



Thermals

Newsletter of the Rocky Mountain Soaring Association

July 2001

AMA Chartered Club 1245

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President's Message

July Heat – Greetings everyone! The middle of the soaring season finds the RMSA in great shape and everyone having a ball. Our F3J in the Rockies contest came off without a hitch thanks to the great CD efforts of Mark Howard and many volunteers. Thanks, Mark, and kudos to those who helped. Many of us continue to work on those F3J skills as the US Team Trials approach (Labor Day Weekend in Chicago). I'm convinced that RMSA will be making a great showing at the "Trials" and some mid summer practices will help to insure our performance. RMSA is probably on the cutting edge of the "new rules" interpretation will a safe contest under our belts featuring great launches. The health of F3J is secure, but it will still be interesting to see how others interpret the rules and push the envelope.

The evolution of hand launch continues to fascinate and at times discourage many. I have just returned from the International Hand Launch Glider Festival (IHLGF) where only "Tip-Launchers" were competitive. This aspect of the hobby has definitely changed with the launch becoming a huge factor in flying HLG. A new crop of pilots have emerged who have the technique down and are doing very well. Unfortunately, many of the low-altitude piloting skill demonstrations evident in past "Internationals" are gone. Aircraft design is now anchored by launch stress factors instead of airworthiness and thermal ability. The shortcomings of some of the models seem evident at our altitude here in Colorado. However, when one door closes, another one always opens and tip launch is an opportunity for new pilots to shine.

Finally, our use of the field seems to be going well with the majority of our contests featuring a harmonious site. Winch equipment failures and line breaks seem to be minimized through the use of heavier line and some heavy maintenance work expended by club members before the contest season. Thanks everyone. Finally, lets keep repeating those field rules and keep everyone on track. Happy flying.

Shannon

Next Meeting:

Date/Time: July 3, 2001 - 7:00PM

Location: Broomfield Advanced Chiropractic
26 Garden Ctr
Broomfield CO 80020-7012

PROGRAM: League of Silent Flight (LSF) Discussion by Dr. Dan



Rocky Mountain Soaring Association

July Open Contest July 8, 2001 Bob Pederson - CD

Registration: 8:30-9:00 AM
Pilot's Meeting: 9:00 AM
First Flight: 9:30 AM
Entry Fee: \$5.00 (\$3.00 Juniors)

Current (2001) AMA membership is required.

Please be registered and have planes assembled by Pilot's Meeting

Tasks: 2 Rounds of T1 – International Duration – man-on-man - times set according to conditions
1 Round of T4 Cumulative Duration (aka 15 min. Add-'em-up) with called Flight Order

Landing: L4 Spot with AMA tapes

I won't start any new rounds after 2:00 so everyone can go home and cool off. *Pilots and spectators should bring lots of liquids, sunscreen and shade if they have it.*

Winchmasters: Please be at the field by 8:45AM. If you are unable to attend please contact the CD to arrange to have your winch/retriever available

Field Rules Reminder

Remember that the only parking area is in the lot at the SouthWest corner of the field. Please do not park along the access road or along the North Side of 120th. Also there is a lot of new grass, so please stay on the well established turf. This is the area on the South side of the field.

Website Changes

We have been using a free web site provider (Homestead) for our site. Homestead recently announced that beginning in August they will be charging a fee for web sites greater than 3 pages. This fee has not yet been established, but will likely be at least \$10/month - \$120 per year. That is 5 memberships to support the website. What I have done is move all of the website data to my corporate site and left just the main page on Homestead. I have pointed the ENTER button on homestead to my corporate site – so you get the the website the same as always (if you enter thru <http://rmsa.homestead.com>). Some of you may have bookmarked the actual main page at homestead and will have to change your bookmark to the new site. I have also left that page on Homestead with a notice pointing you to the new location. The new address is: <http://www.jmccconsulting.com/rmsa/index.html>. While this is a bit of a pain, most users should not notice a difference in the website. For me – as website manager – it makes many things easier. I can now use FTP to update the site (before I had to use a crappy one html file at a time file transfer through http), I can also use ASP and CGI directly on the site (Homestead did not support ASP or CGI so I had to create the online signup pages on another website), and I can run programs against the website to manage it better (I ran a program to find all the broken links and fixed them when I moved it). I hope this is transparent to you, if you have any problems with the website please let me know as soon as you can and I'll take care of it. My contact info is on the last page of this newsletter.

Jim Monaco



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June Open Contest Report Bob Moffett - CD

Twenty-one flyers showed up to fly in the contest. The weather was great. We flew five rounds. Some people had good luck and some people had not so good luck. Skip won the Masters with his usual great flying. Don was second and Dusty was third. I think it was Don's first time to collect some hardware. He has worked hard for it and has come along ways in a couple of years. Lenny was in the hunt but had some hard luck - I have never seen a winch turn over on launch. Jim and Jack got together for a spectacular midair collision. Jim had two popoffs in the same round which didn't help his chances. Talk about hard luck. Better luck next contest Jim.

Dan won the Sportsman's class with Kevin second and Bob Johnson third. Art Ries was our lone Novice – but he tried hard – had some good flights and took his airplane home in one piece. All in all a good day!

Congratulations to all. I would like to thank everyone for their cooperation and help. The move to avoid the sprinkler system worked out well. It was nice to see the kids running through to sprinklers on a hot afternoon. This was my first contest as CD. Thanks again to all for making it a pleasant experience. And a special thanks to Jim Monaco for scoring the event.

Editor's Note: This was Bob's first CD experience and he did a great job. He dealt with a moving sprinkler and kept things moving. The club members truly appreciate the members who volunteer to take on this thankless task. THANKS BOB!

June Open Results

ID	Class	Name	RD 1	RD 2	RD 3	RD 4	RD 5	Total	Norm by Contest	Norm by Class
N Novice										
11	N	Art Ries	456.95	193.83	122.16	94.08	166.08	1,033.11	208.22	1,000.00
S Sportsman										
4	S	Dr. Dan	933.92	856.50	993.04	604.85	1,000.00	4,388.32	884.43	1,000.00
20	S	Kevin Moffett	719.39	873.89	952.63	832.16	915.04	4,293.11	865.25	978.30
7	S	Bob Johnston	1,000.00	1,000.00	832.46	1,000.00	303.35	4,135.81	833.54	942.46
21	S	Marc Monaco	682.82	650.33	989.30			2,322.46	468.07	529.24
M Masters										
14	M	Skip Miller	1,000.00	1,000.00	979.06	982.67	1,000.00	4,961.73	1,000.00	1,000.00
16	M	Don Ingram	1,000.00	1,000.00	982.70	989.40	945.33	4,917.42	991.07	991.07
15	M	Dusty Miller	905.08	958.06	1,000.00	1,000.00	1,000.00	4,863.13	980.13	980.13
9	M	Tom Gressman	826.79	955.75	1,000.00	1,000.00	979.02	4,761.56	959.66	959.66
19	M	Shannon Bingham	792.15	968.82	842.11	1,000.00	981.95	4,585.02	924.08	924.08
8	M	Lenny Keer	1,000.00	1,000.00	991.30	1,000.00	424.78	4,416.08	890.03	890.03
17	M	Bob Lewan	688.22	986.64	984.43	597.81	987.76	4,244.86	855.52	855.52
1	M	Bob Moffett	527.59	988.99	1,000.00	928.95	711.19	4,156.72	837.76	837.76
3	M	Jack Zika	578.23	973.51	922.81	592.33	965.70	4,032.59	812.74	812.74
13	M	Phil Jones	808.37	804.93	1,000.00	920.49	426.55	3,960.35	798.18	798.18
18	M	Charlie Miller	567.33	980.13	388.59	787.99	984.13	3,708.17	747.35	747.35
6	M	Jim Monaco	870.75	744.39	39.22	735.19	1,000.00	3,389.55	683.14	683.14
2	M	Byron Blakesley	1,000.00	644.59	336.82	332.72	826.55	3,140.69	632.98	632.98
12	M	Gary Lewan	913.27	1,000.00	1,000.00	227.04		3,140.30	632.91	632.91
5	M	Bob Rice	541.95	284.14	622.84	226.48	918.77	2,594.18	522.84	522.84
10	M	Bob Pederson	456.63	298.67	921.74	342.81	340.39	2,360.24	475.69	475.69



Rocky Mountain Soaring Association

June HL Report Shannon Bingham CD

The June handlaunch contest was a delightful event held June 16th in near perfect conditions. The contest tasks were the Day 1 International Hand Launch Glider Festival tasks and the full 6-round day was flown. We used Paul Naton's excellent automated HLG timing CD running on a jam box positioned mid-field. I was really glad I picked up this little gem at the International – it is for sale at www.radiocarbonart.com - Paul's website. Thanks to Duracell for keeping up the volume. Thanks to John Kappus for creating a nice, organized set of scoring sheets and bringing adequate copies to the field.

There were eleven contestants with four of them employing occasional tip launches. John Kappus won the contest with an excellent display of the tip launch technique. Flying his own design, John had a score of 5,993 - which is only seven points short of perfect for a six round contest. John's model seems to have a great compromise between structural integrity for launch and high altitude thermal performance. The model just flies well and John's piloting skills were evident in the later rounds where he was able to launch to adequate altitude to find some wave lift over the field when other models looking for thermals fell out. As best I could observe, John tip launched the majority of the time. Based on what I have seen, Kappus is a national contender at this point in the evolution of HLG with the right airplane and the right technique. Good luck John.

Skip was second (5,774) utilizing a hybrid technique of javelin launching the Mapleleaf Mirage when soaring conditions were favorable and tasks dictated, then occasionally switching to a Brian Buass Raptor via tip launch when altitude was needed. With only a few hours practice, Skip seems to be getting the tip launch technique dialed. The Raptor, however, is obviously designed for sea level conditions and seems to drop like a stone in our high altitude air at inopportune moments. (I guess I can't wait to get mine finished.) Skip continues to work on getting the Raptor dialed and is also working with a tip launch Encore. Look for some "wood" to come home from the Nationals this year guys.

I was third (5,416) flying with last year's technique (not tippin' yet) and last year's airplane – Mirage and Brian Buass Feather XL. (I was also wearin' last year's outfit and socks that smelled like they hadn't been washed since last year.) The Mirage has to be the ultimate "idiot-proof" model. A joint design by Don Peters and Skip Miller with a tail by Phil Pearson, mine seemed to be in the right place at the right time. Never hurts to have a good caller either.

New-comer Bill Beggs (Carbon Delight – yes, built-ups still work) was fourth (4,982) and Joseph Newcomb (Sidewinder) was fifth (4,697) and is a young, tip-launchin' son-of-a-gun. Look-out! Jack Zika turned in some strong scores (4,558) flying a nice Mark Kummerow Rad (I think) – beautiful model in the air and Jack flies it well. Charlie Miller (4,540) flew a Mirage and has a Raptor under construction. Nice to see Charlie back in the fray.

A good time was had by all. Here are the final scores. See you next time.

John Kappus	5,993
Skip Miller	5,774
Shannon Bingham	5,416
Bill Beggs	4,982
Joseph Newcomb	4,697
Jack Zika	4,558
Charlie Miller	4,540
Greg Dube	3,590
Dr. Dan Williams	3,473
Wayne Hollenbeck	3,345
Danny Dermer	2,192



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LSF Coordinator Message

First off I would like to get a list of who is on what level and working on what, So if I could get everyone to get me the information, I will post it from time to time. Please email me at drdandc@juno.com or call me at (303) 903-2291. As for what went on this month:

- ?? Ryan O'Hara started and finished his level one this month.
- ?? Ali Ghafari finished his level two landings and thermal flight.
- ?? I got my level four one hour thermal flight out of the way.

Things are picking up – so I hope we'll have more LSF activity next month. On another note I will be building a X-C rig soon for the back of my pickup – a nice chair sitting way up high for those long cross country flights.

Until next month. **Dr. Dan**

Treasurer's Report

RMSA is in excellent finance shape. The purchase of the "Real Balls" drained the checking account earlier this year. With the strong membership this year, the checking account has rebounded.

SAVINGS: \$650.06
 CHECKING: \$828.04
 CASH: \$162.88

I received an e-mail from a member who had bought a winch battery. Could you please resend that e-mail?

Thank you. **John Pearson**

For Sale

Emerald – nice molded plane – some nicely repaired damage, hardly noticeable. 2 JR servos on Ailerons, 2 Airtronics 141s on Flaps and 2 JR Standard servos in the fuse. High Capacity custom battery. \$650 or \$700 with receiver.

Contact Bob Johnston (303) 678-5597 or flyingbob@bobsmail.com

GOING TO THE NATS?

Dr. Dan is looking for one or more flyers headed to the Nats to share driving and accommodations. He is thinking about driving out as a group and renting an RV in Muncie for the week, and sharing the costs. It is nice to stay onsite and it may be cost effective. Email Dan at drdandc@juno.com or call him at (303) 903-2291 if you are interested.

Give a Welcome to New Members

Please welcome the following new members to RMSA. They joined the club during 2001. If you see someone you don't know, walk up, shake their hand and introduce yourself.

Chris Cheshire	5103 S. Laredo Way, Aurora CO 80015	303-699-5598
Jason Epstein	4500 S, Monaco St #1124, Denver CO 80237	303-741-4545 fl8joc@aol.com
Dana Falconer	995 Hy-Vu Drive, Evergreen CO 80439	303-679-8692 danafalconer@hotmail.com
Wayne Hollenbeck	3103 17th Ave #3, Longmont CO 80503	303-651-3874 wayne@hollenbeck.com
Jim Hume	4901 W. 93rd Ave #2236, Westminster CO 80031	303-430-5929 JIMHOSER@AOL.COM
Peter Julier	18858 E. Garden Dr., Aurora CO 80015	303-680-3977 spitfire64@webtv.net
Walter Lurie	220 Garfield St., Denver CO 80206	303-355-5703
Ryan O'Hara	4500 S. Monaco St #1124, Denver Co 80237	303-741-4545 ryan1_ohara@hotmail.com
Tony O'Hara	5491 S. Youngfield Ct, Littleton CO 80127	303-948-2576 tonyohara@compuserve.com



The Fine Art of Thermal Flying

I was cleaning out my hard drive the other day and came across a set of articles that apparently came from a newsletter by Bob Dodgson – a famous sailplane designer and flyer. Although the articles are a bit dated, the messages are eerily familiar. I will be reprinting these over the coming months for your enjoyment.

Jim

The Fine Art of Thermal Flying

by
Bob Dodgson

Reprinted from March 1996 R/C Report and Dodgson Designs building instructions

How many times have you heard someone at a thermal contest say, "I always get all the sink. Every time it's my turn to fly, there is no lift."? Then, there are other people who seem to get their air times most of the time. What are the secrets that enable some flyers to find "lift" nearly every time they fly? This article assumes that the contest is properly run so that sandbagging, the deplorable crutch of the small-minded and unsportsmanlike competitor, is not allowed. After all, anyone can max every flight if he only goes up on tow after seeing someone else spot the lift.

Without a doubt, great thermal flyers have a gift. Most of the skills involved, however, can be learned. The four basic ingredients in thermal flying are: 1)being decisive and knowing the most probable areas to look for lift at any given time and having the guts to go for it, 2)being able to recognize workable lift, no matter how weak, when your plane passes through it, while not being seduced by turbulent air that is not workable, 3)having a plane and the flying skills necessary to work the lift as efficiently as possible and 4)knowing when to leave a dying thermal and when to push the stick forward and reflex the flaps to force the plane to quickly fly out of a bad area rather than to aimlessly flounder around in down air as the less decisive flyers are often seen doing.

Knowing where to look for lift is a lot like playing cards. The best players are the ones who keep track of what cards have been dealt so they can know what the odds are at any given time. A good thermal flyer watches the sky and the other flyers very carefully, trying to establish probable patterns in the lift cycle. This enables him to figure about what part of the sky is due to kick off a thermal when it is his time to fly. Sometimes if there is a massive sink cycle that is killing everyone, just trying a different part of the sky is about the best you can do. In general, unless you have sure knowledge of a thermal do not do your thermal searching way down wind. If you find a thermal downwind, you cannot ride it for long because your plane will soon be blown to the limits of vision. This is assuming that you have a good multichannel glider, sporting an airfoil with a good L/D (ideally with camber changing capability) so that you can get home from most downwind situations.) If you do not find a thermal while flying downwind you can find yourself in big trouble very quickly. It is much safer to search for lift upwind or off to the sides. Under most circumstances, it is best to fly the search pattern at or near the maximum L/D of your glider. This is usually about 3 or 4 MPH above stall speed and 1 or 2 MPH above the minimum sinking speed. Your Maximum L/D speed is increased with ballast. For an unballasted Lovesong for example, the maximum L/D is about 20 MPH, for a Lovesong with 20 oz. of ballast the maximum L/D would be about 23 MPH. The maximum L/D is near but slightly above the minimum sinking speed so if you keep your glider searching at speeds that fall within the range of the minimum sinking speed and the maximum L/D, you will get the most possible air time if you do not find lift and you will cover the most possible sky, thereby affording you the best chance of encountering lift during the flight.

In strong winds, you may have to adjust your strategy. However, in many windy situations there are no standard thermals and you can get better times by flying slowly into the wind and doing a little dynamic soaring by altering your TE camber at the right instants to gain energy from changes in the wind speed. In these situations, flying fast at a high sink rate in a vain effort to find a thermal is a losing strategy. On other occasions, when there is thermal activity in a windy situation, ballast up and put the TE in the "move out" position and search the likely thermal spots. With this strategy, you are gambling on finding workable lift. Good flyers will usually make the best choice as to which strategy to use in a particular windy situation.

Watch closely for tell-tale signs of lift within a half mile radius of the field. We all know that a circling hawk, eagle, buzzard or even seagulls can be a dead give-away as to the existence of lift. Small birds like swallows can be just as reliable. They feed on small insects which can become air-born by thermals. When these swallows are darting around in a small section of the sky, they are probably defining the boundaries of a thermal for you. Sometimes you may even be able to spot a column of dust or even debris such as paper or thistle-down in the air as a thermal indicator. If you suddenly find yourself climbing out on tow higher than is usual for the wind



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condition, you have probably encountered a thermal on tow. Go for it! Wind shifts are another thermal indicator. A sudden temporary shift in the wind direction can indicate that a thermal is nearby and is sucking the air toward it. If the air suddenly warms and the wind dies, you may be standing in the "eye" of a thermal. Sometimes you can see wind patterns in nearby tall grass that indicate multiple or circular wind directions, another thermal indicator. Look for variations in ground cover and terrain. Areas that are dark will absorb heat faster than surrounding lighter colored areas and so will be likely areas to kick off thermals. Ridges can also help thermals break loose if there is a little wind. A slope facing the sun is another possible thermal generating area. We all know about the old standbys such as: parking lots and dark roofed buildings. If nothing else you can always try to slope soar off of the windward face of the buildings or a well defined tree-line.

Two of the most difficult things to learn in thermal flying are being able to recognize what lift is workable and then how best to work it. In general, as you all know, thermals start at the ground and spread out as they go up in a funnel shape. Then, the funnel goes down wind as it rises. The wind also blows the entire funnel down wind usually including the base of it. When you are climbing out in a small thermal at low altitude and following it down wind and it suddenly disappears, if you cannot re-center in it, try flying back to the spot that you first picked it up. The generating spot may be producing a thermal that breaks off down wind while the original spot is sending up another column. If other planes are in a thermal and they are higher than you are, you should look for the thermal upwind of the higher planes. You will normally have to follow the thermal downwind or else it will blow past your plane and you will end up on the down side of it. You'll want to get out of the down air fast. When you are high, or when working thermals that do not seem to have a noticeable core or "hot spot" it is usually best if you work them in flat efficient gentle circle turns. Some thermals have tiny areas of strong lift that can best be worked by standing the glider on its wing tip while doing tight, fast 16 foot diameter circles centered in the "hot spot". This is the only way that you can climb out on some thermals, particularly at very low altitudes. Some gliders perform more efficiently than others in tight circles (this is one of the many aspects of performance that gets top priority in the kits I design). Other thermals seem to require that you fly an upwind climbing leg slowly and on the verge of a stall (not quite letting the plane stall) while whipping around the downwind turn quickly at a faster speed. At low altitude one stall or false move can spell the difference between a max flight and a premature landing. How you fly a multichannel glider through the turn is of utmost importance. If you know that you are in lift but you are not climbing or you are not satisfied with your rate of climb, try varying your thermal technique to find one better suited to that particular thermal. also, be quick to re-center if your climb rate decreases. At altitudes under 30 feet, you can't afford to waste a move. So if you are not losing altitude with a thermal turn, you should probably stick with it. Many times if you fly out of a bubble, you can't find it again even if you have the altitude to try. Don't leave a productive thermal turn, especially at low altitude but you can try shifting the center of the turn slightly while you circle to find the "hottest spot" for maximum climb. Keep in mind that some thermals disappear quickly so it is important that you concentrate all of your efforts to climb to a safe altitude as rapidly as possible. Don't relax just because you have found a thermal. This is not the time to start B.S.-ing with your timer or to casually saunter over to the landing circle. Climb fast! You may only have one chance and a few precious seconds of good lift. Take advantage of it while you have it.

In general, a thermal will try to turn the plane away when it encounters lift so be quick to force the plane to turn into the lift. You may have to try several different circle locations before you are centered in the thermal. Some thermals even seem to have centers that shift, requiring you to re-center your plane several times during a flight. If you stop climbing, try to find a more productive area of the thermal while being careful not to lose the thermal. If you can't do better in that thermal, then get out of the dying thermal quickly and find another one while you have the altitude to do so. There are some occasions when a fixed area is generating lift which you can't work well by any type of thermal circle. Sometimes these may be called "waves" and they may be produced by wind after it has blown over a hill or ridge in a harmonic of the original air pattern caused by the hill. At any rate, smooth gentle flying with minimal control input is the best way to fly this type of lift if it is weak and smooth. Fly large flat turns and figure 8's to stay in the lift area but make as few turns as possible.

The best type of plane for thermal flying depends upon the skill level of the flyer. For beginners, a self neutralizing polyhedral floater like a Gentle Lady is a good choice. As skills increase, then more versatile and higher performance gliders are called for. The top flyers and soon-to-be top flyers will find more room for growth and more possibilities in difficult situations if they are flying a high performance multichannel glider. This is how I felt when I came out with the TODI in 1972 and this philosophy has guided my designing right up to the design of our new Saber. With so many great flyers flying good multichannel machines now, you are really handicapping yourself if you stick with your polyhedral type glider too long. One theory is that if you fly polyhedral for more than two season, your brain atrophies and you then are unable to make the jump up to serious multichannel flying (I said it was only a theory come on . . . lighten up!). Having the best plane, however, will do you little good if you have not mastered the ship. The more sophisticated the glider is, the better you the flyer must be in order to harness the added capability. Become so familiar with it that your glider feels like an extension of yourself, and you don't even have to think about the mechanics of flying it. This frees your mind to help you fly each lift opportunity almost on instinct as your thermal skills increase.

One of the most important things to remember is that altitude is time and distance in the bank. Practice your tow technique until you are getting the highest tows that you can possibly get. Use a Casio altitude watch to compare how high you get with various launching



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techniques and stick with the launch technique that gives you the most height. You have all seen great last ditch saves where a flyer thermals out from a 30 foot high final approach. You may call this good flying but in most cases, if the flyer had flown the early part of his flight better he would not have had to rely on a last minute save. The most important part of a flight is the first minute, when you are the highest and your options are unlimited. Have a plan of action before you launch, based on your skilled observations over the 1/2 hour prior to your flight. Come off of tow aggressively. Don't give up a foot of altitude unnecessarily. When you are high and just off of tow, do not get sloppy! Fly as if you were only 30 feet off the deck. Do not waste this important part of your flight worrying about getting to the landing area. After you launch, move quickly away from the winches and then stop and concentrate on your flying and on your pre-decided strategy for finding lift.

Pick a timer who understands finding and working thermals. He should not try to fly your plane for you but he should concentrate on watching the entire sky and all the other gliders and signs of lift. You want a timer who knows thermal flying well enough so that if another glider flies through lift (even if the other pilot does know that he has flown through lift) your timer knows it and can tell you about it. It is important that your timer knows your capabilities as a flyer as well as the performance range of your glider. Several times, I have found myself timing for a polyhedral flyer and have spotted a thermal for him within easy reach. To my chagrin, he made too many turns before heading for the lift or his glider just did not have the sky covering ability that I was used to or he chickened out just before he reached the lift and so my advice only messed him up. I knew that my glider and I could have easily reached the lift without a second thought but I learned that when I am advising someone else, I must take their skill level, flying style and glider performance into account if I am to help them. A good timer is a most valuable asset, but some top flyers become so dependent on their timers and advisers that you begin to wonder if they could actually even fly without their entourage. Thermaling "by committee" is one way to do it but I have more respect for flyers who can do it on their own even if their groupies are not with them and even if they have an unfamiliar timer.

Perhaps the one thing that really separates the great thermal flyers from the OK thermal flyers, is the ability to immediately recognize when to stay with a thermal, when to leave it and when to re-center in it. How many times have you seen a gaggle of flyers slowly circling down to the ground in what was a thermal only minutes before. The smart flyer left the thermal as it was breaking up and quickly and decisively went in search of another thermal while still high enough to do so, thus saving his flight. If a great thermaler encounters sink he will recognize it immediately and will not waste precious altitude floundering in it. One of the hardest things to do, when in sink, is to reflex the wing trailing edge and pour in down elevator and thus increase your apparent sink rate to get the plane moving fast so you can fly out of the sink as quickly as possible. Fly anywhere just get out of the down air. Whatever you do, do not retrace your flight path and fly through the same down air that you have just flown through. Anything is better than that! Great thermal flyers are decisive, smooth and attentive. They can work any air within a range of half a mile or more, speeding out of sink and maximizing any form of lift. The great thermal flyer expects to get his time whenever he goes up and he doesn't give up until he is on the ground.

Climbing out at 15 feet of altitude is not an uncommon feat for the skilled thermaler be it on final approach or elsewhere. It is a common sight to see great thermalers like Dave Banks thermal his Lovesong or Saber out from a hand toss. Once you have the basic skills and the best thermaling machine to fly, you can spend a lifetime improving your thermaling skills, learning to work lift that you could not work the year before or even the week before. You will find your decision making improving so that you can now salvage "max" flights out of air that is eating everyone else alive. The thrill of thermal competition flying is that there is no end to how far you can go, each flight is a totally new challenge to be optimized. The person who best optimizes each flight opportunity is the one who wins the most contests. This personal growth in thermaling skill is to me the ultimate and ever-new thrill and joy in soaring.

This page was created by Bob Dodgson of:
Dodgson Designs
21230 Damson Road
Bothell, WA 98021



Rocky Mountain Soaring Association

2001 RMSA Contest/Event Calendar

Date	Event	CD	Notes
Jan. 2	RMSA Meeting		
Feb. 6	RMSA Meeting		
Feb 2-4	<i>Southwest Classic</i>		<i>CASL Southwest Classic - Phoenix AZ</i>
Mar. 6	RMSA Meeting		
Mar. 11	Open*	Shannon Bingham	
Mar. 18	Pro-Am	Jim Monaco	Fourth annual Pro-Am
Mar. 24- Sat	PPSS OPEN	Greg Tarcza	March Madness
Apr. 3	RMSA Meeting		
Apr. 8	Open*	Jim Barr	
Apr. 15	HLG**	Shannon Bingham	
Apr. 22	PPSS OPEN	Dave Kurth	Humps & Bumps
May 1	RMSA Meeting		
May 6	Open*	Lenny Keer	
May 12	HLG**	Bob Lewan	Saturday event
May 19 - Sat	PPSS OPEN	Austin Cleis	May Fly
May 26, 27, 28	F3J*	Mark Howard	Special National Event
June 2-3	IHLG		International HL Contest Torrey Pines CA
June 5	RMSA Meeting		
June 10	Open*	Bob Moffett	
June 16	HLG**	Bob Lewan	Saturday event
June 24	PPSS OPEN	Jack Dech	Summer Solstice
June 30	LSF Day	Dr. Dan Williams	Work on LSF Tasks (Saturday)
July 3	RMSA Meeting		
July 8	Open*	Bob Pederson	
July 14 - Sat	PPSS RE	Barry Welsh	Memorial Fly
July 21 - Sat	PPSS RES	Rich O'Connell	Height of the Season
July 28	LSF Day	Dr. Dan Williams	Work on LSF Tasks (Saturday)
Aug. 7	RMSA Meeting		
Aug. 12	Open*	Jim Monaco	Kinda-F3J
Aug. 18 - Sat	PPSS OPEN	Frank Deis	Night Fly
Aug 19	HLG**	John Kappus	
Aug. 25	LSF Day	Dr. Dan Williams	Work on LSF Tasks (Saturday)
Aug. 26	PPSS OPEN	John Read	Dog Daze
Sept. 4	RMSA Meeting		
Sept. 9	Open*	Bob Rice	AKA: Colorado Challenge Cup
Sept. 22- Sat	PPSS OPEN	Bob Avery	Soar Bash
Sept. 29	LSF Day	Dr. Dan Williams	Work on LSF Tasks (Saturday)
Oct. 2	RMSA Meeting		
Oct 6&7	Visalia		Visalia California
Oct. 6 - Sat	PPSS HLG	Milt Woodham	HandLaunch
Oct. 14	Open*	Jim Monaco	
Oct. 21	PPSS RES	Mike Fritz	Witches Brew
Oct. 27	LSF Day	Dr. Dan Williams	Work on LSF Tasks (Saturday)
Nov. 6	RMSA Meeting		
Nov. 11	Open*	Shannon Bingham	
Nov. 17 - Sat	PPSS OPEN	Dave Meyers	Turkey Shoot
Dec. 9	Awards Banquet		
Dec. 15	PPSS OPEN	John Read	BAM Fly

*Club Open points contest ** Club HLG points contest

Italics indicates major national level contests available for points and PPSS events



2000 Board Members

President:	Shannon Bingham	(303) 877-7557	binghams@boulder.earthnet.net
Vice President:	Jim Monaco	(303) 464-9895	JimMonaco@earthlink.net
Secretary:	Bob Rice	(303) 745-5269	bob.rice@tobin.com
Treasurer:	John Pearson	(303) 306-6800	jp7120@aol.com
Past President:	Mike O'Hearn	(303) 693-6925	m.o.hearn@worldnet.att.net

Member Support
<http://rmsa.aquamead.com>
 Chief

Instructor:	Jack Zika	(303) 279-1549	(303) 505-9488 (Pager)
Instructor:	Mark Howard	(303) 278-7519	MHoward@spaceimaging.com
F3B/F3J:	Mark Howard	(303) 278-7519	MHoward@spaceimaging.com
Librarian:	Tracy Cochran	(303) 934-8838	Tcochran@idcomm.com
Newsletter:	Jim Monaco	(303) 464-9895	JimMonaco@earthlink.net

Winch Masters

Bob Rice	(303) 745-5629	Bob.rice@tobin.com
Bob Moffett	(303) 426-0328	Rtm0005@aol.com
Shannon Bingham	(303) 877-7557	binghams@boulder.earthnet.net
Gary Lewan	(303) 277-1375	
Dr. Dan Williams	(303) 439-7777	drdandc@juno.com



Directions to Field

Take I-76 to exit 16. Turn left and follow the frontage road through the circle onto 120th eastbound towards the airport. Take 120th East to Tower Rd. Continue straight through traffic light and look for the sod sprinkler on the left. We are on the southwest corner of that part of the sod farm.

Flying for RMSA members and accompanied guests only.



Rocky Mountain Soaring Association
 1123 S. Oakland St
 Aurora CO 80012

First Class Mail

Forwarding Address Requested