



THE MAX-OUT

Newsletter of the Magnificent Mountain Men

AMA CHARTERED CLUB #177



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Or, join the web group at:
<http://groups.yahoo.com/group/MMMFreeFlight/>

2006-7 (Oct-Nov)



PONDERINGS DEP'T

The 2006 RMC's were wonderful ... even with all of my screw-ups! Now all we need to do is get about 50 more contestants to REALLY have fun. How about some of those folks from Georgia or Minnesota? The mosquito's here are a LOT smaller and don't pester you as much, if at all.

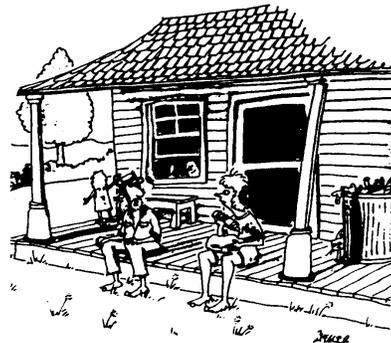
But as luck would have it, sometimes your best just ain't good enough. I bet I took more 2nd's than ever before...just couldn't get the groove, not like I ever was in the groove, but I like to think I can still perform. My throwing arm is shot...thank goodness for Catapult.

What the 2006 RMC's did teach me is that all those old models I have been treasuring in the shop need replacing. Or, perhaps I should build some ships that are actually competitive instead of repaired. If I were Dave Wineland I couldn't say that. My new ships look like they are

30 years old and his 30 year old ships look like new. Go figure....

As Colorado goes, it's September 22nd as I write this, Vail is getting 11" of snow and roads are closed too. That means we will be in shorts by Sunday and can go flying again.

Thermals! Or, heat from the lights, or whatever...
Rick



Ma.....I decided to go to the RMC's next year too,
OK?

"The MAX-OUT" newsletter is printed about the second or third (?) week of the month. Submissions should be not later than the end of the prior month.

TO JOIN THE CLUB OR SUBSCRIBE

- Full membership is offered to any current AMA member: \$35
- (Under age 18 Free)
- SAM-1 Crossover membership: \$20
- Newsletter Subscription Only: \$15
- Send \$ to:

Chuck Etherington
33946 Goldfinch Dr.
Elizabeth, CO 80107-7419

NEAR TERM EVENTS:

MMM MTG!	Every Fourth Thursday at 7:00 PM, Dinner at the Castle Cafe in Castle Rock.
Wings Over the Rockies Indoor 7711 E. Academy Blvd. in the former Lowry AFB Denver	Various Sundays of every month from 1-5pm. Admission \$. A good clean site, 24' height Al Yuhasz at al-yuhasz@worldnet.att.net to receive notice by E-Mail.
SEPT 23-24	SAM-1 ANNUAL MEMORIAL
OCTOBER 1	MMM MONTHLY
OCTOBER 9-12	FAI TEAM TRIALS
OCTOBER 22	MMM MONTHLY

MMM Club Officers and Contact List

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Note: For those of you who wish to have a real live MMM Club Member Name Tag, you can order them yourself through:

Sun Signs
4420 Tennyson
Denver, CO 80212 - 2310
(303) 477-1594

Call and tell them you are with the Magnificent Mountain Men FF Model Airplane Club. The cost is about \$5 delivered to your door.

MMM Decals!
Self adhesive, black on thin, clear mylar

Prices:
\$2 per sheet (5 assorted sizes per sheet)
3 sheets for \$5 -- save 17%
15 sheets for \$20 -- save 33%

Plus \$2 for shipping or, you can to pick them up at one of our summer contests

To order send an email to:
ddeloach@earthlink.net or,
mail your check to:
MMM Decals
831 E. Willamette Ave
Colorado Springs, CO 80903
Indicate the quantity you'd like.

JOIN THE WEBGROUP DEP'T!

The MMM web Group is the best way to keep current and up on the latest club news traffic. It moves better than the speed of government too!

To learn more about file sharing for your group, please visit:

<http://groups.yahoo.com/group/MMMFreeFlight>

Just cut and paste this link into your browser and it will bring you right to the page.

CLUB RECORDS UPDATE DEP'T

Here is an update, post-RMC, according to the last listing (approx June 06). Note that some are new to the list like the Nos gas, OT, and classic gas events. We should be keeping these records too.

Note: Club Records are posted on the MMM Website!

C Gas	Gene Smith	767sec.
HLG	Rob Romash	549
CLG	Todd Reynolds	692
FAC Scale	D. DeLoach	147.5 pts
FAC Peanut	D. DeLoach	125.0 pts
F1A (7 rounds)	Pete McQuade	1242*
F1B (7 rounds)	Ed Vanlandingham (NC)	1250*
F1B (7 rounds)	Ed Wiley	1167*
OT CLG	Lee Hines (NC)	444*
OT CLG	Duane Djerlied	415*
OT HLG	Lee Hines (NC)	268*
OT HLG	Rick Pangell	185*
Classic Towline	Tim Batiuk	540*
1/2A Classic	D. DeLoach	491*
CD Classic	Bob Hanford (NC)	720*
CD Classic	Bill Lovins	696*
1/2A Nos	Larry Kruse (NC)	350*
1/2A Nos	Rick Pangell	172*
A Nostalgia	R.P. Hanford (NC)	720*
C Nostalgia	Dave Wineland	636*
SLOP	Jerry Murphy	599*
SAM A Pylon	Bill Lovins	540*

*previous to 9/20/06 there was no record established

"WELL, I'LL BE" DEP'T

(Or someone actually reads this N/L)

Finally got around to reading Jim's article. I looks like a very useful guide to trimming locked down models. Good job Jim!

I have just a couple of quick comments regarding the trimming of gas models (can't speak to rubber). The article discusses using incidence, rudder tab, etc. to adjust the glide first, and then thrust-line changes to adjust the power pattern. "What adjustments are needed for RR and R-L trim systems? In both cases, the glide is determined first and then the thrust line is altered as required to achieve the desired climb." This effectively isolates the climb adjustments from the glide adjustments which is a good thing, but the amount that the climb can be influenced with thrust-line adjustments alone is limited. The trim element that is missing in the discussion is CG. I feel that the most effective way to isolate climb trim from glide trim is to adjust the power pattern first using the flight surfaces (incidence, rudder tab) and thrust-line. Once the power pattern is established, the glide can be adjusted by shifting the CG and utilizing stab tilt (as long as the stab can be tilted without changing the incidence). The CG shift (and stab tilt) will have maximum effect on the glide and minimum effect on the climb.

Ref: "I flew a Playboy Jr. RR (for as long as it survived) at the 1988 SAM Champs. It would tolerate a 5-sec. engine run but no longer. A longer run would result in it dropping its right wing and spiraling in with increasing airspeed and tightening spiral." That suggests an over-elevated condition. I would figure out a way to quick DT the model (easier said than done on OT gas models) and then trim out the climb. The final piece would be to re-establish the glide and glide-turn with CG and stab tilt. This is especially important for fast climbing Gas models. If the plans are good and you build the model with the right incidences and CG, it may be happy in the climb and glide without having to change the CG position. Otherwise, I believe it's best to isolate the adjustments as described above.

- Chuck

41st Rocky Mountain Free Flight Champs Sept. 2, 3 & 4, 2006

Don DeLoach & Jerry Murphy CDs

The 41st running of the premier free flight contest in the Rocky Mountains is in the history books, and what a contest it was! Forty two flyers paid their money and flew their best trying to win fame and glory. We had flyers from Arizona, California, Kansas, Oklahoma, and Texas, plus a good showing of locals from both MMM and SAM-1 clubs. There were several more flyers on the field with models they did not enter. I have no idea why they decided not to support the club by entering the contest.

This year we added several new innovations. First was flying all events on specific days. This was a major break in tradition that was received with over whelming positive feedback from the competitors. Next was model processing. Remember those great contests of yesteryear where models were processed and a stamp was affixed showing that the model was entered in that event? I recall that having a model covered with these processing stamps was a real status symbol. Check out **Willard's** F1A some time for an example. The 41st annual RMC processing stamp will be a real collector's item as it has both the MMM Logo and our message, "America's Highest Thermals".



Processing Stamp

One innovation from the past that was repeated this year was **Cindy DeLoach** serving as the scorekeeper. She and her two helpers, **Gizmo** and **Mollie** kept the contest running smoothly. Thanks **Cindy**, we could not have done it without you.



Cindy DeLoach

Scorekeeper "par-excellence"

The third innovation was **Herb Kothe Day**. Honoring Colorado's top competitor while he is still an active competitor is a lot more fun than a posthumous event. The **Herb Kothe** celebration took place in several phases. First was the use of his 1959 world champs photo on the contest flyer. Next was the Saturday night dinner honoring **Herb** and the final phase of the celebration was **Herb Kothe** day on Monday where everybody was wearing Aloha shirts and we flew his favorite events.

As usual, the contest started with set-up and trimming the day before. I arrived at the field about 11:30 on Friday with the goal of trimming a couple of recently repaired ships and setting up the tent so we could get an early start on Saturday morning. The conditions were perfect, calm and warm. After helping **Dick Wood** assemble the world's most complex tent while listening to him rant about the placement of my tent at the FAI Annual, I unloaded the model box to start flying. Just as I got the models out the wind came up and started to blow with ever-increasing force. After a couple of hours of sitting in the wind all of us on the field decided to call it quits and go to the hotel. A hot shower and a cold beer took the sting out of the wind.

With such bad weather on Friday afternoon, we were all hoping that the predicted cold front passage would blow itself out and we would have good weather. We got our wish! Saturday morning we were greeted with cool (low 40s) but calm winds. The temperature managed to climb into the low 60's before the day was over but the clouds stayed with us all day. This did not put a damper on flying and many flyers found strong lift. The FAI competitors were on the flight line early and most easily maxed in the cool conditions. That brought the AMA and SAM flyers out to sample the cool but good air. They were also rewarded with good lift and light drift. **Art Hillis** won SAM large rubber with a max-out and **Bill Lovins** did the same in SAM power. When is the last time you saw a SAM Power max-out this on our field? How can you top a max-out in SAM old timer power? How about **RP Hanford's** max-out in .020 Replica? It seems that the senior member of the Hanford FF team sure knows how to run a TD 020. This writer needs to spend some time with him to learn the tricks of making these pesky little engines start when the thermal is here.

The Dynasty Cup FAI events went well. The Nordic glider and Wakefield events were not decided till late in the rounds. **Chuck Etherington** did his best to hold up the club's honor in F1C by taking advantage of the rounds to practice his launch.

Saturday's dinner was a blast as it honored **Herb Kothe**. In addition to honoring **Herb**, **Eddie Vanlandingham** was awarded the Wakefield perpetual trophy for his victory and **Pete McQuade** received the **Mike Desjardens** F1A perpetual trophy for his victory. **Pete** was awarded the trophy later as he was ill and had to miss the dinner. **Art Hillis** was recognized for his good work in improvements and support of the flying field. For his efforts he received the *Master Magnificent Mountain Man* award.

The room was decorated with oversize copies of the contest flyer featuring **Herb** at the 1959 world champs. In addition, **Herb** had a display of his model, awards and many photos. **Herb** talked about his experiences at the five world champs where he competed as well as the 1961 world champs where he was the team manager. He had a great photo from the 1961 event where he and the team is carrying **George Reich** on their shoulders after **George's** winning of the Wakefield cup.



Herb with his picture board

The high points of **Herb's** World Championship competition were his second place finish in 1956 and the US team victory in 1959. See the side bar for more info on **Herb's** accomplishments in international competition.

Back on the field Sunday morning we were greeted with the finest free flight weather I have ever experienced. What a day! Bright blue sky, light wind and temps in the mid 70s. We got a look at free flight heaven this day. The Dynasty Cup FAI events were off and running at 08:00 for the mini events of F1G, H and J. It was not long before the sky was full of models and it stayed that way all day. Anybody who stayed home that day missed what many people say was the best flying day ever.

The HLG glider pen was in action all day long. This was fun place with so many top flyers going head to head. Three competitors posted max-outs, **Rob Romash**,

Lee Hines and our newest flyer from Colorado Springs **Mark Covington**. Both **Rob** and **Lee** posted a fourth max and then dropped. **Mark**, flying in his second MMM contest finished third.

The power flyers were going at it all day long. **Don DeLoach**, **Bobby Hanford**, **Larry Kruse**, **Bill Lovins**, **Gene Smith**, **Rick Pangell**, **Dave Wineland** and myself were putting up max after max all day long. It was great fun to see D gas ships piggy-backing the HLGs floating over head.

I won't go into too many details as the results tell the story better than I can.

Monday was **Herb Kothe** day and everybody showed up wearing their Aloha shirts. Monday's weather was very good, but nothing could top what we had the day before. Here is how good the second best day ever was. My Mini Pearl failed to DT because some knuckle-head failed to put enough rubber bands to pull up the stab. The model flew over head for over 9 minutes before landing less than a towline length away from the launch point.

The glider pen was a hot bed of action again with AMA and SAM catapult glider competition. Four competitors maxed out in AMA catapult with our own **Todd Reynolds** taking the gold with 5 maxes! There were two max-outs in SAM catapult glider, **Lee Hines** and **Duane Hjerleid**. In case you lost count *that is a total of 9 max-outs in the glider pen!*



Todd Reynolds and Lee Hines the CLG maxers

Herb and **Don** flew head to head in Nos. rubber with both maxing out. Herb's model was damaged in its third max and was not able to continue giving Don the win.



Herb and Don bedecked with Aloha shirts and Nos. Rubber ships.

There was something interesting in 1/2A that will effect us in the future. All three places were won with Cyclon powered models. Oh, did I mention that they were locked down! This might spell the end of the line for my trusty old TDs.

At the end of the meet we had a celebration of Willard's Smitz's 85th birthday with cake in the works.



Willard, second from the right, and his 85th B'day cake.

A first for this contest was the fact that the awards presentations started at 3:30 PM. As has been our policy for several years each person received a plaque and then individual event placing tags.

We had another first this year, a tie for meet champion! Both **Tim Batiuk** and **Larry Kruse** had identical championship points.

We all know that a little bit of good luck goes a long way to help a top competitor stay on top. It turns out that a blown piston in my trusty old TD 09 played a big part in deciding the Grand Championship. Both **Larry Kruse** and I maxed out in SLOP and **Larry** dropped his

fly-off. All I had to do was to beat his 73 seconds and the win was mine. I launched into great air, but a little less than 5 seconds later the engine quit. I was kicking myself for messing up the timer until I picked up the model and discovered it had no compression! The top was blown out of the piston. This gave first place to **Larry** and the six championship points that goes with a first place finish. Second place would have given **Larry** four points.

So we have co-grand champions. I can't think of a better outcome for this great contest! **Larry** and **Tim** flew very well and both are great champions. Congratulations to both of these fine competitors.

Thanks for everybody's support in making this a great meet. We are looking forward to Labor Day weekend (September 1,2,&3) of 2007 when we will be celebrating the 50th anniversary of the MMM club and the 42nd running of this contest.

From a non-attender this year:

- Cost of a Mini-Pearl with a slightly used TD .049 and mini-timer: \$70
- Cost of an airplane ticket from Atlanta to Denver plus rental car for 4 days plus motel room and meals: \$1134
- Cost of missing out on the 41st Rocky Mountain Freeflight Championships and watching Randy Reynolds' learning curve: PRICELESS!

Gary Baughman

ALOHA TO MORE IN '07!!!

Herb Kothe in the World Champs

- **1955 Wiesbaden Germany, September 3-5**

This was Herb's first of five US teams, and here he flew both F1A and F1B. This event Herb's 7th place in F1A was the top placing USA F1A flyer. He was 57 seconds out of first place. He was 13th in F1B, only 13 seconds behind the winner. The US team was third and it consisted of Bob Champine and Paul Andrade's father.

- **1956 Hoganas Sweden, August 17-19**

Because transportation was not available herb's model was proxy flown in the Hoganas Sweden event. Here he places second by 5 seconds and the US team was 4th.

- **1958 Canfield UK, August 1-5**

The English weather was a factor as seen in the scores, there was no max-out. Herb was the top placing USA flyer placing 15th, 125 seconds off the lead. The USA team was 10th.

- **1959 Chateau le Brinne France, July 19**

This was a good contest for Herb and the USA. The US team won the championship with Bob Hatschek 2nd, Joe Bilgri 8th, and Herb 10th missing the max-out by just 23 seconds. Seven flyers maxed-out and the flyoff was decided in one round.

- **1961 Leutkirch Germany, Aug. 31 – Sept 4**

Herb was the team manager and George Reich won the Wakefield cup. And the US F1B team was third. In F1A the top placing USA flyer was J. Dailey, a junior, at 8th place. This was the team with Betty Bell and the team finished 5th. The top US F1C flyer was Herb's buddy Dub McCormick in 32nd places. The USA power team finished 15th.

- **1963 and 1965**

Herb did not compete in these two events.

- **1967 Sazena Czechoslovakia, August 18**

Sixteen flyers maxed out with the winner being decided in the second fly-off round. Herb's time of 798 seconds (202 short of a max-out) put him in 44th place. The top placing US flyer was George Xenakis in 26th place followed by A.J. Patterson in 51st place. The US team finished 14th.

Just in case you are wondering if Herb and Bob White were ever on the same team, White's first appearance on a US F1B team was in 1971 where he placed third in Denmark.

103rd ANNIVERSARY OF FLIGHT!

Our organization is invited to participate in celebrations marking the 103rd Anniversary of flight being held at the Pueblo Weisbrod Aircraft Museum in Pueblo Colorado on 9 December 2006 from 9 AM to 4 PM. There is no charge for your organization to participate.

The goal is to display to the public the full range of aviation and aerospace related activities that have resulted from what the Wright Brothers achieved at Kill Devil Hill, NC in December 1903.

The Pueblo Weisbrod Aircraft Museum is one of the largest military aviation museums in Colorado and the Rocky Mountain West with twenty nine military aircraft and missiles on display. In addition, the museum has moved into a new 30,000 square foot hangar that will provide a safe, secure, and "weather" proof area for your organization. We will provide all tables and chairs needed for the event. Please contact us if you need any additional logistical support.

Dec 9th is the day before the annual meeting—perfect. Put it on our calendars. It is a great opportunity to market to the masses. There is no move afoot to participate so please contact Don DeLoach if you want to help.

Official Results

41st Rocky Mountain FF Champs – 2,3,4, September, 2006

Denver, Colorado

“America’s Highest Thermals”

CDs: Don DeLoach & Jerry Murphy

P-30

Ed Wiley	360+150+157	667
Don DeLoach	360+150+130	640
Larry Kruse	360+150+99	609
Ed Vanlandingham	360+138	498
Bill Leppard		345
R.P. Hanford		314
Rob Romash		309
Mel Gray		297
Darold, Jones		189
Jerry Murphy		55

Mulvihill

E. Vanlandingham	540+240+300	1080
Don DeLoach	540+240+173	953
John Anders		526
Ed Wiley		472
Bill Leppard		430
Darold Jones		418

Nostalgia Wake/Rubber

Don DeLoach	540+172	712
Herb Kothe		540

OT Rubber Small

Darold Jones		426
Bill Leppard		390
Rick Pangell		384
Randy Reynolds		372
Art Hillis		302

OT Rubber Large

Art Hillis		540
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FAC Scale

Don DeLoach		147.5
Herb Kothe		127
Larry Kruse		119

FAC Peanut

Don DeLoach		125
Rick Pangell		85
Jeff Pakiz		46

OT Catapult Glider

Lee Hines	360+103	444
Duane Hjerleid	360+55	415
Rob Romash	360+19	379
Tim Batiuk		295
Rick Pangell		167
Ralph Carlson		88

HLG

Rob Romash	360+120+69	549
Tim Batiuk	360+120+63	543
Mark Covington	360+62	422
Randy Reynolds		344
Todd Reynolds		282
Lee Hines		231
Darold Jones		160
Neil Myers		140
Rick Pangell		58
Bill Gieskieng		45
Don DeLoach		35
R.P. Hanford		20

Catapult Glider

Todd Reynolds	360+120+120+92	692
Lee Hines	360+120+120+89	689
Tim Batiuk	360+97	457
Rob Romash	360+56	416
Bill Leppard		318
Randy Reynolds		303
Bill Gieskieng		255
Darold Jones		196
Larry Kruse		177
Richard Branca		103
Ralph Carlson		93
Rick Pangell		62

OT HLG

Lee Hines		268
Rick Pangell		185
Tim Batiuk		161
Rob Romash		141
Todd Reynolds		110
R.P. Hanford		100
Randy Reynolds		89

Junior HLG

Raymond Fair 38

Junior CLG

Raymond Fair 182

Classic Towline

Tim Batiuk 540
 Rick Pangell 423
 Lee Hines 393
 Randy Reynolds 385
 Todd Reynolds 321
 Willard Smitz 173
 Richard Branca 140

1/2A

Bob Hanford 540+180 720
 Gene Smith 540+84 624
 Dave Wineland 540+75 615
 Rick Pangell 444
 Jerry Murphy 433

A Gas

Gene Smith 528
 Bill Lovins 477
 Don DeLoach 465
 Bob Hanford 447
 John Anders 439

B Gas

Bob Hanford 540+180 720
 Don DeLoach 540+162 702
 Bill Lovins 505

CD Gas

Gene Smith C 540+180+47 767
 Bob Hanford C 496
 Don DeLoach D 439
 Dave Wineland C 248
 (Bob Hanford D 380)

1/2A Nostalgia

Larry Kruse 350
 Rick Pangell 172
 Dave Ramsey 152

1/2A Classic

Don DeLoach 491
 Jerry Murphy 463
 Rick Pangell 448
 Bob Hanford 420
 Dave Wineland 360

ABCD Classic

Bob Hanford CD 540+180 720
 Bill Lovins AB 540+156 696
 Gene Smith AB 526
 (Bob Hanford AB 500)
 (Gene Smith CD 373)

A Nostalgia

R.P. Hanford 540+180 720
 Dave Wineland 540
 Gene Smith 492
 Bill Lovins 460
 Larry Kruse 444

BC Nostalgia

Dave Wineland C 540+96 636
 Gene Smith C 493

Slow Open Power

Larry Kruse 540+73 613
 Jerry Murphy 540+59 599
 Bill Lovins 506
 R.P. Hanford 470
 Don DeLoach 414
 John Anders 362
 Bob Hanford 298

.020 Replica

R.P. Hanford 360
 Larry Kruse 250
 Dave Ramsey 238
 Dave Wineland 206
 Jerry Murphy 181

SAM OT Gas Combo

Bill Lovins 540
 Dave Ramsey 232
 Art Hillis 44

Dynasty Cup FAI**F1A**

Pete McQuade 180 162 180 180 180 180 180 1242
 Lee Hines 180 180 180 180 180 180 144 1224
 Willard Smitz 87 143 99 98 51 112 63 653
 Rene Limberger 180 180 180 108 0 0 0 648

F1B

Ed Vanlandingham	180	180	180	180	180	180	170	1250
Dick Wood	180	180	180	180	180	140	180	1220
Ed Wiley	180	180	167	147	153	180	160	1167
Darold Jones	150	113	180	170	138	180	125	1056
Todd Reynolds	96	84	147	157	123	0	0	607
Richard Branca	0	0	97	83	180	180	64	604
Randy Reynolds	124	74	79	71	143	0	0	491

F1C

Chuck Etherington	29	26	39	31	33	35	45	238
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F1H

Rick Pangell	84	120	37	24	100	365
Willard Smitz	45	45	0	0	10	100

F1G

Jerry Murphy	77	120	120	120	120	577
Richard Branca	120	111	120	73	120	544
Mel Gray	120	52	120	120	120	532
Bill Leppard	74	120	120	120	56	490
Ed Wiley	111	86	120	53	120	490
Randy Reynolds	120	49	120	55	120	464
Ed Vanlandingham	120	120	120	0	60	420
Dick Wood	120	109	0	0	0	229
Darold Jones	39	0	0	0	0	39

F1J

Bob Hanford	120	120	120	115	0	475
Jerry Murphy	110	32	37	0	0	179
Fred Carstens	120	0	0	0	0	120



This is the "Aloha Crowd" in honor of Herb Kothe

Grand Champion

Larry Kruse- co	18
Tim Batiuk-co	18
Don DeLoach	14
Jerry Murphy	14
Rob Romash	14
Lee Hines	12
Todd Reynolds	12
Ed Vanlandingham	12
R.P. Hanford	11
Ed Wiley	6
Art Hillis	6
Bob Hanford	5
Richard Branca	5
Gene Smith	5
Rick Pangell	4
Willard Smitz	4
Mel Gray	3
Bill Lovins	3
Dave Wineland	1

Glider Champion

Lee Hines	26
Tim Batiuk	24
Rob Romash	16
Rick Pangell	13
Todd Reynolds	12
Randy Reynolds	7
Pete McQuade	5
Willard Smitz	4
Bill Leppard	3

Perpetual Trophies

Grand Champion
McGhee Memorial – Gas Champion
Bill Gibbons Memorial – Rubber Champion
DesJardons Memorial – F1A
Gollywock Champion
Wakefield Champion
Rubber Scale Champion
Mulvihill Champion

Rubber Champion

Don DeLoach	25
Vanlandingham	15
Ed Wiley	14
Darold Jones	7
Bill Leppard	7
Jerry Murphy	7
Art Hillis	6
Herb Kothe	6
Larry Kruse	5
Rick Pangell	4
Mel Gray	3
John Anders	2

Gas Champion

Bob Hanford	23
Gene Smith	18
Larry Kruse	14
Bill Lovins	14
R.P. Hanford	11
Don DeLoach	10
Jerry Murphy	10
Chuck Etherington	5
Dave Ramsey	5
Rick Pangell	4

Larry Kruse & Tim Batiuk (tie)
Bob Hanford
Don DeLoach
Pete McQuade
Darold Jones
Ed Vanlandingham
Don DeLoach
Ed Vanlandingham

Number of contestants: 42 (most ever!)

States represented: CO, AZ, KS, TX, OK, CA

2006 RMC PHOTOS OF THE CHAMPIONS!



**L-R: Rob Romash, Co-Grand Champion
Larry Kruse, RP Hanford, and Lee Hines**



Tim Batiuk, the other Co-Grand Champion



Lee Hines, Glider Champion



Bob Hanford, Power Champion



Eddie Vanlandingham, Rubber champion



**Willard, second from the right,
and his 85th Birthday cake!**

PERSPECTIVE ON THE RMC's DEP'T

Thanks for a great contest Murph, Don, Cindy and Chuck! This was the first contest that I seemed to gain some perspective on our club and the ebb and flow of the events for each day. Usually I am so focused on keeping track of what I'm doing that I fail to observe the activities around me. This was also the first time that our free flight contest reminded me of the big meets in southern California in the late fifties.....kind of a three ring circus with fascinating people all about and airplanes constantly in the air. I believe that having the excitement of gas ships barreling up into the blue lends that feel to things. We need more gas being flown to stir up the monthlies, I think.

Anyway, this is what I learned:

- I don't know nearly enough about winding rubber motors for performance.
- "....You mean you put in a new motor for every flight!?" I must have said that 50 times over three days (ask Todd)
- ".....And then you throw them away!!!" At least fifty one times.
- I don't have a clue as to how to pick air. I thought I did, but I don't.
- Watching the scale ships flying was pretty fascinating. So I need to learn that also.....and they are rubber powered also. More damn motors in the trash I guess.
- Airframes with tissue covering warp when they land in the wet grass several times. Who woulda thunk it?
- People who travel to out of state Free Flight events typically really know how to do everything I don't.
- When I was a kid fifty years ago, free flights crashed much more often than they do now. I hope I haven't jinxed myself with that one.
- Free flights that land out of sight throw up an invisibility screen that looks like tall grass just like the Romulan's on Star Trek. Only electronic trackers can break through that screen.
- I have learned to love my tracker.
- I found neutral twice on our Honda bike over the week-end.
- Trying to roar in on my bike jumping off with the kick stand down before it comes to a complete stop like Dondy does is hard.
- Mel Gray is from Texas.
- RV bathrooms need to be slightly wider than shoulder width if you're in a hurry.....don't ask.
- Chili should be served only on the last night in the camper not at the beginning of a three day stay (see above).
- When flying catapult, have the bike pointed down wind with the engine running and practice your flying mount in order to stay underneath it because otherwise the little grunts will employ the cloaking device just like on Star Trek.
- My son Todd had five Maxes in Catapult...I didn't think that was even possible. I don't think he did either. Great job, Todd!
- Speaking of Todd, I watched him completely take apart the complicated front-end on his Burdov F1B and repair the malfunctioning Montreal stop with two pair of piers and a lot of persistence. Couldn't be prouder!
- Cindy DeLoach is a princess. Three days among the geezers deserves three days someplace nice. Don?
- Jerry Murphy is from Texas.
- Watching Willard do towline at well over Eighty years old is inspirational (same inspiration launching Dick Branca's Classic Towline while he walks with a limp over our uneven ground). And even being taught tumbling by Rick Pangell while towing a glider is shocking. How does he do that?
- I have visited Texas...Twice.

Anyway I had a great time and learned a lot from a lot of wonderful people.

Thanks y'all,

Randy (Reynolds)

DID YOU EVER WONDER DEP'T? (This is for indoor folks to take note)

Blade element analysis will show the maximum efficiency will occur where the ADVANCE is at 45 deg.

The maximum profile efficiency occurs where the advance angle is $45 - \arctan(0.5 \cdot cd/cl)$ where cd/cl is the blade airfoil's 2D drag/lift ratio. For typical indoor prop airfoils, $cd/cl = 0.1$, so the optimum advance angle is about 42 degrees. Close enough.

Secondly, it is impossible to generate the huge lift coefficients required to generate the required thrust. This is most true when the diameter is limited as in SO. Here the high P/D is totally stalled and the only way to generate the thrust is with much slippage and burning up excessive torque.

This assumes that the blade chords are the same for all P/D's. In general, it is necessary to increase the blade chords pretty fast as P/D is increased. The simple reason is that as the blades slow down, they must be given more area to generate the same thrust without stalling.

The Larabee designs with much area near the hub, with a P/D from 1 to 1.5 as used by Aerovironment in their Micro Air Vehicles etc are much more efficient than more conventional designs. For most model applications squared off tips as opposed to rounded should be even better.

I wouldn't go all the way to a square tip, but it's true that if the profile losses dominate, as they do on an indoor prop, the outer parts of the prop should carry relatively more load.

By far and away the most important design variable on an indoor prop is matching the average radius-weighted blade chord or area to the required thrust and airspeed (or torque and airspeed). The objective is to minimize the blade airfoil cd/cl and hence minimize the profile losses which dominate on indoor props.

If blade area is too big, cl will be too small, and cd/cl will be too large (the analogy is flying a wing too fast). If the blade area is too small, cl will be too big, and cd/cl will again be too large (the analogy is flying a wing too close or even past stall).

A typical arc-type indoor airfoil has a minimum cd/cl in the range $cl = 0.4 - 0.5$, so you want to use the "just right" blade area which will produce this blade cl range. One advantage of the Larabee method, and other related methods (Xrotor, Liebeck/Adkins, JavaProp, etc), is that they will determine the correct blade area needed to achieve a specified cl value, subject to other inputs such as speed, RPM, and torque.

FINALLY A PLACE TO GO TO DEP'T

For those of you with Honda CT (Trail) 90s and 110s, here is THE source for OEM and repro parts... www.dratv.com

They specialize in hard to find parts and accessories for old Honda CTs. I've bought from them before and I highly recommend them.

--Don

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COMING EVENTS

DON'T FORGET !! ALL INVITED !!

OCTOBER 1	MMM MONTHLY
OCTOBER 9-12	FAI TEAM TRIALS
OCTOBER 15	MMM INDOOR IN COLORADO SPRINGS
OCTOBER 22	MMM MONTHLY
NOVEMBER 5	MMM MONTHLY w/SAM-1
NOVEMBER -19	MMM INDOOR IN COLORADO SPRINGS
DECEMBER 9	103 rd Anniversary of Flight (expo in Pueblo-see inside)
DECEMBER 10	MMM ANNUAL BUSINESS MEETING