

# Phoenix Model Airplane Club

HAVING FUN WITH MODEL AIRPLANES SINCE 1937

Volume 17 Number 5

May 2012

## NEXT MEETING

Tuesday May 8<sup>th</sup> 2012

07:00 PM

Room 10

Granite Reef Senior Center

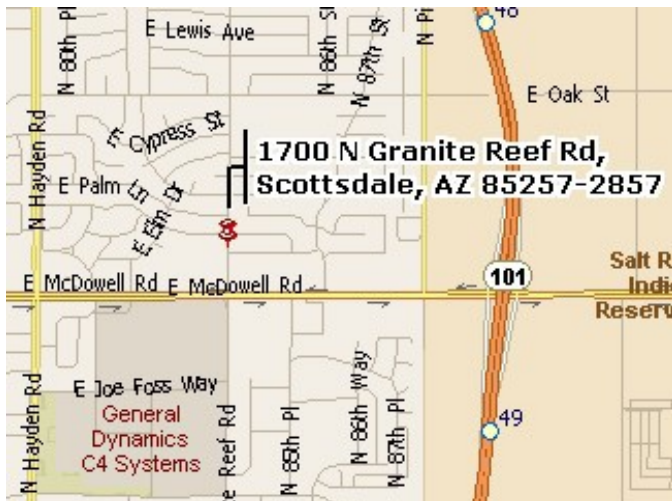
## NEXT CONTEST

**Hot Stuff**

Saturday May. 19<sup>th</sup> 2012

WEBSTER FIELD – ELOY

**AMA membership required for competitors**



## CLUB OFFICERS

*President:* \_\_\_\_\_ Elmer Nelson (480)-460-1366

*Vice President:* \_\_\_\_\_ Tom Gaylor (480)-892-0338

*Secretary:* \_\_\_\_\_ Bill Sewell (623)-551-8678

*Treasurer:* \_\_\_\_\_ Elmer Nelson

*Newsletter Editor:* \_\_\_\_\_ Bruce Grawburg (602)-978-4215  
bgfalcon89@cox.net

*Webmaster:* \_\_\_\_\_ Alan Petersen  
alan@apetersenpaintings.com



**FLYING ACES**

# Meeting Minutes

## PMAC Meeting Minutes

Tues. April 10, 2012

Granite Reef Senior Center, Room 10

1700 North Granite Reef Road

Members Present 10

Meeting Called to order by Elmer at 7:05 pm, A quorum was present.

Treasures report by Elmer

Contest Account	\$1232.00
Club Account	\$1228.00

Both as of end of April, 2012

Elmer and Toby reported on a contact with a lady in Phoenix whose husband died recently. She contacted us asking for assistance in disposing of large RC models and 21 engines. (most brand new and large). Follow up will be made as appropriate.

## Old Business

Next contest, April 22, I-10 Challenge, We have received Sanction.

Tom Gaylor is the CD, 480-892-0338

Eagar Dome contest - The first contest was held and it was a huge success. Steve Riley deserves a strong attaboy for planning and overseeing a well done event. See the April 2012 News Letter for details. Steve called Elmer during the meeting and reported local authorities in Eagar have agree on a second contest in 2013

during the last week of March.

Bruce's Contest Result Data Management software was discussed. It is working and meets the two primary objectives of easier data entry and encourages more flying. Tune-ups are in progress as bugs appear and are eliminated. No effort flights are discouraged and will not be allowed to "manage results".

## NEW Business

The AMA is considering allowing touch and go flights to be counted in some classes.

## Show and Tell

Bob Loeffler brought a balsa strip cutting board that had two micrometer handles, which could be used to cut indoor strips (spars) accurately.

Tom Gaylor demoed and passed around polyethylene vials for CA gluing. He also demoed a heat gun for making small tubing (by stretching heated tubing vial necks ) for indoor gluing. He gave out sample vials.

Elmer demoed an electronic scale, which weighed to three decimals. He also demoed a spar stiffness measuring device.

Toby brought a Texaco Zipper. It was a BMJR kit with a 44 inch wing span. It is for ½ a engines and has a 333 sq. in. wing.

Bill Sewell/secretary

## Prez Speaks

The discipline bonus system we added this year is beginning to have an impact on our contest activity. It is far too early to attempt to draw conclusions, except to state it's clear that most of us are flying at least one extra discipline. Our two top leaders are incorporating all three disciplines picking up the maximum bonus points possible, which is eight (8) points. Remember, the bonus points are added to the overall points earned and are not included in the category points such as AMA/Classic Gas. The easiest discipline to incorporate in your contest plans is the Hand Launched Glider/Catapult Glider category. During the last contest, we had eight people flying in this category with two of them flying both HLG and CG for a total of 10 entries. My guess is we are going to see increased proficiency build in this category as time goes on. From a personal standpoint, I've started building two new cat gliders. I've also gone to one of our local parks and have been practicing. I intend to improve my standing in this category! I might even resurrect my discus launch glider. Maybe I can get Enes to give me a little coaching!

Most of you know by this time, but to assure we all get the word, Steve Hesla suffered a heart attack a couple of weeks ago and has had a triple by-pass operation. Steve is recovering nicely and says he will start his physical therapy shortly. There is no doubt he will be back, but a full recovery from a triple by-pass takes time and a whole lot of patience. I'm sure he would welcome a call.

Along the same line, it was great to see Dick Wood at the last contest. Again as most of you know, Dick suffered a broken hip while flying at Lost Hills in February. He now sports a new hip joint. Here again, his recovery has taken a lot of grit and determination and he is still working on it. Good to see you Dick!

Our next contest falls on Saturday, May 19<sup>th</sup> which is "Armed Forces Day". Hats off to our vets!

Elmer Nelson



Editors Note: We all wish you a fast and complete recovery Steve. We are all hoping you and your wife will back on the field soon. I believe model building is excellent therapy in this type of recovery, so a new plane is your prescription for a speedier recovery.

## Contest Director's Report I-10 Challenge

We had much better weather for this contest than the last two – winds were light and started from the SE at 8 mph. By 9:30 they were down to 5 or less as the wind shifted to the WSW. There were few thermals at first, but after the winds died down and it warmed up there were some big ones. It was quite hot by noon and as flying was finishing the wind started increasing from the east. It was 104 degrees by the time I left the field.

It was very encouraging to see Dick Wood there and flying his F1B. He put up three flights. The most interesting airplane to see was Jean Andrew's CO2 unlimited which scored 3 maxes. Altogether we had 14 competitors from Phoenix and Tucson, with a good number of spectators and persons helping to time.



Jean Andrews launching and Henry Werner timing

<b>PMAC / TFC Champoinship</b>				
<b>Points Standing 2012 Season-To-Date</b>				
	<b>Feb-12</b>	<b>Mar-12</b>	<b>Apr-12</b>	<b>Total</b>
Jean Andrews	23.0	10.0	45.0	78.0
Dick Nelson	11.0	24.0	36.0	71.0
Kent Prescott	18.0		33.0	51.0
Enes Pecenkovic			32.0	32.0
Mike Keller			31.0	31.0
Tom Gaylor	14.0	15.0	2.0	31.0
Bruce Grawburg	10.0	1.0	20.0	31.0
Elmer Nelson	5.0	2.0	20.0	27.0
Dick Strang	15.0		8.0	23.0
Peter Brocks			21.0	21.0
Henry Werner			19.0	19.0
Ralph Hotz	15.0			15.0
Tom Miller	1.0		4.0	5.0
Dick Wood			4.0	4.0

Thanks to Tom Gaylor and Peter Brocks for sharing their photographs.



# Contest Results Eloy I-10 challenge

## PMAC / TFC Champoinship Points Standing 2012 Season-To-Date

Category / Contestant	Feb-12	Mar-12	Apr-12	Total
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### AMA/classic Gas

Jean Andrews	4.0	3.0	3.0	10.0
Tom Miller	1.0		4.0	5.0

### Nostalgia Gas / OT Gas Combo

Dick Nelson	11.0	10.0	9.0	30.0
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### 2 minute combo

Jean Andrews	8.0		25.0	33.0
Peter Brocks			10.0	10.0
Henry Werner			7.0	7.0
Mike Keller			6.0	6.0
Ralph Hotz	6.0			6.0
Dick Nelson		2.0	4.0	6.0
Bruce Grawburg	1.0		4.0	5.0
Tom Gaylor	3.0		2.0	5.0

### 3 min Rubber/Glider Combo

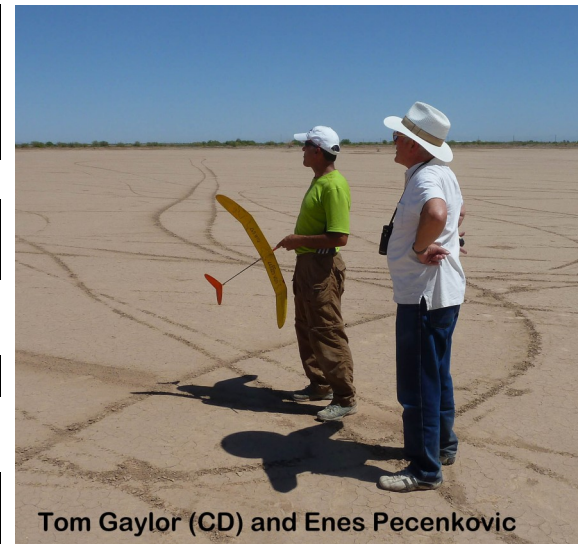
Kent Prescott	18.0		20.0	38.0
Dick Strang	15.0		8.0	23.0
Tom Gaylor	11.0	6.0		17.0
Enes Pecenkovic			14.0	14.0
Dick Nelson			12.0	12.0
Elmer Nelson	1.0		10.0	11.0
Bruce Grawburg	5.0	1.0	5.0	11.0
Jean Andrews		3.0		3.0

### 3 min FAI combo

Peter Brocks			7.0	7.0
Enes Pecenkovic			6.0	6.0
Dick Wood			4.0	4.0
Elmer Nelson	4.0			4.0

### Catapult/ HL Glider combo

Mike Keller			21.0	21.0
Enes Pecenkovic			12.0	12.0
Jean Andrews	3.0		9.0	12.0
Kent Prescott			9.0	9.0
Henry Werner			8.0	8.0
Elmer Nelson		2.0	6.0	8.0
Bruce Grawburg			7.0	7.0
Dick Nelson		4.0	3.0	7.0
Tom Gaylor		5.0		5.0
Ralph Hotz	5.0			5.0



Tom Gaylor (CD) and Enes Pecenkovic



Dick Wood  
back on the field



# Hodge-Podge



Calculation of Optimum C.G. Position by Steve Riley

*The following article was found in the archives of local member Jeff Dunlap. Riley describes a method set forth by Rene' Jossien which was published in the French Quarterly Vol Libre 1977-91.*

I have seen F1B models (Tom Cashman's) set up with this method and they do have excellent trim stability. I also ran this formula on an AMA power model, Jim Clem's Witch-Hawk; the formula comes out with a C.G. of 71%. The plans call for 70%. That's close enough for me.

This method appears to allow for the many subtleties of static longitudinal stability. Most methods approximate the neutral point and allow the designer to choose the margin of stability based on personal experience. This method takes care of everything, and in checking it against several models, is quite accurate.

$$CG = WC + [(SC)(SA)(MA)(PS)] \div [(WA)(WA)]$$

where:

CG = center of gravity, percent of average wing chord aft of leading edge

WC = wing coefficient = 20 + (A+B+C)

SC = stabilizer coefficient = 25 + (D+E)

SA = stabilizer area in sq inches

WA = Wing area in square inches

MA = moment arm. distance from wing L.E. to stabilizer L.E. in inches

PS = projecting wing span, exclusive of the fuselage width, with dihedral shortening

## Wing Coefficient Variables

A = position of wing relative to fuselage centerline (FCL)

+2 if below FCL

+3 if even with FCL

+4 if slightly above FCL

+5 if small pylon (less than 2.75" above FCL)

+6 if high pylon

B = wing airfoil

0 if symmetrical

+1 if flat bottom with upsweep at LE

+2 if flat bottom

+3 if slightly cambered

+4 if highly cambered

C = Type of model and flight pattern

Scale, Coupe F1A-F1B F1C

windy weather/good climb -6 0 +6

all weather/ave(average performance -4 +2 (HLG) +8

calm air best glide -2 +4 +10

## Stabilizer Coefficient Variables

D = vertical fin arrangement

0 if single fin

+1 if twin fins (small area)

+2 if twin fins (large area)

E = stabilizer airfoil

0 if symmetrical

+1 if flat bottom with upsweep at LE

+2 if flat bottom

+3 if slightly cambered

+4 if highly cambered (or VIT on FIC's)

And as with almost all things pertaining to models, you must make the final adjustments after testing



Marv Bashaw



## Outstanding Values

Cool stuff >

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EDMUND  
**SCIENTIFICS**

Per Tom Gaylor

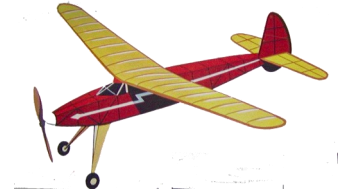
CA glue dispensers cheap – different sizes

Product numbers: 3082346 about \$6 per 100

3082347

3082348

<http://www.scientificsonline.com/disposable-polyethylene-dropper-pipets.html>



## "FAI 14-ROUNDER"



Magnificent Mountain Men

July 13,14,15 2012 in Denver, Colorado

Contact: Jerry Murphy 719-685-3766 <jb\_murphy@msn.com> or

Marc Sisk 719-433-2115 <msisk916@comcast.net>

## 42<sup>nd</sup> U.S. Free Flight Championships Lost Hills, California

September 21,22,23 2012 Contact: Ted Firster 951-776-4971 or cell 951-830-0414

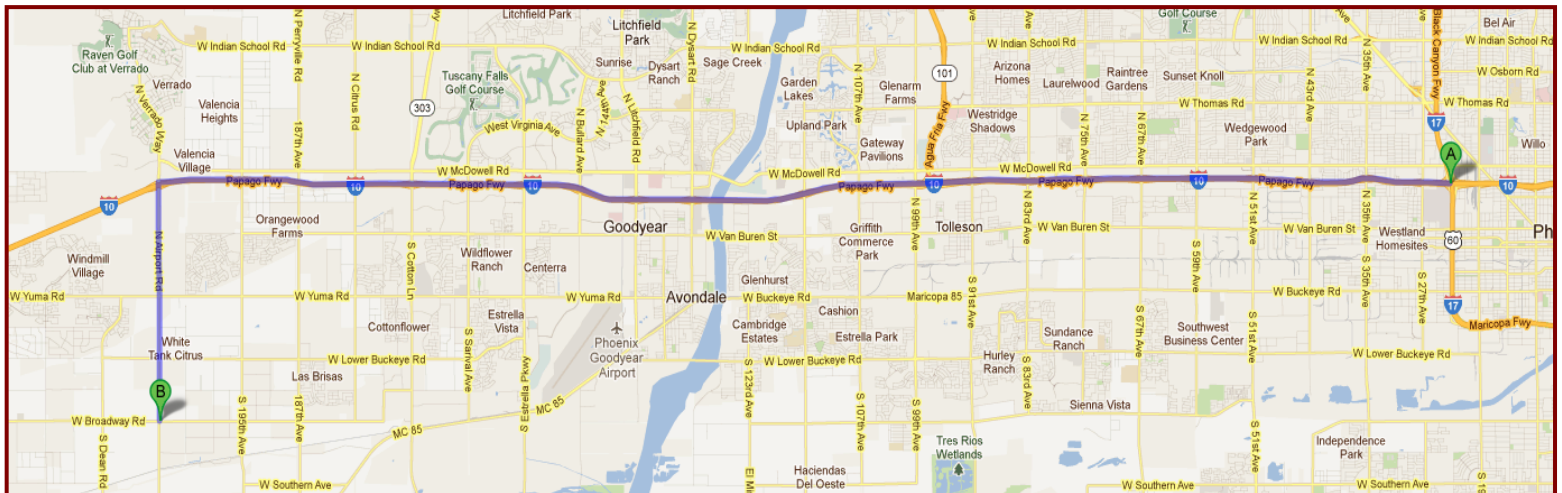
<civyboy3@aol.com> or website LHHFMAA.com

Flying Aces Squadron #72 flying site

W Broadway Rd & S Airport Rd, Buckeye (NW corner)

22.5 miles (25 minutes) west of I-17 exit 120 then go south 3.7 miles

Available for PMAC rubber powered use (**NO POWER or ELECTRIC allowed**)

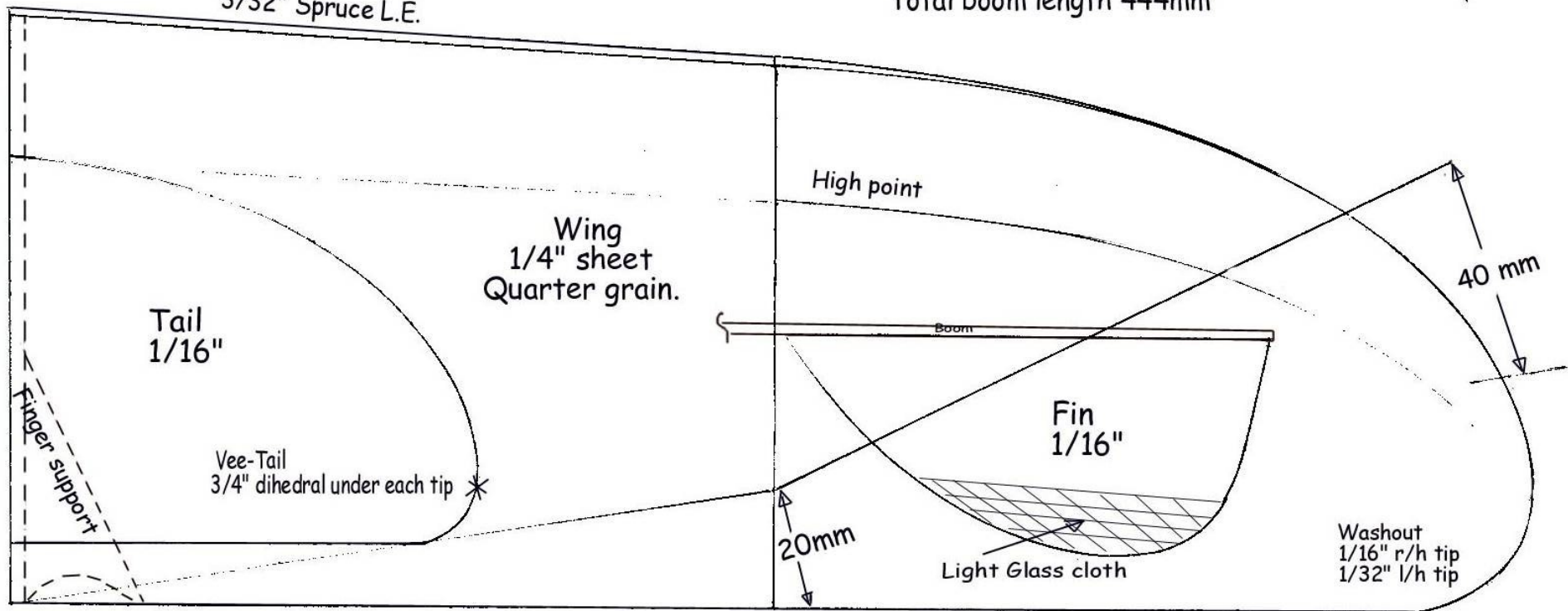
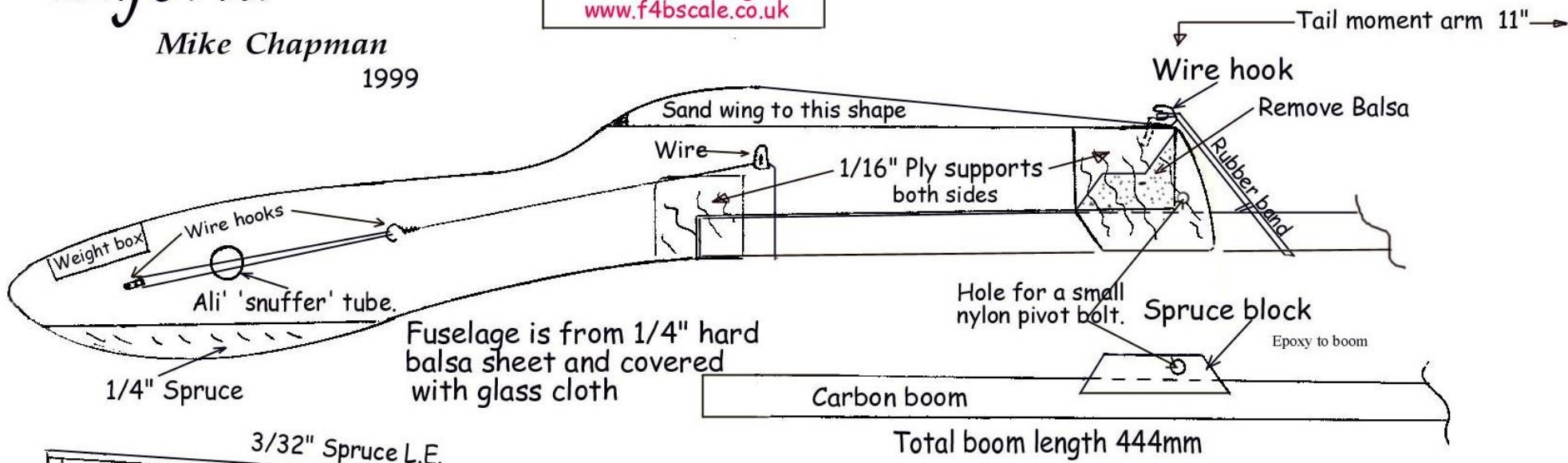


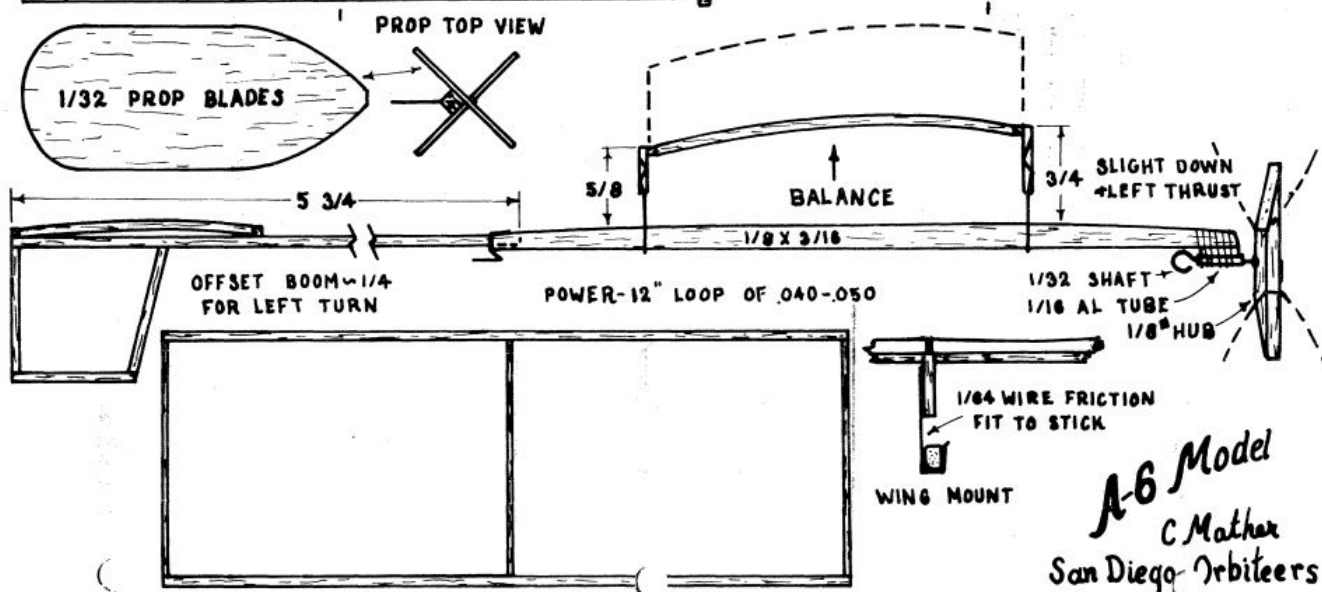
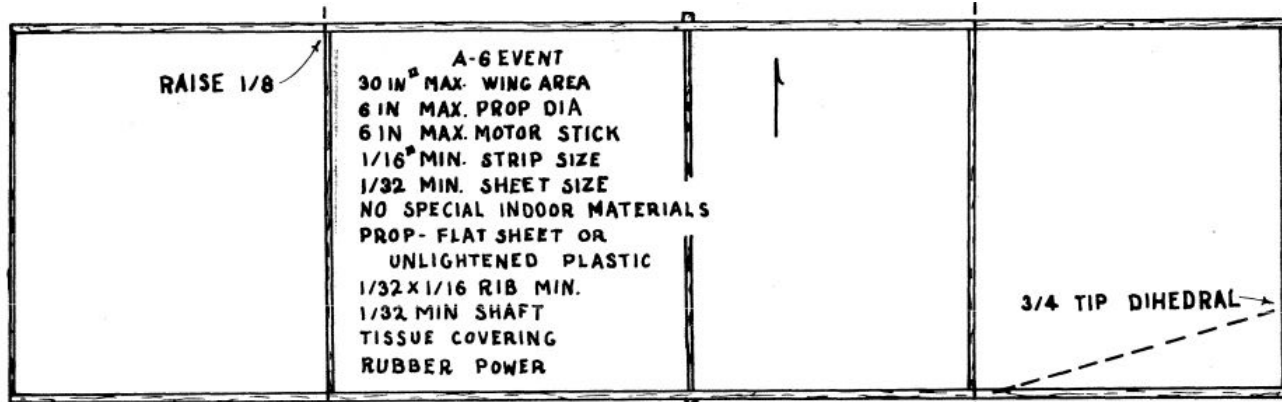
# Hybrid

Mike Chapman

1999

This plan was supplied by  
F4B Scale Magic  
[www.f4bscale.co.uk](http://www.f4bscale.co.uk)





## Next Eloy Contest

Start Time 7:00 am



Start Time 7:00 am

	Nat'l Cup	Nat'l Cup	Nat'l Cup	Nat'l Cup	Nat'l Cup	Nat'l Cup	Nat'l Cup	America & National Cup	
	President's Cup	St Patty's Bash	I-10 Challenge	Hot Stuff	Fall Kick-off	Ghost Riders	Armed Forces Memorial	Arizona Free Flight Championships	
	Sunday	Saturday	Sunday	Saturday	Sunday	Saturday	Sunday	Saturday	Sunday
	2/19/2012	3/17/2012	4/22/2012	5/19/2012	9/16/2012	10/20/2012	11/11/2012	12/1/2012	12/2/2012
<b>Contest Directors</b>	Lichtenberge	Ralph Hotz	Gaylor	Werner	D. Nelson	Loeffler	Andrews	E.Nelson/ Burros	
<b>Contest Classification</b>	A	A	A	A	A	A	A	AA	AA

*Note: All one day contests will be flown in combined categories. Anything you bring to the field can be flown in one of 6 categories*

*\*For national cup points, junior AMA & Classic 1/2A Gas are combined*

### NEXT MEETING

Tuesday May 8th

07:00 PM      Room 10

Granite Reef Senior Center

1700 N. Granite Reef Rd.

Scottsdale, Arizona