



Thermals

Newsletter of the Rocky Mountain Soaring Association

July 2007

AMA Chartered Club 1245

Volume XXXI Number 7

President's Message Mike Verzuh

Well it looks like the heat of the summer is on, but that can mean great soaring conditions. We still have cool nights to create the temperature differential for rising air. Please get out and enjoy the soaring.

I want to thank the members for supporting Dr. Dan and our first Mentor Day. The wind didn't cooperate well, and it was a bit blustery for most beginners so turnout was low. John Kappus will host our next Mentor Day on Saturday July 14th. John will focus on hand launch skills. Please come out and enjoy some expert advice, even if you don't have a hand launch you will be able to get support.

Our July club meeting will be held at the club field on July 8th just prior to July Open contest. It turns out that the F3J Team selections will be held the weekend just before the September Challenge Cup contest, which is currently scheduled for September 9th. We will discuss this date and the potential to recommend a change.

That's it for this month. I hope this message finds everyone truly able to enjoy the local soaring conditions, and I wish all your families the best!

Mike Verzuh
Rocky Mountain Soaring Association President

Treasurer's Report 06/17/07 John Pearson

Savings: \$704.36 (05/31/07)
Checking: \$1147.33 (06/05/07)

Next Meeting:

Date/Time July 8th
Location: At Open contest
Program: See Presidents message

RESULTS

June Open Contest

Contest Date: 6/10/07

ID	Class	Name	Place by Class	RD 1	RD 2	RD 3	RD 4	RD 5	RD 6	Raw Total	Rounds Flown	# Thro w Outs	Total	Norm by Class	Norm by Contest	Place by Contest
	M	Masters										1				
1	M	Jim Monaco	1	1000.00	1000.00	999.93	1000.00	1000.00	1000.00	5999.93	6	1	5000.00	1000.00	1000.00	1
6	M	Cody Remington	2	998.53	880.59	1000.00	986.52	1000.00	1000.00	5865.64	6	1	4985.06	997.01	997.01	2
5	M	Skip Miller	3	993.92	982.33	998.05	1000.00	995.39	821.33	5791.02	6	1	4969.69	993.94	993.94	3
9	M	Bob Lewan	4	1000.00	1000.00	1000.00	986.83	966.61	396.44	5349.87	6	1	4953.44	990.69	990.69	4
10	M	Shannon Bingham	5	203.69	929.11	907.40	996.19	796.32	992.90	4825.60	6	1	4621.92	924.38	924.38	5
8	M	Charles Miller	6	760.23	742.88	804.58	987.39	990.83	922.78	5208.70	6	1	4465.81	893.16	893.16	6
2	M	Jon Padilla	7	814.77	700.31	941.01	991.74	571.36	490.50	4509.69	6	1	4019.19	803.84	803.84	8
7	M	Lenny Keer	8	479.75	568.16	859.32	999.28	664.00	792.62	4363.12	6	1	3883.37	776.67	776.67	10
	S	Sportsman										1				
4	S	Steve Suntken	1	499.88	965.85	923.85	985.01	814.32	774.76	4963.67	6	1	4463.79	1000.00	892.76	7
3	S	Gary Slocum	2		816.40	990.10	958.41	949.47	219.80	3934.19	5	1	3934.19	881.36	786.84	9

June 16th Mentor Day Report

Dr. Danny Williams

I had finished the club trainer (the Multiplex Easy Glider) on Friday before the Mentor Day and was able to take it out for a test ride at lunch. It flew great and was skied out so I was sure it was ready for the new folks on Saturday. The morning was beautiful and several of the club members flew the trainer and pronounced it good to go. The wind began to pick up about 11:00 and was blowing pretty hard by the time our visitors arrived. Two visitors came out about noon and I recognized them as a father and son I knew from working at IBM. I took them out to try the trainer, but the windy conditions made flights short and difficult. The donated Futaba transmitter put the second aileron on channel 6 and we discovered that the trainer box would not operate the second aileron. That meant that training was relegated to giving them the box after launch and then grabbing it to save the plane when they got in trouble. We actually got quite a few short flights in and they were having a ball. Then we had a disaster on launch and the Easy Glider went in hard. The good news is that it is foam and easy to repair. I had the thing back together in about 30 minutes after I got home.

The newcomers thoroughly enjoyed themselves and this week went out and got a glider of their own. They will be joining the club and coming out to fly with us. Please be sure to welcome and help Wayne and Brian if you see them out at the field.

So we got 2 new members on our first day - I think that is a success. I'm hopeful that we will see more novices at our remaining mentor days. Thanks go out to Dr. Dan, Steve and Cody for being out there to help, even though there was not much for them to do.

See you at the next one - John Kappus will be doing handlaunch - it should be good...

Jim Monaco

June 17th HLG Contest Report

CD John Kapus

Our first contest of the HLG series was held on Father's Day. This was a rescheduled event moved from the original date of Mother's Day. It was hoped that the guys would have more latitude on 'their' day, but this also wasn't too good a date and participation was lighter than expected.

The five fliers who attended were greeted by a great day with abundant thermals and low winds. As the first contest, most fliers had things to work through during the contest. I had not flown all year and was rusty. Joseph showed up with a new Encore, but no program in the radio. Steve sported a new Light Hawk, which he was still refining. Everyone also had a bit of trouble. I had a battery pack fail with the wires turning black and falling apart. Joseph broke the Encore between rounds by trying a different radio program with the ailerons reversed. Jim missed a round when Joseph had to use his plane to finish the contest and both Dave and Steve had to quit in the middle of a round with aircraft issues. It looks like we could have all benefited from a little more time checking things out before we got to the field.

We flew 6 rounds instead of 7 to help Joseph get out a bit early. I think he said something about having a date! Joseph flew well, winning every round with near max scores. I came in second, not quite able to hang with our junior. Dave placed third flying very well and would have scored even better without his second round troubles. Steve and Jim were close behind.

I think we all had a lot of fun at this contest and now are warmed up and waiting for the July event. Come on out and join us!

	1		2			3			4		5		6		Grand Total	Norm Score	Place
Name	norm score		norm score	total		norm score	total										
Joseph Newcomb	B	1000	B	1000	2000	B	1000	3000	B	1000	4000	B	1000	5000	6000	1000	1
John Kappus	B	998	A	1000	1998	B	843	2841	A	1000	3841	A	973	4814	5789	965	2
Dave Jensen	A	1000	A	263	1263	A	975	2238	A	608	2846	A	1000	3846	4807	801	3
Steve Suntken	A	901	A	683	1584	B	431	2015	B	941	2956	B	795	3751	4708	785	4
Jim Newcomb	A	928	B	871	1799	A	1000	2799	A	698	3497	B	3497	3497	4497	750	5

SUNDAY July 1st HLG

CD John Kapus

Entry Fee: \$10.00
Registration: 9:00 AM
Pilot's Meeting: 9:15 AM
First Flight: 9:30 AM

Tasks: Tasks derived from the International Hand Launch Contest. 6-7 rounds will be flown.

SUNDAY July 10th Open Contest CD Mike Verzuh

REGISTRATION	8:00 AM Seniors \$10.00 Juniors ??
PILOTS MEETING	8:15 AM
FIRST FLIGHT	9:00 AM

Battery Masters - Please be sure to have your batteries at the field by 8:15 AM "topped-up" and charged

TASKS F3J type with winches

Landing: AMA landing tapes.

Scoring: Man on Man, random flight group assignment.

Rounds: 6 rounds with 1 throw out.

Task: First and Last flights are 15 minute target time. All others are 10 minutes.

SATURDAY July 14th HLG MENTOR DAY John Kapus

This event is from 10:00 AM to 2:00 PM

This mentor day will be for hand launch only and will have:---

1/ Hand launch Clinic - this is an introduction to hand launch glider flying.

2/ John will describe and demonstrate launching and thermalling techniques as well as coaching participants on same.

3/ John will also describe the most common tasks that are encountered in HL competitions.

Potpourri

I would appreciate it if you could spread the word about the Albuquerque Soaring Association's annual F5J Electric Soaring World Challenge. To be held September 14-16 @ the Sod Farm south of Moriarty NM. Friday will be check in and test flying. The contest flying will be all day Saturday and 1/2 day Sunday.

Blue Skies NM is our best regional contest (right now) for hand launch, and its growing. We'll take good care of your guys (RMSA members) with flying, food, and fun. At this time we have Dave and Gary Jensen coming from CO. Blue Skies Over New Mexico Hand Launch Contest is scheduled for July 13-15 (I think only 14-15 are the contest days). Should be a good turnout and a lot of great flying. Check our website at soarabq.org
Buzz Averill

I have high hopes that a 2-day Blue Skies over Colorado could be in our future. What do you think? A strong regional series will stimulate hand launch in our area and give our HL flyers a lot of fun experiences. If you are interested, I'm willing to participate. I think there are several ASA guys who would support it, as well as a growing group from Texas, Arizona, and perhaps California.

Here is an HLG clinic outline from Oleg Golovidov, circa 2005.

Aradhana Singh

HLG Clinic Notes

1. Model Setup

Control System

- use quality servos with minimum gear slop (JR-241, MX-50, HS-55, D-60)
- tight pushrod connections, zero free-play!
- using small servo arms and max servo throws reduces the effect of the servo play
- pull-pull lines - bad! DO NOT USE!
- tape hinges - check often and repair if necessary
- try to achieve a zero slop control system - a DLG at high speed is very sensitive to control play and trim changes!

- beware of servos with temperature drift! can be disastrous during a contest

Structural Integrity

- airframe stiffness is paramount for good launch height - tailboom, wing attachment, vertical tail, horizontal tail - no movements, weak spots, cracks, etc.
- check wing attachment bolts often
- check control rods/clevises/etc. often
- check fin and stab attachment points often

Ballast

- every -good- glider needs ballast in windy weather! If your glider does not need ballast, either it is too heavy, or you have not flown in windy weather
- install a ballast system if your plane does not have it
- test your glider with full ballast in strong winds BEFORE going to a contest

2. Launching

- set the CG and elevator trim so that the model pulls up slightly at high speed - use a dive test or just gradually increase throwing speed and observe the model's behavior
- always launch into the wind!
- stance - glider on the downwind side
- make 1-2 steps into the wind to get the model going wind up - lower body rotates first, the arm with the glider is left behind the lower body
- use your body torso as a coil spring, unwind just before the release
- release - the pushing leg well planted on the ground, lower body stops rotation, upper body and throwing arm catch up with the lower body, the body torso acts as a torque spring, minimum or no wrist motion, absolutely no elbow bending/pulling, the throwing arm must be fully extended and relaxed
- launch presets - elevator up 0-5deg, rudder - neutral or outside 5-15deg, some models may launch well with no preset at all
- glider must rotate to near vertical trajectory very soon after the release to get the maximum height
- minimum control inputs during the climb out!
- push over when the glider speed is slightly higher than the normal level speed
- adjust the trajectory depending on the wind - turn off the elevator launch preset sooner to get a shallower angle; in very strong winds no elevator preset may be best
- launching into the thermal behind or to the side of you – launch into the wind (always!) with a slight bank angle, do a very lazy half turn while climbing, use minimal control inputs, do not forget to push over and remember to account for wind speed - ground speed
- must be much higher than with the regular launch into the wind

3. Finding Thermals

- think about the "river of air" at all times: any parcel of air, good or bad, travels above the ground with the speed and in the direction of the wind.
- observe your model's behavior carefully, learn to recognize when
- the model is in lift (it goes up!) or in sink (it goes down!)
- if you went through a good parcel of air, remember its position relative to the ground, mentally estimate how fast it is moving and in what direction; turn the model back and intercept the good air parcel at its new predicted position; do not go back to the original location unless the wind is very light when circling in a thermal, never try to stay in the same location
- relative to the ground; remember the "river of air"
- use wind shifts around yourself as pointers to find the nearest thermal; rising air in the thermal sucks the surrounding air near the ground into itself - the direction of the relative wind change points to the thermal
- the best thermal marker is another glider circling in it; do not ever be shy about using somebody's thermal; try to circle in the same direction as the first guy in the thermal, if you can; avoid mid-air collisions
- learn to pay attention to other models in the air and learn to judge the strength of the thermal at a quick glance; if a model is flown smoothly but is still struggling to stay level in a thermal, it is obviously not a very strong one; if a model is flown poorly but is still going up, it is probably a very strong thermal

4. Contest Flying

- read and understand the task -before- the round is started! (total time task, limited throws task, extra time in the window or no extra time - 4x2 in a 10min window versus 5x2) for total time tasks:
- launch immediately at the start of the window
- do not spend any time on the ground
- do not ever land off field! It is better to cut the flight short and come back to the field than lose all of that flight time
- for limited throws tasks:
 - watch other competitors closely
 - watch ground signs (wind shifts)
 - launch when any sign of lift is observed (competitor's plane or wind shift indicates a thermal)
 - be aware of the window time - do not spend too much time on the ground just to make 2-3 short flights at the end of the window!
- do not over-fly your target time unless there is some extra time in the window, especially in a total time task or a full window task (5x2 in a 10min window) - land as close as possible to the target time; over-flying every flight by 5-10sec takes 40-50sec or more off your maximum achievable score
- launch high! do not forget to concentrate on the launch technique and to use all of your power for launches during a contest round - do not let excitement and rush of the competition kill your launch
- if you know that you can't launch well while rushing, take 2-4 sec of extra time to get that perfect launch, it may give you much more flight time than those 2-4 seconds lost between the flights
- try to be ahead of the task - if you know you can easily finish the current flight, go upwind and scope the air that is coming towards you, find the thermal that you can use on the next flight
- if you can't scope the air yourself pay careful attention to other airplanes in the air before you come in for landing and choose your direction for the next flight before you launch learn to use ballast efficiently and do not hesitate to use it during a contest as soon as it gets windy; landing out of field due to the strong wind will cost you much more than a lost thermal; if it is windy - ballast is your friend

5. Practicing

- always use a stop watch to time all your flights - you can't improve your skills if you don't measure your performance
- fly contest tasks if at all possible - find a helper (wife or flying buddy) and simulate a full blown contest environment - working time, score sheet, total points
- get a talking timer from Radio Shack, attach it to your Tx, always use it during your practice sessions to simulate a working window
- practice in bad weather days as well as in good ones - if the wind is strong or the clouds covered the sky and there is no lift it is a perfect practice day (a good chance to test your plane with full ballast, or improve your launch technique in zero-lift and zero-wind conditions)
- suggested practice tasks:
 - maximum number of 20 second flights within 4 min (6, 8) window; launches must be higher than 50 ft - practice landing approach timing and quick turnaround and re-launching
 - maximum number of thermals "bagged" within a 10min window (to "bag" a thermal, the glider must make a full 360 deg turn while climbing or 3 turns without any loss of altitude)
 - max flight time is 1 min (2 min), find a thermal within a 1 min flight, land and re-launch into the same thermal - count the max number of times you can re-launch into a previously found thermal; if you can't re-launch into the same thermal for the second time, you must find a new one during the 1min flight (after making a full climbing turn in the previously found thermal)

For Sale

Supra, white/red, excellent condition, with new stronger factory stab \$1,600.00
 Volz wing-max XP servos in wing. Jr 3421 in fuse. Comes with red Jim's Bag and fuselage stand.
Tom Gressman 303-246-3194

Pike Perfect, Purple over red, excellent condition, everything but receiver. \$1,150.00
 Or with Airtronics PCM receiver \$1,200.00.

Bob Lewan, blewan@netscape.com. 303-884-3142.

Rocky Mountain Soaring Association - 2007

RENEWAL _____ NEW MEMBER _____ SPONSOR _____

Please complete the following information for our records:

Family Memberships - Please make and complete a copy for EACH flying family member!

Name : _____ Need name badge? Yes

Address: _____ Year Joined RMSA: _____

_____ Home Phone: _____

_____ Work Phone: _____

AMA #: _____ AMA Contest Director? Yes No

AMA Class Open Youth Family Birth Date: ___/___/_____

LSF #: _____ LSF LEVEL: ___ NSS #: _____ E-Mail: _____

RMSA Membership Class Senior Only Senior W/Family Associate Family
(Note - Senior W/Family receive THERMALS - other Family members check Family Box)

Non-Flying Family members: _____

RMSA Competition Class Novice Sportsman Master

RMSA Offices Held _____

MODELS OWNED

PLANE SPAN COLOR (Top,Bott.,Fuse) CLASS (Open,HLG,Std.) FREQUENCY

Interests: Sports Flying T/D contests HLG Contests NSS Soar-ins F3J
F3B X-C contests Slope contests Other _____

Past Achievements: _____

Dues: \$ 7.50 New Member Initiation Fee
\$ 5.00 Junior - under 17
\$ 25.00 Senior - individual 17 and over
\$ 30.00 Family - any number (same address)
\$ 8.00 Associate (newsletter only)
Make checks payable to RMSA

Comments and suggestions are ENCOURAGED! Please include these with your form!

REMEMBER TO SIGN THE FIELD RULES!!!

Please send to: **RMSA**
% Bob Rice
1123 S. Oakland St.
Aurora, CO 80012

ROCKY MOUNTAIN SOARING ASSOCIATION FIELD RULES

1. The sod farm operations take precedence over **ALL** activities. We use the field at the convenience of the owner.
2. All members will follow **ALL** instructions from **ANY** sod farm personnel without question.
3. When sod farm operations are occurring during a flying session it is **OUR** responsibility to ensure that we will not interfere with operations. If it is unclear as to what is happening or where they intend to mow or work try to talk to workers or management and always move equipment or vacate the premises if necessary. Some workers do not speak very good English – in that case you must make every effort to avoid conflict or interference with operations.
4. Park only in the designated parking areas Do not park on grass, dirt or roads.
5. Avoid setting up on newly seeded areas or young grassy areas. The nice grassy areas are better to land on anyway!
6. Establish a frequency control pole and tag system! Frequency control is to be in effect at all times!! All members will post their frequency control tags on the pole and if there are conflicts, please exercise safety sense as well as share the flight time.
7. Parking and pit areas should be as condensed as possible for the safety of launch and landing.
8. Establish flight line areas for winch launch, high start launch, and hand launch that are separate for the sake of launch, flight & landing safety.
9. Flying over the parking/pit areas at less than 30 feet is prohibited. Doing so in competition **WILL** result in a zero flight score and during R/R flying a disciplinary action by the club.
10. No aerobatics or speed runs over the parking/pit/Launch/Landing zones.
11. Do not launch if a plane is circling in a launch zone: vacate the launch zone as soon as possible if someone is waiting to launch.
12. When entering a thermal occupied by other aircraft, enter in the same direction as the first aircraft
13. Landing aircraft have the right of way!
14. In the event of no mechanical retriever, please shag your own chute/line for the flight
15. Please share the usage of club equipment so that all have equal flight time.
16. Please be courteous and helpful to your fellow flyers as well as informative to all guests/spectators. Enjoy yourself and others!!
17. Absolutely no debris or trash is to be left on the field! Please take it home with you for disposal.
18. Make sure that your plane and electronics are airworthy before each flight. Exercise good safety sense in your flight
19. The aircraft will have an identification name/address or AMA number on or in the model in case of loss.
20. You **MUST** tag your winch/high start spikes or stakes with fluorescent tape so they are easily spotted on the field by all concerned. Members may be fined \$10 for each stake or nail not so marked. Previous damage to sod farm equipment from spikes left in the ground have made this rule **EXTREMELY** important.
21. Absolutely no alcoholic beverages will be consumed, prior to or during participation in any model event on the flying field.

I understand and will comply with all RMSA field rules:

Signature

2007 RMSA Contest/Event Calendar (Revised 3-29-07)

Date	Type	CD	Name/Notes
February 5	RMSA Meeting		
February 10-11			<i>SWC - Phoenix</i>
<i>February 25</i>	<i>Combo (PPSS)</i>	<i>Bob Avery</i>	<i>Snow Fly</i>
March 7	RMSA Meeting	Wayne Angevine	Thermal structure and behavior as related to sailplane flying.
March 11	Open*	Mike Verzuh	Combo Event Open + 2m + RES
<i>March 24</i>	<i>Combo (PPSS)</i>	<i>Chris Keller</i>	<i>March Madness</i>
April 15	RMSA Meeting		On field at competition
April 15	Open*	Bob Moffett	
<i>April 22</i>	<i>Combo (PPSS)</i>	<i>Joel Zellmer</i>	<i>Humps and Bumps</i>
May 1	RMSA Meeting		
May 6	Open*	Steve Suntken	F3J with Winches
May 13	HLG**	John Kappus	Rescheduled to June
May 19	Electric (PPSS)	John Read	Watts O Fun
May 26-27	F3J in the Rockies*	Jim Monaco	
June 2-3	IHLGF		IHLG - California Event
June 5	RMSA Meeting		
June 10	Open*	Jon Padilla	F3J with winches
June 16	Mentor Day	Dr. Dan	
June 23-24	F5B Electric	Lenny Keer	F5B in the Rockies
<i>June 24</i>	<i>Combo (PPSS)</i>	<i>Dave Kurth</i>	<i>Summer Solstic</i>
July 1	HLG**	John Kappus	
July 3	RMSA Meeting		
July 8	Open*	Mike Verzuh	F3J with winches
July 14	HLG Mentor Day	John Kappus	Saturday
July 22-28			<i>Soaring NATS - Muncie ID</i>
<i>July 21</i>	<i>Combo (PPSS)</i>	<i>Greg Tarcza</i>	<i>Height O' the Season</i>
August 7	RMSA Meeting		
August 12	Open*	Dr Dan	Combination event Open +2m + RES
<i>August 18</i>	<i>Combo (PPSS)</i>	<i>Austin Cleis</i>	<i>Howling Coyote (night fly)</i>
August 26	HLG**	John Kappus	
September 4	RMSA Meeting		
September 9	Open*	Jim Monaco	Colorado Challenge Cup
September 23	Scienturfc Appreciation Day		Also Family Day
September 30	HLG**	John Kappus	
<i>September 23</i>	<i>Combo (PPSS)</i>	<i>Bob Avery</i>	<i>Soar Bash</i>
October			<i>Visalia Fall Fest</i>
October 2	RMSA Meeting		
October 14	Open*	Shannon Bingham	
<i>October 20</i>	<i>Combo (PPSS)</i>	<i>Chris Keller</i>	<i>Witches Brew</i>
November 7	RMSA Meeting		
November 11	Open*	Don Ingram	
<i>November 18</i>	<i>Combo (PPSS)</i>	<i>Jerry Murphy</i>	<i>Turkey Shoot</i>
December 9	RMSA Banquet	Mike Verzuh	

*Club Open points contest (Best 6 Scores)

**Club HLG points contest (Best 3 including the PPSS HLG event)

Italics indicates PPSS events held at their location in COS



2007 Board Members

President: Mike Verzuh
Vice President: Steve Suntken
Secretary: Bob Rice
Treasurer: John Pearson
Past President: Jim Monaco

970 532 0638 <mailto:mike@verzuh.com>
303 477 6184 <mailto:flyingdogtwo@cs.com>
303 745 5629 <mailto:briceflyer@comcast.net>
303 306 6800 <mailto:JTP1006@earthlink.net>
303 464 9895 <mailto:JimMonaco@earthlink.net>

Member Support

<http://www.rmsadenver.com>
Chief
Instructor: Mike Verzuh (970) 532-0638 (303) 505-9488 (Pager)
Librarian: Tracy Cochran (303) 934-8838 Tcochran@idcomm.com
Newsletter: Tony O'Hara (303) 948-2576 tonyoco@peoplepc.com

Winch Master

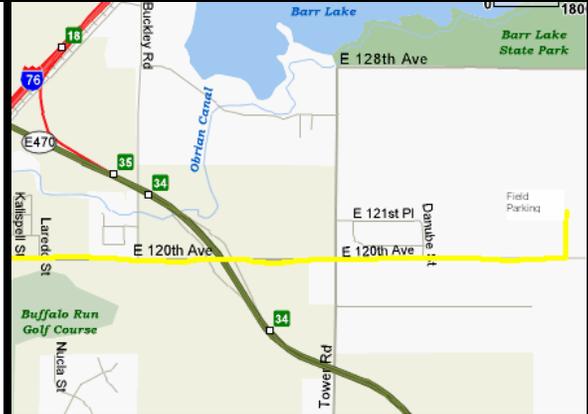
Mike Verzuh (970) 532-0638 <mailto:mike@verzuh.com>

Battery Masters

Bob Lewan
Skip Miller
Joseph Newcomb
Cody Remington
Dr. Dan Williams
Steve Suntken

For Winch Use:

If you are interested in using a club winch please contact Mike for the first time, and I will insure you have all the details for trailer access. Also if you are a new member and have not had a winch operation and safety briefing we will coordinate that.



Directions to Field

Take I-76 to exit 16. Turn left and follow the frontage road to the stoplight and turn east onto 120th eastbound towards the airport. Take 120th East to Tower Rd. Take 120th east of Tower Rd about 3/4 miles. We fly on the North side of 120th which is the SE quadrant 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