermal contest.

I think it's important to note that the fact I own a plane which actually has a tow hook doesn't mean that I have ever launched from a high-start before. My only experience with a similar launch method was a couple years before when I attempted to launch a plane from a winch at FOD. I say attempted because although my plane did launch it didn't fly very far since the wings folded and separated from the fuselage as I stood watching in stunned amusement. The fuse followed an arrow like trajectory ultimately sticking straight into the grass while the wing halves fluttered slowly back to earth. Needless to say, I was hoping the high start was a less traumatic way of getting planes airborne.

I was met by De Portola flyer and PSF member Lou Valencia, who I think was impressed that I followed through on my threat to show up and see what all the fuss was about. He offered a couple of practice launches which I accepted and was pleasantly

surprised to find them not as stressful as a winch launch. So far so good. He hefted my 2 meter Fling and pronounced it a real "lead sled", explaining that the competitive flyers at these contests were using 1.5 to 2 meter planes that were likely half the weight of my rig and predicted prophetically, I would struggle in the light De Portola lift.



The pits at De Portola

After setting up and then repositioning the high-start due to a wind shift, the contest flyers set up the pits and started prepping for battle. As I scrutinized the hardware the competition was unpacking, it was clear I had brought a knife to a gun fight. As Lou predicted, there was no way my sled was going to hang with the exotic, mostly scratch-built planes I saw resting in the lush De Portola grass. It was unbelievable to me that these delicate beauties would tolerate much handling, let alone a full power high-start launch. A quick inspection of Lou's gear revealed a sophisticated scratch-built thermal plane and a newish Spektrum 2.4 radio, which surprised me even more since I had seen none of this stuff in Lou's possession at Del Cerro. Clearly he saves his "good stuff" for contest flying. Now I was starting to get a clearer picture of how serious the De Portola competition is and why the weekly discussions sometime include a little gentlemanly trash talk - serious business, indeed.

Next up was assigning the flight order, which includes attaching name tags to a stake in the



ground in the proper order. This was my first event at De Portola and there were no blank tags so I was assigned a placeholder name tag which read "Skip". Everyone seemed to find this amusing, no reflection on the real Skip, I'm sure. During a brief explanation of the rules, I learned that there would be 3 rounds flown with increasing flight durations required to "max", points subtracted for flying over or under the max and points awarded for landing as close to a stake in the ground as possible. Flight points and landing points would be combined to determine each pilot's ranking. Simple enough, and I was certain that by the end of the day the last thing I would have to be concerned with was my point total, which was sure to be minimal.



Having a timer is essential

My first official launch was a study in how not to launch a plane and resulted in a launch height comparable to a decent hand toss. The more experienced competitors were effortlessly hitting much higher altitudes and easily maxed the first round. There were no landing points for me either as I completely forgot about trying to land close to the marker.

I did improve both my launching and landing results in subsequent rounds, but not enough to risk moving out of a distant last place finish. As a veteran last place finisher in other competitions, I was able to set aside my dismal performance and enjoy the experience of a totally different type of flying.

The high point of my day was actually after the official event had concluded when Lou insisted I fly his contest plane. This is when I started to get a little nervous. In spite of Lou's assurances that all I had to do was not drop his transmitter, I really didn't want to be the one holding the transmitter if something went wrong resulting in the loss of what was clearly a one of a kind scratch-built thermal machine. He offered some last minute advice "Don't touch the sticks until it's off the high start!"



Jim Hurley getting ready to launch

I figured even I could follow those instructions, so I launched the plane and sure enough it flew itself right up to a good launch height, released and started floating. Now that I was past the tough bit, I placed my thumbs on the sticks and started flying. I tried some tentative inputs only to discover that there appeared to be no effect on the plane. Uh oh, I quickly checked the transmitter to ensure it was turned on and tried again. I could just make out the beginning of a slight turn from the plane and it began to dawn on me why these thermal pilots all seemed so darned smooth at the controls. Their rates are turned down so low that stick inputs have almost no influence on the plane! Ah ha! I had learned my first secret of thermal flying and made a mental note to reprogram my TX accordingly.

Lou's plane floated and floated and all I had to do was keep it over the park. With virtually no lift and no effort on my part, it just hung in the air like an anti-gravity machine, easily surpassing my longest official flight and hitting nearly 4 minutes before finally settling back to earth. I could only imagine how long I could have flown if I had found some lift



- but then finding the lift is the magic of thermal flying.



I got to fly Lou's contest rig!

All in all, it was a very enjoyable learning experience and the De Portola regulars couldn't have been more welcoming. The SULA contests at De Portola Park are an excellent opportunity for PSF members who want to test their skills against some of the best local TD flyers or just enjoy a morning hunting thermals with a great bunch of guys. I'll definitely be back in the future with a more competitive plane to see if I've made any progress on my thermaling skills. Maybe I'll even catch a thermal next time!

See you at Del Cerro.

-Steve

Show-and-Tell at the Club Meeting

From Bob Hokita:

"Its a Hubsan X4 H107D micro FPV quad, which you can find [here at Amazon](#).

Its control system is on 2.4Ghz and the FPV system is on 5.8Ghz. I think there are 5 selectable FPV channels, but normally it selects an open channel automatically. The control transmitter has an FPV

receiver and display. A micro SD card plugs into the transmitter to record the FPV video. Both the transmitter and quad battery voltages are indicated on the FPV display, so you know how much 'juice' you have.

The quad operates off one lipo 3.7V 380mAh battery that is charged through a USB charger. There are LEDs on the quad to allow for night flights

(looks pretty cool!) The LEDs flash when the battery gets low. The quad has a detachable prop guard which I highly recommend installing. It's fairly light at 1.9 ounce, so there is usually no damage in minor crashes. I recommend flying it off carpeted floors or grass to minimize damage.

I purchased my quad at [CTRL.ME](#), located in Venice, CA. (They're currently sold-out of Hubsan X4's, but more are on order). They sell and teach multirotors."





More Show-and-Tell...

*Jerry Lake's
newest project
for his newest
engine*



*Lonnie Cope's
beautiful stick-
and-tissue free
flyer*

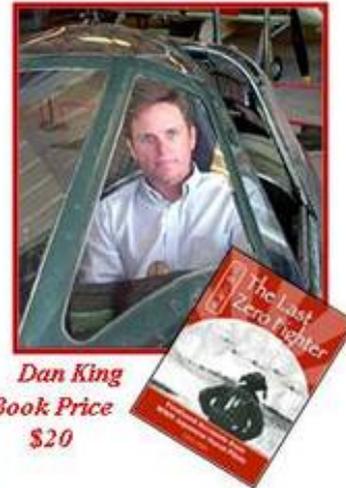


Upcoming Event of Interest...

Celebrity Lecture Series
June 21, 2014 – 11:00 AM

The Last Zero Fighter

Dan King



Dan King
Book Price
\$20

Authentic WWII Veteran Japanese Zero Fighter Strikes the Tarmac at Torrance Airport at Ten Hundred Hours

When America lurched unprepared into World War II, our troops discovered to their horror that their preparations, logistics, and much of their equipment were not up to the tasks that had been thrust upon them. One of the most feared of the overmatching adversary systems was the Mitsubishi Zero fighter. In the hands of a skilled pilot, its speed, maneuverability, and armament were devastatingly effective in duels between Japanese and American airmen. Of course, American technological and industrial might eventually produced machines that were more than adequate to handle the threat. But, at the outset, the Zero was both respected and feared. The saga of this impressive weapon of war has been thoroughly explored and researched by a knowledgeable individual, Dan King, who is uniquely qualified to bring this story to light. Fluent in the Japanese language, and having had the opportunity to live and work in Japan, where he interviewed many of the surviving Zero pilots, Dan also visited many of the island combat theaters, throughout the Pacific, where Japanese and American pilots faced one another. The result is an authoritative and compelling story, told in his new book, *The Last Zero Fighter*. Join us for the real story from Dan King.

Museum Members Free
 Non-members: \$5
 Parking Available in
 Museum Lot



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