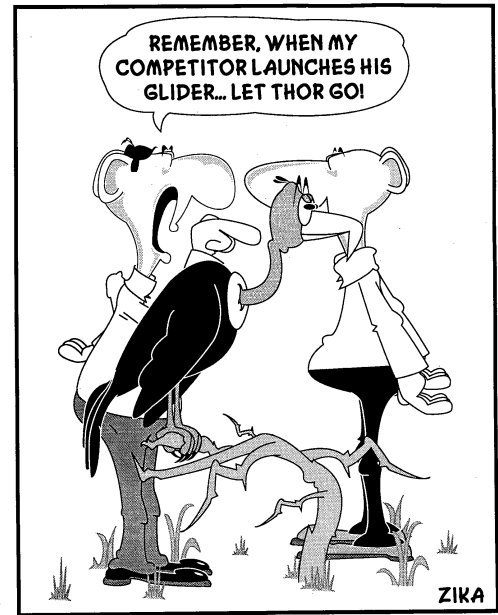


Thermals

Newsletter of the Rocky Mountain Soaring Association



May 1999

AMA Chartered Club 1245

Volume XXIII Number 5

PRESIDENT'S MESSAGE

Now that spring has arrived, we are reminded that Springtime in the Rockies can sometimes mean snowstorms in the plains. This snow won't last much longer and so far hasn't affected our contests. The March and April open contests have been very well attended and for the most part, the winch equipment has performed very well.

Two committees are working on implementing a fourth competition class and standardizing the contest trophies and awards. The work of the first committee will likely take several more months to complete while I hope that the trophy/award committee can wrap things up by June. If anyone would like to contribute to the

committee efforts, please let me know, I'm always open to other's ideas and suggestions.

Next time you're out at the field, please take a couple of minutes to review the field rules which are now posted out there. Flying safety is of paramount concern but we need to be mindful that we are guests of the owner of the sodfarm and should leave nothing but our footprints while enjoying the best flying site around. That means ensuring that all equipment is removed from the field including turnarounds, nails, tape, cigarette butts, etc. If you notice that the club trash can needs to be emptied and you have room in your trunk or the back of your truck, please help out and remove the trash bag and dispose of properly.

Michael O'Hearn

Next Meeting:

Date/Time: May 4, 1999 7:00 PM

Location: Newgate Apts.
10400 W. 44th Ave.
Wheatridge, Co.

Program: Swap Shop - Bring it, Sell it, Buy it. (the last announcement was too late!)

*Steps to meeting room are behind
the building near the pool.*



May Open Contest Announcement

CD: Lenny Keer (970) 352-1194, Lenny970@AOL.com

Date: Sunday, May 16, 1999

Time: 8AM Registration, 8:30 Pilots Meeting

Task: Man on Man Distance

Task Description: We will be flying a modified version of F3B distance. We will use the normal 4 minute course time, and 7 minute working time. Relaunches will only be permitted for line breaks, and in accordance with RMSA's normal pop-off rules (one per round for Novices, and one per contest for everyone else). Note that the working time will not be extended.....the relaunch must take place within the existing working time and an extra winch will be available for that purpose. If more than one pilot in a round requests a relaunch, the entire group will be reflown, and the original scores discarded.

***Special Request:** I would like to have about 6 nonflying volunteers to signal the lap turns for the contest. No experience is needed. If you know someone who would be willing to help out, or if you aren't planning on flying in the contest, please consider coming out to watch the action and lend a hand.*



Spring Fling HLG Contest

CD: Phil Weigle

Date: Sunday, May 23, 1999

Time: 8AM Registration, 8:30 Pilots Meeting

First Round: 9:00 AM

Tasks:

1. Ten launches to make five (5) two minute flights. Best five flights count.
 2. Ten launches to make two (2) two minute flights. Best two flights count.
 3. Three launches within the window to make a 10 minute flight. Last launch counts.
- All tasks will be flown within a ten (10) minute window.
 - All tasks will be flown man on man. The three tasks will be repeated for a total of
 - The first flight groups will be random draw. All subsequent flight groups will be drawn on the basis of times flown. Each contestant is allowed two (2) sailplanes; however, they must be on the same channel. The contestant will be allowed to switch sailplanes between rounds at his discretion. Mid-airs are a possibility, and each pilot has the responsibility to avoid contact with other aircraft. When entering an occupied thermal, assume the rotation direction of the original aircraft.
 - If a sailplane is damaged during a round, or that sailplane has a radio failure, the Contest Director must give his OK to go to the second sailplane. No reflights or additional time will be given.
 - No reflight will be allowed for mid-airs.
 - Avoid flying low over the cars or pits. Fly safely and have fun !!



Rocky Mountain Soaring Association

April Contest Report

The second contest of 1999 attracted 24 eager flyers including a rowdy group from PPSS!

The format was chosen to insure plenty of flight time for all contestants - 2 winches with 12 flyers each, with a fixed flight order and the retrievers. If you maxed your flights, you could have spent over an hour in the air!

Jim Monaco provided on the spot computer scoring with Barb Keer assisting him. Many thanks to both!

In what may be a harbinger of things to come, the PPSS crew walked away with the top score of the day - a well deserved overall to Bob Avery.

Scorekeeper Note: You may notice some negative scores in the results - here is the story: The AMA rules for T3 say all scores are adjusted to a 10 minute task. They explain that to compute the score for a 7 minute task you add 3 minutes to everyones score - then use the table to get the actual score. That works great for 7 minutes - in fact - you actually cannot get lower than 180 points on a 7 minute task - because they automatically add 3 minutes to your score. But it works the other way on the other side of 10 minutes. If you apply the same rule - to adjust to 10 minutes - that means you subtract 2 minutes on a 12 minute task - then compute the score. Soooooo if you score less than 2 minutes you get a negative number... It seems not fair - but the 2 minutes is subtracted from everyones score - so the difference in score is the same... whew... it actually took me quite a while on Sunday to figure that out - I thought it was a programming error - but NOOOOOO - it's the rules....

Jim

April Contest Report

Name	RD 1	RD 2	RD 3	RD 4	RD 5	RD 6	Total	Norm by Contest	Norm by Class
Novice									
Matt Curtis	267	467	16	593	323	68	1734	417	1,000
Gene Oxenrider	251	71	28	200	-47	-41	462	111	266
Sportsman									
Bob Lewan	458	795	687	452	737	772	3901	939	1,000
Bob Moffett	537	660	132	667	676	567	3239	779	830
Gary Lewan	657	653	470	621	345	154	2900	698	743
Shannon Bingham	745	741	621	40	309	182	2638	635	676
Greg Merkle	665	167	736	195	86	682	2531	609	649
Anthony Kay	430	560	304	116	267	266	1943	468	498
Richard O'Connell	254	738	22	465	56	246	1781	429	457
Don Ingram	423	184	308	238	214	145	1512	364	388
Marc Monaco	630	363	68	38	200	12	1311	315	336
Mike O'Hearn	497	207	0	0	0	0	704	169	180
Masters									
Bob Avery	667	481	729	787	784	708	4156	1,000	1,000
Skip Miller	776	793	787	774	180	780	4090	1,000	1,000
Mark Howard	793	378	745	492	793	710	3911	956	956
Jack Zika	711	219	604	757	756	781	3828	936	936
Jon Padilla	613	273	717	731	696	664	3694	903	903
Lenny Keer	756	364	283	745	767	662	3577	875	875
Jim Monaco	724	188	543	641	625	783	3504	857	857
Bob Douglas	454	606	239	376	763	606	3044	744	744
Phil Weigle	700	581	157	724	57	726	2945	720	720
Byron Blakeslee	773	727	80	700	155	0	2435	595	595
Jim Barr	715	146	54	599	599	163	2276	556	556
Jack Dech	742	195	330	187	33	516	2003	490	490
Austin Clies	359	115	-4	691	175	32	1368	334	334

Note that there are two 1000 point totals in Masters class. This is a result of the normalization of scores for the RMSA season points being calculated against the highest RMSA member score.



Rocky Mountain Soaring Association

RMSA 1999 Standings

	Mar	Apr	Best 6	Place	98 Pts	98 Wins	99 Pts	99 Wins	Tot Pts	Total Wins
Masters										
Miller Skip	995	1000	1995	1						
Howard Mark	989	956	1945	2						
Keer Lenny	995	875	1870	3						
Monaco Jim	948	857	1805	4						
Padilla John	792	903	1695	5						
Weigle Phil	965	720	1685	6						
Zika Jack	688	936	1624	7						
Dech Jack	977	490	1467	8						
Blakeslee Byron	758	595	1353	9						
Barr Jim	493	556	1049	10						
Miller Dusty	1000		1000	11						
Evans Nathan	835		835	12						
Douglas Bob		744	744	13						
Pederson Bob	645		645	14						
Rice Bob			0	15						
Sheldon Matt			0	15						
Pearson John			0	15						
Evans Dustan			0	15						
			0							
Sportsman										
Lewan Bob	747	1000	1747	1	13	1	3	1	16	2
Bingham Shannon	938	676	1614	2	0	0	0	0	0	0
Merkle Greg	888	649	1537	3	0	0	0	0	0	0
Moffat Robert	639	830	1469	4	0	0	0	0	0	0
Ingram Don	920	388	1308	5	0	0	0	0	0	0
Lewan Gary	536	743	1279	6	1	0	1	0	2	0
Monaco Marc	821	336	1157	7	6	2	0	0	6	2
Miller Charlie	1000		1000	8	7	2	3	1	10	3
O'Hearn Mike	583	180	763	9	0	0	0	0	0	0
Evans Bert	547		547	10	0	0	0	0	0	0
Kay Tony		498	498	11	0	0	0	0	0	0
Port Don			0	12	11	3	0	0	11	3
Mac Arthur			0	12	0	0	0	0	0	0
			0				0	0	0	0
Novice										
Oxenrider Gene	745	266	1011	1	2	0	3	0	5	0
Butler Jim	1000		1000	2	3	1	3	1	6	2
Curtis Matt		1000	1000	2	0	0	3	1	3	1
Kevin Moffat	996		996	4	0	0	2	0	2	0



Rocky Mountain Soaring Association

For Sale

2 - Reaction 100 inch, full function F3B sailplanes, RTF Excellent Condition \$200.00 each.

1 - Meteor 120 inch, Elevator, Rudder, Spoilers, RTF Good Condition \$125.00

1 - Sagitta 72 inch, Elevator, Rudder, Spoilers, RTF Good Condition \$75.00

1 - No Name 72 inch, Elevator, Rudder, RTF Good Condition \$65.00

1 - Aquila 100 inch, Elevator, Rudder, Spoilers, RTF Good Condition \$100.00

1 - Ultima 120 inch KIT, still in BOX \$150.

Radios Galore, from \$25.00

Tony Kay
(303) 334-6123

F3J World Championship Report

Our own Skip Miller and his son Dusty were proud RMSA representatives at the 1998 1st F3J World Championships. The following report is reprinted courtesy of "Australian Radio Controlled Model News" and the author Max Kroger. It gives us a small view of competition at the highest levels... Thanks Max.

The F3J Flyoff

To set the stage the following results are presented:

The USA's Joe Wurts scores to be top qualifier:

Round	Time	Landing	Score
RD1	9.52	95	994
RD2	9.52	100	1000
RD3	9.53	100	1000
RD4	9.47	95	1000
RD5	9.51	95	1000
RD6	7.34	100	1000
RD7	9.52	100	1000
RD8	9.53	100	1000
RD9	8.07	0	727 *
Total			7994

* drop

In 12th place and the lowest qualifier for the fly off was Phillip Kolb of Germany:

Round	Time	Landing	Score
RD1	9.48	100	1000
RD2	9.52	90	990
RD3	9.50	95	991
RD4	7.08	35	672
RD5	9.50	70	961
RD6	9.49	90	981
RD7	9.52	95	993
RD8	9.50	100	996
RD9	2.34	0	228*
Total			7583.5

* Drop

Notice that only 410.7 points separated 1st to 12th place. This is cored from the best 8 flights out of 9 qualifying rounds.

As you can see if you compare Joe Wurts scores with that of number 12 man Phillip Kolb you will see that essentially it came down to landing scores as a significant separator.

The above score tables show just how competitive this event was. The first 4 days of efforts were now to be discarded, with the top 12 pilots listed below making the two round fly off.

There were two significant aspects to be noted for the fly off, one being the weather - with thermal activity still quite strong, but a moderate breeze was being consistent. Two being the increase in the working time.

These conditions, now meant it was likely that 2 thermals would be needed to max out or an alternate scenario where a second attempt would be required by many, if not all pilots and thus leading to very close scores.

Fifteen minutes in the one thermal with the prevailing breeze would certainly take a model well out of sight downwind, and require a long return journey upwind back to the landing spot. In short, the conditions prevailing were very testing for the finalists and promised some very competitive and entertaining teamwork.

The top 12 pilots making the cut after 9 qualifying rounds were:

1.	Joe Wurts	USA	7994.2
2.	Alex Hoekstra	NED	7979.6
3.	Arend Borst	CAN	7904.6
4.	Peter Hoffman	AUT	7895.7
5.	Stefan Eder	GER	7811.3
6.	Henning Czerny	GER	7779.1
7.	Skip Miller	USA	7738.2
8.	Jan Kohout	CZE	7724.1
9.	Ben Clerx	USA	7710.8
10.	Dion Liebenberg	RSA	7600.0
11.	Bas Breijer	NED	7598.2
12.	Phillipp Kolb	GER	7583.5



Rocky Mountain Soaring Association

With 3 pilots being from both USA and GER respectively these teams were stretched with helpers required. It was decided that the Australian group would offer their helpers to the USA team as we had a common language and had been closely comparing results through out the event.

It was not surprising to be paired up with a US team member tower, but it came as a great surprise to my self to be asked to call for Skip Miller in the fly off. I was to be working closely with one of R.C. gliding's all time great names. I could hardly believe the honor bestowed on me. After the initial shock (as this request came totally out of the blue) I spent some considerable time with Skip with all ears as he was clearly a little wound up, and we had to get to know each other very quickly before the flyoff some 20 minutes off.

I contemplated the situation and spent quite some time with Skip in devising the procedure and strategy that he was going to try to adopt. Skip was clearly "in charge" so to speak and this made it easy for his crew of myself and the 2 towers. He made clear his instructions and with his models being 2 Emeralds and one Ellipse.

I think all models used the SD 7037 airfoil section. In my opinion it was this section that ultimately was a slight disadvantage for Skip in the second round fly off. More on this point later.

The time had arrived to make the long walk out to the flight line for the first of 2, 15 min. flyoff heats. I could still hardly believe my luck. I had flown reasonably well, but had clearly lacked the competition experience that flying in the BIG league so to speak brings. However here I was carrying out the models of one of Radio Modeling's all time greats. Skip had achieved the distinction of being the first F3B world champion in 1977, in South Africa. Now here he was walking out to the flight line in 1998 to have a crack at being the first World champ in F3J! WOW, what if, is all I could think of. I hoped that I could be part of a series of winning flights, rather than be the reason for his demise!

I picked up both of Skip's models and to my surprise they both weighed close to the same weight. Skip had chosen to bring both Emeralds to the flight line, his choice of wing section was limited to the SD 7037. This section being 3.0% camber and around 9.0% thickness. I could only guess at Skip's chosen wing loading but I felt it was no more than 11.00 oz/sq. ft.

With the breeze likely, I felt Skip just might suffer a little if he had to travel big distances either to get to lift or get out of sink. It was not the time to say anything, as all pilots can only enter 3 models so Skip's choice was limited, being made at the time of processing some 4 days previously. I felt however he may have chosen to use a little more ballast in the second model, hence having some wing loading choice. It was noticed that conditions from one end of the flight line to the other could be vastly different. This further complicated the choice of model wing loading etc. In any event, Skip was well in with a chance

and was positive in his approach. Let the first heat of the fly off begin.

Skip had briefed me such that I required 3 stop watches for his calling. One watch to count down the working time of 15 minutes. One watch to record the flight time (unofficially, of course, as there were 2 official timers also) and a third watch to time Skip's climb rates. He was wanting to know his climb times when he started to circle, using this to estimate the strength of the lift. I had never used this technique before, and it was unusual. It just goes to show that there is always something to learn in this fascinating sport.

The first heat was very much a precession with 10 of the 12 pilots all launching into a boomer of a thermal. It was purely going to be a launching landing competition for the first round. If you view the scores you will see that the top 10 pilots all scored a flight time spanning some 7 seconds only 14.45 to 14.52! with 4 pilots also scoring 100 landing points! Wow was this ever going to be close.

After the initial temper of the moment had passed, it was soon made known to all that Arend Borst had hit his helper on landing and hence forfeited all landing bonus points.(I think he had obtained a 100 pt. or 1 meter landing)

The feeling between the two Canadian team members must have been difficult to say the least, but none the less it was reality. This would almost mean that the chance of Arend Borst achieving his ultimate goal would almost be impossible. To Arend's great credit he took it on the chin and proceeded with very little fuss to ready himself for heat 2.

Skip had played it very cool and I had little to do but call his position relative to other closely watched fliers. It was difficult to identify all pilots so we had decided to monitor a few notables, being BORST; WURTS and HOEKSTRA.

There had been a considerable difference of conditions from one end of the launch line to the other. This was to become evident soon after the launch in the 2nd heat. Skip had decided to move off the right hand side of the group soon after launch and to our surprise and delight there was much lift to be enjoyed. Skip proceeded to fly as unobtrusively as is possible, as he did not wish to mark the good air by the all to obvious classic thermal dance. It was not long after the launch, say some 2:30 minutes, that Skip had achieved some considerable height advantage over the remaining field. Things were looking good! Joe Wurts had played safe and stayed with the pack and had flown with the group but had proceeded to halve his launch height. Borst had maneuvered to the right hand side of the group and was considerably further down wind. I could see Joe Wurts placed in the middle of the group doing very badly and looking like he may have to relaunch. Meanwhile Skip was still very high and well out to the right hand side of the group. He had enjoyed a continuous stream of lift feeding into a very strong thermal most likely centered some 500 meters or so down wind.



Rocky Mountain Soaring Association

Joe was by now in a critical, almost desperate situation. He was low with no obvious signs of any good air, meanwhile Skip was high and out 300 to 400 meters to the right hand side of the main bunch. I thought that Skip should now show his hand and head off down wind to catch up with the "main game" ie; the lift which would have certainly moved considerably down wind. By doing this he probably would have separated himself from the bulk of the field and been in a very advantageous position. Instead he chose to stay in what was by now decaying lift and whilst still at some height advantage, was not climbing any further.

The only models that posed any obvious threats were by now well away from Skip. I conveyed this to him and he was contemplating a rapid chase down wind to rejoin the lift that had left him, meanwhile, Joe Wurts had made an almost desperate dive from the rear of the centered bunch to an imaginary point approximately 100 meters down wind of Skip Miller. It was a very brave but calculated move, with Joe's world champs chances hanging on the outcome. If he arrived at his target point not to find any lift, it was doubtful if Joe could have made it back to the landing zone, leading to a likely zero score by virtue of a likely out landing.

In reality Joe cleverly hooked the remnants the lift that Skip had enjoyed for some 4 to 5 min. And proceeded to fly rapidly down wind in pursuit of the down wind lift core. I indicated that Joe had scored a "hit" and looked like he was in "get out of jail" mode. Skip then peeled off and followed Joe's lead and together they were moving rapidly down wind in pursuit of continuously decaying lift.

At this time it was evident that there were only 4 models left with a chance of maxing out. I identified Joe Wurts and Jan Kohout, but I did not initially see Arend Borst. He seemed to be furthest away but it was very difficult to see as by now all 4 models were but pin pricks in the overcast sky. Skip called that he was having trouble seeing his model, and asked that I co-fly closely with him, as all models were now on the visual limit. It would seem that this event would be going to the man with the best eyesight. I guess that the models would have been some 1500 to 2000 meters distant! I certainly could not see a models shape or color at all. Skip remarked that he had lost clear sight of his charge and I called him through the next few seconds of flying. He regained the visual contact and decided that he was heading home.

This was where the test of the airfoil choice was to begin. Borst with RG12a 1.7 % camber; Wurts with RG 15 1.78 % camber; and Miller with a SD 7037 3.0% camber. Skip did everything just right - gradually returning home, but it was evident that he could not out glide the other 2 models. He lost some considerable height on the long, slow haul back up wind. I indicated what I thought was the best track home through the better air, but by now Skip was leading the group all returning home, unfortunately most other models had all ready landed and hence an obvious indication of lift was not present. All Skip could do was head home as directly as possible and complete a 100 pt. landing. We both realized that this was not

likely to lead to a score over Joe Wurts, but no lift could be found. The difference between a 3.0% camber section and 1.8% being gradually made obvious after many painstaking minutes on the long flight home.

Try as he might Skip could not eke out any lift and I was, unfortunately, no help and I could only leave him to his own fate. Skip in his final glide to the spot made a desperate grab for what may have been a small bubble some 20 to 30 feet altitude, but to no avail. This last low down turn cost him his final glide to the spot and as such he landed some 30 to 40 meters from the target. Zero landing score.

Well it was obvious to Skip it was worth the try, as Joe had arrived approx. 60 seconds after Skip, but still not maxing out either. Borst had achieved the seemingly impossible and had achieved a max. flight time of 14.47 sec's. And a 100 landing point bonus. This took the 1000 points for heat 2 of the fly off, but the zero landing score of heat 1 had cost Borst the world championship. Borst finished in third spot and a good consolation result with Jan Kohout moving into 2nd. And Joe Wurts pulling off yet another World Championship. As it turned out regardless of whether Skip achieved his second landing or not, he did not have enough "air time" in the second heat, so as such he had to be content with 4th missing a podium finish by only 146.39 points.

I was somewhat disappointed for Skip as he had clearly lead the charge early in the 2nd heat, but in the final result it came down to section choice in my opinion. The long final glide back to the spot cost Skip dearly in height. Skip was very happy in the final walk back to the pits and said as much, but I had wished for him at least a podium finish as I felt he had deserved such over the total weeks flying.

Joe Wurts was the new World F3J Champion in the year 1998. He is truly a master competitor and I feel the pre-eminent soaring disciple! Joe had the presence of mind to comment that Arend Borst had eclipsed the field in purely soaring skills, but due to a major landing mistake with his team caller, had paid the ultimate price of defeat.

For my part I was privileged to be part of this FIRST F3J World Championships and be in the finals although I was not flying. I shall remember for all time this event and the pilots who demonstrated supreme skill and judgement mixed, in the final analysis, with a little bit of luck.

Later on at the banquet I was sitting not far from Skip and his family. Dusty, Skip's son had placed 5th outright in Interglide, after Skips own placing of 2nd outright. So perhaps it could be viewed that he was also a champion of another sort, in sharing his love and skills with his son on this world stage, some 21 years after he had had his own World Championship win.

For my small part in all these proceeding's, I was just simply very thankful, simply to be there and be witness to it all.

Max Kroger



Rocky Mountain Soaring Association

1999 RMSA Contest/Event Calendar

Date	Event	CD	Notes
Jan. 5	RMSA Meeting		Newgate Apts
Feb. 2	RMSA Meeting		Newgate Apts
Mar. 2	RMSA Meeting		Newgate Apts
Mar. 7	Pro-Am	Jim Monaco	Second annual Pro-Am
Mar. 14	Open*	Mark Howard	
Apr. 6	RMSA Meeting		Newgate Apts
Apr. 11	Open*	Jim Barr	
Apr. 24	RES	Bob Lewan†	Restricted to Rudder/Elevator/Spoiler controls only. Saturday event
May 4	RMSA Meeting		Newgate Apts
May 16	Open*	Lenny Keer	
May 23	HLG**	Phil Weigle	
June 1	RMSA Meeting		Newgate Apts
June 6	Fun Fly	Bob Douglas	Great Plane Race and Funfly event
June 13	Open*	Bob Rice	
June 27	HLG**	Jeff Burg†	
July 6	RMSA Meeting		Newgate Apts
July 11	Open*	Phil Weigle	
July 18	HLG**	Jack Zika†	
Aug. 3	RMSA Meeting		Newgate Apts
Aug. 8	Open*	Jim Monaco	
Aug. 15	HLG**	Lenny Keer	
Aug. 21	2 Meter*	Mark Howard	Restricted to 2 meter models
Sept. 7	RMSA Meeting		Newgate Apts
Sept. 12	Open*	Matt Sheldon †/M. O'Hearn	AKA: Colorado Challenge Cup
Sept. 25	LSF & Fun Fly	Bob Douglas	Saturday event
Oct. 5	RMSA Meeting		Newgate Apts
Oct. 10	Open*	Bob Lewan†	
Nov. 2	RMSA Meeting		Newgate Apts
Nov. 6	RES	Michael O'Hearn	Restricted to Rudder/Elevator/Spoiler controls only. Saturday event
Dec. 5	Awards Banquet		

* Club points contest



1999 Board Members

President:
President: Mike O'Hearn (303) 693-6925 mjohearn@ccgate.hac.com
Secretary: Bob Rice (303) 745-5269 bobr@tobindatag.com
Treasurer: John Pearson (303) 306-6800 jp7120@aol.com
Past President: Jack Zika (303) 279-1549 (303) 505-9488(Pager)

Member Support
www.tobindatag.com/rmsa

Chief
Instructor: Jack Zika (303) 279-1549 (303) 505-9488 (Pager)
Instructor: Mark Howard (303) 278-7519 Markho@tobindatag.com
F3B/F3J: Mark Howard (303) 278-7519 Markho@tobindatag.com
Librarian: Tracy Cochran (303) 934-8838 Tcochran@idcomm.com
Newsletter: Jim Monaco (303) 464-9895 jimmonaco@us.ibm.com

Winch Masters
Bob Rice (303) 745-5629 bobr@tobindatag.com
Mike O'Hearn (303) 693-6925 mjohearn@ccgate.hac.com
Shannon Bingham (303) 814-0571 binghams@boulder.earthnet.com
Gary Lewan (303) 277-1375



Directions to Field
 Take I-76 to exit 17. 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