THE MAX-OUT

Newsletter of the Magnificent Mountain Men

AMA CHARTERED CLUB #177

Editor: Rick Pangell
6994 So. Prescott St.
Littleton, CO 80120
Ph: 303-798-2188

Visit our website at:
www.themmmclub.com
or E-mail us at:
themaxout@aol.com

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

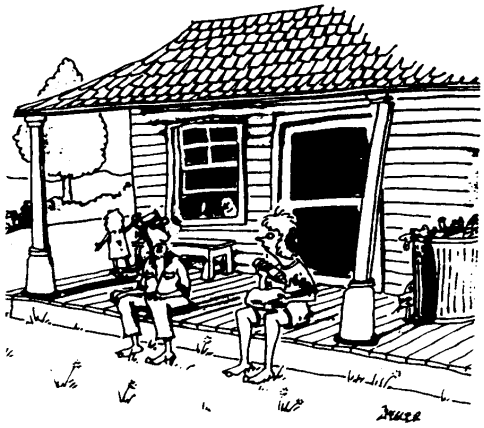
2015-05 (Aug-Sept)

PONDERINGS DEP'T

Adding busyness to the excuse list is OK. Trust me. We have the RMC's coming up and a Scramble on the 23rd. The weather this year has been awesome and if you don't attend Scrambles or the RMC's it's your own fault.

I'm also preparing to get another MMM club member name badge order together. If you do not have one, the approximate cost will be about $11.50 per badge including P&H. Payment can be made by a personal check or paypal to the club. If using paypal, please add $0.25 for fee. Respond to "themaxout@aol.com" if you are interested not later than 8/31.

Thermals! Rick



"Ma …
RMC's... lessee... that means I might want to enter one of the chickens in tip launch. Are you OK with that?"

Thermals!, or heat from the lights, or whatever…

Rick

"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: $40
- SAM-1 Crossover membership: $20
- Newsletter Subscription Only: $15
- Send $ to:
  Chuck Etherington
  33946 Goldfinch Dr.
  Elizabeth, CO 80107-7419

MMM Club Officers and Contact List

President:
Mel Gray 719-629-9775

Vice President:
Ray Boyd 303-466-1254

Vice President At Large:
Mark Covington 719-459-1402

Treasurer:
Chuck Etherington 720-201-6218

PR & Indoor Coordinator:
Don DeLoach 719-964-7117

Website Coordinator:
Rick Pangell 303-798-2188

Club Records Monitor:
Dave Wineland 303-499-8566

Club Points Monitor:
Neil Myers 719-531-7893

Flying Site Oversight:
Pete McQuade 719-522-1239

Newsletter & Other Stuff:
Rick Pangell 303-798-2188

NEAR TERM EVENTS:

MMM MTG!	**Every Third Tuesday 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 Required. See: "www.indoorcolo.org" for complete info

HEADS UP: !!!!

Motorcycle Use on the Field Policy: *Follow the roads wherever possible and not to follow the planes cross-country. Take the shortest path possible to the plane in order to retrieve it. Avoid riding through noxious weeds.*

MMM Now accepts "PAYPAL" for Dues, Contest Entry Fees, Etc !!

- Simply Log in to paypal.com (or create your own 'PAYPAL" account if you want)
- Click on "Send Money" in the upper menu bar
- In the "To" block, type in *mmmffclub@gmail.com*, the amount, and click the button "Services"
- In the next form where you confirm payment, in the Lower "Subject" and "Message" boxes state what the money is for… annual dues, entry fees and such.

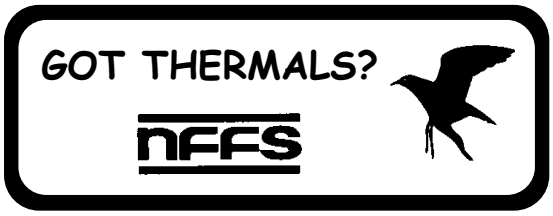
PRESIDENT'S PONDERINGS
Mel Gray

Shoot ! This reminds me that I forgot to get you anything "from the Prez". This will have to do :

To tell the truth, I really don't have anything substantive to offer just now other than we have two terrific contests coming up within 30 days. My personal energy is being challenged a bit at this point. I'm sitting in my shop having just dug out the airplanes that need fixing for the RMC's (like ALL of them!). Sheesh, how did I get in this situation ? Just jigged up the A2 to replace the broken tail boom so I can fly classic towline. P-30 needs a new stab and some recovering. Center punched a yucca on DT with my 1/2A so I have mucho patching / recovering to do there. Got new wings for my Coupe that need to be fitted and covered. Etc, etc,.....

Don't suppose I'm evoking any sympathy am I? See you guys at the field. I DO have a new Frosty CLG to try to trim. It's generally flying like crap just now, and I just cut my finger, and I want my Mommy, and grumble, grumble..... ;<)

Mel



STUMP CLUB DEP'T

This is the place where club members can share their most treasured learning experiences

140S1 HL Glider

JACE PIVONKA	568

140O HL Glider

1 STAN BUDDENBOHM	556


Senior Jace Pivonka stunned the Open HLG gurus when he took the Nats High-Time trophy.

The happening of the day occurred in AMA Hand-Launched Glider (HLG), when 16-year old Jace Pivonka, flying in his first Nats, topped the legendary Stan Buddenbohm to win the Tulsa Glue Dobbers High-Time Trophy. Jace and Stan were the only two fliers to get past the fourth max, at which point Jace won by a comfortable 12 seconds. Jace is likely the youngest flier of all time to win this prestigious trophy in its 55-year history..!!!

122 Dawn Unlimited

1 ABRAM VANDOVER	269
2 JACE PIVONKA	**252**
3 BUD ROMAK	245

Special AMA Member dues offer.

We have a special membership offer if you renew now. You may have heard the Open and Senior membership dues are increasing to $75 and $65 on September 15.

The special membership offer allows you to lock-in at your current dues rate of $58 or $48 by renewing now or before September 14. And you have a choice to lock-in your dues for two years at $113 for Open or $93 for Senior and save an additional $3.00.

Ambroid?

There has been some verbal traffic about regarding Ambroid, or it's lack of and where to get some. Of course, on the 4th of July I had to get curious and asked some of the local pyromaniacs I knew about what they used to keep fuses from getting wet and they responded with the same dilemma... Ambroid! ...then the plot thickened.

From a British Pyrotechnic manufacturer: "I Use NC [nitrocellulose] lacquer to waterproof my fuses, the simplest and cheapest way to make this paste is the method I use.

I take 7 ping pong balls and they need to be at least 1 star rating, in quality, about 80% NC, *(to test if they will work try burning one, if there is a violent reaction leaving very little residue behind you are onto a winner! editors note: this is kind of dangerous and fingers are a precious commodity so be careful !!*) and cut them up into small strips as to let them dissolve in the acetone at a faster rate. And add them to 150ml of 100% acetone. (needs to be housed in an air tight jar, as acetone evaporates very quickly and will turn your mix into a hard lump of nitrocellulose if allowed contact with the atmosphere) Every now and then come along and stir the constantly thickening viscous solution, for this thickness of lacquer in this quantity, it takes about 2 days to completely dissolve, and you are left with a paste with the consistency of paint."

As printed in the September 2004 Windy Sock, the Newsletter of the San Antonio Alamo Escadrille, Joe Joseph, Editor

"Green" Ambroid?

We have seen a report, unverified, that acetone will no longer be used in the manufacture of Ambroid (nitrocellulose) cement. Skeptical at first, we later noticed that our Duco cement didn't seem to hold things together as well as it had. Never hasty to condemn the environmentalists ("green" movement), your editor chuckled over their efforts to save the bugs down deep in the caves from extinction. But hey, this could be serious; to us old timers, Ambroid cement is the patriarch of our hobby. But what if the report is true, and we must now tolerate a weaker glue? In the old days, guys dissolved toothbrushes in acetone to get a good quality Ambroid cement but who knows what toothbrushes are made of nowadays? You might get who knows what, or nothing at all. Well, an item came We can make our own nitrocellulose lacquer, which is simply diluted Ambroid cement..

Here's the way it goes:
Materials: 4 table tennis balls (defined as "two star", whatever that means); 14 ounces of acetone;
a 500 milliliter (17 oz.) glass jam jar with metal screw-on lid; and a stirrer.
(1) Pour the acetone into the jam jar.
(2) Put in the table tennis balls. If you can't fit all at once. just put in as many as you can, and let them dissolve. Once they have dissolved, you can put in the remaining balls. It'll take a couple of minutes for the balls to dissolve. They will get all mushy and break apart. Use the stirrer to make them dissolve faster. Be careful not to get any of the lacquer between the lid and the jar; the lacquer will seal the lid permanently on.

THERMALS
By Mike Jester

Launching your model airplane into a thermal constitutes the holy grail of our hobby in terms of competitive success. Skill in consistently achieving this kind of launching is just as important to winning times as optimum trim, construction, rubber motor and winding. Even an airplane that can only fly for one minute in "dead air" can beat the best airplane if the flier of the former picks the "right air" or his airplane flies into it due to pure luck. Of course, I don't mean to discount the importance of good design, minimum weight, sufficient airframe strength, proper CG, correct decalage, optimum thrust settings, etc.

My first exposure to competitive outdoor rubber powered free flight occurred about ten years ago. John Hutchison invited me to come down to the club's former Otay Mesa flying field and observe one of the club's monthly competitions. I believe the featured event that day was P - 30. Two things struck me during my visit. One was the immense size of the 10 gram rubber motors compared to the 2 gram rubber motors of the indoor Science Olympiad Wright Stuff models I had been working with. The second was the waving of cattails by various fliers to detect thermals. It seemed intuitive to me that ambient hot air should rise sporadically and that your airplane would fly higher and longer if you could launch it into a thermal.

Over the years I have heard constant chatter at contests about catching good air or catching bad air. Perhaps I have fallen into the trap of attributing many of my poor flights to the alleged location of my airplane on the "back side of a thermal."

It can be difficult to detect a thermal before launching, but fairly easy to observe its effect if your airplane flies into one after launching. This may occur during the climb phase, the cruise phase and/or the glide phase. You may see a pronounced bump in the altitude of your airplane during any of these phases. In the case of a so-called "boomer" you will see your airplane continue to climb for a significant duration, even after the motor run has been completed. In such a case, without a reliable DT, you run a real risk of losing your airplane after if flies OOS.

Before addressing methods of detecting a thermal, I will describe some of its physical attributes in layman's terms. According to a detailed scientific analysis in an article recently published in Free Flight Quarterly, a thermal consists of a large column of heated air that can rise hundreds or even thousands of feet.

It is fed by a number of small columns of heated air that are arranged like the roots of a tree. The large column of heated air usually doesn't form until about 150 - 300 feet in altitude. The roots may only be 50 - 100 feet in diameter at ground level. The air is heated a degree or two above the surrounding air by the ground as it is warmed by the sun. If there is sufficient humidity, the water vapor in the air can be heated by the sun and this can also contribute to the formation of a thermal. Outside the roots of the thermal a ring of downdraft is formed, because air is drawn from this region into the roots. This is the dreaded back side of the thermal or "bad air" that can suck your airplane downwardly and significantly shorten its flight. You can inadvertently launch your airplane into a downdraft or it can fly into one.

Early in the morning there is cooler air near the ground forming an inversion layer. The sun has not

yet heated the ground which has cooled overnight. As the sun begins to heat the ground the adjacent air is gradually heated. Moisture and/or dew will begin to evaporate contributing to the formation of thermals as the morning progresses. A light breeze will not impair the formation of thermals and indeed will aid in their detection. Once the breeze begins to build to a significant velocity, the formation of thermals can be impaired. The roots bend downwind and their ends are lifted off the ground. Strong winds will destroy thermals completely due to the fact that the turbulence causes the hot and cold air to mix. In my experience, as noon approaches and the wind speed builds to over 8 - 10 mph your chances of gaining the benefit of a thermal are significantly reduced, if not completely eliminated.

Detecting the presence of a thermal before launching is a tricky business. The three indicators are: 1) a small rise in temperature: 2) a change in wind strength; and 3) a change in wind direction. Some fliers look to see if the seedlings from cattails rise in the air. They are very light and may rise even without a thermal.

How do you rub a cattail and hold a fully wound F1G? Supposedly some fliers use bubble machines, but I have never seen them used at any contest. Some fliers look for a momentary rise in a long Mylar plastic streamer on end of a pole erected at the field. Others try to sense a momentary shift in the breeze on their face or by observing a wind vane.

Serious competitors use a sensitive electronic thermometer with a digital display that can detect and indicate a minute change in air temperature. They also use an electronic air speed detector that can detect and digitally display a sudden change in wind velocity. They will typically observe a Mylar streamer or wind vane to detect a shift in wind direction. The key thing to look for is a drop in wind strength as air is drawn against the prevailing wind into a thermal approaching from upwind. This golden moment will be confirmed by a momentary rapid increase in temperature as the hotter air in the thermal passes over the temperature sensor.

I have seen world record holder Stan Buddenbohm use a small hand held air speed and air temperature detector. He regularly gets maxes on all his CLG contest flights, which is not possible without catching good air. I ordered a COZYSWAN GM816 "digital anemometer air wind speed scale gauge meter thermometer" from Amazon like Stan's detector (cost $16.55). I placed my order at the beginning of May and the unit still has not arrived at my house. Oh well, I guess this inexpensive little device (pictured below) was too good to be true.

Another technique for detecting a thermal is to watch for the moment when a seasoned expert launches his airplane, and to launch your airplane when he launches, taking care not to interfere with the expert's launch. You must be patient as experts will sometimes wait five or more minutes with a fully wound airplane in hand before launching.

This article just scratches the surface of the subject of thermals and free flight. For more information, see "Thermals and Picking Lift" by Paul Rossiter, published in Free Flight Quarterly, Issue No. 55, April 201

36th Annual MMM 14 Round FAI Annual

Jerry Murphy, CD

The 36th annual Magnificent Mountain Men contest has shown once again what a great club we have. The club turned out in force to help make this another great event. This year we suffered a shortage in both supporters and contestants but the club came through. On the topic of contestants we suffered from the World Champs being close to our dates. This resulted in both team members and supporters not being able to travel to Denver so close to the World Champs dates. In addition there was a Canadian world cup event on the same weekend as the MMM 14R meet. These two events resulted in lower than expected competitors.

Our Kansas friends came out to support the event which filled the gap left by the low number of FAI competitors. Special thanks to Earl Griffith, Jim O'Reilly, Chuck and Linda Powell for their support. Our friend Jack Murphy made the trip to fly his electric models and Ian Kaynes made the trip form the UK to fly in both the F1Q and F1E world cup events. And, it wouldn't be a contest if we did not have Peter and Bridget Brocks with us.

Your report is pretty much an accurate summary. I really don't have anything to add concerning the organizational or attendance side of the story. I suppose I could spin a couple of vignettes about the mostly wonderful weather and good flying, the usual enjoyment of hanging out with free flight folk, and the like, but it seems to me that one really needed to be there to have really enjoyed this mellow event. I will relate one moment that is sticking with me and that is when you got two consecutive max flights in E-36 from what certainly appeared to be the same thermal. I don't recall having ever seen that one before. I think my comment at the time was that the air was "thermalicious". Pretty much sums it up.

Mel

Tui Cup FAI

F1A Glider

Place	Contestant	Total
1	Peter Brocks	1160

F1B Wakefield

Place	Contestant	Total
	Jace Pivonka	1248

F1C/P Power

Place	Contestant	Total
1	Chuck Etherington	1226
2	Cade Fedor	517

F1Q Electric

Place	Contestant	Total
1	Jack Murphy	1114
2	Ian Kaynes	1064
3	Jerry Murphy	151

F1G Small Rubber

Place	Contestant	Total
1	Don DeLoach	537
2	Jerry Murphy	529
3	Darold Jones	484
4	Jace Pivonka	440

F1H Small Glider

Place	Contestant	Total
1	Chuck Powell	120

F1J Small Power

Place	Contestant	Total
1	Cade Fedor	212
2	Ray Boyd	166

F1E Magnet Steered Glide

Place	Contestant	Total
1	Peter Brocks	327.78%
2	Tom loerger	289.45%
3	Ian Kaynes	275.55%
4	Cade Fedor	207.23%
5	Mike Fedor	201.67%
6	Rick Pangell	107.23%

Centennial Cup FAI

F1A Glider

Place	Contestant	Total
1	Peter Brocks	779

F1B Wakefield

Place	Contestant	Total
	Jace Pivonka	753

F1C/P Power

Place	Contestant	Total
	Cade Fedor	550

F1Q Electric

Place	Contestant	Total
	Jack Murphy	989
	Ian Kaynes	667
	Jerry Murphy	150

F1G Small Rubber

Place	Contestant	Total
1	Jerry Murphy	568
2	Don DeLoach	480
3	Darold Jones	333

F1H Small Glider

Place	Contestant	Total
1	Chuck Powell	415

F1J Small Power

Place	Contestant	Total
1	Cade Fedor	406
2	Ray Boyd	173
3	Troy King	164

F1E Magnet Steered Glide

Place	Contestant	Total
1	Peter Brocks	368.24%
2	Ian Kaynes	288.53%
3	Tom loerger	240.00%
4	Rick Pangell	233.80%
5	Cade Fedor	140.16%
6	Mike Fedor	118.71%

Catapult Glider Saturday July 1

Place	Name	Total
1	Mark Covington	579
2	Rob Romash	259
3	Chuck Powell	183
4	Troy King	145
5	Brandon Nevarez	105
6	Linda Powell	58

Hand Launched Glider Sunday J

Place	Name	Total
1	Troy King	388
2	Jace Pivonka	348
3	Mark Covington	323
4	Don DeLoach	318
5	Chuck Powell	106
6	Brandon Nevarez	93
7	Cade Fedor	7
8	Rick Pangell	6

NFFS Classic Towline Glider

Place	Name	Total
1	Mark Covington	518
2	Chuck Powell	62

Fast Gas

Place	Name	Class	Total
1	George Avila	C gas	485
2	Troy King	B gas	483
3	George Avila	A gas	456
4	George Avila	A/B Classic	375
5	Ray Boyd	1/2A	232
6	Troy King	A/B Classic	147
7	Troy King	C gas	73

Slow Gas

Place	Name	Class	Total
1	George Avila	SLOP	452

Fast Electric

Place	Name	Class	Total
1	Don DeLoach	A	554
2	Jack Murphy	A	236

Slow Electric

Place	Name	Class	Total
1	Don DeLoach	E 36	470
2	Jack Murphy	E 36	466
3	Linda Powell	E 36	330
4	Jerry Murphy	E 36	325
5	Chuck Powell	E 36	324

P-30

Place	Name	Total
1	Brandon Nevarez	330
2	Bill Carney	300
3	Jerry Murphy	177
4	Chuck Powell	168
5	Jim O'Reilly	120

Old Time Rubber Combo

Place	Name	Total
1	Herb Kothe	533
2	Chuck Powell	443
3	Jim O'Reilly	415
4	Don DeLoach	127

NFFS Nos. Rubber Combo

Place	Name	Total
1	Don DeLoach	684
2	Jim O'Reilly	540
3	Chuck Powell	493

Mulvihill/Moffett Combo

Place	Name/ class	Total
1	Earl Griffith/ Mulvihill	706
2	Bill Carney/ Mulvihill	621
3	Herb Kothe/Moffett	555
4	Earl Griffith/ Moffett	508
5	Brandon Nevarez / Mulvihill	405

COLORADO FREE FLIGHT

FREE FLIGHT WITH AN ALTITUDE!

UPCOMING EVENTS

DATE	EVENT	FEATURE EVENT
August 23	MMM MONTHLY	Scramble
Sept 5 thru 7	Rocky Mountain Champs!!	AMA, FAI, FAC

FIRST CLASS

IF THIS BOX IS CHECKED, THIS IS YOUR LAST ISSUE UNTIL YOU PAY YOUR DUES!

The Magnificent Mountain Men
6994 So. Prescott St.
Littleton, Colorado
80120