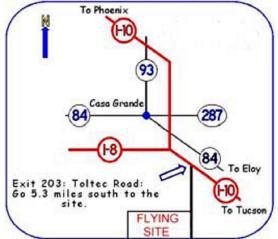
# PHOANX MODEL APPLANE CUB

HAVING FUN WITH MODEL AIRPLANES SINCE 1937

VOLUME 16 NUMBER 6

JUNE 2011





NEXT MEETING
Tuesday June 14<sup>th</sup>
07:00 PM
Granite Reef Senior Center
1700 N. Granite Reef Rd.
Scottsdale, AZ

NEXT CONTEST
"FALL KICK OFF"
Sunday
September 18<sup>th</sup>
WEBSTER FIELD
ELOY

#### **CLUB OFFICERS**

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#### PREZ SPEAKS

Good News . Bad News. For those of you who were starting to crank out an indoor model to fly in the Eagar Dome. you have more time to get ready than we originally thought. In fact, it isnot going to happen this summer. By the time we can get a sanction, a rental agreement worked out and the necessary site insurance completed, the school systems use of the facility will negate our access to the dome. Steve Riley has made two trips to Eagar in an attempt to get this off the ground this summer. He has met with the dome manager and more importantly with the Superintendent of Schools. He has learned that in late July and early August the dome, which is not air conditioned, can become very hot with high humidity. This is the summer monsoon season in northern Arizona which brings frequent afternoon rain showers. The dome manager says that at times clouds can be generated in the dome. On the positive side, the Superintendent of Schools sees a real positive spin-off for their science program if we are willing to do a little training while using the dome. Steve continues to be our point man on this so, dong give up hope, we will continue to work on completing a use agreement. In the meantime, anyone who might like to drive up there and check out the dome will be welcome. Our best point of contact remains Tom Price, the local businessman who is our enthusiastic supporter. Our summer Dawn Patrol schedule is published here in. Because of the heat, it is always a good idea to do our flying when others might be on the field. Suggest those who might be going to Eloy put the word out via our email net.

Our June meeting is our last one before starting up again in September. See you there!

Elmer Nelson

#### **HOT STUFF**

Contest report

Our dual club May Contest was a big success wind-wise.+ As you all know the wind has been up almost every day both before and after. The wind was at a really comfortable level and no movement of the flight line was necessary. There was the usual super flying by Dick Nelson and Steve Hesla in gas. Both flew in quite a few events. Reports have it that Steve had a flight of over an hour with his classic C job. He almost lost it but managed to track it down 5 miles South and East. Rubber flyer Dick Strang was missing because of illness but the usual rubber flyers led by Jean Andrews and Tom Gaylor flew well and often. Competition between Enes and his wife Jasminka proved to be the closest of the day. Enes bested her in tow line by a few seconds. Look out Enes!!!. All your usual running around didnot seem to help much as Jasminka calmly put up some very good flights only to lose by a couple of seconds. A real treat was the discus and catapult glider flying of Tim Batiuk, nationally known flyer from California. He came over seeking additional National points. It always wonderful to have Tim present as he represents the best in catapult and discus launch glider technique and heas a great gentleman.

I want to thank all the people who helped make this contest a success by helping me with guidance and suggestions. Peter Brocks, Jean Andrews and later Elmer Nelson made my first contest as CD a success.

Ralph Hotz

# AMA/Classic Gas

# **MAY 21, 2011**

Contestant Name	Event	Flt 1	Flt 2	Flt3	FO 1		Total Time	Time
Steve Hesla	A/B Classic	180	180	180	70		610	6
Steve Hesla	AMA A Gas	120	137	180			437	4
Steve Hesla	AMA C Gas	180	180				360	2

# Nostalgia Gas/OT Gas Combo

Contestant Name	Event	Flt 1	Flt 2	Flt3	FO 1	FO2	FO3	Total Time	Time
Dick Nelson	C Nos	180	180	180	180	180	360	1260	14
Dick Nelson	A Nos	180	143	180				503	12
Dick Nelson	OT B Pylon	180	127	138				445	10
Steve Hesla	B Nos	180	70	78				328	8
Steve Hesla	A Nos	105	180					285	6
Dick Nelson	OT B Fus	58	68	63				189	4
Dick Nelson	1/2 A Nos	65						65	2

2 Minute (	Combo	(F1G/H/	J, .020 Re					
Contestant Name	Event	Flt 1	Flt 2	Flt3	FO 1		Total Time	Time
Peter Brocks	F1G	120	120	120	180		540	12
Tom Gaylor	P-30	100	120	120			340	10
Jean Andrews	P-30	65	58	120			243	8
Bruce Grawburg	P-30	58	61	47			166	6
Dick Wood	F1G	120	7				127	4
Shig Samio	IP-30	120					120	2

# 3 MinRubber/Glider Combo (Mulvihill, Moffett, OT Rub, Nos Wake/Rubber, Classic Tow)

Contestant Name	Event	Flt 1	Flt 2	Flt3	FO 1		Total Time	Time
Bruce Grawburg	Small Cabin	180	110	180			470	18
Shig Samio	OT Large Stick	89	180	106			375	14
Jean Andrews	OT Stick	180	180				360	12
Tim Batiuk	Classic Tow	110	146	210			466	16
Jean Andrews	OT Cabin	166	180				346	10
Tom Gaylor	Nos Rub	142	98	93			333	8
Shig Samio	Nos Wake	78	77	99			254	6
Shig Samio	OT Small Stick	166	47				213	4
Shig Samio	Mulvihill	54	138				192	2

# 3 Minute FAI Combo (F1A/B/C/P/Q)

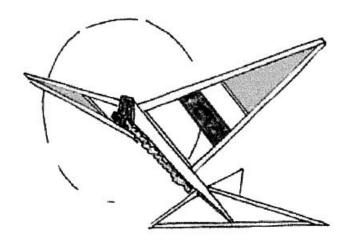
Contestant Name	Event	Flt 1	Flt 2	Flt3	FO 1		Total Time	Time
Dick Wood	F1B	180	180	153			513	8
Peter Brocks	F1A	73	180	180			433	2
Enes Pecenkovic	F1A	152	136	180			468	6
Jasminka Pecenkovic	F1A	120	180	159			459	4

# Catapult /HL Glider Combo

Contestant Name	Event	Flt 1	Flt 2	Flt3	Flt 4			Total Time	Time
Tim Batiuk	OHLG	120	120	120	120	360	97	937	10
Enes Pecenkovic	OHLG	120	120	120	120	44		524	8
Tim Batiuk	Cat Glider	106	120	120				346	6
Tom Gaylor	Cat Glider	13	38	24				75	4
Tom Gaylor	OHLG	28	23	23				74	2

#### 2011 PMAC-TFFC Contest Category Ladder

	2/20/2011	3/19/2011	4/10/2011	5/21/2011	9/18/2011	10/22/2011	11/13/2011	12/3/2011	TOTAL
AMA/CL Gas									
Steve Hesla		67	125	68					260
Dick Nelson	22	21							43
Jean Andrews		5						· · · · · · · · · · · · · · · · · · ·	5
		prince							·
Nos/OT Gas									
Dick Nelson		98	94	135					327
Steve Hesla		52		40					92
Jean Andrews		28							28
3 Minute Rub/Glider	Combo								
Jean Andrews		28	42	49					119
Bruce Grawburg		16	15	38					69
Shig Saimo				63					63
Tom Gaylor		15	18	18					51
Dick Strang			39						39
Kent Prescott		5	12						39 17
Elmer Nelson			8						8
3 Minute FAI Combo	T								1
Peter Brocks		29		22					51
Dick Wood		10		28					38
Enes Pecenkovic				21					21
Jasminka Pecenkovic				19					19
2 Minute Combo	T								T
Peter Brocks		33	30	42					105
Tom Gaylor		41	33	30					104
Jean Andrews		10		23					33
Bruce Grawburg	<b></b>		14	16					30
Kent Prescott			21						21
Dick Wood				15				·	15
Shig Saimo				10					10
Henry Werner	5								10
Cat/HL Glider Combo									T
Enes Pecenkovic				38					38
Tom Gaylor				16					16
Ben Nead	<del>                                     </del>		12						12



# 2011 Overall Contest Ladder Summary

	2/20/2011	3/19/2011	4/10/2011	5/21/2011	Total
Dick Nelson	22	119	94	135	370
Steve Hesla		119	125	108	352
Jean Andrews		71	42	72	185
Tom Gaylor		56	51	74	181
Peter Brocks		43	30	64	137
Bruce Grawburg		16	29	54	99
Shig Saimo				73	73
Dick Wood		29		43	72
Enes Pecenkovic				59	59
Dick Strang			39		39
Kent Prescott		5	33		38
Jasminka Pecenkovi	c			19	19
Ben Nead			12		12
Elmer Nelson			8		8
Henry Werner	5				5

### **DAWN PATROL!**

Here spour Dawn Patrol schedule for this summer. We can start anytime [sunrise ~ 5am] and go home when it begins to get hot. There spafety in numbers and it spand a good idea to go flying alone. PMAC DP is an informal scheduling of test sessions where you should expect to find others flying . or you can call/email folks to find out who is going. No attempt has been made to compare this schedule with out-of-town contest dates so you'd have to do your own checking. I should be there for at least half of the dates . hope to see you there, too! / AL

2011 Da	wn Patrols a	t Eloy
Month	Saturday	Sunday
June	11	26
July	9	24
August	6	21
September	3	

#### **BALSA**

A sheet of 1/32+thick balsa looked OK on first glance, but when held up to an intense light source all these little cracks appeared.

My dial caliper also finds sheets that are thicker on one edge than the other.

Your primary tool for selecting balsa should still be a good triple beam balance. Some of the electronic scales dong repeat well enough.



NFFS released a pair of videos for instructing youngsters (up to about 80) on building and flying indoor models. %Building and flying an Indoor Model Airplane+and %Building and Flying an Indoor Helicopter+ Downloadable plans are included. Even if you dong fly indoor, you will learn something from these DVDs. If you are working with youngsters, they are a must. Bob Stalick, Jack Shafer, and Mark Allison have really produced an outstanding pair of DVDs.

Below is one of the downloads from the first DVD.

Pounds per cubic foot - for 3" x 36" balsa sheets

	APPA BERT HANDE STOLEN BEST FOR THE MANAGE SEASON AND AND AND AND AND AND AND AND AND AN	4 lb	6 lb	8 lb	10 lb	12 lb	14 lb
1/32"	sheet wt. In grams:	3.54	5.316	7.088	8.859	10.631	12.403
thick	sheet wt. In ounces:	0.125	0.188	0.250	0.313	0.375	0.438
1/16"	sheet wt. in grams:	7.088	10.631	14.175	17.719	21.263	24.806
thick	sheet wt. in ounces:	0.250	0.375	0.500	0.625	0.750	0.875
3/32"	sheet wt. in grams:	10.362	15.947	21.263	26.578	31.894	37.209
thick	sheet wt. In ounces:	0.375	0.563	0.750	0.938	1.125	1.313
1/8"	sheet wt. In grams:	14.175	21.263	28.350	35.438	42.525	49.613
thick	sheet wt. in ounces:	0.500	0.750	1.000	1.250	1.500	1.750

## **GOLD NUGGETS**

A FEATHER by John Pakiz, Omaha, NE

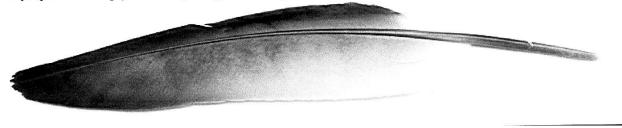
This is a pigeon flight feather I found in the front yard. I like to look at nature, as no one is smarter than God. The feather has an airfoil, and is reflexed at the T.E. Notice the shape and think of this as a wing. Our study of aerodynamics says a wing should approximate an ellipse for best lift distribution over the span.

Notice where the quill is – way up front by the leading edge. The airfoil high point line runs along the quill line. Years ago I saw a sheet that compared the wing cross section of various birds. I noticed the buzzard wing airfoil high point line was close to the L.E. I thought, "Hm, buzzards are great soaring birds so why not replicate this on my models?" I called such sections the John Pakiz Buzzard Special.

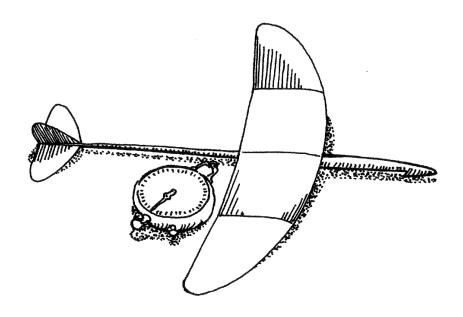
Years afterward I learned that airfoils with the high point close to the leading edge are advantageous because if the boundary layer separates (separation bubble), then the airflow has a chance to reattach to the wing before it gets to the trailing edge. This in effect increases the coefficient of lift and decreases drag. My small sport rubber models with buzzard's wings climb like rockets and the wings don't stall.

Now look at the feather again and think of it as a propeller. See how it tapers toward the tip with the thickest chord near the hub. I can attest from experience that props like this are more efficient than ones with a constant chord. Since the tip spins faster than the hub, you can have a shorter chord at the tip, still have a good Reynold's Number value and less vortex drag.

A propeller is simply a rotating wing, so once again think of the ellipse shape. These are simply thoughts.







# **NEXT MEETING**

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