



Skip Miller Launching at the SW Classic

# Thermals

Newsletter of the Rocky Mountain Soaring Association

March 2000

AMA Chartered Club 1245

Volume XXIV Number 3

## President's Message

Greetings Glider Guiders - Spring is in the air. It may be moving at about 30 gusting to 50, but nevertheless in the air. Hopefully your model sailplane is too. I hope March finds all of you well and looking forward to the soaring and contest season with anticipation.

This year has definitely gotten off to a good start with our club making an excellent showing at the Sunbird Hand Launch and Southwest Classic in Phoenix. In the Sunbird one-design, Tom Gressman (4th) and Lenny Keer (7th) gave Joe Wurts (1st) a run for his money flying Dave Thornburg's (5th) original design loosely acknowledged as the first "hand-launch" in the approximately 60-inch class. I had the pleasure of timing for Dave Thornburg on a couple of flights and really enjoyed meeting him. Watching 15 classic and roughly identical models being flown into the air in alternating rounds was a blast.

In the Dave's original rules (anything goes) part of the contest, our guys again made a great showing with Skip Miller (2nd), Charlie Miller (7th), Mark Howard (9th), Dusty Miller (13th), Shannon Bingham (18th) and Tom

Gressman (30th) making a fine showing among the 46 pilots registered. Mostly 60-inch models were flown in this second component of the contest. This contest included some of the best of the California HLG pilots with Joe Wurts, Paul Anderson, Arthur Markiewicz, Gordon Jennings and George Joy chasing that hot air with our own RMSA pilots.

The Sunbird will stand as a great precursor for the International Hand Launch Glider Festival where I hope we will again make a great showing. By the way, The official registration packet for the IHLGF will be mailed the first week in March. If you have participated in the IHLGF in any of the last 3 years, you are on the TPG's mailing list. If you have moved during that time or if you would be interested in additional information or receiving a registration packet, please give Ron Scharck a call at 619- 725-5434 or e-mail him at Scharck@aol.com.

The Southwest Classic was also a windfall for RMSA competitors. The Classic is another "Visalia"-style contest with 140 pilots flying out of 177 registered. Skip Miller (2nd), Dusty Miller (9th), Charley Miller (27th), Shannon Bingham (38th, hey, that's me in the middle of the first page) and Lenny Keer (83rd after an overshoot penalty negated a flight) contributed to RMSA finishing

## Next Meeting:

Date/Time: March 7, 2000 - 7:00PM

Location: Heli Port Hobbies  
1400 W 70 Ave  
Denver CO 80221-7023

SEE MAP INSIDE



# Rocky Mountain Soaring Association

2nd in team standings behind the Torrey Pines Gulls (TPG) team. This is significant since RMSA was flying against many of the best Southern California glider clubs and flew quite a few tough down-wind landings. Congratulations to Joe Wurts who again won the contest. Our own Mark Howard won the Rudder-Elevator-Spoiler (RES) division and the PPSS crew showed up in force and flew well. Barb Keer was also on hand to provide moral support and keep the belching and farting from getting too out of hand. All-in-all a wonderful four days of practice, competition, fellowship and SUNSHINE.

In other news, I have received contributions toward "Real Balls" bearings for the winches from nine pilots. Keep those pledges coming. Meeting attendance has also continued to be weak and we will be moving the meeting to a new location as advertised in this newsletter. At the last meeting, the central issue was the treatment of the Rudder-Elevator-Spoiler (RES) contests. Two proposals have been crafted that will be voted on given a quorum at the March meeting. If you care about RES competition and want to be involved in the decision, please come and vote. If we do not have a quorum, the RES contest series will consist of two non-sanctioned contests and the issue will be tabled until next year. The proposals are as follows:

**RMSA RES Contest Series - Optional Contests Proposal**  
The RMSA Rudder-Elevator\_Spoiler series shall consist of four contests. Two of these contests shall be the RES only contests currently indicated on the RMSA schedule. The RES ONLY contests shall award prizes to top three by class at the discretion of the CD. Two existing OPEN contests during the course of the year shall be identified (Tentatively May 7th and November 12th - by arbitrary and capricious selection by your club President) as RES OPTIONAL Contests. In the RES Optional contests, a pilot wishing to compete in the RES class must fly an RES model and be scored along with the pilots flying unlimited models. RES optional pilots' scores for the two contests will count toward the unlimited contest standings for the club championship. No unique ranking or prizes shall be given to RES pilots as part of the individual RES Optional contests other than those won as part of the individual Unlimited contest standings. The RES scores

from the two Optional contests shall (also) be applied toward an RES overall series score for the year. The best combined score of three of the four possible RES events shall be used to select an RES series champion and a second and third place pilot. Trophies shall be awarded for the RES series top three at the end of the year as RMSA currently recognizes the winners of the hand launch series. RES model requirements shall be identical to the RES rules for the AMA/LSF Nationals.

**RMSA RES Contest Series - Three Contests Proposal**  
A third RES contest shall be added to the contest schedule, tentatively, Sunday June 18th. The best combined score of the three RES events shall be used to select an RES series champion and a second and third place pilot. Trophies for the individual contests shall be at the discretion of the CD. Trophies shall be awarded for the RES series

top three at the end of the year as RMSA currently recognizes the winners of the hand launch series. RES model requirements shall be identical to the RES rules for the AMA/LSF Nationals.

There you go. What a mouthful. I hope one of these solutions satisfies the desires of the burgeoning RES competition class without impacting those interested in preserving the current Unlimited series structure. This continues to be an exciting year for the RMSA. Our pilots are flying better than ever and interest and intensity is very high. What a kick!

Regards, Shannon.

**FIELD NOTICE!!**  
The sod farm owner has asked us to stay OFF of the newly overseeded part of the property. If you can't recognize the established turf from the re-seeded turf then use this guideline...  
**Draw a line from the concrete pile in the parking lot to the center of the sprinkler – then stay to the SOUTH of the line!!!**  
**Be sure to comply so we can maintain our privileges at this beautiful site!!**

## March Club Business

**RES Contest Status** – The last and FINAL attempt to decide the status of RES events is to be determined at the March meeting. If a quorum is present we will decide the fate of RES scores according to the plans outlined by Shannon above – OR as amended at the meeting. If there is no quorum or agreement, the RES contests will remain as they are at present – fun fly events.



# Rocky Mountain Soaring Association

## March 12th Open Contest CD Lenny Keer

**Entry Fee:** \$5.00  
**Registration:** 8:30AM  
**Pilot's Meeting:** 9:00AM

**Current (2000) AMA membership is required and must be shown – if you haven't renewed – get to it...**

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

**Winchmasters:** Please be at the field by 8:00AM. If you are unable to attend please contact the CD to arrange to have your winch/retriever available

**Tasks:** Tasks will be man on man duration with times set according to conditions.

**Landing:** Regular AMA landing tapes will be used.

## Zagi Spring Fest - Fun Fly – April 2, 2000 CD Lenny Keer

**Entry Fee:** \$5.00  
**Registration:** 8:30AM  
**Pilot's Meeting:** 9:00AM **DAYLIGHT SAVINGS TIME!!**  
**CD:** Lenny Keer, Lenny970@AOL.com or (970) 352-1194

*2000 AMA cards will be required.*

**Tasks:** Tasks will be thermal duration, Zagi Limbo, Zagi Bowling, and more depending on number of entries and time.

**Airplane requirements:** Stock Zagi 400's with the stock speed 400 motor and stock prop. 7 or 8 cell nicads, 500 - 600 mah

This is guaranteed to be a blast! If you've got a Zagi bring it out and join the fun. If you don't have one, there is still time. They build in about a day and are easy to fly. Spectators are welcome too and we'll be putting on a great show!

**Lenny Keer (Lenny970@AOL.com)**



# Rocky Mountain Soaring Association

## 3rd Annual RMSA Pro Am Soaring Event

**What is it?**

A fun TEAM soaring event with 2-man teams picked randomly.

**Who is it for?**

Everyone - One Pro and one AM per team

**Why?**

To help new and current non-contest fliers learn to fly better, for our Masters to pass on their fantastic knowledge, and to tune up for the coming soaring season

**How will it work?**

One Pro and one Amateur will be paired as a team for the entire day. The team scores will be combined at the end of the day to determine the winning team.

- Round 1 will be the "Trim" round. In this round the Pro may fly 1 time to achieve the round duration, but the Am may fly as many times as they can/want to achieve their "best" score. Best is defined as a combination of 1 flight and landing. Landings may not be combined with a different flight. It need not be the last flight. During this round the pro may launch and fly the Am sailplane to help with trimming and setup, but only flights completely flown by the Am are eligible for scoring.
- Rounds 2-n will be standard AMA T1 International Duration with only 1 scoring flight allowed per contestant and FAI 15 meter landing tapes.
- Amateurs are allowed 2 popoffs per round - Pros are allowed 1 per contest.
- Rounds will be flown "open winch" which will allow the Pros to instruct the Ams in air reading and selecting a time to fly.
- Rounds will be 50 minutes long and you must launch prior to the round-end signal in order for the flight to count.
- Pro and Am MUST time for each other - Pro should help the Am learn the basics of timing.
- There are no field boundary requirements - land safely where you can for flight points.
- In order to balance the number of Pros and Ams it may be necessary for a single PRO score to count with more than one AM score (different teams) or vice versa..
- The CD will make the final determination of who is a Pro and who is an Am. Basically all Masters are Pros and all Novices or non-contest flyers are Ams. The Sportsmen pose a classification challenge. For simplicity - any flyer that went to sportsman in the last 1/2 of the 1998 season will be considered an Amateur unless in the opinion of the co-CDs the flyer is significantly closer to a masters skill than a novice. The guiding rule is fairness.
- Amateurs are encouraged to fly their plane up the winch with the Pro throwing and pedaling the winch, but for those unable or fearful of the winch, the Pro may fly the sailplane to the top of the launch, but must give the transmitter to the Amateur immediately when the plane is off the towline.
- Your first flight of a round must be your scoring round (except flight 1 for Amateurs), but after you have completed a scoring round you may fly as many flights for fun as you can in the rest of the flight window.

**Masters - *This is an opportunity to have some fun and help out our newest flyers and members... and tune-up for the contest season.***

**Beginners/Novices - *This is your opportunity to work one on one with a Master for a whole day, and even if you never fly another "contest" this will improve your soaring skills a great deal. Come take advantage of it...***

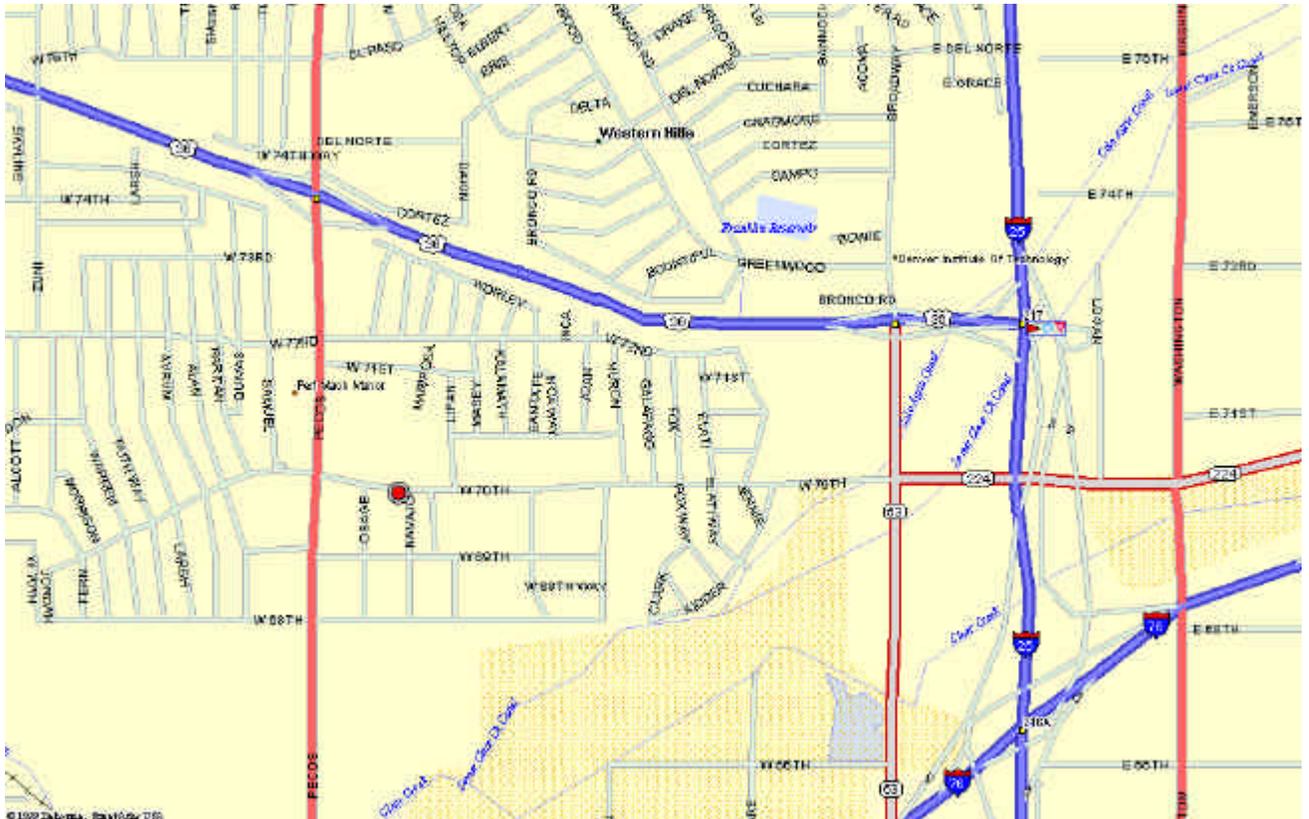
**Date:** Sunday March 19, 2000  
**Registration:** 8:30 AM to 9:00 AM  
**Pilot's Meeting:** 9:00 AM  
**First Round:** 9:15 AM  
**CD:** Jim Monaco (303) 464-9895 jim.Monaco@econvergent.com  
**No Entry Fee, AMA Membership Required**  
**Certificates will be awarded to the top 5 scoring teams and the top Pro and Amateur**



## NEW MEETING LOCATION

We have secured a new meeting place at Heliport Hobbies. Hopefully this will be more convenient to our members and we can remain there for the foreseeable future. The address is:

Heli Port Hobbies  
1400 W 70 Ave  
Denver CO 80221-7023  
(303) 430-8828



### Volunteer CDs Needed

We are currently in need of CD for 2 events on the calendar. The April 16 Handlaunch contest and the September 16 RES contest need someone to step up to volunteer. The HL contest is unsanctioned and the CD does not need to be an official AMA CD to run this event. The RES events may or may not need to be sanctioned (depending on the outcome of the March meeting). In any event, we can find a CD to officially run the event if we can get a volunteer to help significantly. Please consider helping out if you can.

### Ain't got a Zag-E for the Zag-E-Fest?

#### Don't despair, roll your own

I wanted a Zag-E but Glen (Action Hobbies) couldn't get any in from Trick because of a speed controller supply problem.

After waiting for several weeks and watching Lenny, Mark and my son Jeff having so much fun with their Zag-E's I decided I could wait no longer.



# Rocky Mountain Soaring Association

I went to Glen's and picked up a Zagi THL, a Zag-E canopy/motor tray kit and a pair of Zag-E props.

I had several 6 volt Graupner speed 400 motors and some speed controllers and a 8 cell, 500 mAh battery pack laying around my shop.

If you have to buy a motor, be sure to get the 6V motor. The 7.2V will fly the Zag-E but it will not have the top-end speed of the 6V.

Any speed controller will work as long as it has BEC (battery eliminator circuitry). I had a Pixie 14 handy and used that but a JETI - 10 or 14 or a Rondo or practically any controller rated at 14 or so amps will work just fine.

Construction of the Zagi THL and the Zag-E is the same except for the lack of motor tray/canopy cutouts in the top of the THL wing and cutting out a section at the rear of the wing for prop clearance..

I cut out the motor tray on the scribe lines and left a lip at the rear of the tray. I then placed the tray onto the top of the wing to see where I needed to dig out some foam so the motor tray would sit flush to the top of the wing contour.

After measuring twice and checking the side clearance I marked the outlines and cut into the foam with an exacto just inside the lines. Then I simply dug out the foam with a flat bladed screwdriver until the tray fit into the cavities. You can also rout out the cavity if you're real nit-picky or you can use a hot soldering iron and melt it out. Be aware that the fumes from melted foam is pretty bad stuff so if you melt it use adequate ventilation.

Other than that, construction is a piece of cake and is strictly EPP/foamie easy.

How does it fly compared to a \*real\* Zag-E? Couldn't tell the difference. My son and my Zag-E's are so equal that it is strictly pilot ability when we are chasing each other all over the sky. We haven't had a chance to take on Mark and Lenny yet but I am confident that all the planes will be so equal that it would be hard to tell any difference between the factory Zag-E's and my own \*home-brew\*.

Are they strong? Well, the first day out I flew it into the ground at full speed. It kind of put a crack in the motor tray but I flew it the rest of the day.

The second time out I did a split-S and leveled out at about Mach 1.3 just as the &%(#^& sprinkler jumped up and ran into me. This time the motor tray was in about 6 pieces but

other than that, nothing. I bought a new motor tray at Glens and was flying the next day.

Last week I split-S'ed down to catch my son ((I got to stop doing split-ses) about the time he was doing a climbing 180 to catch me. WHAMMM !!! What a spectacular mid-air. Battery packs and canopies and motor trays went flying everywhere ! Jeff went over and picked up his Zag-E and found the battery and said he thought it was OK and promptly flew it again . Mine had a busted prop so I couldn't fly mine until I replaced the prop.

Jeff did a victory roll. Yeah, they're tuff.

One caveat: I talked to Joe Tiesan of Trick RC and Trick DOES NOT endorse this modification to their stock lines. Joe said that the Zagi-400 (Zag-E) airfoil is different from the Zagi THL and once I fly a 400 I will be able to tell the difference.

Sorry Joe, I don't think so.

**Bob Douglas**

## Break it in...

Psst, the secret is out

OK, Buster Brown just left a gift for you on your doorstep. A brand spanking new Graupner Speed 400. Let's rush down to the basement and stick that bad boy in your new Zag-E.

Hold on there Homer, let's see if we can't void the warranty on your new \$9 motor first.

I'm not going to go into how motor speed is limited by bouncing brushes and how bouncing brushes create arcing and arcing equals RF interference and all that. Let's just say that it might be a good idea to break-in the motor first. And while we're at it, let's advance the timing a bit too.

There are two popularly accepted ways to break-in a speed 400 motor. One quick and dirty, the second, a little more involved (and a little more effective).

The easiest way is to simply hook up one "C" cell alkaline battery to your motor (the red dot on the motor is positive by the way) and let the motor run (in the proper direction) for a couple of hours. Then disconnect, put it in your plane and go fly. Please, at least do this much.

The other way is to mark the end bell and the motor case so you can get it back together with the factory timing set properly (just put a scribe mark across both). Make up a pack of 3 NiCad batteries (3.6V). Get a bowl of distilled water and run



# Rocky Mountain Soaring Association

your motor in reverse for two minutes in the bowl of water (go ahead and laugh, I'm not kidding). Unhook the batteries and hook them up to run your motor in the right direction and submerge it (running) for another two minutes

Disconnect everything and take your motor apart and blow out the moisture as well as you can. Take all your parts and place them near a 60 watt light bulb for an hour or so to finish drying the places you couldn't get to.

After you're sure that EVERYTHING is as dry as it's going to get, use a small piece of emery attached to a 1/4 inch piece of balsa and clean up the commutator and make it shine and then take a cotton swab dipped in alcohol to wipe off the commutator.

Put your motor back together. Make sure that the scribe marks on the can and the end bell line up so you will have the right timing set.

Put a drop of light-weight oil on the front bushing and a LITTLE drop of oil on the bushing at the rear of the motor. Go careful here or you will get oil on the commutator that you just cleaned.

Finally, we are going to advance the timing. All Graupner motors come with the timing set at neutral so they can run in either direction. We want to advance the timing by 1/8th inch on speed 400 motors.

Simply turn the end-bell opposite the direction that the armature turns for your particular application. Use the scribe marks that you made and set the timing 1/8th inch advanced.

The above should gain you an increase of 800 to 1,000 rpm.

Good luck, don't come to me to buy you a new motor if you screw it up

**Bob Douglas**

## Publisher Needed

If you have the desire to help your club out, we are looking for a volunteer to take over publishing activities from John Pearson who has kindly performed this thankless task for several years.

It would be helpful if you had access to a copier that can duplex copy. RMSA would reimburse you for copier supplies such as toner and paper. If you do not have access to a copier you can still help by coordinating the current process of taking the masters to Kinkos for reproduction, then stamping and mailing the copies. We currently mail about 40 copies out each month. Thanks for your support!

## Your RMSA Team in Phoenix

We had a great turnout in Phoenix for the Southwest Classic in Phoenix. As Shannon mentioned we finished 2<sup>nd</sup> by a very small margin. Mark Howard took 1<sup>st</sup> place in RES! Here are the top 10 finishers and the scores of the RMSA members who participated. Congratulations!!

### Open Class

Place	Name	Score	Plane
1	Joe Wurts	3349	Stratus
2	Skip Miller	3324	Emerald
3	Daryl Perkins	3322	der schpot dorker
4	Paul Anderson	3295	Addiction
5	John Rodgers	3267	the Combo
6	Gordon Jennings	3252	Diamond
7	Jerry Robertson	3251	Bird of Prey
8	Michael Smith	3230	Sapphire
9	Dusty Miller	3220	Eclipse V
10	Tom Kallevang	3207	Emerald
27	Charles Miller	3125	Xantipa
38	Shannon Bingham	3035	Emerald
83	Lenny Keer	2750	Emerald
132	Bob Pederson	1639	Thermal Eagle

### RES

Place	Name	Score
1	HowardMark	2927
2	HayesRay	2894
3	TroutCraig	2576

## SW Classic Pictures



*left to right: Shannon Bingham, Mark Howard, Skip Miller, Dusty Miller, Lenny Keer, Charlie Miller (missing-Bob Pederson)*



*Skip and Dusty*



*The Flight Line*

## 2000 RMSA Contest/Event Calendar

Date	Event	CD	Notes
Jan. 4	RMSA Meeting		
Feb. 1	RMSA Meeting		
<i>Feb 4-6</i>	<i>Southwest Classic</i>		<i>CASL Southwest Classic - Phoenix AZ</i>
Mar. 7	RMSA Meeting		
Mar. 12	Open*	Lenny Keer	
Mar. 19	Pro-Am	Jim Monaco	Third annual Pro-Am
Apr. 4	RMSA Meeting		
Apr. 9	Open*	Jim Barr	
Apr. 16	HLG**	?	
April 30	2M*	Mark Howard	Restricted to 2 meter models
May 2	RMSA Meeting		
May 7	Open*	Bob Pederson	
May 13	HLG**	Skip Miller	Saturday event
May 27-28	F3B	Mark Howard	National Level Open
<i>June 3-4</i>	<i>IHLG</i>		<i>International HL Contest Torrey Pines CA</i>
June 6	RMSA Meeting		
June 11	Open*	Bob Rice	
June 17	HLG**	Lenny Keer	Saturday event
July 1	RES	Rick Housden	Saturday event - Rudder/Elevator/Spoiler only
July 11	RMSA Meeting		
July 16	Open*	Bob Lewan	
<i>July 22-29</i>	<i>Soaring NATs</i>		<i>Muncie Indiana</i>
Aug. 1	RMSA Meeting		
Aug. 6	Open*	Jim Monaco	Kinda-F3J
Aug 13	HLG**	Bob Lewan	
Aug. 27	2M*	Mark Howard	Restricted to 2 meter models
Sept. 5	RMSA Meeting		
Sept. 10	Open*	Mike O'Hearn	AKA: Colorado Challenge Cup
Sept. 16	RES	?	Saturday event
Oct. 3	RMSA Meeting		
<i>Oct 7-8</i>	<i>Visalia</i>		<i>Visalia California</i>
Oct. 15	Open*	Shannon Bingham	
Nov. 7	RMSA Meeting		
Nov. 12	Open*	Bob Rice	
Dec. 10	Awards Banquet		

\*Club Open points contest

\*\* Club HLG points contest

**Italics indicates major national level contests available for points**



**1999 Board Members**

<b>President:</b>	<b>Shannon Bingham</b>	<b>303-499-2314</b>	<a href="mailto:binghams@boulder.earthnet.net">binghams@boulder.earthnet.net</a>
<b>Vice President:</b>	<b>Jim Monaco</b>	<b>(303) 464-9895</b>	<a href="mailto:j.m.monaco@worldnet.att.net">j.m.monaco@worldnet.att.net</a>
<b>Secretary:</b>	<b>Bob Rice</b>	<b>(303) 745-5269</b>	<a href="mailto:bob.rice@tobin.com">bob.rice@tobin.com</a>
<b>Treasurer:</b>	<b>John Pearson</b>	<b>(303) 306-6800</b>	<a href="mailto:jp7120@aol.com">jp7120@aol.com</a>
<b>Past President:</b>	<b>Mike O'Hearn</b>	<b>(303) 693-6925</b>	<a href="mailto:m.o.hearn@worldnet.att.net">m.o.hearn@worldnet.att.net</a>

**Member Support**

[www.homesquad.com/rmsa/files/rmsaopen.html](http://www.homesquad.com/rmsa/files/rmsaopen.html)

**Chief**

Instructor:	Jack Zika	(303) 279-1549	(303) 505-9488 (Pager)
Instructor:	Mark Howard	(303) 278-7519	<a href="mailto:Mhoward@spaceimaging.com">Mhoward@spaceimaging.com</a>
F3B/F3J:	Mark Howard	(303) 278-7519	<a href="mailto:Mhoward@spaceimaging.com">Mhoward@spaceimaging.com</a>
Librarian:	Tracy Cochran	(303) 934-8838	<a href="mailto:Tcochran@idcomm.com">Tcochran@idcomm.com</a>
Newsletter:	Jim Monaco	(303) 464-9895	<a href="mailto:j.m.monaco@worldnet.att.net">j.m.monaco@worldnet.att.net</a>

**Winch Masters**

Bob Rice	(303) 745-5629	<a href="mailto:Bob.rice@tobin.com">Bob.rice@tobin.com</a>
Mike O'Hearn	(303) 693-6925	<a href="mailto:m.o.hearn@worldnet.att.net">m.o.hearn@worldnet.att.net</a>
Shannon Bingham	(720) 304-7474	<a href="mailto:binghams@boulder.earthnet.net">binghams@boulder.earthnet.net</a>
Gary Lewan	(303) 277-1375	



**Directions to Field**

Take I-76 to exit 17. Take 120<sup>th</sup> 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*