



Academy of Model Aeronautics

Chartered Club #970
5 Year Gold Leader Club

Skywriter

PRESIDENT'S MESSAGE...

BY: ROSS JONES

The 2004 Flying Season is off to a good Start! Skymasters ruled the skies (albeit by a slim margin) during Mark Smith's Inter-Club fun fly. The Romeo and Holly Cloud Hoppers members came out of hiding and almost won the day – but read on inside for details!

Now for business. We Skymasters need to keep the pending land swap within our State Park boundaries in mind. It isn't over yet. Recently there was an editorial in the Detroit News supporting this land swap and the information this editorial used was, shall we say, convenient; and rather wrong. Based on what I have gleaned from this editorial and what I am seeing, a new tact is in order. It has been made clear to me that the value of the land to our east has been based on its existing zoning, which, at present is farmland. Now, in the appraisal business you can value land any way the owner wants. Let's have a look at how land is typically valued.

Generally speaking, an appraiser does what is called a comparative analysis, basing the price of the property on what property of similar size and quality has recently sold at; or been appraised to. Zon-

ing is a large factor in pricing determinations, and the proximity of the zone in question to other, less valued zones is also very much a factor. Now with a residential property, this is a simple matter in zoning – it is zoned residentially and



OPENING DAY
STONY CREEK FLOAT FLY

normally remains so. But what if your residentially zoned property is externally obsolete and surrounded by development that is more office than residential? External Obsolescence is a real estate term used to explain why good houses in bad neighborhoods or next to a landfill are differentially valued from other similar houses. Now, do you value your home on a residential basis, or through the lens of office space zoning? Which is worth more?

These are the things that you ask during an appraisal in this special situation. Whether or not the property is zoned one way or the other matters not; what matters is the valuation of the land under each condition.

So, let's look at our land east of Scripps road field. We know that the State of Michigan Natural Resources Commission (NRC) holds that this land has been deemed externally obsolete from prior statements to justify the swap. Underutilization and lack of buffer zones were just two things they mentioned in their correspondence; making it unsuitable for the use originally intended; hunting and recreation. They also have let us know that the land has been valued with the present zoning in place – Farmland! Now wait just a minute, why would one value property as farmland when there is a possibility of valuing the land under a commercial zoning?

So therein lies the rub. This is the part that is not fair and doesn't look very good at all. Orion Township has made it clear they wouldn't support any rezoning of this property if it is released from the

(Continued on page 2)

2004 Club Officers & Appointees...

President:	Ross Jones	6028 Meadowgreen	Waterford	48327	248-738-4435
Vice Pres:	Paul Zabawa	PO Box 138	Metamora	48455	810-678-3332
Secretary:	Joe Hass	1142 Brunswick Dr.	Rochester	48309	248-321-7934
Treasurer:	Joe Rubinstein	155 Cayuan	Lake Orion	48362	248-693-4265
Editor:	Mike Holmes	2557 Hemlock Ct.	Oxford	48370	248-969-9189
C F I :	Ron Sokacz	40714 Matlock	Sterling Hts	48310	586-977-1404
State Park:	Bill Stark	1010 E. Clarkston	Lake Orion	48362	248-693-8639
Membership:	Gary Weaks	2512 Red Fox Trail	Troy	48098	248-540-8358



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public domain. But why would someone want this property so bad if this were the case? Simple: money. Rezoning this property is a several million dollar windfall to whomever the owner is, hands down. I recently heard the following from one of our members - "Speaking of public hearings, I can guarantee that despite what the DNR and politicians have stated, there will be no public hearing. New master plan boundaries for all 96 state parks and recreation areas was approved two weeks ago without a single public hearing, and we were not advised that it was on the agenda as was promised. Only the master plan boundaries of Wetzel State Park and Bald Mountain Recreation Area were changed by the Commission. We need to come up with a fresh idea to insure a public review as regards the land swap."

PHOTO CONTEST



Announcing the 1st annual Sky-masters Photo Contest. Email your best airplane and members pictures. A highly qualified board (Carolynn, Sam and I) will pick the best photos. Gift certificates for the top three, plus star billing on the Member Pics section of the website. See the Member Pics section for the type of pictures I mean.

Nice clean backgrounds, etc. Posed pictures, not pictures of planes with stuff everywhere.

Email your photos to:

peteskymaster@sbcglobal.net

Please don't send them to my regular email address and clog it up!!!!

Pete Foss

We have been telling those that would listen that this is an unfair arrangement for the taxpayer. We need to keep up with this situation as the summer unfolds and a new commissioner comes into play. We will keep you posted as to what is afoot. But I anticipate writing about this at the Federal Level - namely Senator Carl Levin, as this land swap proposal sits with the National Park Service. We need to take a long term view on this issue. As far as Lake Orion Township stating that they would not support a rezoning - time is on the side of the owner. And a good,

PROPOSED AMENDMENT TO BE REVIEWED AT JUNE 5th FIELD MEETING

Article II—Meetings

b). June through August— Held on the first Saturday of the month. Presently they are held at noon, Change to:

b). June through August—Held on the first Wednesday of the month @ 8:00 pm.

This would be in effect in 2004 for July through August as voting must occur.

Pictures From the field



Mark Smith and his new "Ariel" 2 meter plane. 160 fx, 11lbs, 4 Oz bought at a swap meet for \$10. (or so he told Elizabeth)



Steve Fredericks and his new 1/4 scale "Sopwith Pup". It weights 14lbs and has a 120 YS 4 stroke. He won it. (I am doing something wrong!!!)

MIDWEST REGIONAL FLOAT FLY **14th ANNUAL**



SEPTEMBER 11-12

EVENT DIRECTOR NEEDED!

CONTACT: ROSS JONES NOW!

PROP WASH...



Hi All,

Our series on designing a RC model on the PC continues. As before, let's start with a recap

We have chosen our model, chosen our primary 3-view, have it vectorized and ready to read in

We have set up our CAD environment, including scale (1:1 hopefully!) and layers

We are tired of how long Joe is taking to describe this

So, now we might actually get to draw a line or two this month!

Our first step is to bring in the Vectorized 3-View into our CAD program and get it to the size we need to use. In figure 1 below, I have read in the vectorized 3 view and then moved it to the trace layer I set up.

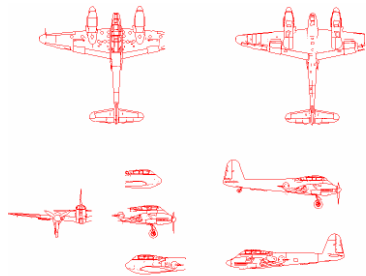


Figure 1 - Trace Layer of Me410 Drawing

Now, the first thing we have to remember here is that the vectorized drawing is at the same size as the paper we used from the scanner. In other words, in the picture above, if I measure (using the CAD program measure tool) the wingspan from the above data, it comes out to about 8.25 inches (from middle of the fuse to the left wingtip in the upper left top view) – this corresponds to a total wingspan at the present scale of about 16 inches. This is O.K. if I am making an indoor flyer using LiPo's, but I am planning on a 90" wingspan, so I have to make this trace layer data bigger. How are we going to do this?

First off, let's talk about where the 90" wingspan came from. I chose 1/7 scale on the Me410 for a couple of

reasons, one being I wanted to use a medium size 4 stroke for both engines, many other warbirds use this scale, and it would keep the wingspan to something I could still fit in my car. One of your critical decision points at this stage is what scale you want, or what wingspan you want. You may need to scale the design to fit a landing gear or engine you want to use, but whatever the driving force, once you have chosen the scale of the final model, calculate the wingspan from the original. Here is the math for the Me410

$$\text{Full scale wingspan} = 53' 7''$$

$$1/7 \text{ scale} = 53' 7'' / 7 = 92 \text{ inches (approximately)}$$

So now, I just took a half wing-span measurement of 8.25 inches on the scanned image, and I want this same measurement on the final scaled version to be 46 inches (remember, my measurements are half wingspan, fuse center to wingtip)

I need to scale the trace layer data by the following formula

$$\text{Scale factor} = \text{desired wingspan} / \text{measured wingspan} = 46 / 8.25 = 5.412$$

If you are still following me now, we need to somehow scale up the entire trace layer by a factor of 5.412 – In TurboCad, this is very easy, and I suspect it is easy in every CAD program. Here are the steps I used

View only the Trace layer

Select all data on the trace layer

Enter a x-scale factor of 5.412 and a y-scale factor of 5.412 in the scale tool, hit enter and wait for command to finish

After this command finishes, (and it can take a long time!), the view of the data looks exactly the same, but if you zoom out, you will probably see the extents of the data are bigger, assuming you have "rulers" turned on your drawing. The data has remained unchanged except for being increased in dimension by the scale factor.

Now, we should have a 3 view at the precise size and scale on our trace

layer, so it is time to lock the layer (locking the layer means not allowing edits to data on a layer). We will be turning the trace layer on and off often in our design processes as we use it to trace outlines of objects and to verify things we create are still scale. Our trace layer is 1:1 for our drawing – no measurements or further scaling are needed, and trust me, we are almost ready to start drawing.

Interestingly, we should also consider a manufacturing issue here. For our balsa and ply parts, we might want to consider if we are going to have them laser cut. If the answer is yes, then we will alter some of our design methodology to make this easier.

Allow me to diverge once again (are you beginning to wonder if I am EVER going to get to actually drawing lines on the CAD system?)

I am a big fan of Laser cutting of our parts for several reasons, but one of the primary ones is better fitting parts and stronger joints are possible. If you look at the small planes in our hobby that are laser cut, you will see joints that are just not possible with die cutting or a band saw. The parts can be made to fit together and interlock, and laser cutting makes this possible. The reason I make this point now, is that we have to draw outlines and set up a few things BEFORE we draw to allow for Laser cutting files to be generated. If you think you are going to one day kit out your beautiful creation for sale, then this point is even more important as there will be additional constraints on the design that your Laser cutter will impose on you if you want him to cut you 100 kits. I will discuss many of these as we go.

Now that my discussion on Laser cutting is over, it's time to begin drawing. All we have so far on the design is a trace layer, and how do we approach the "blank sheet". Here is what I do initially

Draw a complete outline of the Fuse (top, side views) and a complete outline of the wing – These would be the planform views.

There are several more steps, and they will be covered in the coming months. Why do I draw the outlines of the fuse and wing, since it essentially copies the trace layer? - Several reasons

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The trace layer data will be more than likely disjoint and non continuous. The vectorizing process we did to our 3-view will probably makes lots of little line segments rather than a continuous line. This would be very bad for laser cutting and make for a sloppy drawing.

The 3-view may have the total fuse in sections, like my Me410 was, and we will need a complete fuse to work with (same with wing)

We need to put our actual design data on another layer rather than the trace layer.

While I still have a little room left for this month, so let's look at a real close up of the Me410 trace layer near the nose

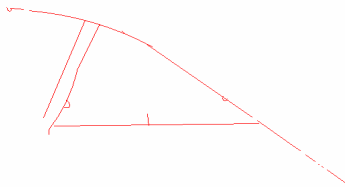


Figure 2- Close up of Me410 Trace Layer - Nose area

If you look closely at the trace layer, the lines are not exactly smooth, and are broken up. Our first task is to build up the planform views – nose to tail (both side and top/bottom for Fuse) and the same for the wing. We will refer to these often in our detailed design. Next month, I will discuss how I will actually follow this trace layer using an extremely helpful concept in CAD known as snaps (for those of you familiar with snaps, we will heavily use the snap to object in this tracing)

I know this is taking a long time to get to the actual “work” involved, but there are many concepts to go over so you can also understand why I am doing something rather than just how. When we begin this hobby, we often are told to do something (like epoxy here, CA there...) without often understanding why. My goal is to also help you understand why so that you can create your own design that may be much different than the Me410 example we use.

So, next month we plod along with some drawing and more concepts

See you at the field – spring has sprung and I am ready to fly once the rain stops!

ROMEIO CLASSIC SCALE RALLY

2004

SKYHAWKS WELCOME YOU TO THE 1ST ANNUAL “FUN SCALE MEET”

- ANY MODELS THAT RESEMBLE A FULL SCALE AIR-CRAFT - “STAND WAY BACK SCALE” ARE WELCOME
- EACH MODEL MUST MAKE 1 FLIGHT TO QUALIFY FOR PRICES EITHER BY THEIR OWNER OR HIS TEAM PILOT.
- **1ST PLACE** - PILOTS CHOICE WINNER VOTED ON BY ALL REGISTERED PILOTS \$50.00.
- **2ND - 4TH** - WILL BE DETERMINED BY A RANDOM DRAWING OF ALL THE REGISTERED PILOT ENTRIES.
- CONTEST DIRECTOR DECISIONS ARE FINAL! CONTEST DIRECTOR IS NOT ELIGIBLE FOR ANY PRIZES.

JUNE 12



CASH PRIZES
\$50
\$25
\$15
\$10



CONTACT: STEVE FREDERICKS 248-693-6686

SKYMASTERS Membership Meeting May 12, 2004.

Ross Jones started the meeting at 7:36PM

Our guest speaker, Keith Shaw, was unable to make his presentation. He apologized and promised to come back later this year when we get back to indoor meetings.

Ward Miller of Shelby Township visited us for the first time. Ward has flown electrics and has just got into gas-powered flight.

Blair Evans is an electrical engineer and also visited us for the first time. Blair has experience with glow and is going to electric.

The Team Fun Fly is scheduled for Sunday May 16, 2004. Mark Smith is the CD.

The May 26th meeting will be a field clean up day at the field

The June 5 meeting (the first Saturday of the month) will be an outdoor meeting at noon at the field.

June 19 is the scheduled date for the Small Fry / Electric event.

Skymasters apparel is now done. Ross Jones will contact those that ordered product.

AMA Membership General Rules are available from AMA in pdf format.

There was a huge turnout for show and tell that took up almost 1.5 hours to present.

Paul Sabawa brought in a foam Frog built from plans from Foam Fly.com.

Wade Wiley brought in a new 12-volt battery called Optima. It is a deep discharge type battery, good for charging power systems at the field. It is spiral wound with electrolyte held in a fiber-glass webbing. It costs \$180.00.

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Greg Bausa displayed his GWS ME 109. 9 ounces with stock motor Llew Ellyn Young brought in a Caliber 30 helicopter from kyosho OS 32 ARF. ABCS gyro with digital rudder servo, dual belt drive with Futaba radio.

Gene Thuringer showed off his Hobbico Sky Vista for a 40/46. Only a phillips screwdriver and pliers are needed to assemble it in one evening. 6 pounds.

Wade Wiley also brought in his Great Planes Stuka. 7 channel Airtronics, OS 91,

9 pounds. Wade replaced the foam wheels with Robart scale wheels and added detail to tail.

Chris Hass spoke about his Hobby Lobby Corsair He built it with a Speed 300 with 4.5 gear box, 10X5 APC prop,

Castle Creations Pixie 20 ESC, FMA receiver.

Ross Jones showed off his Top Flight P-51 Razorback. 13 pounds, OS 120 for power, Spring Air retracts. Ross rebuilt it after a crash into wires.

Herman Grief proudly explained his Dornier 335 built from Model Airplanes News plans. Flat Monokote, 56 inch span, 9 pounds 3 ounces, YS 63and Magnum 30 4 stroke for power. Main tank feeds the engines with headers. Spring Air retracts. Klien regulator for rear engine.

Joe Finkelstine had his Edge 540 from Dave Patrick Models. It is equipped with a Saito 180, digital Hitec 160 ounce servos, 2-piece wing, I.e.d. voltmeter from Andy Low of Electrodyamics. 14 pounds.

Ron Boucke had his Lazy Bee with a Speed 180 with gear box. Futaba

transmitter, GWS 4 channel receiver, CS10 servos, 5 amp ESC, NIMH battery.

Joe Rubinstein had his 4 star 40 electric conversion lightened to weigh 3 pound. Max Cim brushless motor 13 x7 prop 16 and 19 cells. 4 pounds with lithium battery.

Dave Land had his Magic modified with wing plates instead of tips going for repeat of fun fly win with MDS engine.

Charlie McGlothlin showed his variation of the Roadrunner set up for OS 120 pump. Covered with Monokote with wheel pants and 3 inch spinner.

Jim Held had his huge Mariner built from plans in the November issue of Model Airplane News. 78" long with 101" span. Set up for 2 .46 engines.

Blue foam fuselage had over 200 tem-
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Membership Renewals for 2004

All membership renewals and membership questions for 2004 should be addressed to:

GARY WEAKS
2512 Red Fox Trail
Troy, MI. 48098

You can phone Gary at:
248-540-8358
or email him at:

Gary.T.Weaks@USA.dupont.com

Remember, if you are renewing by mail you must include a photocopy of your 2004 AMA card & completed application.



- P 40 engine with prop & muffler & \$25 OBO, ENYA 60 engine with prop & muffler \$35 OBO Contact Lola Grey 248-435-2947
- Metro Flight 112D Nicad/NIMH Cargers 1 to 36 Cells up to 5 Amps \$75.00 each. Panasonic Individual 3000 Mah Cells. Make packs to your specific needs. Good for planes/cars/boats \$1.50 per cell. Joe Hass 248-321-7934, e-mail joehass@cmconnect.net

STONY CREEK FLOAT FLYING



The Skymasters and the Fraser Flying Clubs have joined forces again this year to promote float flying at Stony Creek Metro Park. Every Wednesday weather permitting there will be flying at "Winter Cove" from 9:00 - 12:00. After entering the park stay to the left, watch for signs, it is on the right after the golf course.

Stony Creek is west of Van Dyke (M-53) on 26 mile road. There is a \$4.00 daily park fee or annual park pass is available.

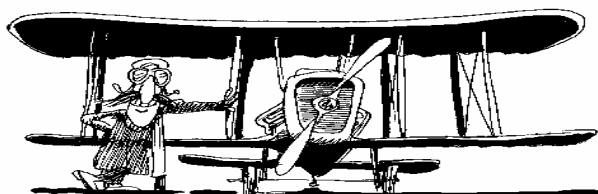
"Get your floats on and join us at Winter Cove every Wednesday"

For information contact: Jim Held 248-641-9724
jimwheld6651@wideopenwest.com

AREA EVENTS...

AMRCC CONTEST SCHEDULE

- ✈ JUNE 5.....FIELD MEETING.....ROSS JONES 248-738-4435
- ✈ JUNE 5.6.....RCCD COMBAT CHALLENGE.....JAY LAWLESS 248-727-3722
- ✈ JUNE 12.....ROMEO SCALE RALLEY.....STEVE FREDRICKS 248-693-6686
- ✈ JUNE 13.....PMAC BIG BIRDS OVER PONTIAC.....LINDA VELLA 248-627-8060
- ✈ JUNE 14, 28.....SENIOR CENTER..... HAROLD REUTER 248-391-2669
- ✈ JUNE 19SKYMASTERS SMALL FRY,ELECTRIC & SAILPLANES...PETE FOSS 248-236-0676
- ✈ JUNE 19,20.....RCCD BIG BIRD IMAA.....DON VERES Sr. 586-725-4322
- ✈ JUNE 26,27.....SIGNAL SEEKERS PRECISION AEROBATICS.....BOB KANE 734-281-8514



LAKE ORION SENIOR CENTER
 HELP OTHERS BUILD PLANES
 THEN FLY THEM IN THE SPRING!
 1:00 - 5:00 THE 2ND AND 4TH MONDAY OF EACH MONTH
 CONTACT HAROLD REUTER AT 248-391-2669

" SKYMASTERS " ~ MAY ~ 2004

SUN	MON	TUE	WED	THU	FRI	SAT
		1	2 STUDENT NIGHT	3	4	5 MEETING FIELD
6 RCCD COMBAT	7	8	9 STUDENT NIGHT	10	11	12 ROMEO SCALE
13 PONTIAC BIG BIRD	14 SENIOR CENTER	15	16 STUDENT NIGHT	17	18	19 GLIDERS ELECTRIC
20 RCCD BIG BIRD	21	22	23 STUDENT NIGHT	24	25	26 SIGNAL SEEKERS
27 SIGNAL SEEKERS	28 SENIOR CENTER	29	30 STUDENT NIGHT			

plates and is covered with 3 layers $\frac{3}{4}$, 5 layers on bottom. Wing is white foam and is sheeted.

John Hakala did an internet search on sea planes to find the Sea Star a 38 ft 260 mph aircraft. John designed his airplane for an OS 61, 81" span, 8 pounds.

Joe Hass showed off his Banchee G-3D (glow) and E 3-D (electric). Same platform but different power systems. 57 inch span. Glow is 4 pounds 4 ounces. Electric is 3 pounds 15 ounces. It will be an upcoming review in RCM.

Ross Jones thanked Bill Dezur for all his work supplying coffee for our meetings.

Romeo Airport will host "Barn Days" on October 9 barn days. Bill Dezur is chairman of event for scouting. The Yankee Lady B 17 from Yankee Air Force will be there.

Wade Wiley won the 50/50 raffle.

CHET BRADY MEMORIAL FLOAT FLY

The 3rd annual Chet Brady Memorial float fly was a great success. Twenty one pilots got in tons of flights in between the storms that rolled through the area. The rain stopped by 8:30 or so and when I arrived at 9:05, Dane Devine was already in the air. The conditions were really much better than expected with light winds until we stopped flying about 1:30. (all except Dave Shea who arrived a tad late at 1:00 for the 9:00 event). All in all a great time was had by all. Spectators included one of Chet's daughters and her husband were there to represent the Brady family. See you next year!!!

Pete Foss Event Director

BALD MOUNTAIN FLOAT FLY REPORT

Sunday, May 23rd. Not looking good. I pulled two people out of 18" of Water on Telegraph road on the way up to get the trailer. Little sleep from the night before because it was LOUD – with the thunder and rain. So a light turnout was expected to my 8th year running the Bald Mountain Float Fly. Light attendance @ only 20 pilots, compared to our usual 35, but the weather cooperated for most to get in a couple of flights. Jim Held was kind enough to let me know what it was like

INTER-CLUB FUN FLY



The first Inter-Club Fun Fly was a great success with 3 clubs represented Holly, Romeo & Skymasters. We had 2-5 member teams, one made up of Skymasters and the other a combination of Holly & Romeo. With 10 events each club had one member fly each event. Romeo-Holly led most of the day but it was all tied up by the last event, so we had to go to a tie breaker event. Skymasters pulled it out by only seconds.

Fun Fly's are always a great time, but I think with having clubs competing adds more Fun and less pressure and it's great to meet new R/C'ers. The weather couldn't have been better 5mph winds, 70 & sunny. Ross Jones did a great job as MC for the event. Mike Holmes show off his culinary skills as chef for the day. And thanks to Ed Kincer of the Holly club for his help in this event. (thanks guys)

Our next Inter-Club fun fly will be at Holly on July 24. All are welcome to fly or just cheer for the home team. (have you ever seen R/C Bowling?)

~Mark



FUN FLY FLYERS

to fly an Arrow – but only just; he kept me on a tight leash with a buddy box. Sure enough, after an immelman in knew not which end was up... Good thing for that buddy boxJ.

Wade Wiley brought his motor to power the life boat – and we had to rescue the lifeboat this year. There was no beach this year. Fully 40 to 50 feet of the beach was under water and the entire grounds were completely soaked – it was very unusual! Bill Stark and Bob Remer remarked that they had NEVER seen Trout Lake with this much water in it!

Around 1:30pm that rain came

back and we pretty much called it a day. Gift certificates were handed out at random to 5 pilots. Pete Foss remarked that this was one of his most successful float fly runs yet. Came back with the same number of planes he went out with and won \$25 in total gift certificates besides!

Special thanks to Wade Wiley for the boat (as always), Roger Schmelling, Samantha & Carolyn Foss and Denise Cardillo for their help at the grill!

Ross Jones Event Director



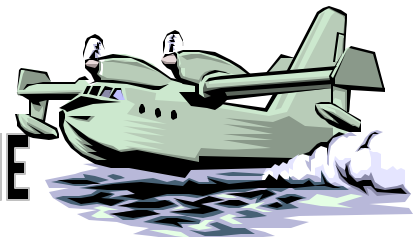
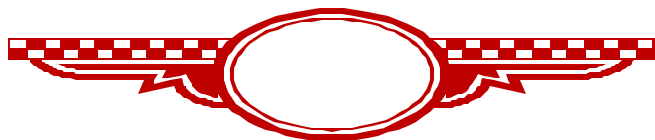
SKYMASTERS RADIO CONTROL CLUB OF MICHIGAN

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Web site: www.skymasters.org
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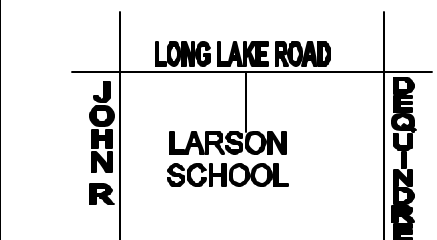
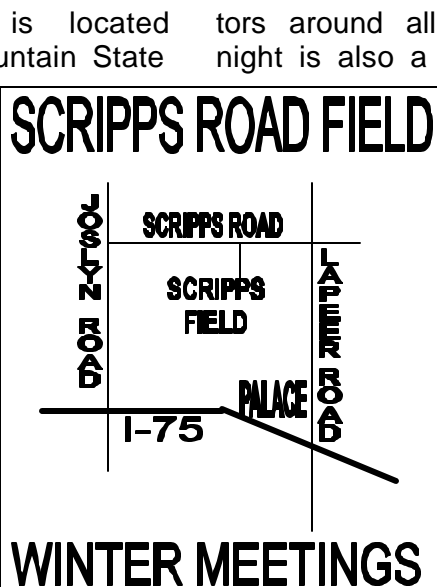


HOME OF THE "MIDWEST REGIONAL FLOAT FLY"

Skymasters Information.....

Skymasters field is located within the Bald Mountain State Park on Scripps Road (see map). State Park Permits are required and can be obtained from the Park Headquarters located on Greenshield Road or at club events. Flying is permitted from 10 AM to 8 PM. The noise limit for 2004 is 94 dBa at 10 feet—this noise rule is strictly enforced.

In the summer, Wednesday evenings are Student Nights and there are usually instruc-



tors around all day. Student night is also a pot luck buffet, bring something for the grill & a dish to pass. Meet the Instructors and arrange for more instruction time together on other days. Our Chief Flight Instructor is Ron Sokacz (810) 977-1404.

From June to August, Club meetings are held at the field, on the first Saturday of the month at 12

noon. A great chance to fly and socialize. Winter meetings—September to May—are held at Larson Middle School (on Long Lake just east of John R—see map). On the second and fourth Wednesday of the month at 7:30 PM. Bring a model for Show and Tell, enjoy coffee with donuts and listen to the speaker of the evening.

The Skywriter newsletter is sent to members, local hobby shops, and other R/C clubs in the area and around the country. All contributions are welcome. Please send articles to the Editor. If you know of anyone who may be interested in R/C Aviation, please give them a copy of this newsletter or a copy of an AMA magazine. It may spark their interest!