



Academy of Model Aeronautics

Chartered Club #970
5 Year Gold Leader Club

Skypwriter

PRESIDENT'S MESSAGE...

BY: ROSS JONES

Greetings Skymasters!

The board has been hard at work coordinating schedules with other clubs through AMRCC and it feels like spring already! See inside this newsletter for the events and dates we have arranged so far. I'll get to the ones we're still coordinating in a moment. As usual, the first event falls with our most important date, the **Bald Mountain Involvement day** on Saturday, April 17th. We need your attendance here as the State Parks really need us. Put this one down on your calendar right now! We'll be working this year to coordinate a "Inter-Club Fun Fly." Actually, this was Mark Smith's idea and gained momentum last year, with a lot of interest expressed earlier this year. We're still trying to nail down a date – but it will happen. Mark Smith is sure to plan a few surprises – and to bolster stocks held in the party supply industry – specifically with balloon stocks...

At this point, we have event directors (ED's) and contest directors

(CD's) lined up for every event save the big one, the MidWest Regional Float Fly (MWRFF). I regret that I am unable to attend this year, as I must attend the International Machining & Technology Show (IMTS)



WINTER FLYERS AT SCRIPPS PHOTOS BY: MIKE HOLMES

that happens on even years. Here's what I propose: I'll sign on as CD for now, coordinate the event, get prizes and otherwise work everything out until it's almost time, but someone has to step forward to take the reins for this one on the big days – which

are September 11 & 12, 2004. I'll be honest, thanks to Steve Fredericks and everyone else who knows and has worked in this event – it was a relative breeze for me to run! Because of these guys and their wives – this event was very successful and to my knowledge, everyone is coming back! Some of these guys, and Steve want to take a well-deserved break this year, so their (and my) notes are going to allow for a seamless transition. But a transition has to happen here, folks. Someone must step forward – I recommend that several good friends get together and work it out. Don't worry, there will be plenty of volunteers but decide to do it now - don't wait! - we need you right away!

We've had more snow this year than in the past several. Winter fliers had asked that we might plow the entrance and parking lot to the field. Jeez! No one really knew where to start. But a pioneering spirit named Bob Zorn asked for permission to use a State Park truck and away he went! Thanks from everyone, Bob!

(Continued on page 2)

INSIDE This Issue

Senior Center.....	2
Swap Meet.....	3&4
Prop Wash.....	5&7
Event Calendar.....	6
Meeting Minutes.....	7

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:	Mark Smith	1955 Hopefield Dr.	Lake Orion	48359	248-391-5970
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

(Continued from page 1)

Bob is also in our Radio Control Airplane club with the Lake Orion Senior Center. Skymasters has donated a Sig Kadet kit and building supplies – and the kit is coming along very nicely. Bill Stark, Harold Reuter, Mike Holmes and I have been regular ‘instructors’ there and we need a few things to complete this project. Upon the project’s completion, the members of the class will fly with us on some of the student nights in the spring. The plane will return to the possession of Skymasters and serve as a club trainer for kid/scout events, etc. Can anyone donate a 4 channel radio? How about a .40 sized 2 stroke engine? I may line up something at the swap meet, but please keep us in mind for this great cause. You should see these guys working on the plane – they absolutely love it!

~Till next time -
see you when I see you! Ross



ROSS & HAROLD HELP AT SENIOR CENTER



LT-40 ALMOST DONE PHOTOS BY: MIKE HOLMES

Orion Senior Center Update

With the donation of a Sig Kadet kit – complete with hardware, three rolls of covering and all the supplies necessary to build it, five members of the Orion Senior Center meet regularly to complete it.

Bob Zorn, Ed Pecheniuk, Harry Skalba, Gino Thomas and Glenn Geshman are some of the most eager students you’ve ever seen. Ross

Jones, Bill Stark, Harold Reuter and Mike Holmes have been the “instructors.” Under the guidance of Harold Reuter, students are exposed to a variety of building techniques and the theory of how planes like this go together. They are having a blast – and really enjoying watching the instructors “fight” over how to correctly glue a joint.

Meetings started on January 12th and as of the last meeting on February 23rd we have the fuselage framed and the wings joined. As you well know, it looks like we’re getting there, but we’ve a ways to go... It’s very fast paced and everyone is learning a lot.

We’ve got some spectators – we don’t mind a few more, come on over if you are in the area. Meetings are the 2nd and 4th Mondays of the month from 1PM to 5PM.

For Sale

¼ scale Tiger Moth Including, 2.2

Cobra gas engine, all servos, Futaba 6XA computer transmitter and receiver, Balsa USA floats. Built by Herb Dohem
\$ 850 Al Mrock
248-969-8139

Ghost Of Hendersons

Retires lunch and build or bull session 2nd and 4th Monday of the month at the Orion Senior Ct. in Lake Orion. The room is available from 1:00pm to 5:00pm with lunch served at noon. We have seniors and kids building model planes, so hang around and explore other activities available. For more information contact the Senior Center at 248-693-2066, Harold Reuter at 248-391-2669

WINTER FLYERS

WANT TO FLY THIS WINTER?
THE WINTER FLYERS ARE OUT
FLYING MOST WEEKENDS WE
WILL BE FLYING SUNDAY'S FROM
12 till 3 WEATHER PERMITTING.
COME OUT AND JOIN US.



"SWAP SHOP 2004" ...

BY: ROSS JONES

The laugh of the night for me came when I asked Jack Fleming at 6:15PM if he would be willing to herd people outside who had not bought tables and were milling around the entrance. I wanted him to kick them out and invite them back in at 7:00pm. He looked at me for a hard minute and said, "what, are you nuts?..." Needless to say, the 2004 Skymasters Swap & Shop lived up to its name as a 'temporary zoo.' Overall attendance seemed to be down this year, and I'd estimate the attendee number to be around 225 people besides those that purchased a table, for a total of 300 persons.

Thanks to Mark Smith's finite economical demand and supply analysis (he wrote the flier) and Ross Jones' logistical capabilities (he scrounged for all the tables), we managed to sell out every single one of our 63 tables @ \$10.00 each! Bill Dezur and his wife Louise did very well in the kitchen having slaved over a hot stove during the day of the event in order to have prepared enough supplies. He and his draftee are to be commended for running a tight ship and knowing exactly how many line items to have on hand.

Wade Wiley brought the most stuff in one van. A computer, chairs, tables, power cords and everything necessary to run a first class flight simulator. His pro-



PHOTOS BY: MIKE HOLMES

(Continued from page 3)

ceeds were donated to Skymasters! Several Attendees even donated ½ the proceeds of their kits at the auction we had, run professionally by Joe Hass (I'm thinking they liked hearing his voice...). Now there is a multi-talented individual who managed to haul in most of the prizes we gave away at the two door prize drawings. Greg Cardillo also brought several kits and we simply had too many – but alas, we'll have plenty of events coming soon where we will give away those kits Greg hauled in! See Inside this issue for more details there.

Now I know I'm going to miss somebody here, so please forgive me in advance if your name is not here. Jack Fleming, John Verbruggen, Herm Greif, and Mike Holmes handled registration and raffles flawlessly. They did so well, that all of the magazines and catalogs we received from our sponsors at RC Report, Cermark and Model Airplane News were completely cleaned out. Now I have no more explaining to do with my wife over how much space this hobby takes up in the basement (I had stored them for months prior to the Swap Meet)... I know several of you helped out during setup and take-down and helping Bill Dezur with the coffee. Doug Riley and Greg Cardillo also lent a much needed helping hand. Thanks very much for your help. The wild ride part of this club is that there is always help from members, but you never know how much and from whom until you are THERE! You can't have everything!

Thanks Everyone!

~ROSS

PHOTO CONTEST



Announcing the 1st annual Skymasters 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

"FUEL SALE"

It's time once again for me to place the annual fuel order. This year, orders will be accepted by **phone only** at the number shown below. Please leave a message if I am not available when you call.

- ☛ **10% Cool Power @ \$10/gallon (ordered by the drum)**
- ☛ **15% Cool Power @ \$11/gallon (if orders permit a drum, otherwise \$12/gallon)**
- ☛ **10% Omega @ \$11/gallon (factory packed)**
- ☛ **15% Omega @ 12/gallon (factory packed)**
- ☛ **Four-Cycle @ \$12/gallon (factory packed)**



Alan McGee
(248) 589-0283

*Please feel free to inquire about other fuels available from Morgan. Please place your order no later than **April 30th**. I hope to have the fuel available by mid-May.*

Thank you.

PROP WASH...



Joe Finkelstine

Hi All,

I have had several requests in the last few weeks to expand on a topic I gave a talk on a few months ago at our club meeting. If you were unlucky enough to be sitting through it, you may recall my talk was on designing RC models using CAD. Because of time constraints, I was only able to give a somewhat brief overview of the process and I hope to go into much greater detail now, so I can really cure your insomnia!

Before I can begin any of this, there are several qualifiers about this whole CAD thing, and I have to say them so I can say I told you so later when you

curse at me for getting you interested in this. Without Further ado, here are some of the golden rules of model RC design using CAD.

The computer is a big dumb adding machine – The designer of the model (that would be you) must still decide on materials, construction methods, engine type, wing span, etc. The CAD program happily draws lines, arcs, and circles blissfully ignorant of the fact that what you are drawing is meant to fly.

The steps necessary to design a good and safe flying model plane do not depend on a computer. The methods of design and decision making are the same regardless if you draft with a T-square or a computer mouse.

Even though the computer is basically a drafting tool, it can be an extremely fast drafting tool and is superb at taking on many of the mundane and difficult drafting tasks. The key is understanding the power and limitations of the CAD environment you have available.

The methods I will describe are what work for me. Like many things in this hobby, there are multiple ways to get things done and my way may make no sense at all to you.

From a high level, I hope to convey to all of you the process and detail of the steps I used to design the first revision of a ME410, which was a WWII German twin engine heavy fighter (not a very successful one, but that is another story...)

We will go into much more detail of each one of the steps below, but here they are in one place for now.

- ➔ Make a list of full scale models that interest you.
- ➔ Go hunting and gathering for reference materials on your list of favorites.
- ➔ Narrow your list to one or two candidates that have required reference.
- ➔ Make initial design decisions – desired scale, wingspan, realism, etc.
- ➔ Transfer the printed 3 view or other outline reference onto the computer with your CAD program.
- ➔ Manipulate your computerized 3 view to the correct size and scale.
- ➔ Make some primary wing decisions – rib type (NACA), construction type

(one-piece, plug-in, etc.), and control surface support.

- ➔ Make some primary fuse decisions – former placement, construction type, tail feather design.
- ➔ Construct overall design views – top, side, etc.
- ➔ Detailed design of ribs, formers, shaped pieces, etc.
- ➔ Finish primary design views.
- ➔ Finish part template views.
- ➔ Add design notes.
- ➔ Create necessary files for making/cutting parts.
- ➔ Make yourself a kit, or pay someone to do it.
- ➔ Build your creation, go back and make changes if things don't go together quite like you thought they would.
- ➔ Test fly your creation, go out and gather up the pieces, decide what went wrong and make changes to the design for the next revision.
- ➔ Repeat last step until she flies like a champ.

As the next few months progress, and depending on the patience of our new newsletter editor, I will detail each of these steps as much as is reasonable. For this month, let's look at the first few items in the list above

Make a list of full scale models that interest you

The key here is to really make a list of airplanes that interest you based on ***your*** criteria. If you actually do take on the task of designing this ship from scratch, you will be with it a long time, so pick something that will keep your interest. My list of potential modeling ships is always in a bit of flux, as I read more about obscure and under-represented planes from our past. For example, I have found I like modeling early WWII warbirds, as well as multi-engine warbirds. I also like examples from between the wars, both civilian and military. As I have read more and more on history, I have found many books with hundreds of WWII planes I never knew existed. I could easily model WWII military aircraft for the rest of my life and not even begin to exhaust the listings I have seen. One of the major good points of scratch scale building is that all planes for which some documentation exists are potential choices for you. If you only choose to build from kits or ARF's you are stuck with whatever the vendors decide to market. This is why there are only about 50 or so unique

(Continued on page 7)

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

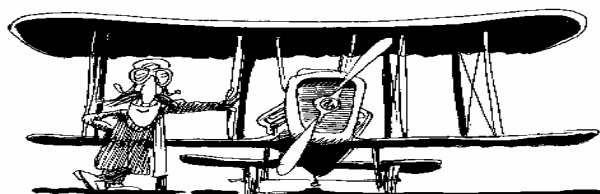
You can phone Gary at:
248-540-8358
or email him at:

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.

AMRCC CONTEST SCHEDULE

- ★ MARCH 1.....RETIREES BREAKFAST.....RAMSHORN.....BOB BURNS 248-628-4666
- ★ MARCH 8.....SENIOR CENTER.....HAROLD REUTER 248-391-2669
- ★ MARCH 10.....MEETING HORIZON MODEL'S PETER BERGSTROM ON 4 STROKES ROSS JONES 248-738-4435
- ★ MARCH 15.....RETIREES BREAKFAST.....RAMSHORN.....BOB BURNS 248-628-4666
- ★ MARCH 21.....RIBCRACKERS SWAP.....LIVONIA SENIOR CENTER.....VINCE BLASKY 248-624-9442
- ★ MARCH 22.....SENIOR CENTER.....HAROLD REUTER 248-391-2669
- ★ MARCH 24.....LARSON MEETING.....FOAM FLY'S DAN SCHWARTZ.... ROSS JONES 248-738-4435
- ★ APRIL 2-3-4.....TOLEDO R/C EXPO.....WWW.TOLEDOSHOW.COM



**1:00 - 5:00 THE 2ND AND 4TH MONDAY OF EACH MONTH
CONTACT HAROLD REUTER AT 248-391-2669**

"SKYMASTERS" ~ MARCH ~ 2004

SUN	MON	TUE	WED	THU	FRI	SAT
29	1 RETIREEES BREAKFAST	2	3	4	5	6
7	8 ORION SENIOR CENTER	9	10 LARSON MEETING	11	12	13
14	15 RETIREEES BREAKFAST	16	17	18	19	20
21 RIB CRACKERS SWAP	22 ORION SENIOR CENTER	23	24 LARSON MEETING	25	26	27
28	29	30	31	1	2 ~TOLEDO~	3

Skymasters Membership Minutes, February 11, 2004

Ross Jones started meeting at 7:30 PM with introduction of guests:

→Bruce Thoms of Clinton Township.

→Tony Antonelli of Rochester Hills

→Dave Nellis of Sterling Heights Dave recently took 3rd place in Sport Scale at the Nationals and is machining and hand building a functional radial engine.

Update on Bald Mountain land swap. The DNR apparently wants it. Ross Jones shared a recent newspaper report in the January 21, 2004 Oakland Press. Orion Township objects to the swap. Bill Stark suggested that we request a public hearing. The road and parking lot have been plowed. The hardy will be able to fly.

Mike Holmes is new newsletter editor. Mark Smith will work through the transition.

Friend of Bald Mountain meet second Saturday of each month at 10

AM at Park Headquarters. Get involved as they help to preserve the park.

Cleve Lee of Experimental Aircraft Models made a presentation on



his new line of R/C ARFS based on full size homebuilt aircraft. These are unusual, well-built, light airframes with a good compliment of hardware. Why fly another sport aircraft when you could fly a scale aircraft that flies like a sport aircraft? Currently available are the Glasair SII, RV-6/6A, Zodiac XL. These air-

craft list for \$295.00. Club members will get a \$30.00 discount if orders are placed by March 20, 2004. Available soon will be the Europa XS Tri-Gear, Glastar and Challenger II Ultralight.

Show and tell had four aircraft. Fred McConkie brought in his first kit built aircraft a Sig Somethin' Extra. It is powered by the new Hanger 9 Evolution.

Jack Goodrich brought in a flying wing built from a crashed Razzle.

Pete Foss displayed a 3-D electric called the "Attitude" with a brushless motor. With a positive thrust to weight ratio it will climb out of hover.

Joe Hass brought in the new Cermark Pitts S2B in Aviat colors. It is powered by Saito 1.2 and has the new Hitec Karbonite Digital servos. It will be a kit review in Radio Control Modeler.

Cleve Lee made one of his new Zodiac ARFS available for a raffle. Joe Hass won the kit.

\$104.00 went to the club treasury as a result of the raffle.

(Continued from page 5)

warbirds from WWII available in the market. There are many different scales and sizes, but the choice available to you is very limited. Bringing a plane to market is quite risky for RC suppliers, so they have to be conservative and go with what they believe will sell. This risk is why we see primarily Mustangs, Spitfires, and P-47's from the manufacturers. I am not trying to disparage these magnificent warbirds, but you literally have 1000 choices out there for just WWII alone! – Pick a ship that is unique and you really like!

Go hunting and gathering for reference materials on your list of favorites

This is a never ending task for me now, as I am always on the lookout for interesting reference materials on airplanes. I have a list of 20-30 airplanes in my head that are in various stages of gathering, so I spend my time often at swap meets looking through used books, magazines, etc.

There is some discipline here though. One key piece of reference you will absolutely need for any scratch design is a 3-view. For those of you who are not familiar with a 3 view, it is a scale drawing of the plane in the top, side and frontal views. This 3-view gives the plan-form views necessary for you to replicate the overall outline. Without this, you are not replicating but inventing. I also seek out 3-views that have fuselage cross-sections. For reasons I will discuss in future columns, cross-sections are extremely helpful. The second

set of disciplined reference you should seek for any candidate is color, markings, and detail. These might be the form of photographs, cockpit drawings, color reference, etc. Depending on your desire of scale fidelity, you will need this to prove you replicated a ship down to its colors, markings, and other details.

I often read that many new scale modelers (like me!) invert the importance of documentation and building. Scale building is about replication not authentication. When I went looking for documentation about the ME410, I found conflicting 3 views. I chose one particular 3-view that had great detail and I chose to use that one. I did not engage in the argument of which one was correct, as it would be an impossible task to actually determine the "authentic" one. I am attempting to replicate a 3 view that I have from a publicly available source (i.e. a book) – If I ever compete with my Me410, I must show I built it to the 3 View I chose, not some "authentic" 3-View.

Unfortunately, we often first build a ship, then go looking (hoping?) to find documentation to verify what we did. That is backwards in the scale world. If it is important for you to closely match the full-scale, you need to gather the necessary documentation before you even draw a single line.

Next month, I will begin with the process assuming we have chosen a ship, and have at least a 3-view in hand.....Keep the balsa dust flying, spring is near!

~JOE



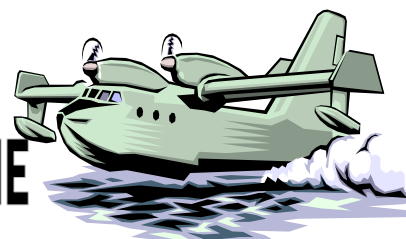
SKYMASTERS RADIO CONTROL CLUB OF MICHIGAN

Mark Smith
1955 Hopefield Rd.
Lake Orion, MI. 48359

Web site: www.skymasters.org
Email: masmith248@earthlink.net

UPCOMING EVENTS

MARCH 1.....RETIREES BREAKFAST
MARCH 8.....SENIOR CENTER
MARCH 10.....LARSON MEETING
MARCH 15.....RETIREES BREAKFAST
MARCH 22.....SENIOR CENTER
MARCH 24.....LARSON MEETING
APRIL 2-3-4.....TOLEDO RC EXPO
GET OUT AND FLY IT'S GETTING WARMER!



HOME OF THE "MIDWEST REGIONAL FLOAT FLY"

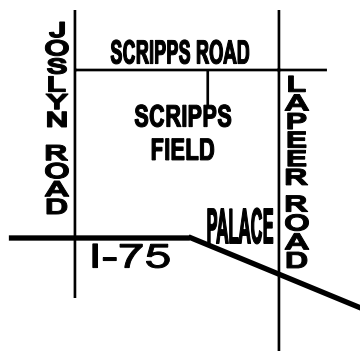
Skymasters Information.....

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 2003 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 night is also a pot luck buffet,

SCRIPPS ROAD FIELD



WINTER MEETINGS



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!