



# Thermals

Newsletter of the Rocky Mountain Soaring Association

February 2007

AMA Chartered Club 1245

Volume XXXI Number 2

## President's Message    Mike Verzuh

Looks like we really have a battle with Old Man Winter going and we sailplane flyers are on the losing end. There is still the chance for Hand launch or electric flying, especially if you can catch your ship in the air on landing! I know Steve is still getting in a lot of hand launch practice at the club field routinely – go Steve! The South West Classic is upon us and RMSA is sending a strong contingent this year. The latest Phoenix weather is cool, 60s with some rain, so hopefully the field will soften up a bit. I don't know about you but I'm thinking even 60s sound pretty great right now.

The club contest schedule is set, and I want to thank all the returning CDs for supporting the season. So far the yearly Pro-Am warm-up contest is not on the schedule. Jim Monaco can across a great idea that may be a better replacement for it. It is called "Mentoring Day".

Mentoring Day is at least one day a month that is dedicated to helping build skills of our members and to help prospective members. We will need member volunteers to staff these days. We would expect that on those days the mentor would be at the sod farm for a certain number of hours (perhaps 10:00 to 2:00), set up a winch and perhaps a hi-start and be available to assist any and all that show up to improve their skills or learn to fly. The day could start with a skill building task for the first 90 minutes where the mentor demonstrates and then helps attendees with specific skills – for example launching, or landing or air reading, or building or repairing... etc. The rest of the time is open mentoring where the mentor assists the attendees with whatever specific needs that they want to improve. It is basically open flying with mentoring assistance.

We will put together a club trainer with a buddy box setup for helping raw beginners and to allow prospective members to try their hand. The trainer equipment will live in the trailer and probably will need to be charged the morning of use.

To make this successful, we need to have at least 1 mentor volunteer each month of the normal flying season – that means 9 volunteer day's minimum. If we get more mentor volunteers we can extend the number of available days. If you think this is a worthwhile activity and can help by volunteering one or more days, please email me back. When you do this also consider what program you might do for the first 90 minutes and give me your ideas. Remember – you do not need to be the top guy in any activity to be a mentor. We are targeting this as a means to help less skilled pilots and most of us are capable of helping beginners along.

If this is a good idea and we can get enough mentors, we will also create a brochure for the hobby shops advertising these sessions in an attempt to attract some new pilots.

So I need input from the membership on whether this is an attractive idea or not. How many of you would be interested in attending some of these sessions? *Please drop me an email with your interest and especially if you would like to volunteer as a mentor.*

Finally, go RMSA at the SWC and bring back a first place team win!

**Mike Verzuh**  
**Rocky Mountain Soaring Association President**

**Vice President's Message      Steve Suntken**

Tony came up with a very good idea to try and spice up our newsletter by suggesting we start a Q & A column. (See below before adverts) I would invite all members to give this a try at one time or another. We're going to have to get some more involvement going within this club if we want to attract new pilot/members.

In doing so,

Tony also posed the first question. "Anyone's impressions on the setup for the F5J style Omega." More to the point, Tony asked how some like to set this plane up and their impressions concerning Flap vs. Spoilers. It just so happens that this was one of the first high performance planes I learned on few years back. When I bought this plane from Lenny, he had it setup so the ailerons' would go into the spoiler configuration. So naturally, I flew it like this for quite awhile. I eventually started experimenting and eventually ended up using the ailerons as flaperons so I could 'drop' the surfaces during landing. Coupled with plenty of 'down' elevator coupling. I say the word "Plenty," as I've found this plane seems to need more airspeed than usual to keep from stalling. That's why I would find it usually landed at almost a 35\* (nose down) angle. But this wasn't much of a worry as the plane was so lite and still floated at such a steep angle. If set up correctly, I could bring this plane into a nice, slow (almost) floating stop. Rather than the skid landing one would get using spoilers (and no skag). Because, as people know, spoilers only kill lift and does very little in slowing, in most cases

**Steve**

**Next Meeting:**

**Date/Time:** TBA

**Location:** TBA.

**Program:** TBA

## Watts Up with E-Soaring

The continuing development in electric power systems makes this an excellent time to consider adding an electric sailplane to your fleet. Recently, several trends have started to emerge. First, the technology of Li-Poly batteries keeps getting better. The best cells now are able to handle currents of up to 50C for short durations and the cell capacities have been getting larger. This means that it is no longer necessary to use parallel packs for high performance. This makes the packs simpler, more cost effective, and durable. Most of the competition classes have or are considering changes to their rules to allow Li-Poly batteries to be flown and it appears that NiMH cells will soon be as obsolete as NiCads.

The second trend that has been occurring is the availability of many new brushless outrunner motors. An outrunner motor is designed differently so that it's outer case revolves along with the prop. These motors tend to have a low Kv value, which gives them a lot of torque. Because of this, they are able to turn a relatively large prop without the need of a gearbox. This lowers the cost and complexity of the power system. Outrunners are less efficient and heavier than a comparable geared brushless motor, but their simplicity and low price makes them a good choice for sport flying. The popularity of "3D Foamy" models has brought many new brands of outrunners to the market at very attractive prices.

Speaking of outrunners, the SP400 class of F5J competition seems to be in its last days. There is a new entry level class taking hold using a small outrunner motor system. There are some specifications to regulate which motors are suitable, but the Hacker A20-20L motor is the run-away favorite. These models can be flown on a 7-cell NiMH or 2-cell Li-Poly battery pack and perform quite well with that power. They are less trouble than the old SP400 systems, more durable, and make a better setup for sport flying too.

F5B models are the top of the food chain in electric sailplane competition. This competition requires the model to climb to altitude and then (while gliding) fly as many laps as possible on a defined course within 200 seconds. The model may climb as many as 10 times outside the course, but always gliding while on the course. After that a 10-minute duration task is flown, along with a spot landing. The models flown at the world competition level are currently powered by 16 NiMH cells, though a rule change allowing a 4S Li-Poly battery is on the horizon. There is also a 10-cell class which is easier to fly. These models have a larger wingspan, lower weight, and less power which makes them excellent for sport flying also. Otherwise, they fly by the same rules and the FAI class. A rule permitting a 3S battery instead of the NiMH cells is expected soon.

Lenny Keer

## Potpourri

This is a new section where every one is encouraged to ask questions; provide answers and even give unsolicited tips. I'm sure most of the info will directly relate to RMSA activities however, even remotely related ones will be welcome (subject to space available!)

For example, I was directed to a web site (of Utah Flyers) about 6 months ago that had some rather spectacular videos of exploding Lithium Poly batteries.

Here it is if anyone is interested <http://www.utahflyers.org/movies/Lipofires.wmv>

Nothing like that visual info to reinforce necessary safely precautions that we all need to take when using these cells, particularly now that (as Lenny says above) they are becoming very popular!

Let me suggest that your answers to published questions are made directly to the enquiring person in order to save time. Also the original questioner sends all answers (these can be condensed if necessary) and their results- where appropriate, to me for next newsletter insertion. Also Jim has indicated that he can add these question/answer topics to the RMSA web site to provide a resource for many of us.

### Here is my first question!

I want to use ailerons on a 1.5M electric soaring Omega to slow glider up during precision landings. What are the pros/cons of controlling them up (as spoilers/crow) or down (as flaps)?

Tony O'Hara

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## For Sale

**Schulze 6-330 charger with latest software upgrade      \$130.00**

Excellent 2-port charger for Lipo, NiMH, and other cells. Retails for \$200, I picked this one up at a very good price to pass along to a club member.

**Lenny Keer**

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## Renewal Reminder

It's time to renew your memberships. Renew with the application  
in this newsletter, (below)

Or on-line at <http://www.rmsadenver.com>

# 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:

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Signature

## 2007 RMSA Contest/Event Calendar (Revised 1-24-07)

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 6	RMSA Meeting		
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 3	RMSA Meeting		
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	
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 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 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	Scienturfic 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**

<b>President:</b>	<b>Mike Verzuh</b>	<b>970 532 0638</b>	<a href="mailto:mike@verzuh.com">mailto:mike@verzuh.com</a>
<b>Vice President:</b>	<b>Steve Suntken</b>	<b>303 477 6184</b>	<a href="mailto:flyingdogtwo@cs.com">mailto:flyingdogtwo@cs.com</a>
<b>Secretary:</b>	<b>Bob Rice</b>	<b>303 745 5629</b>	<a href="mailto:briceflyer@comcast.net">mailto:briceflyer@comcast.net</a>
<b>Treasurer:</b>	<b>John Pearson</b>	<b>303 306 6800</b>	<a href="mailto:JTP1006@earthlink.net">mailto:JTP1006@earthlink.net</a>
<b>Past President:</b>	<b>Jim Monaco</b>	<b>303 464 9895</b>	<a href="mailto:JimMonaco@earthlink.net">mailto:JimMonaco@earthlink.net</a>

**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](mailto:Tcochran@idcomm.com)  
 Newsletter: Tony O'Hara (303) 948-2576 [tonyoco@peoplepc.com](mailto:tonyoco@peoplepc.com)

**Winch Master**

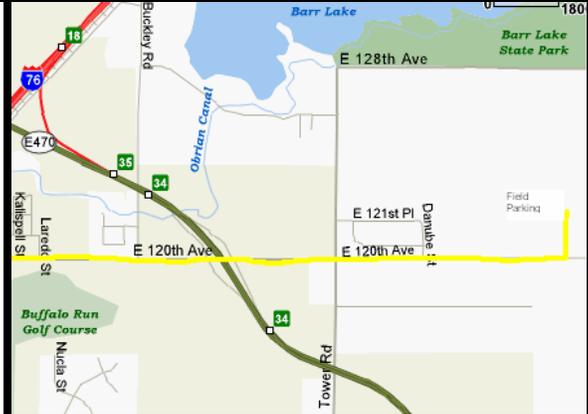
Mike Verzuh (970) 532-0638 <mailto:mike@verzuh.com>

**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 120<sup>th</sup> eastbound towards the airport. Take 120<sup>th</sup> East to Tower Rd. Take 120<sup>th</sup> 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*