

SAN DIEGO

# Scale Staffel

Jan/Feb/March 2015



April's indoor flying at Grossmont College has been cancelled because it falls on Easter



Scale Staffel  
FAC Squadron #41  
AMA chapter 915

— P R E S I D E N T ’ S L A N D I N G S T R I P —

# Another Flying Season

by John Hutchison

Our three contests in 2014 were a great success and a lot of fun. I hope you are putting together your list of new planes for the 2015 events. The dates have been set for April 18-19 and August 22-23 at Perris, CA with our third contest being held at the WESTFAC V in Buckeye, AZ on October 21-24, 2015. Hope you all can attend these events.

It is with great sorrow that I must report our dear friend and pillar of the model building community, John Oldenkamp (1931-2014), has passed away. He will be sorely missed. His contributions to community associations and to model builders everywhere have been recognized for many years. There will, sadly, be an empty spot at our flying field.

After many years of being Contest Director, I would like to thank William Scott and George Mansfield for taking over the position. This has put new enthusiasm into my own building and flying program. My personal list of projects keeps getting longer and longer. So...all you flyers stand back, 'cuz here I come!

Speaking of Scale Staffel Members George Mansfield and, also, Bob Hodes, they have both achieved great accomplishments in 2014. Bob achieved the Blue Max Award and was presented the medal at the Flying Aces event in Geneseo, NY in July. George achieved his sixteenth victory at the Scale Staffel event in August and was awarded the medal at our November meet. CONGRATULATIONS!

Bob Hodes isn't done, yet! He won the 2014 Grand Champion Award for winning the highest accumulative scores for all three events. CONGRATULATIONS again!

We have secured the Grossmont College gym on the first Sunday of each month for 2015 for our Indoor Contests. The schedule is on the website ([www.scalestaffel.org](http://www.scalestaffel.org)). This year we are adding Embryo to the list of events. That makes three divisions for indoor: Phantom Flash, No-Cal and Embryo. All featured events are flown under FAC Rules and are eligible for FAC Kanones. The first three months featured: January, Phantom Flash; February, No-Cal and the first Embryo contest was held on March 1, 2015.

We held our annual Scale Staffel / Orbiteer Banquet on January 24 at Giovanni's Restaurant in Kearny Mesa. It was great to see you there!

Build! Fly! And have fun! LLFF! (Long Live Free Flight!)

John Hutchison

**FLYING  
ACES**  
**SQUADRON 41**

# A Year of Trying New Things

by William Scott

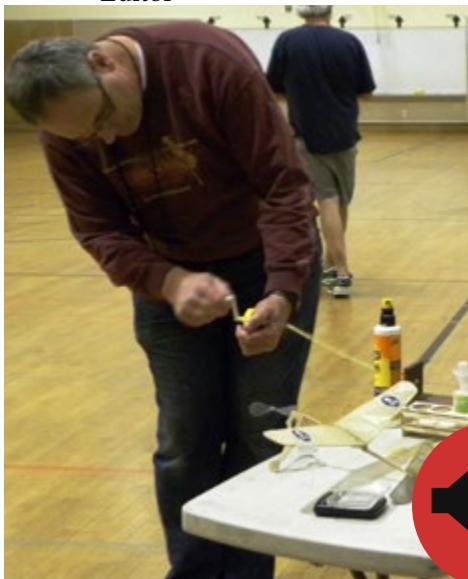
We have begun by planning a head. Our regularly scheduled indoor events, held the first Sunday of every month are all confirmed. We have our two outdoor events scheduled at Taibi Field in Perris CA, April 18 and 19 as well as August 22 and 23. We have WestFAC in Arizona on October 21 through the 24. And finally we are proud to introduce a new member to our squadron, Laurissa, who has volunteered to help the squadron attract more people to our different events. She is currently attending college, earning her degree in the field of advertising and is interning at two companies, Oster and Associates doing public relations and Visual Antics doing marketing outreach. Welcome Laurissa.

You may have noticed a speaker/volume icon sitting below inbetween the two photos. This is a new feature we are experimenting with. It is an audio track. Click on the symbol to take a listen and let us know what you think.

Until we see each other at the field. Build strong, cover well and fly to the max.



William Scott  
Editor



## Indoor Contest Schedule 2015

|     |                           |     |  |
|-----|---------------------------|-----|--|
| JAN | Phantom Flash             | AUG | No-Cal   |
| FEB | No-Cal                    | SEP | Embryo   |
| MAR | Embryo                    | OCT | Phantom Flash                                    |
| APR | Cancelled (Easter Sunday) | NOV | Canard One-Design<br>(Wrisley Zephyr) and No-Cal |
| MAY | No-Cal                    | DEC | Embryo   |
| JUN | Embryo                    |     |  |
| JUL | Phantom Flash             |     |  |

## INDOOR CONTEST

The first Sunday of every month  
Big Gym at Grossmont college  
8800 Grossmont College Drive  
Park in lot "3"  
Gym opens at 7:30 a.m.

## TABLE OF CONTENTS

|  |    |
|--|----|
| President's Landing Strip . . . . .                              | 2  |
| From the Editor . . . . .  | 3  |
| Annual End of the Year Luncheon . . . . .                        | 4  |
| First Sunday January Photos . . . . .                            | 5  |
| Contest Results: January . . . . .                               | 6  |
| Aeromodeler of the Year . . . . .                                | 7  |
| First Sunday February Photos . . . . .                           | 8  |
| Contest Results: February . . . . .                              | 9  |
| April Outdoor Contest Announcement . . . . .                     | 10 |
| First Sunday March Photos . . . . .                              | 11 |
| Contest Results: March . . . . .                                 | 12 |
| Debut of Two New Contests . . . . .                              | 13 |
| Balsa Foam . . . . .   | 14 |
| MAXOUT Embryo X . . . . .  | 15 |
| Local News / Businesses . . . . .                                | 17 |
| One-Design Event Flier . . . . .                                 | 18 |
| Walt Mooney<br>4th of July Contest Flier . . . . .               | 19 |
| August Outdoor Contest Announcement . . . . .                    | 20 |
| 2015 Scale Staffel T-Shirts . . . . .                            | 21 |
| Advertisers . . . . .  | 22 |
| WestFAC V Flier . . . . .  | 25 |
| 23rd Annual World Wide Postal Flier . . . . .                    | 26 |
| <b>Cover Photo</b>   |    |
| Mike Jester with his Rearwin Speedster. Photo by Arline Bardick. |    |

# Annual End of the Year Luncheon

by William Scott



**O**ur annual end of the year luncheon is a great time for us to catch up with each other after the holidays. We talk about our kids, grandkids and some of us can even boast about our great grand kids. We talked about plans for the next year and reminisced about the past year, we handed out two certificates and couple of trophies with lots of hooping and hollering.

Scale Staffel in the past few years has handed-out two trophies. There is our Outdoor Grand Champion trophy, which this year was won by Bob Hodes. He received his trophy at the last outdoor contest.

The second trophy is for Aeromodeler of the Year. This person represents an shining example of a club member, they attend most events, are competi-

tive, are collaborative and supportive at many levels. They help out the beginners, learn from the masters, and act as a club ambassador. This year the Aeromodeler of the Year is Mike Jester. You can read about him later in this newsletter.

This year the club introduced a third trophy, the Indoor Grand Champion perpetual trophy, which means it is held for a year at a time. This trophy will be awarded to the person with the most combined points earned at our indoor events from January to December of that year. We award three points for first place, two points for second and one point for third. Being consistent in all categories will be key to winning the trophy.

The luncheon is also our chance to thank our (this year, nine) sponsors and to remind our members to support them when we can. This year, for our

raffle, we received over fifty different items from the sponsors. There were kits at various levels of expertise, tools, jigs and fixtures, books, local gift cards, and jewelry; something for everyone. The money generated through the raffle is used to help cover the cost of our plaques and winner name plates given out at our outdoor events. Thank you to the following companies for making our raffle a big success.

- **Bob Holman Plans**
- **Diels Engineering, Inc**
- **Penn Valley Hobby Center**
- **Plans and Things**
- **Schultz's Hangar  
(was Sterner Aero-Werkes)**
- **Starlink Flitetech Models**
- **Thomas Design**
- **Volare Products**



— INDOOR FLYING —

# First Sunday of Every Month: January 2015

Photographed by Arline Bartick



— INDOOR REPORT —

# Contest Results: January

Tabulated by CD of the Month

January 4, 2015

| Event: A-6 (6 entries) | Airplane | FLIGHT TIMES |     |     | (Best two of five) |     | SCALE FLT | BONUS  | SCALE  |       | CD: William Scott |
|------------------------|----------|--------------|-----|-----|--------------------|-----|-----------|--------|--------|-------|-------------------|
| CONTESTANT'S FULL NAME |          | 1            | 2   | 3   |                    |     | FACTORED  | POINTS | POINTS | TOTAL | PLACE             |
| Richard Wood           |          | 175          | 220 | 187 |                    |     |           |        |        | 407   | 1                 |
| Steve Shepersky        |          | 179          | 156 | 172 | 201                | 185 |           |        |        | 386   | 2                 |
| Mike Jester            |          | 190          | 169 | 160 | 193                | 188 |           |        |        | 383   | 3                 |
| Greg Hutchison         |          | 172          | 168 | 169 | 188                | 193 |           |        |        | 381   | 4                 |
| John Hutchison         |          | 154          | 146 | 183 | 135                | 125 |           |        |        | 337   | 5                 |
| Mark Chomyn            |          | 77           | 77  | 67  |                    |     |           |        |        | 154   | 6                 |

January 4, 2015

| Event: Phantom Flash (5 entries) | Airplane | FLIGHT TIMES |    |     | (Best three of six) |     |    | SCALE FLT | BONUS  | SCALE  |       | CD: William Scott |
|----------------------------------|----------|--------------|----|-----|---------------------|-----|----|-----------|--------|--------|-------|-------------------|
| CONTESTANT'S FULL NAME           |          | 1            | 2  | 3   | 4                   | 5   | 6  | FACTORED  | POINTS | POINTS | TOTAL | PLACE             |
| John Hutchison                   |          | 102          | 89 | 112 | 113                 | 101 |    |           |        |        | 327   | 1                 |
| Greg Hutchison                   |          | 63           | 61 | 70  | 79                  | 80  | 36 |           |        |        | 229   | 2                 |
| Nick Panousis                    |          | 50           | 56 | 57  | 51                  | 45  | 60 |           |        |        | 173   | 3                 |
| Don Bardick                      |          | 25           | 40 | 48  | 46                  | 46  | 58 |           |        |        | 152   | 4                 |
| Richard Wood                     |          | 29           | 34 | 44  | 35                  | 39  | 55 |           |        |        | 138   | 5                 |
| Bill Hill                        |          | 5            | 31 | 48  | 21                  | 26  | 16 |           |        |        | 105   | 6                 |

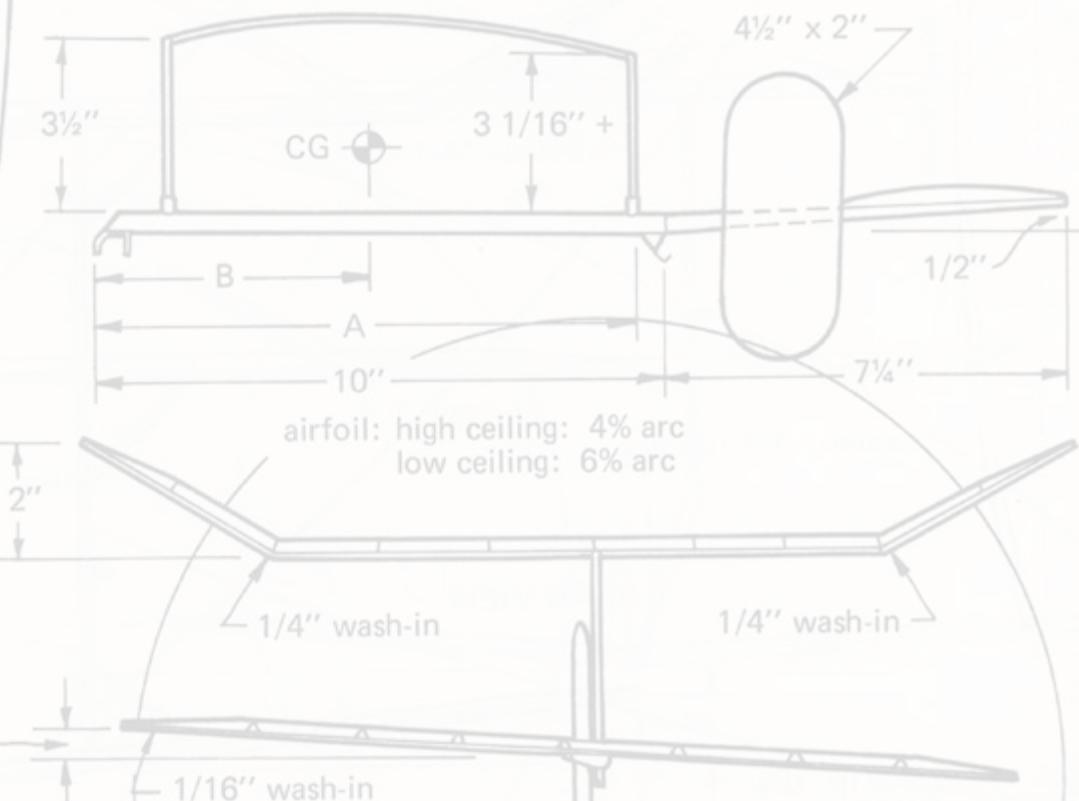
Weights:

body + tail: 1.05 gm.  
wing: 1.12  
propeller: 0.78  
nose weight: 0.15  
3.10 gm.

17" dia. x 27" pitch  
propeller  
.025" "C"-grain balsa

Outlines:

rudder: .040 x .040  
stab: .040 x .050  
L.E. + T.E.: .055 x .080  
tips: .040 x .055



# Aeromodeler of the Year

by Mike Jester



**M**ike flew a lot of 25 cent STRATO and JETFIRE gliders as a youth, and many rubber powered stick models like the SLEEKSTREEK. He also dabbled with tissue covered balsa airplanes, building a few Guillow's kits with little success. His P38 never made it past the bones stage. It was not until he met John Hutchison in 2004 when seeking assistance for his daughter, Julie, in the Science Olympiad Wright Stuff event, that Mike began to learn the how to build and fly from a great mentor. In those days, Mike was building Wright Stuff airplanes in parallel with the students he was coaching. They were 7 or 8 gram stick and film rubber powered indoor duration models. Over the years Mike says he learned the most from John, a member of the FAC Hall of Fame. Early on Mike learned that there were three main problems with the stick and tissue models he had built as a young man, namely, heavy balsa wood, bad rubber and poor trim. In retrospect, Mike's early built-up models had little

chance of ever flying more than 15 seconds before crashing.

He now builds and flies a wide variety of indoor and outdoor free flight rubber powered airplanes. For indoor, he flies A-6, Limited Penny Plane, Phantom Flash, Embryo, No-Cal and catapult glider. For outdoor he flies P-30, Coupe, WWII, 2 Bit+1, Peanut, OT/Nostalgia Rubber, Embryo, Phantom Flash, FAC rubber scale and catapult glider, and soon E-36. Mike says he does not possess the high level of craftsmanship skills that many take for granted in our hobby, but he says he tries to make up for that disadvantage with preparation, attention to detail, and data recording. He and Dorothy recently spent three days at the SW Regionals in Eloy, Arizona, where he competed in six events.

Over the past ten years Mike has coached middle school and high school students at Francis Parker School, including two of his own children, in various indoor flying events in the national

Science Olympiad competition. They have won numerous gold and silver medals in rubber powered airplane and helicopter events and in elastic launched glider events in the San Diego regional and State of California Science Olympiad competitions.

Mike's latest build was an outdoor MAXOUT X Embryo with an extremely long fuselage as described in a later article in this newsletter. He is currently building a much smaller and lighter indoor Embryo of his own design for the Scale Staffel contest at Grossmont Junior College on March 1, 2015. After that, Mike says he will build a HOT BOX P-30 to fly in the April 26, 2015 Orbiteers one design contest which is a tribute to the modeling legend, John Oldenkamp.

Mike says he enjoys the comradery and generosity of the members of the Scale Staffel FAC squadron and other model airplane flying clubs. He says that the model airplane hobby is a lot cheaper than golf, and better for your back.

— ZEPHYR CANARD CONTEST —

# First Sunday of Every Month: February 2015

Photographed by Arline Bartick





# Contest Results: February 2015

Tabulated by CD of the Month

February 1, 2015

| Event: Penny plane (5 entries) | Airplane | FLIGHT TIMES |     |     | (Best two of five) |     | SCALE FLT | CD: William Scott | BONUS  | SCALE  | TOTAL | PLACE |
|--------------------------------|----------|--------------|-----|-----|--------------------|-----|-----------|-------------------|--------|--------|-------|-------|
| CONTESTANT'S FULL NAME         |          | 1            | 2   | 3   | 5                  |     | FACTORED  |                   | POINTS | POINTS |       |       |
| Richard Wood                   |          | 229          | 39  | 198 | 250                | 241 |           |                   |        |        | 491   | 1     |
| John Hutchison                 |          | 222          | 205 | 192 | 154                | 266 |           |                   |        |        | 488   | 2     |
| Greg Hutchison                 |          | 174          | 169 | 252 | 215                | 197 |           |                   |        |        | 467   | 3     |
| Mike Jester                    |          | 235          | 197 | 184 | 205                | 172 |           |                   |        |        | 440   | 4     |
| Don Bardick                    |          | 153          | 187 | 57  | 138                | 201 |           |                   |        |        | 388   | 5     |

February 1, 2015

| Event: No-Cal (4 entries) | Airplane | FLIGHT TIMES |    |    | (Total of three) |   |   | SCALE FLT | CD: William Scott | BONUS  | SCALE  | TOTAL | PLACE |
|---------------------------|----------|--------------|----|----|------------------|---|---|-----------|-------------------|--------|--------|-------|-------|
| CONTESTANT'S FULL NAME    |          | 1            | 2  | 3  | 4                | 5 | 6 | FACTORED  |                   | POINTS | POINTS |       |       |
| Richard Wood              |          | 89           | 60 | 83 |                  |   |   |           |                   |        |        | 232   | 1     |
| Mike Jester               |          | 67           | 80 | 8  | 75               |   |   |           |                   |        |        | 222   | 2     |
| John Hutchison            |          | 50           | 60 | 45 | 59               |   |   |           |                   |        |        | 169   | 3     |
| William Scott             |          | 12           |    |    |                  |   |   |           |                   |        |        | 12    | 4     |

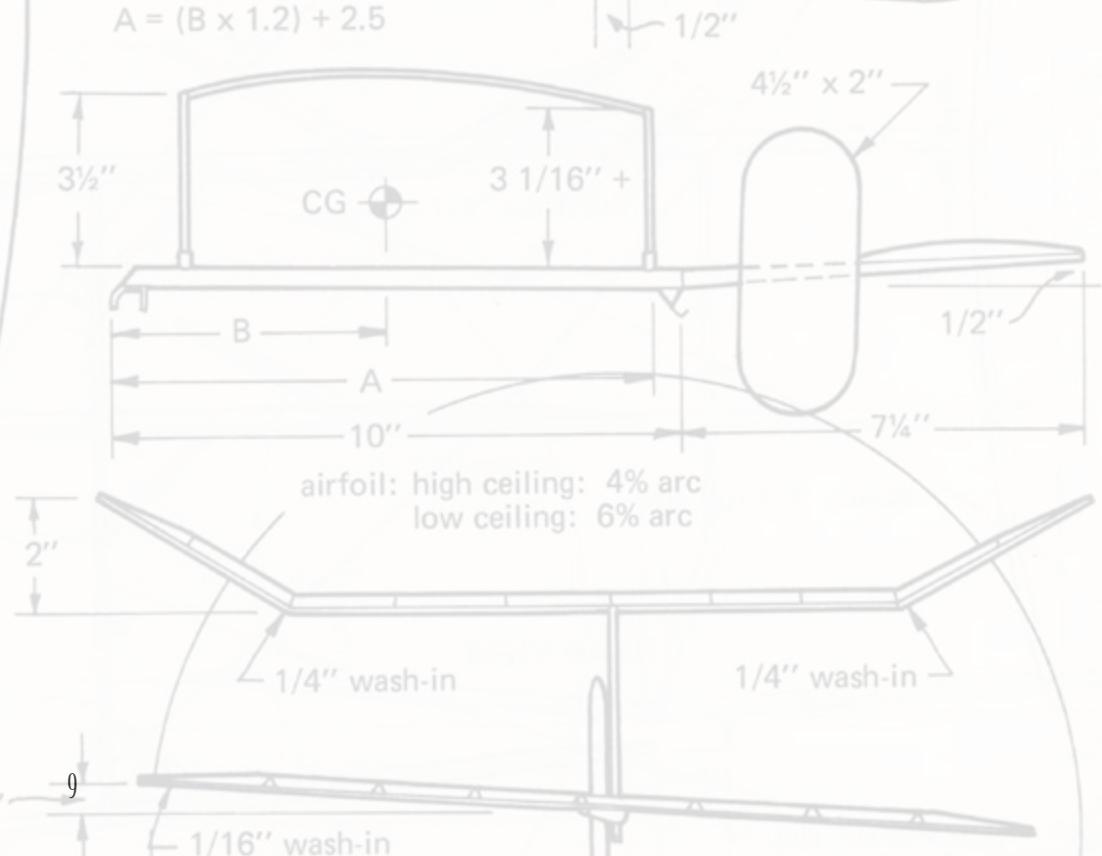
### Weights:

body + tail: 1.05 gm.  
wing: 1.12  
propeller: 0.78  
nose weight: 0.15  
3.10 gm.

17" dia. x 27" pitch  
propeller  
.025" "C"-grain balsa

### Outlines:

rudder: .040 x .040  
stab: .040 x .050  
L.E. + T.E.: .055 x .080  
tips: .040 x .055





**FLYING  
ACES**  
SQUADRON 41

# SAN DIEGO

# Scale Staffel

## April 2015: Outdoor Flying Contest



**Saturday and Sunday, APRIL 18 and 19, 2015, 7:30 a.m. to Noon**

**Taibi (Scamps) Flying Field, Perris CA, Location (33.7803656,-117.1972964)**

### Events Prizes

Awards for first to third place.

### Fees

\$8 for contest including entry for one event, \$3 for each additional event, \$20 maximum to cover contest entry and 5 to 13 events

### Contest Directors

**George Mansfield**  
gmansfield75@gmail.com  
phone (858) 453-3857

**William Scott**  
wscott127@yahoo.com  
phone (619) 469-9681

### Awards Presentation

Immediately following the contest's final gun on Sunday

### Hotel Accommodations

Red Lion  
480 S. Redlands Ave, 92570  
(Less than 2 miles from the flying field)  
**(951) 943-5577**

*Lunch is at the flier option for both days*

*Pilot's Meeting: 8 a.m. on both days*

### FAC Single Model Events

Fly any event on either day, but all flights for a given event must be flown on the same day

1. FAC Rubber Scale
2. FAC Power Scale (90 second max)
3. FAC Embryo Endurance (ROG)
4. FAC Jimmie Allen (ROG)
5. FAC 2-Bit (+1) Rubber, 1/2 Wakefield (ROG)
6. FAC No-Cal (no max)
7. FAC Golden Age Civil Scale
8. FAC Jumbo Scale

### One-Design Comet Cub Contest

9. Must be Comet kit #3206

Contest will follow rules for Golden Age Combined

### Mass Launch Events

#### Saturday

10. FAC World War I Combat:  
Wind at 8:20 a.m., Launch at 8:30 a.m.
11. FAC World War II Combat:  
Wind at 9:20 a.m., Launch at 9:30 a.m.

#### Sunday

12. Double Trouble (Twins)  
Wind at 8:20 a.m., Launch at 8:30 a.m.
13. FAC Greve/Thompson Race:  
Wind at 9:20 a.m., Launch at 9:30 a.m.

\*Earn points towards your GRAND CHAMPIONSHIP. This contest's scores coupled with those of the later Scale Staffel contests held in 2015 will determine our annual Grand Champion. The trophy will be presented after the last event of 2015 to the flier who garners the most 1st to 3rd place points in the 2015 Scale Staffel contests.

— INDOOR CONTEST —

# First Sunday of Every Month: March 2015

Photographed by Arline Bartick



— INDOOR REPORT —

# Contest Results: March 2015

*Tabulated by CD of the Month*

March 1, 2015

CD: William Scott

| Event: Catapult Launch Glider (4 entries) | Airplane | FLIGHT TIMES (Best two of nine) |      |      |      |      |      |     |      |      | TOTAL |       | PLACE |  |
|---|----------|---------------------------------|------|------|------|------|------|-----|------|------|-------|-------|-------|--|
| CONTESTANT'S FULL NAME                    |          | 1                               | 2    | 3    | 4    | 5    | 6    | 7   | 8    | 9    | TOTAL | PLACE |       |  |
| John Hutchison                            |          | 15.7                            | 17.1 | 16.1 | 11.1 | 21.9 | 22.4 | 22  | 20.9 | 21.7 | 44.4  | 1     |       |  |
| Don Bartick                               |          | 19.5                            | 15.6 | 6.1  | 12.7 | 47   | 16.3 | 4.9 | 17.3 | 16.5 | 36.8  | 2     |       |  |
| Mike Jester                               |          | 2.7                             | 8.7  | 5.7  | 16.7 | 18.1 | 9.1  | 4.1 | 8.4  | 16.7 | 35.1  | 3     |       |  |
| Larry Miller                              |          | 2.9                             | 10.7 | 14.8 | 2.8  | 14.8 |      |     |      |      | 29.6  | 4     |       |  |

March 1, 2015

CD: William Scott

| Event: Embryo (6 entries) | Airplane | FLIGHT TIMES (Total of three) |    |    | SCALE FLT |        |        | BONUS | SCALE |           | tail cone .015" |  |
|---------------------------|----------|-------------------------------|----|----|-----------|--------|--------|-------|-------|-----------|-----------------|--|
| CONTESTANT'S FULL NAME    |          | 1                             | 2  | 3  | FACTORED  | POINTS | POINTS | TOTAL | PLACE | "C" grain |                 |  |
| Greg Hutchison            |          | 46                            | 58 | 53 | 157       | 1      | 157    | 1     | 157   | 1         |                 |  |
| Richard Wood              |          | 51                            | 60 | 24 | 135       | 2      | 135    | 2     | 135   | 2         |                 |  |
| John Hutchison            |          | 26                            | 42 | 50 | 118       | 3      | 118    | 3     | 118   | 3         |                 |  |
| Mike Jester               |          | 37                            | 34 | 36 | 107       | 4      | 107    | 4     | 107   | 4         |                 |  |
| John Hutchison            |          | 22                            | 32 | 34 | 88        | 5      | 88     | 5     | 88    | 5         |                 |  |
| Nick Panousis             |          |                               |    |    |           |        |        |       |       |           | 6               |  |

**Weights:**

body + tail: 1.05 gm.  
wing: 1.12  
propeller: 0.78  
nose weight: 0.15  
3.10 gm.

17" dia. x 27" pitch  
propeller  
.025" "C"-grain balsa

**Outlines:**

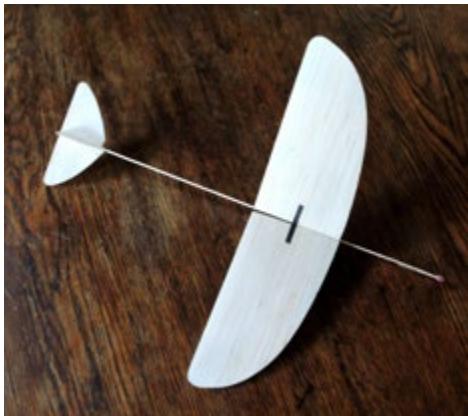
rudder: .040 x .040  
stab: .040 x .050  
L.E. + T.E.: .055 x .080  
tips: .040 x .055

# Debut of Two New Contests

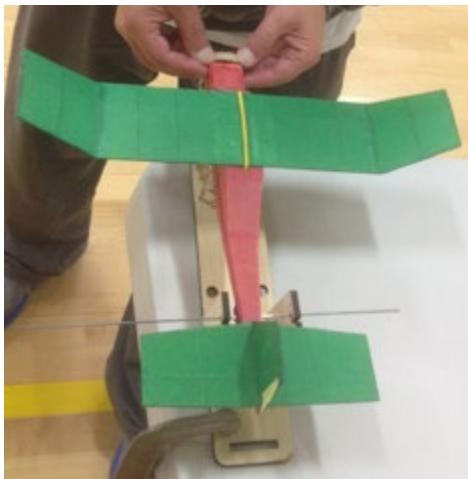
by William Scott



Science Olympiad CL Glider



AMA CL Glider



FAC Embryo

**O**n March 1, Scale Staffel held our first indoor Embryo contest and the Orbiteers held their first indoor catapult launched glider contest. Both were very successful events. We had six members enter the Embryo contest. When we fly Embryo's outdoors, there are at least two thoughts on how to fly. The first is to fly as high as possible and let the thermals and the drift carry the plane for two minutes. Some call this the trash bag concept. The second is to climb at a much slower rate, in a great circle, and allow the plane to look for thermals, and use them to carry the plane for the two minutes. This method is sometimes referred to as the thermal hunting method.

In a gym, there is a ceiling and no real thermals, so what is the best course of action? Set your plane to climb to the ceiling and as it reaches the ceiling, that should be the time when the motor reaches its cruising phase and then your plane should cruise all the way to the ground leaving about a third of the winds you put into the motor still on the motor. All very easy to write about and much harder to actually do.

There were also four new people using the gym to fly Science Olympiad catapult launched gliders. It was fun to watch the kids fly right next to the Orbiteers with their catapult launched gliders. The kids were very good and were putting up flights over 20 seconds with a 24' ceiling. It was a bit disappointing that the models that fit into the rules for Science Olympiad did not fit into the AMA rules. The kids would have been in the running. We flew often together with no mid-air collisions.

When one of the embryos would be ready for an official flight we would clear the floor and the kids would look on in amazement as this rubber powered plane would rise off the ground, climb to the ceiling then just circle. Once, twice maybe three times and then slowly descend to the gym floor after 40 to 60 seconds.

Hopefully, the kids will be back to fly again maybe even in one of our contests.





A working sheet of foam.



The nacelles



The turret fairing.

# Balsa Foam

by Bob Hodes

A flying buddy, Sean McKinley, introduced me to a product generically known as balsa foam. I had never heard of it, but apparently, artists and industrial designers have been using it for some time.

The stuff can be used in applications where blue foam typically is used on our scale models. It seems to be as light as blue foam, but is more like balsa than the blue foam. It cuts easily, and can be sanded and painted like balsa. It comes in blocks and sheets. I have found it at Michaels, plus there are a lot of suppliers to be found on-line.

As far as I know, there is no actual balsa used in the production of the foam. I think the "balsa" comes from its appearance, which is sort of balsa-like.

The foam, when cut to its final shape, is a little fragile, and will require a coating to toughen it up. I have found the Elmer's wood glue works well — I just brush it on and then sand when dry. A second coat with sanding sealer is all that is necessary to get a smooth, tough finish. I am sure there are many other products that could be used to fill and coat the foam, but I have not experimented with anything besides the Elmer's wood glue. I use regular balsa filler to cover any small holes or gouges in the surface.

A word of warning — a lot of dust is generated when sanding the foam. It is non-toxic, but you might want to use a mask.

I have used white glue, canopy glue, and Duco to glue the foam pieces to the aircraft structure. All work well. The foam will take dope. Also, acetone/thinner will not melt the foam.

The foam apparently is offered in two densities — a light density, which is the version I have used. There is also a heavier, denser version, which I have not tried. From what I have read on-line, the denser version is better for fine detail.

I have now used balsa foam in a couple of my FAC models, and I definitely like using it better than blue foam. I have attached a couple of photos showing the foam used at the rear of engine nacelles for a new twin. The other photo shows the foam used as a turret fairing for the same model.

# MAXOUT X Embryo

by Mike Jester



Prior to this build, I had only ever built one Embryo model, the Prairie Bird. It developed warps and I could never get it to fly for longer than 45 seconds. Other club members, like John Merrill, were getting two minute maxes with their Debut Embryo models. My Prairie Bird even had a DT, which turned out to be unnecessary. Don't get me wrong, Bob Peck designed a nice little airplane. However, my execution of this Peck-Polymers classic turned out to be a Prairie Dog. I therefore decided to build a new Embryo model for the club's April 2015 outdoor contest in Perris.

The FAC rules for the Embryo Endurance event are relatively simple. Monoplanes are limited to 50 square inches of wing area, the stab area cannot exceed 50% of the wing area, and the fuselage has to be large enough enclose a rectangular box measuring 1.25 x 1.50 x 3.00 inches or larger. The wing and tail must be built up and covered on both sides with Japanese tissue or equivalent. There is a requirement for landing gear and the wheels must be  $\frac{3}{4}$  of an inch or larger in diameter and must rotate freely on their axles. There are bonus points for 3-dimensional exhaust pipes, 3-dimensional wheel pants, and three different cockpit configurations. Scoring

is based on the total of 3 ROG flights, plus bonus points. There is a 20 second minimum and a 120 second maximum.

I eventually settled on the MAXOUT X Embryo designed by Joshua Finn. He is a regular contributor on the Hip Pocket Aeronautics (HPA) website, quite an accomplished builder and flyer, and a very nice guy who is eager to help. This is the tenth Embryo he has designed in a string of Embryos.

See the October 2014 edition of *Free Flight Quarterly* for a detailed description of the evolution of Joshua's MAXOUT X design. Its distinguishing feature is an extremely long fuselage (25 inches) that accommodates a 30 inch long, 10 gram rubber motor made of two loops of 1/8 inch rubber. The hook to motor peg distance is approximately 19 inches. I had the small plan for the MAXOUT X blown up to full size at Mesa Reprographics. I was careful to make sure it was sized accurately because Joshua has truly "maxed out" every dimension under the rules. The projected wing span of the MAXOUT X is 20 1/2 inches. The horizontal stabilizer span is 10 inches.

The long nose of the MAXOUT X requires a light-weight balsa prop. I made an 8 1/2 inch diameter balsa prop

from laminated strips of 7# balsa with a P/D of 1.25 and a weight of approximately 2.75 grams. For comparison purposes, a similar-sized injection molded plastic prop weighs approximately 5 grams. I'd say it took me 6 – 8 hours to build and shape this prop. There was way too much sanding involved. I am not sure it was worth the effort as the similar-sized plastic prop has a beautiful shape and probably could have been scraped to reduce its weight.



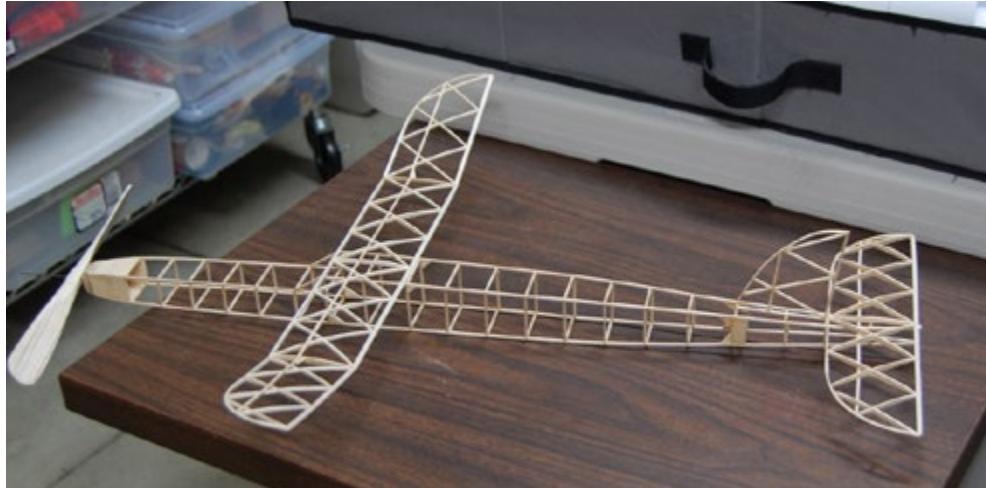
The fuselage of this airplane model has a conventional construction, except for its extended length. It is made of 1/16 inch square balsa sticks. The weight of my uncovered fuselage turned out to be 3.5 grams.

The wing and stabilizers are complex and time consuming to make due to their geodetic construction. However, Joshua says this makes them resistant to warps. Now, there's the ticket! I had to laminate 1/64 x 1/16 inch balsa strips for the wing tips and both stabilizers. I'd say it takes twice as long to build wings

and stabilizers with this construction compared to a conventional construction. The wing has under camber. Per the designer's recommendation, I built 1/16 inch of wash out into the wing tips.

I included a coil spring tensioner for the prop hook to prevent bunching of the long rubber motor. A pivoting U-shaped clutch was incorporated to ensure free-wheeling. Joshua recommends a pop-off wing DT, but it employs a fuse in the center of the wing, which I can't use here in California. Rigging a latch and viscous damper

I made my first use of water-based Eze Dope when covering the stabilizers of this model. It's supposed to help the structures resist warps. The bottle did not have any instructions and I initially applied it full strength to my stabilizers. I didn't like the messy finish of the dried Eze Dope on my stabilizers. I went back and read a review of the Eze Dope product written by Dave Scigliano in the club's August 2014 newsletter. Based on his recommendation, I made a mixture of approximately 70% water and 30% Eze Dope. I then used the mixture on the wing and was happy



for a pop-off wing DT without a pylon on the airplane sounded too complicated to me, so I used the conventional tilting stab and viscous timer button arrangement for the DT on my MAXOUT X. I hope they turn out to be necessary.

I covered the fuselage with orange Esaki tissue, shrank it with a water mist, and then finished it with Krylon clear lacquer spray. The clear Krylon spray clouded in some areas, as it often does. My supplies include a ton of orange tissue for some reason so it was time to start using some of it up. I used red Esaki to cover the stabilizers as this color helps me locate a model after it has landed, often with the tail sticking up.

with the finish. I am not re-covering the stabilizers for beauty points.

The flame design on the wing was suggested by one of my niece's daughters. I wanted my new MAXOUT X Embryo to look unusual even if it doesn't fly very well. The landing gear assembly is removable. It uses .031 inch music wire that plugs into 1/16 Aluminum tubes glued to the fuselage with epoxy.

The all-up weight of my finished MAXOUT X will turn out to be approximately 23 grams. I have to admit that the target weight for this airplane recommended by the designer is less than 20 grams. Oh well. I am starting out with 3 degrees of down thrust and

3 degrees of right thrust. Surprisingly, Joshua said I should not shim the LE of the wing so right now it has zero incidence. He said just rely on shimming the horizontal stabilizer during the trimming process. Joshua recommended locating the CG at 100%. I will mount the viscous timer button longitudinally to set the CG at 100%. I like to avoid adding clay.

I'll let you know how my MAXOUT X flies, or you can watch for it at the club's April 2015 contest in Perris, assuming that I get it flying reasonably well between now and then. And now for my next model, drum roll . . . another Embryo, this time one suitable for the club's March indoor contest at Grossmont Junior College. The MAXOUT X is totally unsuitable for indoor flying.

If you are looking for other outdoor contest winning Embryo designs, you might take a look at the MAVERICK, which is very similar in looks to the MAXOUT X. You can get the plan for the MAVERICK and the MAXOUT X on the HPA Plan Gallery. The Debut designed by Gordon Roberts is the gold standard for this class, and is available in a laser cut kit from Easy Built Models. Others have found success with the Embryomatic. I also thought about building the Big Cat Embryo which is currently available as a laser cut kit from Volare Products. It is based on a more conventional, but still very successful, Embryo designed by Al Backstrom of Irvin, Texas.

Try building an Embryo if you have not already done so. It will be more fun if lots of people fly this event at our indoor contests at Grossmont Junior College and at our outdoor contests at Otay and Perris.

# Coming Soon

by William Scott

**T**here was a “Coming Soon” sign erected at a nearby shopping center that has seen good times and bad times; and is currently under reconstruction and revitalization. The two anchor stores, Toys R Us and Walmart Grocery kept the shopping center alive through the most recent economic downturn. With more people employed, businesses are looking for opportunities to expand or capitalize even in this little town of La Mesa, CA.

La Mesa is interesting because of its population, with just over 57,000 people: 12,400 are under the age of 19; 14,350 are 19 to 34; 15,675 are 35 to 55 and 14,500 of the residents are over the age of 55, meaning it will soon be time to retire and start a hobby. The current list of stores serving residents are: two quilting stores, a beading store, a knitting store, a train store, a few coffee houses, a few tackle shops, a bike shop, and a gun shop; what else could we possibly need in this town of nine square miles? Yep, you guessed it, our own hobby shop.



# Peck-Polymers is Coming Back

January 13, 2015

I'm happy to announce that I was able to work with A2Z Corp to purchase Peck-Polymers.

Like most of you, I have built many Peck kits over the years and always found them to be a high quality product. A number of kit makers and scratch builders rely on Peck parts such as thrust bearings, prop shafts, wheels and of course the famous Peck silver props! When I heard that A2Z wanted to sell their model division, I was excited at the opportunity to own a great company!

Please be patient as we work to transfer the Peck inventory from Colorado to Connecticut. I will begin kit and component production as soon as possible, but there is much work to do. Please check back often as we build our new web site. If you are a kit manufacturer, please write me here to discuss any urgent kit component needs and I will do my best to accommodate you!

I look forward to supplying the Peck products free flight modelers have come to know and love, and I have several new kit ideas in the works, too!

Thank you!

Chuck Imbergamo

Peck-Polymers

**[www.Peck-Polymers.com](http://www.Peck-Polymers.com)**

# One-Design Event



PIPER CUB, KIT NO. 3206

This is a contest of planes built to the Comet Kit #3206 specifications. The contest will follow the FAC Golden Age Combined rules described in the 2014-2015 FAC Rule Book.

All 2015 Scale Staffel Outdoor Contests will feature this event.



SAN DIEGO ORBITEERS AND SCALE STAFFEL

# Fourth of July Contest

## Judging and Rules

General rules apply to all contestants and airplanes

All contestants MUST wear a real tie! (no paper, fake, clip on ties) No exceptions!

All models MUST have an American flag attached! No exceptions!

Awards to third place in all categories

Contest director to determine categories

## Peanut Scale Rules, \$100 for first place

Peanut Scale is open to any design

Peanut plans must be presented with model

Walter Mooney style judging

Total of three flights, flight => 20 seconds

## Bostonian Rules

Hand launch flights

Total of three flights, flight => 20 seconds

## Embryo Endurance Rules

Walt Mooney style judging

FAC bonus points: 1 point for 3-dimensional exhaust, 3 points for 3-dimensional wheel pants, 5 points for windshield or windscreens.

Maximum of 9 points.

Total of three flights, flight => 20 seconds

## 2x Peanut Scale Rules, \$100 for first place

2x Peanut Scale must be a Walter Mooney design only

Wing span must be twice the published wing span

Plans must be presented with the model

Rubber power only

Walt Mooney style judging

Ineligible models: Ford Centennial, Ford FBA-2A, and Aeronca Defender

## Scale Judging

"Mooney" judging rules will be used. Considering all factors including FAC bonus points, judge will rank all planes in each category from first to last, scoring them as 1 for first place, 2 for second place and so on.

## Flight Scoring

Flight scoring will be the combined time from the three official flights (> 20 seconds) hand launched attempts. Max individual flight time: 120 seconds.

Fliers will be placed in rank order (1,2, etc) from first to last place based on decreasing average flight scores, from max to min.

## Total Scoring

Total scoring for each entry will be the sum of its "scale" and "flight" places. The lowest total wins first place, second lowest wins second place and so on.





**FLYING  
ACES**  
SQUADRON 41

SAN DIEGO

# Scale Staffel

August 2015: Outdoor Flying Contest

**Saturday and Sunday, AUGUST 22 and 23, 2015, 7:30 a.m. to Noon**

**Taibi (Scamps) Flying Field, Perris CA, Location (33.7803656,-117.1972964)**

#### Events Prizes

Awards for first to third place.

#### Fees

\$8 for contest including entry for one event, \$3 for each additional event, \$20 maximum to cover contest entry and 5 to 13 events

#### Contest Directors

**George Mansfield**  
gmansfield75@gmail.com  
phone (858) 453-3857

**William Scott**  
wscott127@yahoo.com  
phone (619) 469-9681

#### Awards Presentation

Immediately following the contest's final gun on Sunday

#### Hotel Accommodations

Red Lion  
480 S. Redlands Ave, 92570  
(Less than 2 miles from the flying field)  
**(951) 943-5577**

**Lunch is at the flier option for both days**

*Pilot's Meeting: 8 a.m. on both days*

#### FAC Single Model Events

Fly any event on either day, but all flights for a given event must be flown on the same day

1. FAC Rubber Scale
2. FAC Power Scale (90 second max)
3. FAC Embryo Endurance (ROG)
4. FAC Jimmie Allen (ROG)
5. FAC 2-Bit(+1) Rubber, 1/2 Wakefield(ROG)
6. FAC No-Cal (no max)
7. FAC Golden Age Civil Scale
8. FAC Jumbo Scale



#### One-Design Comet Cub Contest

9. Must be Comet kit #3206

Contest will follow rules for Golden Age Combined

#### Mass Launch Events

##### Saturday

10. FAC World War I Combat:  
Wind at 8:20 a.m., Launch at 8:30 a.m.
11. FAC World War II Combat:  
Wind at 9:20 a.m., Launch at 9:30 a.m.

##### Sunday

12. Double Trouble (Twins)  
Wind at 8:20 a.m., Launch at 8:30 a.m.
13. FAC Greve/Thompson Race:  
Wind at 9:20 a.m., Launch at 9:30 a.m.

\*Earn points towards your GRAND CHAMPIONSHIP. This contest's scores coupled with those of the later Scale Staffel contests held in 2015 will determine our annual Grand Champion. The trophy will be presented after the last event of 2015 to the flier who garners the most 1st to 3rd place points in all of the 2015 Scale Staffel contests.

# Order your 2015 Scale Staffel T-shirt



*Front*

*Back*

**by April 3 and pick it up at the  
Perris Event on April 18 and 19**

Men's and women's sizes available: small thru XL: \$20 each

XXL and larger are \$22 each

E-mail your order to [wscott127@yahoo.com](mailto:wscott127@yahoo.com) remember to let me know the size and quantity you would like. Shipping for this item is not available. You can pick up your order at any of the Scale Staffel indoor or outdoor events including the Walt Mooney event on July 4th and WestFAC V in AZ.

— FREE FLIGHT —

# Thank You to our Supporters!

*San Diego Scale Staffel*

---



**Bob Holman Plans**  
Cadd drawn plans and laser cut parts for old time models  
**www.BhPlans.com**  
P.O. Box 741 San Bernardino CA, 92402  
909-885-3959 Fax: 909-889-9307



---

## Diels Engineering, Inc.



Kit #40-LC  
P-47D Razorback  
model by Andrew Ricci

P.O. Box 167016, Oregon, Ohio 43616 U.S.A.  
email: dielsengr@buckeye-express.com

**www.dielsengineeringinc.com**

---

## PENN VALLEY HOBBY CENTER



Lansdale, PA 19446

**www.pennvalleyhobbycenter.com**

(215) 855-1268

# Thank You to our Supporters!

*San Diego Scale Staffel*



**PlansAndThings.com**

A web based cottage industry offering high quality scale  
free flight plans and modeling publications



14450 Maplewood St. Poway, CA 92064 U.S.A. email: [info@starlink-flitetech.com](mailto:info@starlink-flitetech.com)

**[www.starlink-flitetech.com](http://www.starlink-flitetech.com)**

Opening Soon



**SCHULTZ'S HANGER**

4019 Nicholas Street, Easton, PA. 18045

(610) 216-3486, [fyteraces@rcn.com](mailto:fyteraces@rcn.com)

*Scale & Sport Model Aircraft Kits, Short Kits,  
Plans, Laser Wood Packs & Accessories*



Schultz says:  
"Das ist gut zeug"

# Thank You to our Supporters!

*San Diego Scale Staffel*

---

## Thomas Designs

505 Wildflower  
Burnsville, MN 55306  
e-mail: thomasdesign@frontiernet.net  
Phone: (952) 435-1086

**[www.thomasdesigns.net](http://www.thomasdesigns.net)**



---

## Volaré Products

7686 B Drive South  
Battle Creek, MI 49014  
E-mail: george.bredehoff@gmail.com  
shortysbasement@gmail.com  
phone: 269-339-9795  
(weekdays after 5pm – anytime on weekends)



**[www.volareproducts.com](http://www.volareproducts.com)**

---

— UPCOMING EVENT —

# WESTFAC V

*in Buckeye, AZ*

*Hosted by Arizona CONDOR Squadron*



October 21 - 24, 2015

*Celebrating the 75th Anniversary of the battle of Britain and France*

*Check our website for more details in the coming months [www.westernfac.com](http://www.westernfac.com)*

# 23rd Annual Worldwide Postal Competition 2014/2015

by Caley Ann Hand



Welcome to another year of non-stressing, friendly, and laid-back competition. This year will see some major changes in the categories available. We will continue to include the past categories, as many still are familiar with those, and wish to continue flying in those categories.

I have been asked to take over the "Tiny Glider Postal", so it looks like we will have 6" and 8" wingspan flying in catapult and hand launched gliders.

I have had requests to have FAC type events, and will now include those, with the exception of the mass launch varieties. We will continue to have the KK Senator and Cloud Tramp events, also. Those are just too traditional to see them going away.

The Postal time frame remains the same, 1st of July 2014 through 30th of June 2015.



I will be emailing, or using snail mail to send the final results to all of the participants. Please pass on that this event needs more participants of all ages. Pass along my email address, so that those people you contact can let me know they are interested, and so I can email an announcement to them. The

Postal can only continue if those participating spread the word.



When you report your results, please don't wait until the absolute last day to send them in. Do send them in when you get full results on a particular model/category. Please include the following information: times, model name, wingspan (measured as per plan), and anything else you might want to add about your flights. I would love to see pictures of either your models, of your preparation for flight, or flying them. Photos are great to include in the results. One thing to remember about our Postal, is that you don't have to complete all your flights on a particular model on the same day. We all know the hazards of flying our light and fragile models. Models can get damaged or just plain broken, and need repair to fly again. Weather can intrude very quickly. Or the dreaded airplane eater, otherwise known as a tree, can ruin your day.

Vintage/Oldtimer classes are for designs authenticated to have been flying outdoors prior to December 31,

1950, even though plan publication may be of a later date in any kit, commercial magazine, SAM publication, club newsletter, etc. Multiple entries with different models may be made in all events but flights in one event may not be "doubled up" with any other class for which a given model is eligible — separate flights, please.



To maximize flying opportunities there is ample scope for rubber models and gliders to be flown in multiple events and you are encouraged to take a stopwatch, pencil and notepad with you each time you go to your local field, or to a contest, as an added incentive to your flying enjoyment. Bear in mind, also, that any number of individual models may be flown in any event for which they are eligible.

Please send entries/scores/reports/results to me via email, as this helps to reduce overall costs, eases communication and enables wider distribution of submitted photos.

Please return your entries to:

Caley Ann Hand  
6639 Datura Avenue,  
Twentynine Palms, CA 92277 USA  
or caleyannhand@yahoo.com



Enlarge plan to a 12' wing span

