

Looking Up

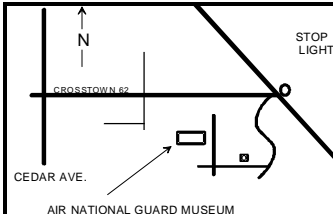
January 13, 1999

Issue 22

Wanted: Sailplane Pilots!!

All **MRCSS** members must also be a member of the **AMA** Academy of Model Aeronautics. See any hobby shop or contact an officer for an application.

To join **MRCSS**, Send \$20 to
MRCSS
5354 Newton Ave. S.
Minneapolis, MN 55419



MRCSS Newsletter

<http://www.rcsoaring.com/mnclubs.htm>

MRCSS Club Officers:

PREZ: Kirk Hall 866-1388
VP: Mark Miller 306-9984
SECR: Jim Ladwig 920-1245
jimladwig@internetmc.com
TRES: Jack Perecman 377-4166
EDITOR: Steve Stadler 483-5894
sstadler@holadayinc.com
DISTR: Andy Karl 926-6538
andy_karl@ccgate.apl.com
RECORDS: Jim Smith 831-8184
jamescsmith@worldnet.att.net
LIBRARY: John Croke 891-1029

INSTRUCTORS - HELP FOR BEGINNERS

Corky Wald 459-2005 Cottage Grove
Bob Botha 507-345-1832 Mankato
botha@mctcnet.net
Bill Sampson 425-3422 Osseo
wjsamp@juno.com
Mike Trutwin 953-3612 Lakeville
mtrutwin@profdesign.com

Schedule of MRCSS Events:

Jan.	21st	meeting 7:00 – 10:00 pm Air National Guard Museum
Feb	6th	Holiday Party 7:00 pm @ the Pattersons
Feb.	18th	meeting 7:00 – 10:00 pm Air National Guard Museum
Mar.	18th	meeting 7:00 – 10:00 pm Air National Guard Museum
Apr.	15th	meeting 7:00 – 10:00 pm Air National Guard Museum
May	20th	meeting 7:00 – 10:00 pm Air National Guard Museum
June	17th	meeting 7:00 – 10:00 pm Air National Guard Museum
July	15th	meeting 7:00 – 10:00 pm Air National Guard Museum
Aug	19th	meeting 7:00 – 10:00 pm Air National Guard Museum

JIRIK SOD FARM	ROBINSON LANDSCAPING	PRESCOTT SLOPE	SUPERSLOPE
4 miles East of FARMINGTON on Co Rd 66. Park on Co Rd 66 or on Blaine ave (N/S road). Wind and high starts available on site. Contact an officer for locker combination.	2 miles East of Lexington Ave on Main Street (CR 14, 125th street) in Lino Lakes . This is the Sod Farm on the South side of the road. DO NOT FLY ON THE SOD FARM ON THE NORTH SIDE OF THE ROAD.	8 miles east of Prescott Wisconsin on Hwy. 10 Take Minnesota Hwy. 61 to Hwy. 10 just north of Hastings. East on Hwy. 10 into Wisconsin, through Prescott. Continue east on Hwy. 10 8 miles to "The Virginian" restaurant on north side of road. Park in north-west corner of lot, hop the electric fence and climb the hill. beware the fence. It's hot! N.N.W. to N.E. winds.	4 miles SE of Northfield . Take MN 246 to Ibson ave. South on IBSON then East on 135th to Isaacson Trail. Isaacson Trail follows top of the Ridge. SSE to WSW winds at 5-25 MPH needed.

FIELD RULES for SOD FARMS

Nos

- No walking on newly seeded or new growth area
- No driving or parking on the property unless owner permission given on the day you visit (even on "on site" roads).
- No Smoking or Alcoholic beverages
- No Littering
- No music or yelling
- No walking on wet areas
- No recreational vehicles
- No flying of GAS models
- No flying near owner buildings
- No assisting none-insured flyers
- No parking in front of access points

YESs

- Use bright colored streamers on all stakes
- Use frequency board when 5 or more members are flying
- Take all trash home with you
- Pick up any debris found, even if it is not yours
- Park only on the road, and appropriately
- Yield to all farm work and all farm workers, be friendly!
- Use off-site rest rooms
- Report all questionable none-MRCSS activities
- Report rule violations to a Leader Member
- YOU ARE A GUEST SO ALWAYS ACT LIKE ONE

l o o k i n g u p

Meeting Minutes - December 17, 1998

President Mike Trutwin called us to order at 7:32 P.M.

NEW FACES - Same old faces this month.

EVENT REPORTS - No reports on past events.

CLUB BUILDING PROJECT - As reported in the November newsletter, kits for the Falcon sloper have been prepared and will be available at the January meeting.

CLUB TRAINER - Mike Trutwin has ordered Highlander kits in quantity at a 25% discount. Delivery is expected before Christmas. You may pay upon receipt of your kit. Mark Miller will build one kit as a trainer owned by the club and available for instruction flights.

BUILDER'S CHALLENGE - Dave Engleson left with Mike Trutwin copies of the rules, which will be published in the newsletter. Entry deadline has been extended to the January meeting. Dave will solicit donations of prizes from MRCSS members as well as from manufacturers and dealers. John Croke will give Dave a list of donors from last year. Corky Wald commented that Hub Hobby in Little Canada has been our best support over the years. Kirk Hall mentioned the new hobby shop in Roseville, on Hamline Avenue, between Highways 36 and 694, owned by Rich Ross, recently of Hobby Warehouse in Richfield.

HOLIDAY PARTY - It was assumed [correctly] that Don Patterson will be host on February 6.

HOLIDAY GIFTS - Ed Berris is making donations to charities in the names of our landowners..

NEWSLETTERS - Only 8 or 10 November newsletters were sent electronically. All members who can are urged to let Steve Stadler know they do not need the printed copy of our newsletter. This will save a lot of expense for the club. Andy Karl volunteered to replace Jill Trutwin as newsletter distributor (a position long held by Russ Bagley).

Several members noted the absence of the map of the meeting site, and suggest it be included in future issues. Jim Ladwig said he and Don Patterson like the reduction in the black backgrounds, but enough remain to require lots of printer ink, and requested the backgrounds be further opened up, particularly at top and bottom of each page.

ACTIVITY CALENDAR FOR 1999 - The only contest

set is the Builder's Challenge in May, with Andy Karl as CD. Steve Metz and Mike Martindale are willing to each run a contest.

The Freeze Fly was set for noon on January 1, 1999 at Lake Normandale, with the site at 694 and Central as backup in the event of unsafe ice conditions. It was suggested that summer Fun Flies be held twice a month, and Tom Rent pointed out the advantage of having a closer site. Tom will follow up on some possibilities.

Jim Ladwig reported that MARCEE is interested in joining us in a swap meet. MRCSS members feel that late February or March is a good time, and Kirk Hall will look for available space. The focus is to be on Sailplane and Electric R/C items, since other clubs hold Wet-Fuel swap meets. Publicity needs to be posted soon in hobby shops.

SUGGESTIONS FROM THE OUTGOING PRESIDENT - Mike Trutwin suggests the contest calendar be firmed up at the January meeting, that the club bylaws be reviewed early in the year, the status of our incorporation be confirmed and the age for junior member dues be restated.

Questions and Answers, and General Discussion

Q. Are the 10-cell packs at Ax Man worth buying?

-Yes, they consist of Sanyo 800AR cells, for only 40 cents per cell. The packs must be taken apart and re-assembled for our purposes. There is a one-ohm resistor and a thermal switch inside and all connections are by spot-welded tabs which are not low resistance connections. Current should be kept below 20 Amps, so they are fine for Speed 400 motors and most "can" motors.

Q. What paint should I use for a dark blue finish on fiber glass?

-Black Baron/21st Century spray can. Primer is required, fill and sand.

-Thinned Spackle can be used for filling pinholes.

-Krylon Spray comes in many colors. Avoid recoating in the period 2 hours to seven days after the first coat to minimize wrinkling of the finish.

-Oil fumes from a kerosene heater will spoil the glass surface for painting.

l o o k i n g u p

Q. Are computer simulator programs worth while?

-Great Planes is somewhat advanced over Dave Brown, but the high-resolution background often makes the model hard to see. Both do a good job of training for the left-right reversal when the plane is flying toward the pilot and other fundamentals. They are not the same as real-world flying, so will probably not be of long-term use to you, but the crashes that all beginners make are far less expensive on the simulator.

Q. How can we use the Internet in our hobby?

-There is a Web page called eBay Auction that has a million items listed now, with some 200 model items each day. Each auction lasts one week, with the money going directly from the buyer to the seller. The seller is charged for the listing. Radio sets have gone for under \$100.

-There is a maillist with R/C Soaring items. Address not immediately available. Mark Miller found a ratty repairable Hobie Hawk for \$30.

-Providers used by MRCSS members include minn.net, pclick, usfamily.net, goldengate.net.

General Discussion Items

-Tom Rent heard of an automated answering service for \$10-15 per month that may meet the needs of the MRCSS for announcing flying sessions.

-The annual Sport Aviation Conference will be held at the Minneapolis Convention Center on February 13 and 14. Model and full-scale displays expected, as well as interesting forums.

-Mike Trutwin is looking for a JR computer radio.

Bill Sampson wins Second Choice Raffle Prize

As first winner, Mark Miller's son took the Hitec charger, then Bill Sampson chose the certificate for a glider ride with Tom Rent. Sanding blocks were the other two prizes.

Sloper and Gentle Lady Shown

Kirk Hall brought his Freedom Sloper, an ARF originally by Kraft-Air. The kit comes in seven pieces. Kirk thought the fuselage a little weak, with only two bulkheads. He added triangle stock for longerons.

Jim Ladwig displayed a Gentle Lady built and flown by

one of the teams at Washburn High School last fall. Despite a landing that buried the nose two inches into the football field, the fuselage did not break. The front rail for the servos tore loose, and Jim told of plans to strengthen that in future models. Some suggested thinning white glue for better penetration into balsa.

The perseverance of the students to keep on flying was shown by the use of masking tape to hold the stabilizer to the fuselage when it was found that glue joints to MonoKote do not hold up well.

This glider was donated to us and is available as a second Gentle Lady trainer to supplement the Highlander EPP model. The radios in these Gentle Ladies have a buddy-box trainer system.

Patterson's Host Holiday Party

Don and Gert Patterson are once again opening their "back porch" for our Annual Holiday Party on Saturday, February 6 at 7 P.M. Bring a spouse (or significant other), a dish to share and a healthy appetite. Be sure to save room for Gert's delicious cream puffs. Their house is at "the end of the road", so be sure to bring the map with you. Call 612-476-2057 from your cell phone if you are hopelessly lost.

Freeze Fly held 1 P.M. on 1/1/99 at 694 & Central

It was a brisk affair, lasting only 45 minutes, with a wind chill of 20 below and short flights. Craig Lamatsch was the first up with his Les Garber Special Speed 400 pylon racer, and the flight will not soon be forgotten by Craig's nephews. Dave DeGroot was next with a nice flight of his Electric Storm, but his aerobatics were given only second place. Mike Martindale then flew his Speed 480 Hot Liner. Jim Ladwig tried the Astro Viking, but the motor would not run. Back home, a poor connection at the fuse holder was found to be the cause of the problem. President Kirk Hall was a spectator, as were Peter and Stephanie Lamatsch, their son Aaron and nephew Brian. All adjourned to The National Hobby Company to thaw out, read magazines and look at kits. Mike bought a magazine with an article on airbrushing, a possible future meeting topic.

1999 BUILDERS CHALLENGE

A question was brought up at our last meeting as to if there were any Swap Meets or Auctions coming in Jan & Feb.

I just got this on off of the STPRC Newsletter

TCRC Auction Feb 23rd
St Peter's Church
6720 Nicollet Ave.
Richfield, MN
Registration @ 8:00 am
Auction @ 10:00 am
Questions call:
Bill 612-869-5493
Jim 612-445-5257

-----> MARK YOUR CALENDARS <-----
MARCEE99 E-FLY June 25th, 26th, & 27th
Thanks Tom Rent

Historically this event has been put on to encourage members to build new planes, half built ones sitting on a shelf, or new ones still in the box or in your head. Lets get them built and flying. This has been one of the more popular events each year and this is how it works.....

All club members are invited to participate.

Pledge the number of planes you intend to build for the contest. Pledges will be accepted up until the January monthly meeting. (I can be reached at (651) 695-0708 or at dengleson@cunningham.com for questions and pledges.)

Any glider or electric powered plane will qualify.

There is a \$10 entry fee for each model pledged. Each entrant will get their entry fee back along with (2) raffle tickets when they present the flyable model at the monthly meeting in May.

The money that is not reclaimed or forfeited because a member did not complete a model is used to buy prizes or can be used as a cash prize also. (TBA)

Local and national hobby stores have donated items in the past to be used as prizes. (Ed Berris included)

An extra raffle ticket will be awarded if the plane is presented at an earlier meeting. (Bonus)

All planes will be judged at the monthly meeting in May. A ballot will be provided for each member in attendance.

Separate prizes will be awarded for the following; 1) Best overall entry - peoples choice. 2) Best scratch built or own design. 3) Most unique entry.

The raffle will begin following the judging portion of the night.

I am sure I missed a few points here so please feel free to help me out with any suggestions or comments you might have.

Thanks, David Engleson

l o o k i n g u p

MRCSS APPLICATION/RENEWAL FORM

___ CHECK IF INFO SAME AS LAST YEAR (See label on front) (no need to fill further)

NAME: _____ AMA: _____

STREET: _____

CITY: _____ STATE: _____ ZIP: _____

PHONE (N): _____ PHONE (D): _____

E-MAIL: _____

COMPUTER RADIO CHANNELS: _____

OTHER RADIO CHANNELS: _____

Delivery of Newsletter : ___ E-MAIL ___ US Postal Service

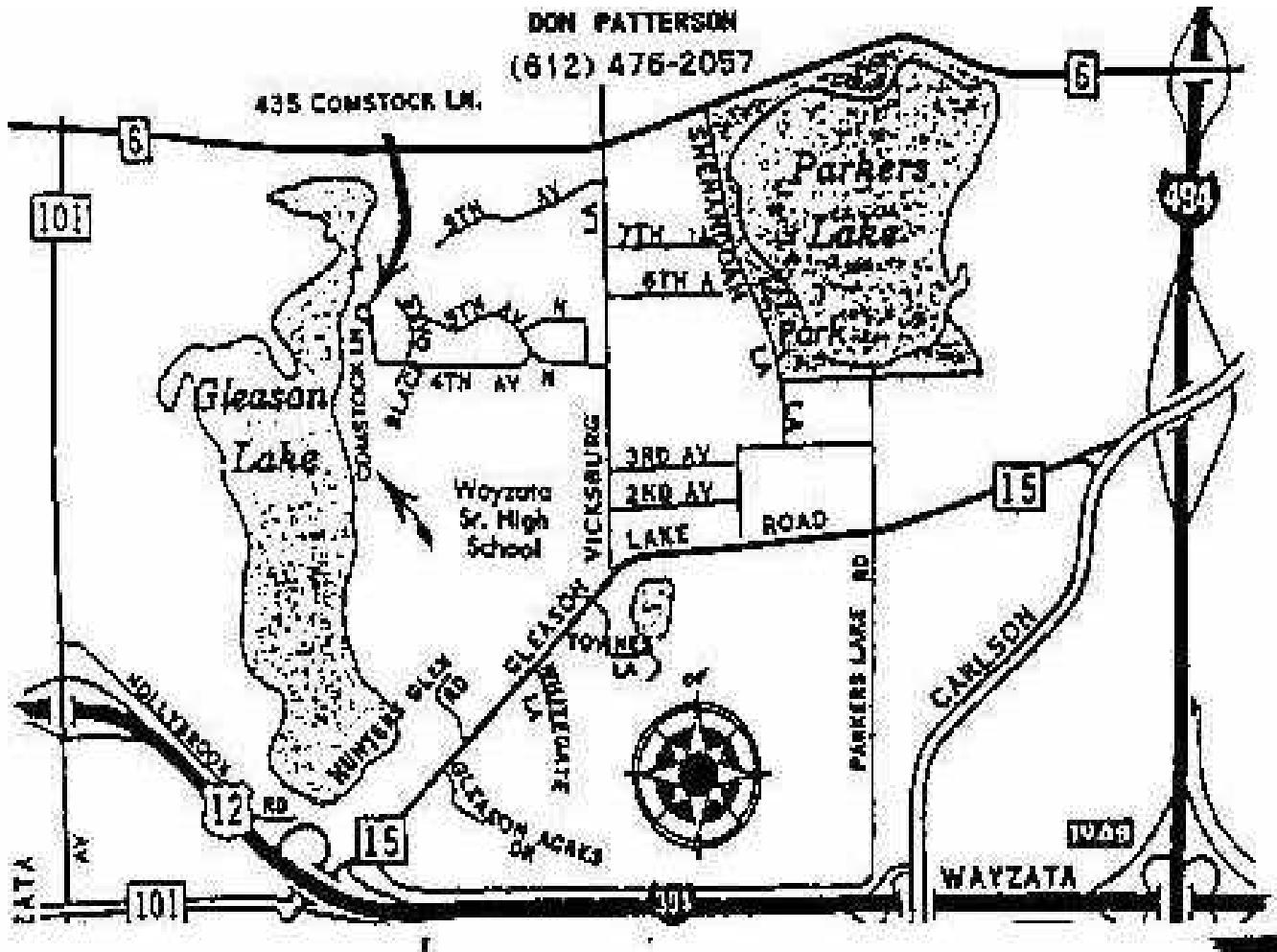
FEES: Associate \$10 (Newsletter Only)
FULL / FAMILY \$20
Junior (under 19) \$10

MAKE CHECKS PAYABLE TO MRCSS

Please return to: **JIM LADWIG** by January 1 sooner is preferred
5354 Newton Ave S.
Minneapolis, MN 55419

Patterson's Host Holiday Party

Don and Gert Patterson are once again opening their "back porch" for our Annual Holiday Party on Saturday, February 6 at 7 P.M. Bring a spouse (or significant other), a dish to share and a healthy appetite. Be sure to save room for Gert's delicious cream puffs. Their house is at "the end of the road", so be sure to bring the map with you. Call 612-476-2057 from your cell phone if you are hopelessly lost.



l o o k i n g u p

1999 MRCSS FREQUENCY USAGE CHART

January 2, 1999

CH	Computer	Regular	CH	Computer	Regular
00			30		Rent, Carver Rosenquist, Dahl
01			31	Okinow	Lamatsch
02			32	Metz, Harold, Okinow Stinson	Berris, Lamatsch Rent, Stinson
03			33	Rent Stewart	
04			34	Schmidt, Berris, Paske	Rent, Stewart, Paske, Brinkman
05			35	Harold	Harold
06	Bagley	Bagley	36		Berris, Lamatsch
07			37	Okinow	Paske
08			38	Berris, Karl Christensen	Bagley, Brinkman Berris, Hocker
09			39	Stadler, Berris	Miller
10			40	Berris Degroot	Bagley, Trutwin, Hocker Karl, Kotval, Wald
11		Rent, Sampson	41		Hanson
12		Rent, Vogelsang Van Benthuyzen	42		Wald, Rosenquist, Bristow
13	Hall, Patterson	Paske	43		Nordquist, Palen
14	Olive	Rosenquist, Paske	44		Griffiths, Vogelgesang Rosenquist, Brinkman
15	Lamatsch	Gold, Clinton, Rosenquist Tucker	45	Brinkman	
16	Botha Wald	Cotter, Coghlan Rosenquist	46	Christensen, Okinow	Brinkman, Metz, Rent Perecman, Dahl
17	Sowder, Hall	Sowder, Paske, Schworer	47	Martindale	Igoe
18	Botha Lamatsch	Botha, Kotval, Olive Nordquist, Christensen Rosenquist, Hocker	48	Okinow, Sorenson	Nordquist, Jorgensen Wald, Patterson, Vogelsang
19	Bristow	Olive	49	Berris, Wald	Palen
20	DO NOT USE. LOCAL INTERFERENCE	DO NOT USE. LOCAL INTERFERENCE	50	Berris Stewart, Young	Perecman, Carver, Wald Rosenquist, Hanson
21			51	Cooke	
22	Stewart	Berris, Rosenquist	52		Griffiths, Olive, Rent, Bailey Metz, Carver, Dahl, Christensen, Huemmer
23	Perecman, Vogelgesang	Wald, Sorenson	53	Smith, Engleson	
24		Bailey	54	Metz	Cotter, Karl, Igoe, Sampson. Patterson, Huemmer
25		Sampson, Croke	55	Stewart	Fisher, MRCSS
26		Bristow, Kotval Croke, Berris, Perecman	56		Perecman, Knox Igoe, Hocker
27	Nordquist Perecman	Lamatsch, Schworer, Phelps	57	Cotter	Bagley, Smith, Sampson Ladwig, Martindale, Lewis
28	Haley	Bristow, Kotval Degroot, Wald	58	Lamatsch, Vogelsang	
29	Trutwin	Sampson	59	Lamatsch	Olive, MRCSS

**Please contact Jim Ladwig (612.920.1245 or jimladwig@cwixmail.com)
if you ADD or DELETE radios so we can keep this list current.**

l o o k i n g u p

Dec. 30, 1998

Hellooooo Minnesota,

It's been a long time since I wrote an article for my old club newsletter, and I have no excuses except to say that I had other things that I would rather do. Anyone else have that problem?

I joined the South Bay Soaring Society in San Jose, CA when I moved west in 1993. I retired this year and now have become the newsletter editor of the SBSS. So much for the extra time on my hands. I've had the good fortune to fly at the largest glider contest in the world, Visalia, and at what is becoming the scale event in the United States, Los Banos. I have enjoyed flying in a contest every month of the year since I have been here until this past year, but I think that I'm suffering from burnout. Now, if the weather isn't just right, I don't care to go to the field. Bummer. I can remember when I first started flying gliders, I couldn't figure out why guys like Tom Rent and some of other club members weren't at the field at 9:00 a.m. every Saturday and Sunday like I was. It would be a little rainy and no one would show up for the contest. "Where is everyone?" Well now I know. There are other things in life besides RC gliders. It sure was a passion for awhile. Don't get me wrong, I still love the hobby; it's just that I don't have that passion that I once had.

In the past few years, I have owned the R and R, Genesis, the Ron Van, Spectrum, the V-tail Spectrum, Slegger's Vulcan, and the Black Hawk (made by some one in Arizona). Each was a great plane in its own right. The Genesis is probably one of the best all-around gliders on the market but kind of difficult to launch for some people. The Spectrums were great in calm weather but not good in any kind of wind. The Vulcan is a lot of fun and does OK in good air. The Black Hawk was, and I have to admit that *was* is the correct term here, my pride and joy. I finished 46th out of 200 at Visalia in 1997 with it. Its big problem was that the fuselage was very flexible, which they later corrected. After two years of hard flying I finally broke the tail off at the top of a launch. I understand the Black Hawk is not sold any more. I really like the S9000 airfoil; it was fast and yet could slow way down to thermal like the 7037. My Black Hawk had an obechi and foam wing with hollow-molded, carbon-fiber flaps, ailerons, wing tips, and rudder. All surfaces had

preparatory airfoils. They also made a hollow-molded, carbon-fiber wing and stab (if you could afford it).

Right now my biggest joy is my ¼ scale ASW 21. It's an all glass ship that I was given if I could repair it. Boy, I snatched that one up without a second thought. It took me two more repair jobs to find out what was causing it's problems, and since then I have been in love with the ship. Hint: the tow hook goes *under* the leading edge of the wing, not just in front of the CG. Take a look at a full scale sometime. Now we are Aerotowing at the club field. We can only have a power plane at the field once a month to aerotow, and there are only a few of us right now that take advantage of it. There are a lot of scale gliders in the club, but they are mostly slope flyers. We hope to convince them to try aerotow, and then we can start having scale contests like the ones in Europe.

Like most clubs the SBSS has been losing members and we are looking for ways to encourage more people to join. No one seems to be interested in stick building anymore, and young people don't stay with it long enough to gain any proficiency, so maybe aerotow might bring in some of the power flyers. We still have the hard-core contest group of flyers, but the weekend fun flyers are disappearing.

By the way, Bob Botha (from Mankato) has a son, Kevin Botha an engineer at Ames, NASA .Kevin is a member of our club, and he is developing several airfoils for F3B and for thermal duration.. R and R products are molding the wings (I believe from aluminum molds) and they are currently being tested at our field. They look very promising, so keep your eyes out for a new wing in the near future.

I hope to drive back to Minnesota next spring and take a flight with Tom Rent. That's a good excuse for coming back isn't it? Maybe we can get in a flight or two at the sod farm too.

Till then have a good 99.

Eugene Heggen
heggengearing@thegrid.net

SOUNDINGS

Takes a Licking, Keeps on Ticking

Ka-thunk! Two Zagi-LEs have just collided in mid-air. One hurtles to the ground, forcing its flier down the hill in pursuit, while the other one soars on victoriously. "Kill! Kill! Eeeoww! I stuffed him," shouts 15-year-old Sam Siegel.

The wafting breezes and a bright blue sky laced with cumulus clouds make it another perfect day for flying on Snake Hill in Malibu, California. More than a dozen Zagi owners have gathered for a Fur Ball, a free-for-all combat meet. Designed and manufactured by Jerry Teisan, the Zagi-LE is the model flying wing that has become the standard in slope combat—extreme competitions between radio-controlled models. You can build one in the morning, fly it in the afternoon, and attack and crash as often as you like—they're virtually indestructible. "At one combat contest I had 50 mid-air kills and 25 crashes to the ground—tons of abuse," says Teisan. "I've had a truck run over one and a dog intercept another, thinking it was a weird kind of Frisbee, and they flew just fine with tread marks and fang dents."

Teisan's Trick Radio Control company offers three models, ranging from \$45 to \$100 (see www.zagi.com). They're not just for kids, klutzes, and crazies, says Teisan, who's known in model airplane circles as the Flying Wing Guy. "Experienced fliers will get really good, because they'll be able to do what they never could do with a high-performance fiberglass or carbon fiber airplane."

Teisan has seen his competition come and much of it go. "Everybody sort of scoffed at the whole flying wing thing and for two years the other major model plane manufacturers left me completely alone," he says. During that time, Zagis garnered

a sky-high reputation. Nobody's scoffing now. Zagi flier Jim Thorne put it this way:

*There once was a sloper quite shaggy,
Who was trying to knock down a Zagi.
He flew without fear
and thought he was clear,
But took home his plane in a Baggie.*

Although Teisan launched his company just four years ago, he's been building model airplanes since childhood. Throughout three careers—as an industrial and fashion photographer, a building trades consultant, and a fisherman, Teisan flew his model airplanes whenever he could. By 1990 he was spending his spare time making custom composite racing aircraft and selling them on a one-by-one basis. But

when he saw a foam airplane at one of the local flying fields, it got him thinking.

"The worst thing about learning to fly model planes is you spend 20 to 30 hours building this fragile thing out of sticks and balsa wood, and then you finally get it up in the air and—boom!—within three minutes of stick time it crashes and breaks," he says. "Then, even if you get it back together, it never flies as good. But the new foams coming out returned to shape after impact."

Teisan combined his passion for flying wings with the latest in foam technology. He perused old German airfoil books, settling on a wing design attributed to "Zagi." He cut wings from expanded polystyrene or styrofoam and attached leading edges of soft expanded polypropylene. "Then I invited a bunch of friends over, and we installed their radio gear and went out to test fly them," he says. "The one I called the Zagi-LE worked the best."

The Zagi-LE was such a hit everybody at the hill that day wanted one. Within months, Teisan was in business producing Zagis from his home in Venice, California. Today he is shipping about 500 every month around the world. "These days, kids who have grown up with the computer know a joystick and gimbal



JERRY TEISAN



COMPOSITE BY DOON REEL

from the time they crawl, and their eye-hand coordination is just incredible," says Teisan. "They're learning to fly in a day, but the airplanes have to be indestructible for that learning process."

Sure enough, two boys in today's Fur Ball competition took top honors—Sebastian Mark, 9, walked away with the trophy, with Sam Siegel coming in

second. Despite more than 100 kills and half again as many crashes, everybody at Snake Hill went home with their Zagis intact and only their egos bruised.

Now that his Zagis have taken off, Jerry Teisan has accomplished all his childhood dreams—except one. "I always wanted to be a pilot," he says, "of full-scale airplanes."

—A.J.S. Rayl

l o o k i n g u p

MRCSS CLUB RECORDS

STUFF

LONGEST SLOPE DURATION

ALL TIME HIGH RECORD

CLASS	NAME	TIME	DATE	NAME	TIME	DATE
1.5M/HL	Tom Rent	3:21:00	10/23	Tom Rent	3:21:00	10/98
2 METER				K. ROGERS	4:29:00	10/87
STD	Tom Rent	1:56:00	10/24	TOM RENT	3:17:07	8/89
OPEN				K. ROGERS	2:45:38	10/82

LONGEST THERMAL DURATION

HL	NAME	TIME	DATE	NAME	TIME	DATE
ILLUSION HL	Brian Brinkmann	0:25:30	8/30	Brian Brinkman	0:46:01	7/96
ILLUSION	Jim Ladwig	0:1:03	4/28	Dave Degroot	0:11:13	5/96
1.5M	Tom Rent	0:12:56	10/24	Jim Ladwig	0:02:55	5/98
2 METER	Jim Ladwig	0:12:40	8/21	K. ROGERS	1:37:48	8/83
STD				R. DIABALSO	2:13:00	6/87
OPEN	Tom Rent	0:37:02	4/26	S. BOWMAN	3:17:10	5/90

LONGEST ELECTRIC DURATION

5/6 CELL	NAME	TIME	DATE	NAME	TIME	DATE
7 CELL	Jim Ladwig	0:18:11	5/03	TOM RENT	0:44:49	4/93
OPEN	Jim Ladwig	0:12:40	8/21	J. SMITH	2:44:12	8/94
				Brinkman	1:04:38	9/94

FLIGHTS AFTER 6 pm

SLOPE	NAME	TIME	DATE	NAME	TIME	DATE
THERMAL	Bill Igoe	0:1:09	4/28	C. KOTVAL	0:45:02	4/88
ILLUSION HL Thermal	Jim Ladwig	0:0:13	4/28	Jim Ladwig	0:00:13	5/98
ELECTRIC	Jim Ladwig	0:9:01	9/06	JIM SMITH	0:20:44	8/93

CROSS COUNTRY FLIGHTS

<12' SPAN	NAME	TIME	DATE	NAME	TIME	DATE
>12' SPAN				KARL/ PERECMAN	6 MILES	6/90

*** BOLD NAMES REFLECT ACTIVITY RECORDED DURING THE MONTH ***
PHONE ALL RECORDS INTO JIM SMITH. 831-8184.

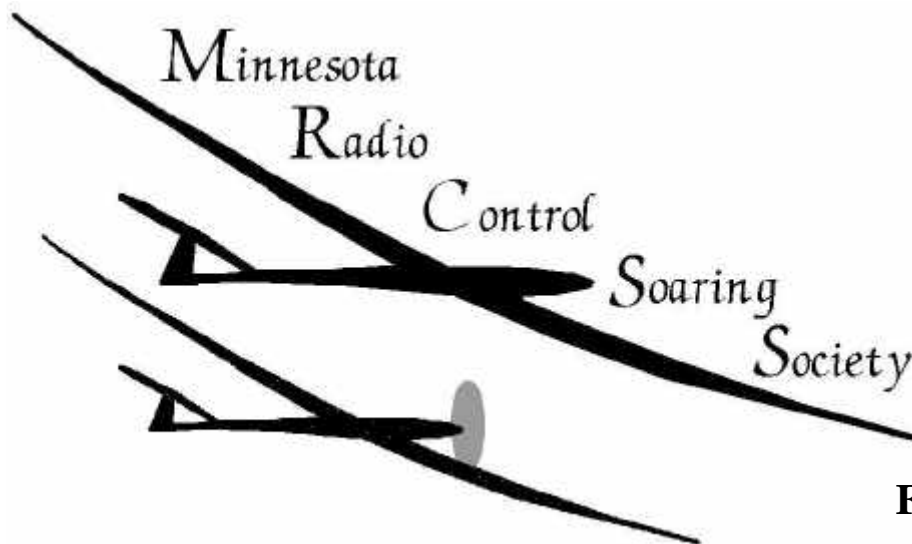
LOTS OF OPEN RECORDS PICK A CATEGORY AND GO FOR IT !!!

100 Minute Club

Thermal Tom Rent Level 2
Tom Schworer Level 1 2M

Slope Mike Trutwin Level 2
Tom Rent Level 3
Level 4
Level 5

Steve Stadler / MRCSS
786 Cannon Ave.
Shoreview, MN 55126



FIRST CLASS MAIL