

# Hot Air



## Message from the President

July 2013

The latest on the upgrade to the sump capabilities at Entradero Park is that we should see activity in August. I do not know what the initial extent of the early work will be. The City may start with more surveying work or they may come in right away with the earth moving equipment. Regardless, be prepared for the activity and the potential disruption to our ability to fly. For those of you with the ability to fly weekdays, please drop me an e-mail or a call if/when the grading begins.

The Fourth of July is fast approaching. The weekdays preceding the Fourth and the subsequent weekend are clear with no scheduled baseball activities showing on the calendars to which I have access.

As I posted in last month's Newsletter the Tom Hick's baseball camp is ongoing at Entradero. The camp will preclude weekday flying. Although I included the calendar last month, here it is again for your reference:

June 24 -28	Session 1
July 8-12	Session 2
July 15 -19	Session 3
July 22-26	Session 4
July 29- August 2	Session 5

The time each day is 9:00 AM to 3:00 PM, Monday through Friday.

The heat we are experiencing is a good reason to be cautious if you are planning a day flying in the sun. A good hat, sunglasses, sun screen and plenty of water are the order of the day. If you are up at Del Cerro and your favorite ride has gone down, make sure that you let someone know before you hike down the trails to get it.

### Next Meeting

**Wednesday,  
July 3rd  
7:30 pm**

**La Romeria Park  
19501 Inglewood Ave**

Getting back up will be the dangerous part. Lots of water will be required and the hike itself will seem especially tortuous compared to negotiating the trails on a cool day. Your plane isn't worth much compared to your health. If it is a hot day, consider coming back early the next day to retrieve it, rather than risk not getting yourself back.

I just spent the last two weeks in England on business. 11-12 hour days were the norm. I was even able to convince the Brits that they needed to work the weekend due to the problems they

### Upcoming Fun-Flys

**Del Cerro July 6th  
Entradero July 26th**

are having with the product they need to deliver. I am not quite sure what time zone or continent I am on, but I do know that all of this traveling is sure getting in the way of my being able to bend the sticks. I am hoping to have the opportunity to do so over the July Fourth weekend.

Hope to see you at the meeting or one of the fields. All the best.

- Jeff



## The Ultimate Del Cerro Setup

## Part I - The Concept

If you fly at Del Cerro regularly amidst a variety of flying conditions, there are probably times when you wish you had a different plane to fly for the conditions on a given day. Honestly, nothing is more frustrating than charging up your super-light floater for a thermal session at DC and then finding that the wind is actually blowing 20+ mph. While there may be tons of lift, launching your floater into these conditions would be like tossing a kite without a string into a typhoon. It'll fly but you'll have to chase it into the next county to retrieve it. On the other hand, showing up with your ballasted molded mini sloper would be ideal for the conditions above but be prepared for some exercise (hiking) if conditions are light.

Would it be possible to build a plane that would perform well in both Del Cerro extremes? What would this plane look like? Would it have to be crazy expensive or exotic? Just for fun, let's see if it's possible to conceptualize what type of model could float and thermal in light lift and still penetrate on a windy day @ DC. What would our performance requirements be?

1. **Light Wing Loading:** DC generally has relatively light lift most of the time and this concept would need to be able to thermal and fly in light slope lift.

2. **High Wing Loading:** The only way to make a light plane penetrate in windy conditions is to increase wing loading as needed. A ballast tube should make this possible.

3. **Durability:** Landings at DC not only need to be fairly precise but also the airframe needs to withstand impacts with unfriendly rocks, not to mention that sign that has collected a few planes over the years. Yeah, that sign that says something about flying rules @ DC. I'm surprised it doesn't include a rule about avoiding the sign while landing.

4. **Safety:** Logically, if one is going to be loading a model up with lead and then landing it in the midst of dozens of civilians at a popular sightseeing spot, it should have some impact compliance designed into it.

Okay so now we have the basic requirements for this model, let's see how various options stack up.

**Basic Ballasted Built-up Floater:** This is an attractive option since most of us already have a DC floater and adding a ballast tube is pretty easy. The only problem here (and don't ask me how I know this) is that adding much ballast weight to an existing 2 channel balsa floater exponentially increases the impact force (confetti factor) during less than perfect landings. Add the challenge of slowing down this lead sled while landing without flaps, crow or a parachute and this option seems likely to be great fun for exactly... one flight!

**Fantastic Foam Flying Freight Train:** Foam 2-meter ARF gliders are really popular and cheap and they can be ballasted. Foam is a little more user-friendly for repairs and absorbs some of the extra impact forces with higher wing loading, but it also isn't very rigid and any appreciable extra weight tends to cause the wings to bend alarmingly which isn't good for aerodynamics. And let's be honest here: no one likes to fly something that behaves like a drunken seagull in a wind storm.

**Magnificent Molded Mauling Machine:** From a purely theoretical standpoint, a nice, efficient molded sailplane would be perfect for the job of light lift and high wind flying. The only obvious problem here would be the carnage caused by landing what amounts to dual carbon fiber samurai swords (the wings) joined to the javelin like fuselage of said efficient sailplane in a crowded public park. The locals would



undoubtedly breakout the torches and pitchforks and lynch anyone caught with a transmitter in their hands.

Okay, let's try to identify the characteristics above that meet each of the requirements and build a composite of our theoretical perfect DC plane. Remember, the goal is to create one plane that we could keep in the car at all times and fly at Del Cerro whenever we want regardless of the conditions.

1. Either a foam or built up structure would produce a light lift flyer. Perhaps a combination of both construction methods.
2. Add some ballast and you could penetrate in higher wind speeds.
3. EPP foam is extremely durable. A

combination of EPP foam and carbon / balsa structure would definitely produce a light and durable airframe, like a combat wing!

4. Foam also has some amount of impact compliance. Having personally measured the impact force of numerous foam combat wings through the admittedly unscientific but never the less effective "missed hand catch" method, I can confirm that the chance of injury is greatly reduced compared to catching samurai swords.

*There we have it! Our ideal DC flying machine for all conditions is a combination foam / built up, ballasted flying wing!*

Next month: Part II - "The Build!"

- Steve Kratz

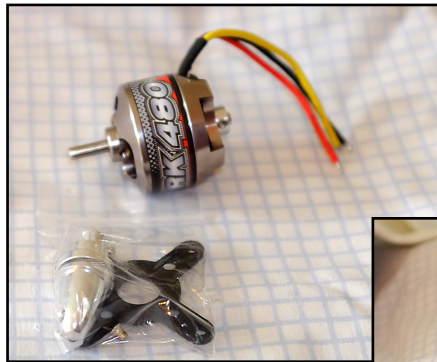
"Show-and-Tell" from Recent Club Meetings



*Continued...*



Monthly Raffle!



*Once again, we will hold a raffle at the July club meeting.*



*Come on out and win something cool!*



**Club Officers and Volunteers for 2013**

- President: Jeff Chambers  
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