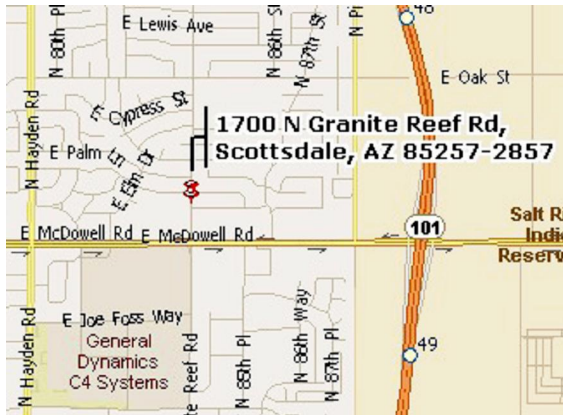


# PHOENIX MODEL AIRPLANE CLUB

HAVING FUN WITH MODEL AIRPLANES SINCE 1937

VOLUME 16 NUMBER 12

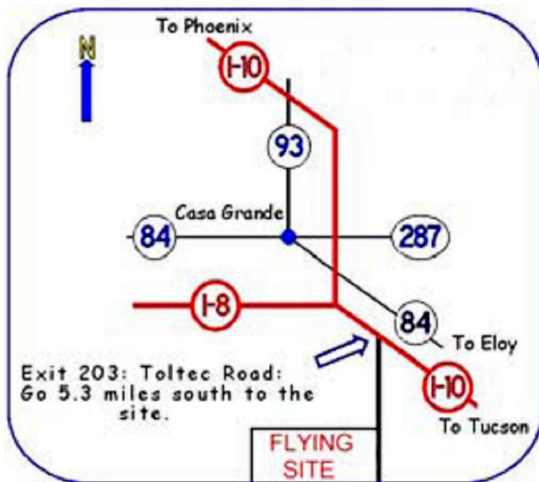
DECEMBER 2011



**NEXT MEETING**  
**Tuesday Dec. 13<sup>th</sup>**  
**07:00 PM**

**Granite Reef Senior Center**  
**1700 N. Granite Reef Rd.**  
**Scottsdale, AZ**

**NEXT CONTEST**  
**SOUTHWEST REGIONALS**  
**Jan. 14<sup>th</sup>, 15<sup>th</sup>, and 16<sup>th</sup>**  
**2012**  
**WEBSTER FIELD**  
**ELOY**



## CLUB OFFICERS

*President:*

Elmer Nelson (480) 460 1366

*Vice President:*

Tom Gaylor (480) 892 0338

*Secretary:*

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*Treasurer:*

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Alan Petersen

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**FLYING ACES**

## PREZ SPEAKS

Don't forget! Our December meeting is when we elect our officers for the coming year. Think through who you would like to have serve. Most important, don't forget to look in the mirror and ask yourself which of the four positions you could contribute to. It's healthy to have change. Said another way, it's time for a new President! We will also set next year's dues.

Bruce Grawburg and I have continued to chew on a revised method of scoring our contests. We will finish our proposal and have it out for comment in time to implement it starting with our February contest. From feedback I have gotten from our last couple of meetings and from one on one conversations with several active fliers, a few things have become quite clear. First, the six categories we have seem well supported. There is no sentiment to return to scheduling individual events such as P-30, A AMA Gas, etc. The ability to fly ~~any~~ anything you can drag out to the field is widely supported. The idea of earning bonus points for participating in more than one discipline has support, as is the concept of requiring the annual club champion to demonstrate proficiency in two or three different disciplines. The disciplines referred to are: Power (gas and electric), Rubber powered, and Glider. The method of currently awarding bonus points will probably be revised. Experience with the current system suggests the points gap between contestants seems to open too fast and to the extent that this in itself can be demotivating to many. As example, 5 bonus points per max might be reduced. Also the 10 points for flying three official flights with each model entered seems irrelevant in most cases. The method of awarding points for total time needs further study as well. The good news is that Bruce has the skill to write a computer program to handle whatever changes we come up with. As the bookkeeper I really welcome this.

If you have not been to the field lately, you might be unaware of some changes that will affect the way we set up to fly. We now have crops growing on the fields to the south of our area. Fortunately, these crops are planted in the lower half of these fields leaving a bare area adjacent to our field. A bigger current issue is the field immediately to the east of our field and just beyond Toltec Road. This was just planted. Regardless of the type of crop, the probability of having a wet field for our models to land in is a problem. The ½ X 1 mile field immediately north of our area has finally firmed up. You can easily drive all over this field and our bridges to this field are in good shape. Rather than set up the flight line where we usually do, we plan to make greater use of the RC field as our principle operating area.

Let's go fly!

*Elmer Nelson*



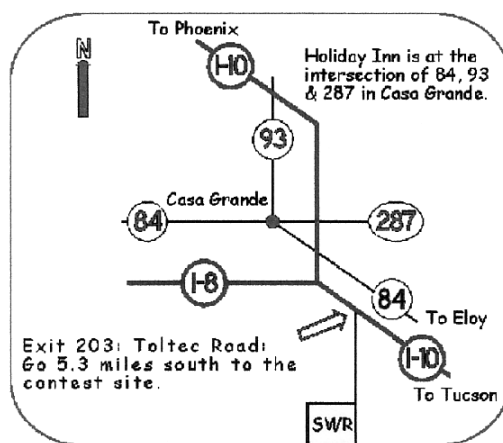
# Southwest Regionals Model Airplane Championships

January 14, 15, 16 2012 Eloy, Arizona

**3 Contests** – same weekend, same site: about 5.5 mi S. of I-10 on Toltec Road at Exit 203 about half way between Phoenix and Tucson

~AMA, SAM, NFFS, FAC Free Flight  
 ~FAI Free Flight [14 & 15 only]  
 ~SAM RC Old Timers

**FREE swap meet Saturday afternoon at AMA FF official's area**



## AMA, SAM, NFFS, FAC Free Flight

Saturday 8am~4pm		Sunday 8am~4pm		Monday 8am~2pm	
A Gas	HLG	C Gas	Nos Wakefield	1/2A Gas	Sm.Rub. Stick
D Gas	Junior Cl.Tow	Clas 1/2A Gas	Half-A-Wake	B Gas	Cat GI
Classic AB Gas	Jr HLG	C Nostalgia	Jimmie Allen	Clas CD Gas	A1 Tow
1/2A Nostalgia	E36 Electric	Nos Cabin	Moffett Rub	1/4A Nos	
B Nostalgia		OT Gas Fus	Junior Cat. GI	Early 1/2A Nos.	
Sm Rub. Fus		Lg Rub. Fus	Clas Open Tow	A Nos	
Lg Rub. Stick		P-30	Electric A&B	OT Gas Py	
Nos Rubber		Junior P-30	Jrs: Delta Dart	.020 Rep	
Half-A-Wake		Twin Push Mass Launch 11AM		Mulv Rub	
Tomboy - Saturday & Sunday					

## FAI Free Flight

Saturday	Sunday
F1A	F1G
F1B	F1H
F1C /F1P	F1J
F1Q	

## SAM RC Old Timers

Saturday	Sunday	Monday
Pure Antique	Antique	Electric LMR
B Glow	Ohlsson Sideport	1/2A Tex. Scale
Electric Texaco	C Glow LER	Brown Jr. LER
C Ignition LER	Texaco	A Glow
1/2A Texaco	Speed 400 LMR Special Event**	A Ign LER
B Ignition LER	E36 Electric Replica***	Spirit of SAM
Wakefield Class LMR Electric*		

### Additional information:

Complete details with event listings, special event or field rules, entry blanks for the free flight contests, maps, and places to stay:

[www.aalmps.com/12info.htm](http://www.aalmps.com/12info.htm)

Southwest Regionals history with results and pictures:

[www.aalmps.com/swrintronu.htm](http://www.aalmps.com/swrintronu.htm)

**AMA/NFFS/SAM/FAC Contest:** CD:Al Lidberg, 1127 W. Dunbar Dr, Tempe, AZ 85282  
[aalmps@aol.com](mailto:aalmps@aol.com) 480-309-6564

**FAI Contest:** CD Peter Brocks, 9031 E. Paradise Dr. , Scottsdale , AZ 85260  
[brocksarizona@cox.net](mailto:brocksarizona@cox.net) 480-614-6183

**SAM RC Old Timers Contest:** CD Bob Angus, 6640 N. Columbus, Tucson, AZ 85718 520-299-9034

## **RUBBER MOTOR TURNS**

Michael Woodhouse

Can I clarify a few points made about rubber and turns? Below are my thoughts and suggestions and are only about turns and nothing else. It's very, very brief!

We know that there are differences in rubber from batch to batch. These differences are in both the quality and nominal size from batch to batch and even within in each batch.

We need to somehow get a handle on the numbers of turns that the rubber we are using will take. There are formulae around, I tend to avoid these and work out my own needs.

How do I avoid formulae? There are too many variables that will make a formulae use not the way to go. Just think about the variables there are:

Cross section of the rubber - there are differences between actual and nominal size, the size will often vary within a box!

Type/make of rubber

Number of strands - The relationship to the cross section of the rubber.

Lubricant - Silicon, Soft soap etc

Braided or not.

Temperature

However there are basics out there which can be done that will help sort things out. Make motors up by weight not length. Do this even when weight is not part of the required specification. Always fly the model on the same weight of rubber and length of motor each time. This will help give a consistent performance. Weigh the rubber and strand to give a motor of the required length. My motors vary in strandage to get the same length. My motors in 1/8" vary from 26-28 strands with the odd 30 or 24! 1/16" gives a pattern of 52-54 with the odd 56. This shows if nothing else that the 1/16" is more consistent in either width or thickness. Even doing this with a box that has variations one can only ponder on what happens within each motor.

It is a fact that the thicker the overall cross section of the motor the less turns per unit of length can be applied regardless of how long the motor is. That is to say a thicker motor of a given length will take less turns than its thinner counterpart. The rubber when wound twists within each strand as well as the total bundle. How well or badly this winding is done will effect the total turns that the motor will take. Over a cross section of greater than 16 strands 1/4" equivalent the number of turns per length of motor that can be applied falls off badly. So the rubber is less well used.

The move towards more thinner strands helps both the tuning of and exact length and getting a better wind. The thinner rubber strands will flow around each other more easily than the thicker plus the effect of the twist within each rubber strand is less of an issue.

Regarding more or less turns on a motor made up of thinner rubber if it is of the same weight and length. My answer is still just a maybe a few more turns, well certainly not less. The reason being the twist effect within each strand creates less stress, the bundle will also be more smoothly wound and this has to help on the positive side. Now that said that I'm working at the upper end of the overall cross section that can be used. Going down to thinner motors I would concede that more turns may be available, but again only a minimal number.

Before any testing run in the motor.

What can then be done is to simply wind and test a motor from a batch you are going to use for the turns that it will take. Experience, record keeping and a torque meter etc are applied to the mix. Prior preparation and practice will prevent piss poor performance so I reckon that I can get it right quite readily. I only use a motor once for a contest flight, after a push to 99.9% consistency in the motor is out of the window. The next big wind will see strands going. How do I know if I've got my best turns? Well, when I remove a motor after a flight and I find a couple of strands have let go I reckon I was close to maximum. Plus a second go will always blow strands on the wind up.

Yes, despite this I do break motors. Last one that I broke was in the fly off for an F1B team place for next year's European Champs. I pushed it, risked it and bang! The next motor held with a few less turns and I made the team, the model finished in a tall tree and took into the dark to get down and is now in for repair.

*Michael Woodhouse*

[mike@freeflightsupplies.co.uk](mailto:mike@freeflightsupplies.co.uk)

<http://www.freeflightsupplies.co.uk>



## 2012 SOUTHWEST REGIONALS

**The 2012 Regionals are just around the corner, and as always there are a few changes.**

Jean Andrews is sponsoring the "**Nostalgia Cabin**" event at the Regionals. This event is flown to Nostalgia Gas rules but it intended for cabin models, including any of the Pay Load designs from that era. Pay Loads don't have to carry the weighted dummies and often are great flyers that way.

And John Patton is sponsoring The new FAC ½ A Wakefield

### ***And a new event for the R/C old timers Electric Replica:***

**a new remote-controlled provisional event for R/C old timers**

#### **Goals:**

Encourage the building and flying of remote-controlled, replica models of fuel-powered, SAM-legal models. There are many kits and plans available for the current *Replica .020 Power* event. The advent of reliable, reasonably-priced, micro radio control components makes this class workable and affordable. Added to that is the availability of small brushless in-runner and out-runner electric motors coupled with inexpensive LiPo batteries and inherently safe chargers now on the market.

#### **The Model:**

Not to exceed 36+in wingspan projected.

Replica Model of any fuel-powered model kitted or built from plans published by December 31, 1942.

Motor - any electric brushed or brushless in-runner or out-runner

Battery - a 2 cell lithium polymer battery of any capacity

Propeller - fixed, no folding propellers

Landing Gear - Two-wheel landing gear may be substituted for a single wheel.

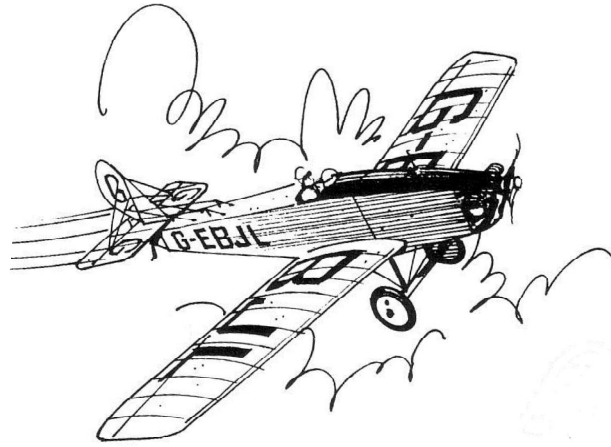
Construction - Construction is at the discretion of the builder.

Airfoil - Airfoils may be modified, but must retain the characteristic shape of the original, i.e., RAF 32 Type, 6409 type, Single Surface type, Clark Y type etc.

#### **Flight Task:**

Motor Run - Motor run is 120 seconds. A restart of the motor after 120 seconds results in a zero score for that flight. This time may be changed at the discretion of the Contest Director.

The model's score is the sum of the best two of three flights (10 minute max). In the event of more than one competitor achieving two maximum flights, at the discretion of the Contest Director, the winner may be determined by a fly off.



**MERRY CHRISTMAS AND A HAPPY NEW YEAR**

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**2012**

**WEBSTER FIELD**

**ELOY**

**Phoenix**  
MODEL AIRPLANE CLUB

**Steve Riley**

**605 La Casa De Prasa Dr. S.E.**

**Rio Rancho, New Mexico 87124**





Andrew Barron from Connecticut



Tom Gaylor, our club photographer



Glenn Schneider from California



Bill Booth from California



Professor+John Oldencamp from California



Santa's helpers. Mike Roseberry and Ralph Hotz



Lake Eloy+ One of the better Free Flight sites  
around well, most of the time.

Hey, at least it wasn't dusty



Ah, now this is more like it !



Jean Andrews, Dick Strang (nice to see you up and around again) and Al Lidberg

A special thanks to Tom Gaylor for the pictures

As always, if you want a full page copy of one of the pictures, send me an email.

*Steve*