# PHOENIX MODEL ARPLANE QUB

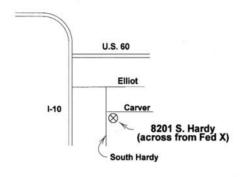
HAVING FUN WITH MODEL AIRPLANES SINCE 1937

# **VOLUME 12 NUMBER 1**

**JANUARY 2007** 





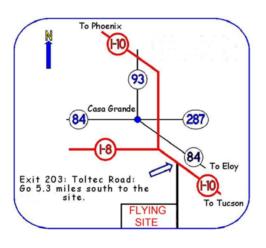


NEXT MEETING
JANUARY 9th
7:00 PM.
8201 S. Hardy
Tempe police Dept.
Auditorium









NEXT CONTEST
THE SOUTHWEST
REGIONALS
JANUARY 13TH, 14TH, & 15th
ELOY ARIZONA

# **DUES ARE DUE**

Your \$15.00 will help keep us going.





# **CLUB OFFICERS**

President:
Vice President:
Secretary:
Treasurer:

Newsletter Editor:

8112

Al Lidberg (480) 460-1366

Peter Brocks Bill Sewel

Elmer Nelson

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#### Young Tucson Glider Flyers at Eloy

by Benjamin F. Nead (AMA 737391)

The idea of teaching kids to build and fly models came to me in the summer of 2003. On the 100th anniversary of the Wright brother's Kittyhawk flight I wanted to have my son, Ben, and some of his other 2nd grade friends be able to experience the simple joys of putting something together that they could fly in their school playground. My son's school, The Miles Exploratory Learning Center (ELC), is part of the Tucson Unified School District (TUSD) and hosts about 300 students between Kindergarten and 8th grade. An afterschool enrichment class program, which any TUSD parent is eligible to teach as long as sufficient student interest is present, was already in place at Miles ELC. The principal was only too happy to accommodate my lesson plan and even provided a nominal financial incentive for my time (most of which I choose to use offsetting material expenses and buying new tools). Thus, the Tuesday afternoon "Things That Fly" afterschool enrichment class was born at Miles ELC and continues to this day.

Classes are only one hour in length and meet just one day per week. This makes it somewhat challenging in that the simplest project can take weeks to complete under ideal conditions. Even the most focused student will tend to burn out well before any of these projects begin to look like they're capable of sustained flight. The "payoff" you are constantly preaching to them is that all the cutting, sanding and gluing will eventually result in a finished product that is worth all the time and effort expended.

Much has been written on the limited attention spans of today's computer video game generation. But a quick perusal of classic model airplane literature (such as Frank Ziac's 1959-61 Model Aeronautics Year Book) indicates that the problem is hardly a new one. I really don't think that today's youth are any less capable of performing these tasks than those of previous generations. The difference is that they have far more in the way of interesting activities vying for their attention than we did in our formative years. The greatest challenge for any adult showing them the art of modeling is to attempt to keep it fresh and interesting. Some days you succeed and some days you don't.

Although I have structured semesters around building Delta Dart rubber powered models and various Estes motor model rocketry projects, everything has invariably centered around some sort of catapult launch glider (CLG) design. CLGs are sufficiently rugged (far more so than any sort of small rubber powered prop plane) and don't require new motors for each flight (as do model rockets). Unlike a comparable size hand launch glider design, the CLG can be placed into the air with equal ease and precision regardless of the student's physical size and/or upper body strength. It's the great equalizer in all these respects.

As my experience as a modeler has developed since returning to the hobby a few years ago (yes, I'm still learning at age 48) and the median age of my students has increased over the years, the performance profile of our models has begun to outgrow our schoolyard boundaries. When I decided that this fall's project would be a variation of Al Lidberg's Sweepette-ette 14, I knew that it would sufficiently challenge my current crew of eleven 3rd through 5th graders. I knew that it would also occupy a semesters worth of weekly classes but ultimately reward them with something that would truly perform. Indeed . . . the 1st "proof of concept" prototype that I completed for myself disappeared into a thermal on the Marana field one sunny Saturday morning in early November!

My version of Al's design (original published in the November 1974 issue of Flying Models and reprinted in this newsletter last month) features a thicker wing plank and a stiffer spruce fuselage than originally called for. I also added provisions for catapult launching as it was initially specified a hand launch design only. For little more than cosmetic reasons, I decided to revise the outline of the tail surfaces while being careful to retain the same area as the originals. The thicker airfoil section would make for a gentler glide and the thicker fuselage, while adding more weight, would make it a bit more robust in the hands of a smaller child who might not be as careful in handling a model airplane as much as a more experienced flyer.

As with all such projects, I started by scanning the original plan into the computer and drawing on top of it in Adobe Illustrator. This is done to create dedicated paper templates which can be printed out at will. These paper templates get glued onto the individual wood parts with spray-on Photo Mount glue. The paper not only provides a clearly delineated guide for where to cut and sand, it does double duty in making the wood a bit stiffer (especially good for the thin tail pieces). After cutting and/or sanding the parts, the remaining paper is easily removed by splashing naphtha on them. The naphtha not only instantly debonds the Photo Mount glue, it also cleans the wood of any other dirt, grease and embedded sanding dust without raising the grain (as alcohol would). I use this computer generated paper template technique for all my scratch built projects now (after-school and otherwise) and I also devote some class time to show students how a computer can be used like this to aid in the design and construction of a model airplane.

All students work with real tools such as sharp X-acto knives, sanding blocks and metal rulers. Each of them also gets to try using a small wood cabinetmakers plane to do some of the wing shaping. Depending upon the intricacy of the particular task at hand, they work by themselves in a group setting or individually one-on-one with my direct supervision while the others watch. I've found that most of these kids can safely use these "adult" hand tools and have the proper mental temperament to do so without hurting themselves or those around them.

( continued on next

#### Young Tucson Glider Flyers at Eloy (continued)

I let everyone know from the first day of class the consequences of inappropriate handling of tools and materials as well as any other behavior that could compromise safety (i.e.: immediate expulsion). I'm happy to report that this has always been enough.

I use a rather elaborate jigging system to make sure that wing dihedral joints are perfectly aligned and tightly glued (another article for another time) and this, as well as other final assembly tasks, is clearly demonstrated in class. It's assumed that when these kids begin to build on their own outside of my class (the ultimate goal) they will not have a lot of these more esoteric tools and jigs at their disposal. They will have to resort to improvising construction techniques with what they have available to them and, while the results will probably be less accurate, this, too, will provide a valuable post-classroom learning experience for them. Since these models clearly needed more flying space than our schoolyard could provide, we had to find a place and schedule a convenient time to get them into the air. My original idea was to have the class come up to the Marana field just outside of Tucson for an informal fly-off around the Thanksgiving holiday. But, after checking dates, it was decided that we could participate in the December 3rd Eloy contest. Notice was given to parents of transportation requirements and each student became a junior AMA member so they were eligible. Everything was set for a perfect flying day but this was ultimately dashed by weather that refused to cooperate. The winds were very high that Sunday morning - in the 25 to 30 mph range - and this prevented the sort of ideal trimming and flying conditions that I had hoped for. Despite this, all eleven students (with their very dedicated and supportive parental "ground crew") made the long trip. We actually managed to get all the models in the air briefly and, amazingly, only two of them suffered damage. We also had the encouragement and support of glider veterans Tim Battiuk, Rocco Ferario and his son, Anthony. Additionally, the Phoenix Club made up some very nice certificates for all the participants.

The saga isn't over yet. The two broken gliders were easily repaired during our remaining class sessions and everyone got to take home a finished project that represented their hard work for the semester. Arrangements were then made for a series of Marana field fly-offs in the week following the Christmas holiday in preparation for (and hopes of) that we will all make another shot at Eloy for the January Southwest Regionals. If you happen to see a group of kids up there putting their catapult gliders through the paces that weekend, you'll know their story.

Ben

Ben and the parents of these students are to be commended for helping them experience the thrill of watching their own creations dance in the sky. The pride and satisfaction of watching their own efforts come to life. Hopefully some will take advantage of the scholarship opportunities made available by the **N**ational **Free Flight Society**. Some may want to get into international competition. But hopefully, all will continue to enjoy a pretty neat hobby and the friends they make along the

Steve

#### A NOTE FROM THE EDITOR

Please check this issue closely. A lot of changes in the contest schedule including some Saturday contests. Also a new scoring system for the club championship. These changes are the result of a lot of effort on the part of the contest committee.

We have a new club president, Al Lidberg, A new club secretary, Bill Sewel, and Elmer Nelson will be the new treasurer. Peter remains as V.P.

A special thanks to John Nystedt for all the years of service to the club.

And don't forget to send in your dues!

I hope to see all of you at the Regionals, Cheers, Steve

# **PMAC Minutes**

### December 12, 2006

Meeting was called to order by President Elmer Nelson at 7:00 PM.

A quorum was present.

Treasurer's Report.

Contest Account balance: \$2,237.74 PMAC Account \$368.83

Note, at this time PMAC has outstanding bills for news letters of approximately \$200.

#### Old Business.

**2007 Contest Program and Schedule**. The contest program that will have six major categories was approved last meeting and was reviewed again during this meeting. The 2007 contest schedule was also presented and approved. New for 2007 will be holding half of the contests on Saturdays. The dates approximate those of 2006.

**Arizona Free Flight Champs**. Attendance at this year's contest was the largest of recent years. National Cup and America Cup were both important drawing cards for this contest. A total of 26 FAI and 19 AMA/NFFS contests competed. Additionally, Ben Need of Tucson brought 12 junior flyers who he is teaching to build and fly Cat Gliders to the contest. Income vs expenses:

Income: \$815 Expenses porta potties \$140

AMA plaques 171 est.
Printing 22.15
FAI glass mugs 165
Profit \$316.

(estimate pending receipt of AMA plaque charges. Above balance shows income but no expenses have been deducted)

# 2007 Combined Club Champion.

The FF Championship settled the winner and runners up for 2007. As in the past years, a total of \$100 will be taken from the contest account to be divided between the top three as follows: Champ \$50, second \$30 and third \$20. The winners were:

Champion: Peter Brocks

Second Elmer Nelson Third: Dick Nelson

Club Dues for 2007. Dues will be held at \$15 for 2007.

**Flight Line Safety**. The need to move the line for shifting winds was discussed. As a club policy we will move the line to comply with the intent of the AMA rules.

#### **New Business.**

**Election of Officers**. The annual election of officers was held with the following results.

President: Al Lidberg
Vice President: Peter Brocks
Secretary Bill Sewell
Treasurer Elmer Nelson

**Show & Tell**. Elmer Nelson led a question and answer session using a new cat glider to spur questions. Discussion lasted approximately 30 minutes.

Meeting adjourned at 9:00 PM

2006 Contest Ladder

Name	2/26/2006	3/26/2006	4/22-23/06	5/21/2006	9/17/2006	10/22/2006	11/19/2006	12/2-3/06	Total
Brocks, Peter	7	10	8	7	5	5	9	10	61
Nelson, Elmer	8	11	6	8	5	2	10	2	52
Nelson, Dick	2	5	9	4	3	5	6	9	43
Andrews, Jean	2	5	8	3		5	1	*	24
Wood, Dick		3	1		2	3	3	8	20
Farmer, Jim			3	1	1			9	14
Hidinger	2						5	7	14
Miller, Tom		5			2		2	2	11
Archer, Ryan								8	8
Samio						4	3		7
Seamster, Jim	*		7						7
Archer, Randy								6	6
Lichtenberg		*	1			*		5	6
Prescott		, 3			1		1	1	6
Roberge								6	6
Sobala								6	6
Farmer, Joey	-		2					3	5
Farmer, Sam								5	5
Strang	2				2				4
Lovejoy, Roland		1				2			3
Need, Ben							2	*	2
Donnelly, Dennis			1						1
Langelius, Bill		*							0

<sup>\*</sup> Did not fly required minimum number of flights

PMAC CONTEST SCORE SHEET December 2 3 2006

NAME	A Gas	AB CI Gas	1/4A Nos	A Nos	B Nos	C Nos	OT Gas	Nos Rub	OT Rub I	CI Glider	Cat Glider	HL Glider	F1A	F1B	F1C	F1G	F1J	Total
Brocks											2	2	4			2		10
Farmer, Jim															9			9
Nelson, D	х	х		3		4	1			1								9
Archer, Ryan															8			8
Wood, D										Ser				4		4		8
Hidinger				4	3	х												7
Archer Randy															4		2	6
Roberge				6		х												6
Sobala			4	2														6
Farmer, Sam															5			5
Lichtenberg						5												5
Farmer, Joey															3			3
Miller, Tom	2																	2
Nelson, E												1		1				2
Prescott, K									1									1
Andrews								х										0
Need, Ben											x							0

X Flew but did not complete three official flights

#### 2007 PMAC/TFFC CONTEST SCHEDULE

	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	Spring	I-10	Hot	Fall	Ghost	Turkey	Arizona F	na Free Flight		
	Cup	Break	Challenge	Stuff	Kick-off	Riders	Shoot	Champi	onships		
	Saturday	Sunday	Saturday	Sunday	Saturday	Sunday	Saturday	Saturday	Sunday		
	2/24/2007	3/18/2007	4/21/2007	5/20/2007	9/15/2007	10/21/2007	11/17/2007	12/8/2007	12/9/2007		
GAS EVENTS								8	7		
AMA ½ A GAS	(Jr) (SO)	(Jr) (SO)	(Jr) (SO)	(Jr) (SO)	(Jr) (SO)	(Jr) (SO)	(Jr) (SO)	(Jr) (SO)			
AMA A/B GAS	Х	X	Х	Х	Х	Х	Х		A/B		
AMA C/D GAS	Х	Х	Х	Х	Х	Х	Х	C/D			
AMA Classic 1/2A Gas	(Jr) (SO)	(Jr) (SO)	(Jr) (SO)	(Jr) (SO)	(Jr) (SO)	(Jr) (SO)	(Jr) (SO)		(Jr) (SO)		
AMA Classic AB Combo	Х	Х	Х	Х	Х	X	Х		X		
AMA Classic CD Combo	Х	Х	Х	Х	Х	X	X	Х			
NOS ¼ A	Х	Х	Х	Х	Х	Х	Х	Х			
NOS 1/2 A GAS	X	X	, X	Х	Х	Х	Х		Х		
NOS A GAS	Х	Х	Х	Х	Х	Х	Х	Х			
NOS B/C GAS Comb o	X	Х	Х	Х	Х	Х	Х	С	В		
NOS Early 1/2 A Gas	X	X	Х	Х	Х	Х	Х		Х		
OT .020 REPLICA	Х	Х	Х	Х	Х	Х	Х	Х			
OT GAS COMBO	Х	Х	Х	Х	Х	Х	Х		Х		
OT RC	X	Х	Х	Х	Х	Х	X	Х			
Rubber Events								4	3		
P-30	(Jr) (SO)	(Jr) (SO)	(Jr) (SO)	(Jr) (SO)	(Jr) (SO)	(Jr) (SO)	(Jr) (SO)	(Jr) (SO)			
NOS RUB, Nos Wake, & Comb	Х	X	X	X	X	X	X	Nos Wake	Nos Rub		
OT Fus Combo Rubber	Х	Х	Х	Х	Х	Х	Х	Х			
OT Stick Combo Rubber	Х	Х	Х	Х	Х	Х	Х		Х		
MULVIHILL	Х	Х	Х	Х	Х	Х	Х		Х		
MOFFETT	Х	Х	Х	Х	Х	Х	Х	Х			
FAI Events								3	3		
F1A/F1B/F1C Combo	Х	Х	Х	Х	Х	Х	Х	F1A,F1B,F1C			
F1G/F1H/F1J Combo	Х	Х	Х	Х	Х	Х	Х		F1G,F1H,F1J		
GLIDER EVENTS								1	2		
H. L. GLIDER	(Jr) (SO)	(Jr) (SO)	(Jr) (SO)	(Jr) (SO)	(Jr) (SO)	(Jr) (SO)	(Jr) (SO)	(Jr) (SO)			
CAT GLIDER	(Jr) (SO)	(Jr) (SO)	(JR)(SO)	(Jr) (SO)	(Jr) (SO)	(Jr) (SO)	(Jr) (SO)		(Jr) (SO)		
Classic Glider	X	X	X	X	X	X	X		X		
Contest Directors	Lichtenberge	E. Nelson	Brocks	Roberge	Loeffler	D.Nelson	Andrews	Burros/	Nystedt		
Contest Classification	Α	Α	Α	Α	Α	Α	Α	AA	AA		
Total Events	26	26	26	26	26	26	26	17	16		

Note: All one day contests will be flown in combined categories. Essentially, anything you bring to the field can be flown in one of six categories



BUILD, FLY, SMILE Marv Bashaw at Eloy

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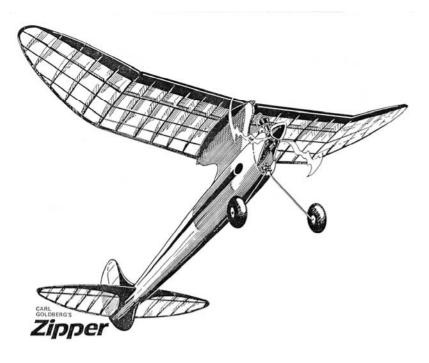
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NEXT MEETING Jan. 9th

NEXT CONTEST
THE SOUTHWEST
REGIONALS!
ELOY

# **PHOENIX**

**MODEL AIRPLANE CLUB** 

Steve Riley 605 La Casa De Prasa Dr. S.E. Rio Rancho, New Mexico 87124