

PREZ Speaks

WOW . we really had some flying going on at the last contest! Dick Nelson and Steve Hesla put on a flying circus that was really fun to watch. Additionally, there was a lot of flying going on in all of the other categories. CD Dick Strang said it was just fun to sit back and watch the activity. If you missed this one, plan on coming out to the September contest for more of the same.

A tip of the hat goes to all of the ladies that came out to support their valiant flyers! This show of support tells me that our two clubs are in good health. I would also like to give kudos to Brigitte Brocks who never fails to walk the flight line and greet all of the ladies. Thanks Brigitte, it means a lot to everyone.

We recently sent a check from our combined contest account to Reed College, Portland, Oregon in memory of our good friend Roland Lovejoy. Reed College was Roland's Alma Mater.

Just a reminder, summer flying activity continues with the Dawn Patrol events. The schedule is posted here-in. Also, PMAC monthly meetings are cancelled for the months of July and August. We will pick our meeting schedule up again in September. Have a great summer.

Elmer Nelson

The May 2010 Hotstuff contest report

The May Hotstuff for Arizona Free Flight was held on May 15, 2010.

The weather was excellent, the winds were light all day. It was 66 Degrees at seven A.M. when Dick Nelson flew his first official flight, and when we closed at one thirty, Elmer Nelson flew the last flight, it was 92.

We had eleven entries, who flew 103 official flights. The thermals were typical for Eloy, in May, very large.

The airplane mix was about equal, glider, rubber and power.

The only thing negative, was Al Lidberg put too much air in his compressed air powered plane, and it blew-up, sorry about that Al.

Overall, a good time was had by all. Hopefully all of this years flyers will be back for next year, Plus, I hope some new faces as well.

I enjoyed it,
your CD,
Dick Strang

2010
PMAC-TFFC
Contest Category Ladder

	221/2010	3/20/2010	4/18/2010	5/15/2010	TOTAL
AMA/CL Gas					
Steve Hesla		40	125	126	291
Dick Nelson		14	0	52	66
Jim Kruse				19	19

Nos/OT Gas					
Dick Nelson	6	36		174	216
Steve Hesla			26	26	52
Tom Miller			17		17
Ralph Hotz			15		15
Tom Gaylor				21	
Elmer Nelson				20	

3 Minute Rub/Glider Combo					
Jean Andrews		35	20	34	89
Tom Gaylor		21	18	23	62
Kent Prescott			32	26	58
Elmer Nelson			24	32	56
Bruce Grawburg			31	14	45
Enis Pecenkovic			14	30	44
Dick Strang			14		14
Roland Lovejoy		13			13

3 Minute FAI Combo					
Enis Pecenkovic		17	31	29	77
Peter Brocks			24	12	36
Tom Iorger			33		33
Jim Farmer			18		18

2 Minute Combo					
Tom Gaylor		21	41	28	90
Jean Andrews	6	12	34	21	73
Elmer Nelson		23	27	12	62
Ben Nead		14		14	28
Mike Bower			18		18
Dick Strang			14		14

Cat/HL Glider Combo					
Enes Pecenkovic	18	16	16	19	69
Elmer Nelson	20	14	12		46
Kent Prescott		6	14	12	32

2010
Overall Contest Ladder
Summary

	2/21/2010	3/20/2010	4/18/2010	5/15/2010	Total
Steve Hesla		40	151	154	345
Dick Nelson	6	50		226	282
Enes Pecenkovic	18	33	61	78	190
Elmer Nelson	20	37	63	64	184
Tom Gaylor		42	59	72	173
Jean Andrews	6	47	54	55	162
Kent Prescott		6	46	38	90
Bruce Grawburg			31	14	45
Peter Brocks			24	12	36
Tom Joerger			33		33
Dick Strang			28		28
Ben Nead		14		14	28
Jim Kruse				19	19
Mike Bower			18		18
Jim Farmer			18		18
Tom Miller			17		17
Ralph Hotz			15		15
Roland Lovejoy		13			13
Chuck Stewart					0
Dan Sobala					0
Frank Roberge					0
Joe Ritchey					0
Mike Roseberry					0
Nicholas Harris (jr)					0

PMAC DAWN PATROL at ELOY
Fly until 9-10AM, then adjourn for breakfast.

	Saturday	Sunday
June	5	
		20
July	3	
		18
August	1	
		14
	28	

OK – there are 7 dates to plan around, and to expect to see and fly with others this summer. See you there!



Bruce Grawburg. His new Sparky model flew for the first time and flew very well. This is the first model he has built since getting active after many years off.

Dick Strang was the Contest Director for the May contest. Good job Dick, thanks.



Steve Hesla. He flew six models! He is a real competitor and is giving Dick Nelson a real run. His wife is coming and timing for him.

Elmer Nelson with his F.A.I. Lucky Lindy.

Elmer has worked hard for this club for years. At the end of the day get him a cold one. He has earned it. He likes Corona with a twist of lime.



Photos by Tom Gaylor

Wing Construction: Put on your bibs and let's talk ribs!

*This is one of a series of articles by **Mike Isermann** on weight saving ideas. While*

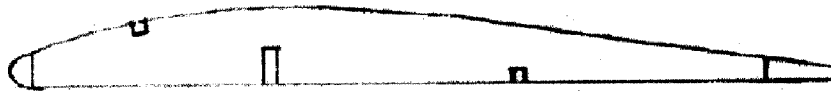
Mike is obviously talking about FAC

models, there are ideas here that everyone can use.

We're not talking BBQ pork ribs here we're talking sliced, cracked and slab-sided ribs.

That's slab-side not a slab o'ribs. I tell you I need a bib when I see some of the beautiful wing structures that are produced when sliced and cracked ribs are employed. I drool with envy! It's without wonder that a number of the consistent winners at FAC events have done so well with these great weightsaving/ structurally sound techniques. I'm an old slab-side rib user but have slowly been moving to the other side of the fence. Now don't get me wrong, I'm not saying that slab-sided ribs are no good or even a thing of the past, (although they might be for some) I'm saying be open minded here. So what are the benefits and the drawbacks of each system? Let's examine the different types of construction and then you can decide.

I'll start with the old standby, slab-sided ribs.

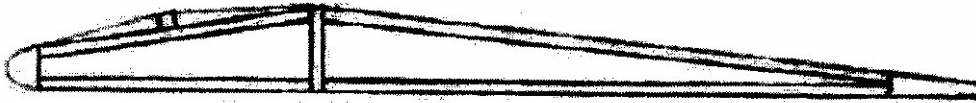


This method is the one most of us are familiar with and have used for at least part of our modeling careers.

Not a bad way to go. You are afforded an infinite number of airfoil possibilities and a solid rib gives you reasonable strength as long as you don't use too thin and/or too light of wood. One of the problems building with slab-sided ribs is that your spar notches seldom line up. This is commonplace in kit wood. If you do not take the time to straighten them out you will build reflex stresses into the wing that will show up after

covering. Ever wonder why no matter what you do, some warps keep coming back? Try sanding your notches in after construction. Second drawback: Weight. Someone told me a long time ago that when building a model airplane you should try to build it as light as you can and when you think you have achieved just that, cut the weight by another 20%. Face it, wood is weight. So it stands to reason that any reduction in structural mass will reduce weight. Some people cut holes in ribs and that helps, but is there a need for all that wood? Bottom line is that weight is the enemy and if you can save a few tenths of a gram here and there, before you know it you are dropping grams translating into lower wing loadings. And that's a good thing!

Let's move on to cracked ribs

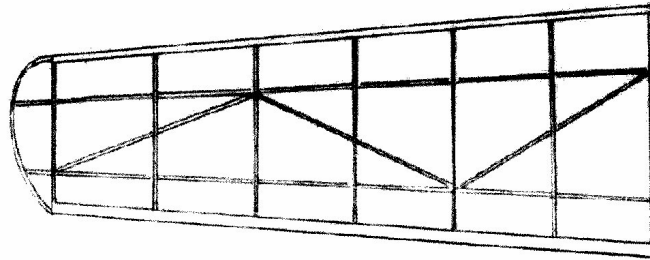


Crack rib construction utilizes a full chord-depth spar that is notched top and bottom at each rib position to accept 1/16x1/16 square balsa strips. The top strip is cracked at the spar and then glued in three places; the leading edge, Trailing edge and the spar notch. This leaves an airfoil profile that looks more like a wedge than an aerodynamic shape. The addition of a turbulator spar adds some shape to the business end of your airfoil; however, the drag and lift coefficient is not going to be optimal. The shape does produce a lifting wing but I think the air is dirtier than that of a smooth camber airfoil. Dirty air is just another word for drag. Thin wings (10% chords or less) seem to be best when using the cracked rib approach. I have seen plenty of planes with these wing designs fly away. You can't argue with success. But then I've seen thermals lift tents 100 ft into the air. The true test of an airfoil is in dead air. If you choose this form of construction you will yield a low weight structure that is reasonably strong. Drawbacks include less efficient wing profile and a very limited selection of airfoils. Airfoil design variables will be limited to maximum chord height or camber height and chord length. A flat bottom profile with straight taper from maximum chord/camber height leaves a lot to be desired if you like to try different airfoil designs. You're kinda stuck with a modified Clark Y. Some people swear by certain airfoils and some say Reynolds Numbers are too low to matter at the scale we work with. I will let you be the judge.

Now let's look at sliced ribs.



(I saved the best for last.) Sliced rib construction seems to take the best from both worlds. The easiest way to make a sliced rib is to trim the camber off the top of a slab-sided rib. Continuing development of this technique has yielded some innovative structural improvements. 1/32 balsa sheet wood is now being laminated on forms to create tried and tested airfoils. These laminations make for a stiffer structure and they allow the builder to cut uniform ribs. Sliced rib construction often uses two full-depth spars located at about 30% and 70% chord. The spars are not usually notched, but I like to do it that way. Strips are laid at rib positions between the leading edge and trailing edge of the wings. The spars are dropped in and then cambered ribs that have been sliced from the lamination are glued over the spars completing the profile.



Geodesic cross-bracing is then installed from the nose radius of the root rib to the rear taper of the third rib passing through the center of the second rib. Bracing is installed in an alternating pattern (much like a truss) out to the tip rib. The rigidity of this type of construction is truly wonderful and talk about light! You can try more airfoil designs including semi-symmetrical types. I'm not sure I would try undercambered designs, but there is no doubt someone is doing it. That would be the only drawback I can see other than the time factor. This form of construction takes twice as long to build. If time is a concern then this construction technique may not be for you. All of the construction methods we looked at are sound systems that offer different options as well as differing results. I'm sure there are other pros and cons that can be thrown in the mix. These traits are what I look for when choosing a method of construction. Each aircraft is different and one system may suit your subject better than another. Hybrids are also possible. I combined slab-sided rib leading edges with cracked rib tapers on my latest aircraft the Blohm and Voss P.193.01. The possibilities are truly endless. Let your imagination run free. Give sliced or cracked ribs a try. You too will need a bib when you see how light and strong your structures come out. My friend Bruce Findley knows all about the benefits of slab-sided ribs, smoked ribs, cracked ribs, marinated ribs, sliced ribs... I bet he is slicing some right now! Hey Bruce, you got some BBQ sauce on your cheek there!

Light wing loadings to all, OOS Mike



The Chopper

Gussets. Ya gotta have the darn things but they are a bit tedious to cut out.

This neat little tool sure speeds it up. Here is mine set up to cut some small ones. Make the cut, flip the stock over, advance it and make another cut. They are all 90 degrees and the same size. The width of the stock sets the size of the gusset.

This tool also comes with plastic stops for other angles. With the 90 degree stop you can cut fuselage cross pieces that are all exactly the same length.

Model railroad shops usually have them or order one direct. About \$30.00

Steve



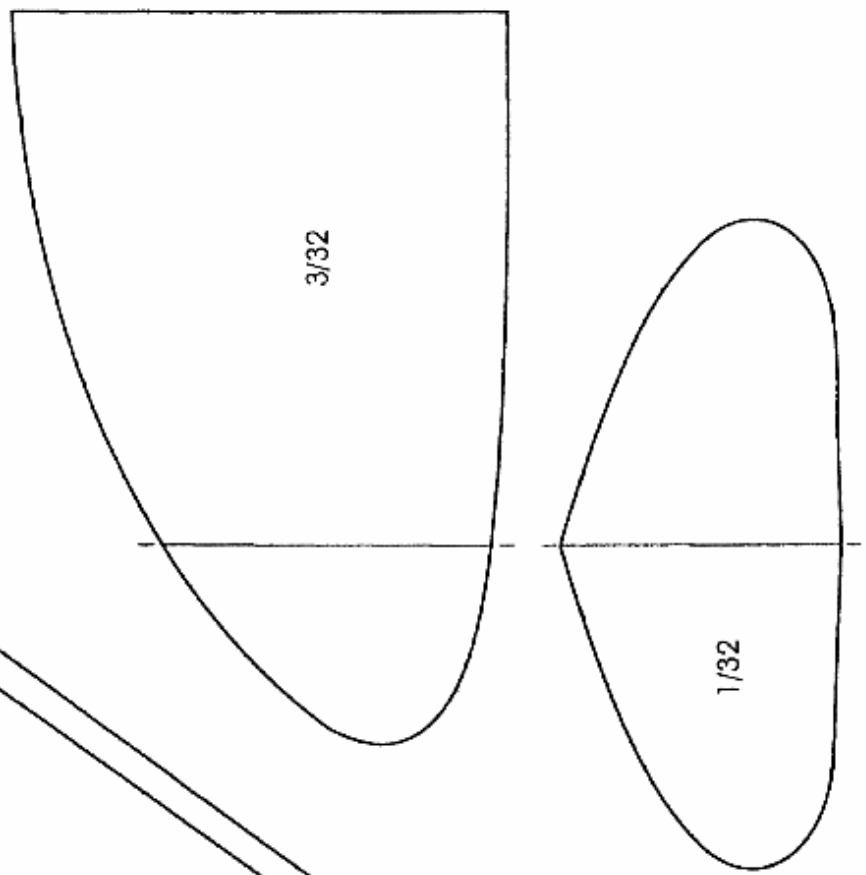
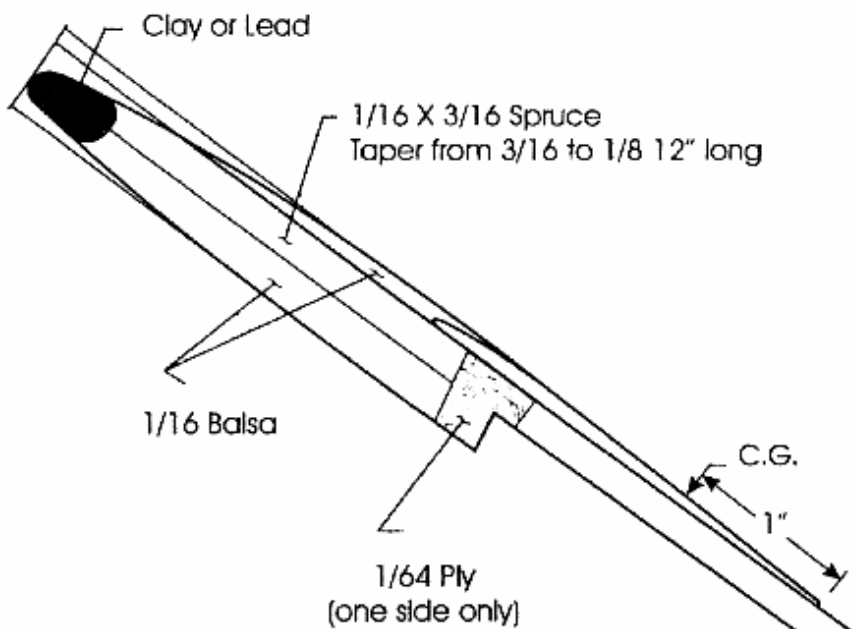
Northwest Short Line

<http://www.nwsl.com>

Telephone: (406)-375-7555

PO Box 1349

Hamilton, MT 59840 USA



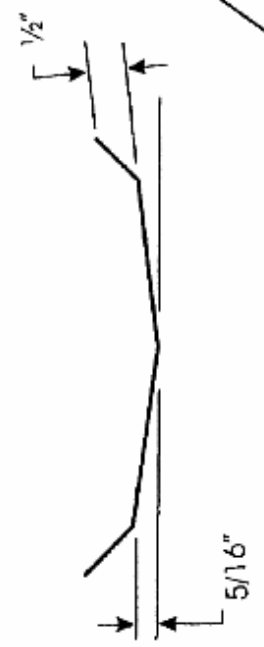
LAWN DARTIE

8" CATAPULT

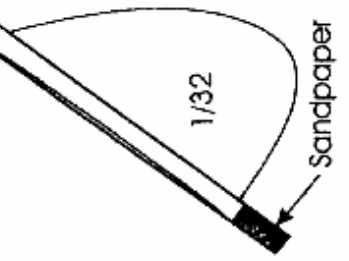
2-20-09 Hannah

Full Size

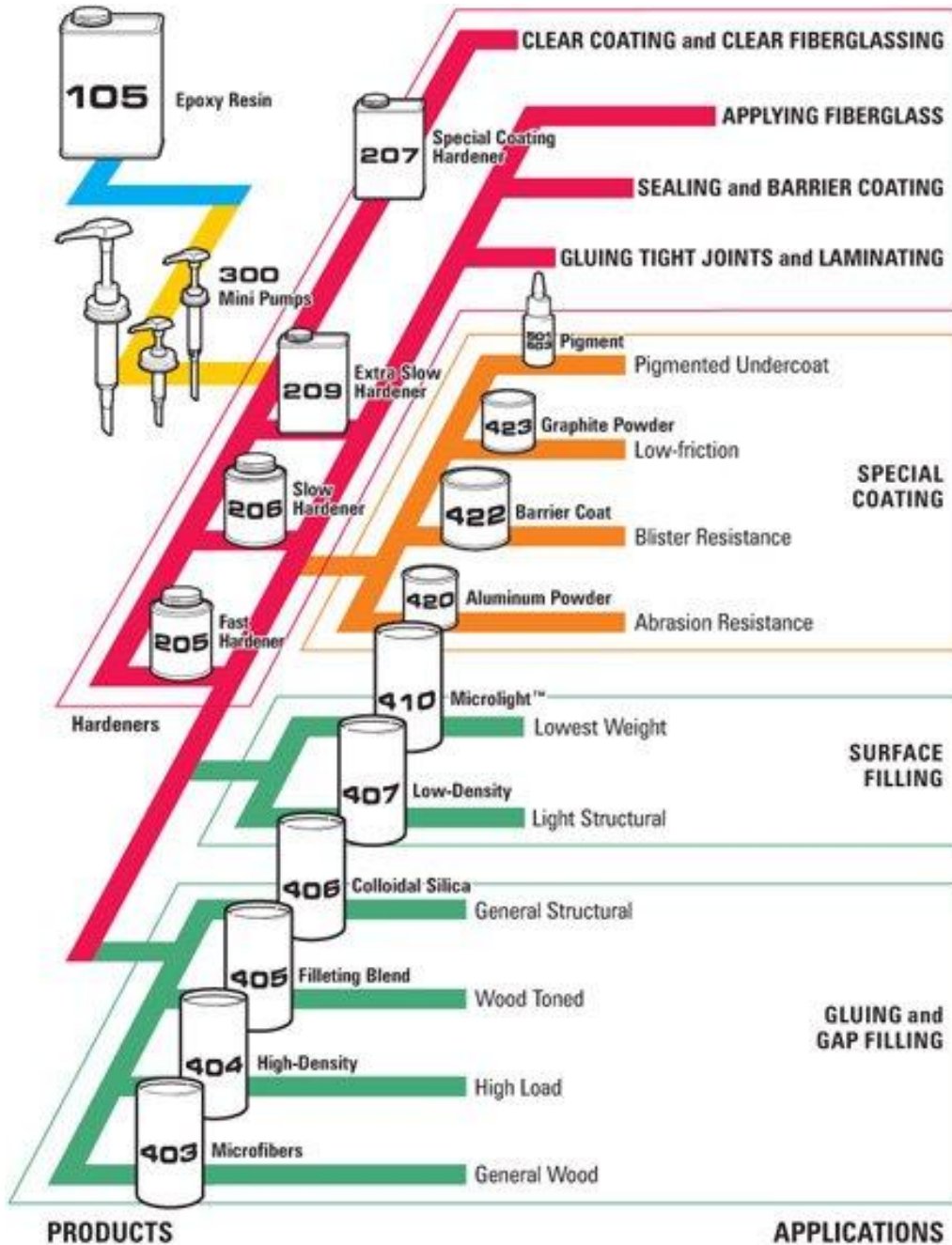
Wt. 5 Gr.



Build with
NO stab tilt



Epoxy



West System (Gougeon Brothers, Inc) makes a variety of marine epoxy products. Even though it is made for the marine industry it's even sold for repair of full sized aircraft. They make a great manual to help you pick the right product for your application.

This chart shows the product line including some handy fillers. The dispenser pumps automatically give you the correct mix of resin to hardener.

The full line is available at West Marine stores www.westmarine.com/ or a limited line at Aircraft Spruce. www.aircraftspruce.com/ I've seen it in a few hobby shops too. I have used it for years and have never been disappointed.

Steve

Start Time
 May-Sept: 7:00 AM
 All others: 8:00 AM

2010
 PMAC/TFFC
 CONTEST SCHEDULE

December 18, 2009

	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	Spring Break	I-10 Challenge	Hot Stuff	Fall Kick-off	Ghost Riders	Turkey Shoot	Arizona Free Flight Championships	
	Sunday	Saturday	Sunday	Saturday	Sunday	Saturday	Sunday	Saturday	Sunday
	2/21/2010	3/20/2010	4/18/2010	5/15/2010	9/19/2010	10/23/2010	11/14/2010	12/4/2010	12/5/2010
GAS/ELECTRIC EVENTS								8	7
AMA 1/2 A GAS	(Jr) (SO)	(Jr) (SO)	(Jr) (SO)	(Jr) (SO)	(Jr) (SO)	(Jr) (SO)	(Jr) (SO)	(Jr) (SO)*	
AMA A/B GAS	X	X	X	X	X	X	X	A	B
AMA C/D GAS	X	X	X	X	X	X	X	D	C
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	X	X	X	X	X	X	X	AB	
AMA Classic CD Combo	X	X	X	X	X	X	X		CD
NOS 1/4 A	X	X	X	X	X	X	X	X	
NOS 1/2 A GAS	X	X	X	X	X	X	X		X
NOS A GAS	X	X	X	X	X	X	X	X	
NOS B/C GAS Combo	X	X	X	X	X	X	X	C	B
NOS Early 1/2 A Gas	X	X	X	X	X	X	X		X
OT .020 REPLICA	X	X	X	X	X	X	X	X	
OT GAS COMBO	X	X	X	X	X	X	X		X
ELECTRIC COMBO	X	X	X	X	X	X	X	X	
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, & Combo	X	X	X	X	X	X	X	Nos Wake	Nos Rub
OT Fus Combo Rubber	X	X	X	X	X	X	X	X	
OT Stick Combo Rubber	X	X	X	X	X	X	X		X
MULVIHILL	X	X	X	X	X	X	X		X
MOFFETT	X	X	X	X	X	X	X	X	
FAI Events								3	3
F1A/F1B/F1C/F1P/F1Q Combo	X	X	X	X	X	X	X	F1A,B,C,P,Q	
F1G/F1H/F1J Combo	X	X	X	X	X	X	X		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	(Jr) (SO)	(Jr) (SO)	(Jr) (SO)	(Jr) (SO)	(Jr) (SO)	(Jr) (SO)	(Jr) (SO)		(Jr) (SO)
Contest Directors	Lichtenberge	Mike Keller	Brocks	Strang	D. Nelson	Loeffler	Andrews	E. Nelson/ Burros	
Contest Classification	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

(7)

The **31st** Magnificent Mountain Men
14-Round FAI Annual
 America's Cup, Hartill Trophy & NFFS National Cup Competition
July 9, 10, 11, 2010
Denver, Colorado

July 9 (Friday)—5 rounds of F1E
 (America's Cup sanctioned)

July 10 & 11 (Saturday & Sunday)—7 rounds each day of
 F1A, F1B, F1C, F1P, F1Q—(14 rounds total)
3 rounds each morning of F1G, F1H, F1J,
 F1K, Vintage FAI Power—(6 rounds total)

Saturday, July 10

*Round 1 0730 – 0900
 *Round 2 0900 – 1030
 *Round 3 1030 – 1200
 Round 4 1200 – 1300
 Round 5 1300 – 1400
 Round 6 1400 – 1500
 Round 7 1500 – 1600

Sunday, July 11

*Round 8 0730 – 0900
 *Round 9 0900 – 1030
 *Round 10 1030 – 1200
 Round 11 1200 – 1300
 Round 12 1300 – 1400
 Round 13 1400 – 1500
 Round 14 1500 – 1600
 Flyoffs start at 1630 on
 Sunday

*Rounds for F1G, H, J, K

Hartill Trophy Events - F1A, B, C, G, H, J

Bonus Events - AMA/NFFS rules apply, no rounds:

Saturday, July 10

CLG, P-30, Fast Gas Combo*, Slow Gas Combo**, OT
 Rubber Combo, Mulvihill***

Sunday, July 11

HLG, Classic Towline, Fast Gas Combo*, Slow Gas Combo**,
 Nos Rubber/Wake Combo, Moffett***

*Fast Gas Combo: 1/2A, A, B, C, D, 1/2A Classic (CI), AB CI, CD CI.
 Contestants may fly any/all events on either/both days and
 take their best score for awards purposes. All scores will be
 kept separately for NC points purposes. All flights for an individual
 event must finish on the same day started.

**Slow Gas Combo: 1/4A Nostalgia (Nos), Early 1/2A Nos, 1/2A
 Nos, Nos A, Nos B, Nos C, MMM Slow Open Power (SOP). Cat
 II engine runs and maxes. 180 max and 12 sec engine runs for
 Nos and SOP. Contestants may fly any/all events on
 either/both days. Only their best score will count for awards
 purposes but all scores will be kept separately for the purpose
 of NC points. Must finish all flights for each individual event
 on the same day started.

***No awards for these events, but NC points will be earned.
 Fly either day, but you must finish all fights on same day started.

Banquet:

Check the MMM website for date, time, and location.
www.themmmclub.com

Accommodations:

Check the MMM website for details.
www.themmmclub.com

Miscellaneous:

Free RV and tent camping on the field, no hookups or dumping.
 Porta-potty permanently on site.

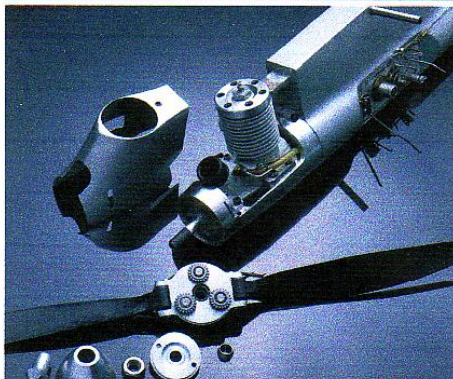
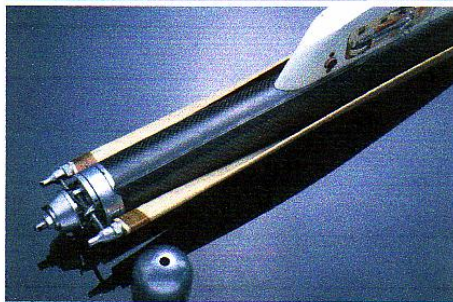
Directions to the Field:

(From the east side of Denver) The field entrance is located
 on Quincy Rd. about 7 miles east of its intersection with the
 E-470 toll road. Head east on Quincy for about six miles and
 look for a "T" intersection with Watkins Road. Now precede
 one more mile east on Quincy and slow down when you see
 a plant entrance on your left. Now look to the right and you
 will see the **MMM** sign and gate. **If you find the gate
 locked, please re-lock it behind you.**

Please Note: The E-470 toll road is cashless. A photo will be
 automatically taken of your front and rear license plates. A
 bill for the toll will later be mailed to the registered owner of
 the vehicle.

For more information contact:

Jerry Murphy, 719-685-3766 <jb_murphy@msn.com>
 or
 Marc Sisk, 719-433-2115 <msisk916@comcast.net>



Photography: Steve Gelbreath

Detach, Fill Out, and Mail to:

Jerry Murphy, 9 Via Escondido Valle, Manitou Springs,
 Colorado 80829

Please include a photocopy of your AMA license.

Pre-Entries (that I receive by July 1st) will save you \$10:

\$20 per event for FAI, and \$5 per event for non FAI.

\$25 maximum fee.

At-Field Fee Payment: \$25 per event for FAI, and \$10 per
 event for non FAI. \$35 maximum fee.

NAME _____ AMA # _____

ADDRESS _____

CITY / STATE / ZIP _____

E-MAIL _____ CELL # _____

Circle events entered:

FAI: F1A, F1B, F1C, F1E, F1G, F1H, F1J, F1K, F1P, F1Q

Glider: HLG, CLG, Classic Towline

Rubber: P-30, OT Rubber Combo, Nostalgia Rubber/Wake

Combo, Mulvihill, Moffett

Gas: 1/2A, A, B, C, D, 1/2A Classic, AB Classic, CD Classic,

1/4A Nostalgia, Early 1/2A Nostalgia, 1/2A Nostalgia,

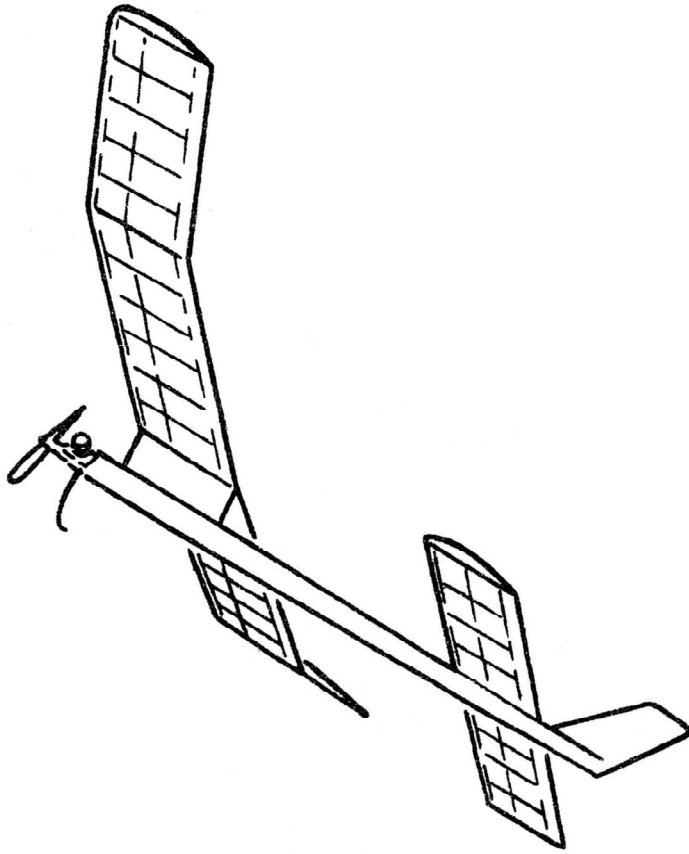
Nostalgia A, Nostalgia B, Nostalgia C, MMM Slow Open

Power, Vintage FAI Power



Magnificent Mountain Men
"a Free Flight Modeling Heritage in the Rocky Mountain West"
www.themmmclub.com





NEXT MEETING

Tuesday June 8th
07:00 PM
Room 09
Granite Reef Senior Center
1700 N. Granite Reef Rd.

DAWN PATROL

See schedule inside

NEXT CONTEST

Fall Kick Off
Sunday
September 19th

Webster Field
Eloy

Phoenix
MODEL AIRPLANE CLUB

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