



Academy of Model Aeronautics

Chartered Club #970
10 Year Gold Leader Club

Skywriter

Indoor at Ultimate Soccer



Just another Tuesday morning at Ultimate Soccer. The indoor flying has been a huge success this winter thanks to Jim Held, Roger Schmelling, Fred Engleman and Joe Hass. 60+ pilots every week.



2010 Club Officers & Appointees...

President:	David Wendt	4549 Sedona	Clarkston	48348	248-969-8738
Vice Pres:	Paul Zabawa	PO Box 138	Metamora	48455	810-678-3332
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Editor:	Pete Foss	562 Tanview Dr.	Oxford	48371	248-236-0676
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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

PRESIDENT'S MESSAGE...

This month my president's message contains a number of unrelated topics. There are people I want to thank for giving their time to the club. I also want to bring the membership up to speed on the major activities of the BOD. Finally I will leave you with my insight on a letter I received this month.

By the time you read this the Skymasters will have hosted another successful Swap Shop. I hope you all had an opportunity to purchase what you were searching for. If you get a chance thank Joe and Chris Hass for running the Swap Shop this year. Joe is one of the hardest working people I know. In the first two months of 2010, Joe has organized all of the Symposiums for the winter meetings, run the Swap Shop, and worked on obtaining the prizes for several of our summer events. In addition to all that, Joe was published in the March Model Aviation magazine. Be sure to check out the article on page 12.

Being president has opened my eyes to what a unique organization we have. We have several members in the club that routinely give up their time to make sure all of us have an opportunity to have fun. Every week Jim Held, Roger Schmelling, and Fred Engleman run the indoor flying at Ultimate Soccer Arenas. With several clubs joining forces to bring us these sessions, we have seen pilot numbers exceeding 100. These three gentlemen are running 23 large indoor events, one each week. They have done a terrific job and deserve our thanks for putting in the time to make the indoor season a success. Bill Dezur and his wife Lou organize the food and cooking equipment for the Swap Shop and the Midwest Regional Float Fly. In addition, Bill provides coffee and doughnuts for our winter meetings. As many of you know our meetings are often attended by 100 plus pilots. My point is it takes a lot of effort to lug the supplies, not to mention setting up and tearing down for every meeting. Our web site is one of the best RC club sites in the US. Greg Cardillo created and maintains the site. In addition, Greg is responsible for all the terrific photography on the Skymasters web site. Pete Foss does a fantastic job with the newsletter. The newsletter is one of those thankless jobs that takes time and dedication to pull off. The list does not end with the people I have just mentioned. There are numerous other folks that volunteer significant hours to the better standing of the club. It is very easy to take for granted all of the people that make things happen. We are a great organization and it is because of the members. If you see these folks in the near future, please tell them you appreciate what they do.

It took a while but we finally hit some serious winter weather. We were scheduled to have Mark Freeland discuss Retro RC in our February 10th meeting but the weather didn't cooperate and Mark has been rescheduled to April 14. We have a great line up for the rest of the winter meetings. Be sure to check out the "Upcoming Events" section of the Skymasters web site (*or page 9 of this newsletter*) for details.

The BOD meets each month to organize all of the tasks that need to be accomplished for the club. We now have the dates finalized for the 2010 events and are working on AMA sanctions. If you wish to be a contest director, please contact me. I will help guide you to the AMA paperwork. One of the fastest growing segments of our sport is helicopters. You may have noticed we have seen an increase in the number of helicopter pilots at the Skymasters field. We will soon be asking the state for an additional field for helicopter use. I have no idea if the state will be able to accommodate our needs, but I don't see the harm in asking. Stay tuned for the results of our negotiations.

On a completely different topic, I recently received a letter from a friend of a work associate of mine. This person was interested in knowing which foamy would be "the best" to learn to fly RC in his back yard. He expressed an interest in a low cost way of getting into RC. I pondered on the subject for a while before crafting a reply. I told him learning to fly at a low cost is all about good instruction. It is my opinion that learning to fly on your own will not be inexpensive, even with a low cost plane. The plane does not make the experience easy, the instructor does. I have seen several students learn how to fly and never get a scratch on his/her plane. I'm not saying it will always happen that way. On the other hand I can pretty much guarantee that a first plane will not last long learning to fly without help. I feel the instruction at Skymasters and many of our neighboring clubs is top of the line. If you know somebody that wants to learn, bring them to the field this spring and get them in contact with one of our instructors. Help grow the hobby!

That's all for now,
David Wendt
Skymasters President 2010

Jan 27 Meeting Minutes

January 27, 2010

Attendance: 87 Members and Guests.

Dave Wendt called the meeting to order at 7:00PM

Dave Wendt recognized three new members who were joining the Skymasters – Larry Perry, Mike Youngmeier, and Pat Bailey. Joe Hass also introduced special guest Mike Pavlock. Mike is with the Radio Controlled Club of Detroit (RCCD) and his son Scott is the local rep for Castle Creations. Mike was offering pre-registration for the raffle and promoting the Watts over Wetzel event on May 2.

Building and Flying Techniques - Joe Hass then kicked off a whirl wind of great building and flying tips for indoor electric planes with Chris Hass helping. Some of the highlights (not all inclusive) follow:

Joe gave some great tips on how to glue foam effectively and prepare it for a strong glue joint. Make sure you square off the foam edge with a cutting blade/scalpel using a cutting board or you can sand the edge. If using CA, make sure to use foam safe CA which is available from Bob Smith Industries (BSI). Any foam kicker will work but some work better than others. BSI foam kicker (works well with foam) as opposed to ZAP foam kicker (too aggressive). When applying the kicker hold the sprayer approx 12-18 inches from the foam so you can generate a mist. Avoid the pooling of CA kicker on the foam. Joe also discussed using a micro tip for your CA to help control the glue flow. Chris demonstrated how to build a plane laying it on a flat surface and using a ruler to line it up. He then tacked the plane to the board using a drop of CA. This helped to construct a plane that was squared up and provided the right positioning of the wing and horizontal stab. Nice job Chris.



Joe Hass discusses a few of the hardware products available for smaller airplanes.

Joe also demonstrated how to effectively use carbon fiber for pushrods construction. He built the pushrod with the ends connected via heat shrink tubing. Once he had everything assembled and positioned properly, Joe finished the job by using a drop of thin CA which secured the pushrod end, heat shrink tubing, and carbon fiber rod. Chris stated thin CA will wick the entire length of the heat shrink tubing. When using carbon fiber, make sure you roughen the carbon fiber before gluing to remove any residue. Do not rub with your finger as you may get some carbon fiber splinters and also use a breathing mask. George Maiorana also added he does this under running water and wet sands the carbon fiber. An added benefit of this method is it removes the carbon fiber from the house via the drain.

Joe and Chris discussed hinging techniques and talked about using Blenderm which is available at medical supply stores, pharmacies, or through DuBro. Make sure you apply the Blenderm straight and do not stretch or curve it on the control surface. A suggestion was made to hinge the control surface on both the top and bottom which provides numerous benefits. If you do not want to double hinge the entire control surface, Chris suggested only doing the second application in the area of the control horn. Blenderm does not stick very well to EPP foam but does work well with Depron foam. *(A pass with a warm covering iron over the tape helps - Pete)*

While discussing control horns, Joe and Chris discussed how Depron foam breaks down over time. To guard against this condition when using control horns, use control horns with a large foot print against the foam such as those made by DuBro called Micro Razor. These spread the pressure of the control horn and movement over a larger area of the foam. Lock the control horn in place with a drop of CA. Another option is to use E-flite's Zip control horn or place a piece of plywood in the foam surface.

Making small Z bends for our control rods sometimes proves to be challenging. Joe used some excellent props demonstrating how to make a series of 90 degree bends that were simple and more accurate than using a Z

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Chris Hass discusses setting up a variable pitch prop.

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bend tool. DuBro has announced a new Z bend tool for wire that is .047" diameter or smaller although no one has experience with this tool yet.

Some other miscellaneous tips courtesy of Chris Hass: – JST connectors are good for 10 amp applications or less and Micro Deans connectors are good for higher amp applications. Rare earth magnets with a washer work good for securing hatches and wings in some applications. You can take a pinned hinge apart and use half the hinge as a handle for the hatch. Low temp hot glue works well for securing antennas and landing gear because of its flexibility.

Chris did a nice job explaining the very technical topic of setting up variable pitch props and the associated throttle curves. The topic was beyond this Secretary's mental comprehension. Suffice it to say it sounded good and if you need further information – contact Chris!!!!

Last tip of the evening from Joe concerns turn-

ing our planes with adverse yaw. You should use coordinated rudder turns to correct this condition. This involves using the rudder stick, playing with the way you set up your control rods and servos, or the way you mix rudder and aileron on your computer radio.

C-133 Cargomaster Presentation - Wow! George Maiorana discussed his partially completed scale version of the C-133 with a wingspan of approximately 10 feet (1,400 square inches) and an equal length. This monster will be powered by four electric motors running 13" props. George started his C-133 construction 1½ years ago and has approximately another 2 years before completion. Once completed, George will cover it with Flite Metal aluminum tape and put on approximately 500,000 rivets. How did George decide the size of the plane? He designed a nacelle to fit his selected motor and then scaled the remainder of the plane accordingly!



George Maiorana with his 10 foot wingspan designer scale C-133 Cargomaster.

Additional Building Tips – George also had some building tips for us including how to apply paint to Depron foam. George removed the shiny covering with sand paper and then used a Sharpie pen for color. This can best be done by cutting off about ¼" of the plastic around the tip of the pen and then brush it on the foam. Use a small cloth with alcohol to spread the color on the foam. You can also substitute the foam from the inside of an ink jet cartridge for color instead using a Sharpie pen. Ink jet printer refills will also work but you will want to thin it with alcohol since the color is very concentrated. Use five parts of alcohol to one part ink.

How do you personalize and improve the looks of your mass produced ARF? Joe demonstrated some very simple techniques to personalize your generic looking ARF. Signs By Tomorrow is a company who makes vinyl signs. You can tell them what you have in mind or bring your project into them. They will be very helpful in designing some unique additions to your airplane graphics. There are other things you can do to spruce up your plane – use spruce! Joe showed us a landing gear that used plain wire. However, when Joe added some

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spruce trim to the wire, it made a huge difference in the plane's appearance. Joe also painted the white control horns using Tamiya paint to match the color of the plane. Nice job Joe.

Designer Decals – Larry Boulet discussed how to make custom decals. Larry uses water slide paper which is compatible with laser printers. You can place photos, letters, or anything else on the paper via your computer. Larry also showed us various other decal techniques and provided an interesting talk.

2.4 GHZ in the Soccer Arena - Joe Hass provided some good tips to help us with radio reception challenges in the arena. Using some "interesting" props, Joe demonstrated how RF inside a metal box bounces around and we end up with RF saturation. With 80 Spektrum transmitters on, 160 channels are used. With Futaba and their frequency hopping, they start bouncing around looking for channels that do not have any interference. The result is a lot of congestion. Joe also discussed how RF radiates from an antenna. It radiates least strongly from the end of your transmitter antenna. Also, the receiver picked up RF from the side of its antenna. It is very important to have you antennas positioned correctly. The receiver antennas should be gently bent so the tip of the antenna is not pointed directly at the transmitter when the plane is in the air. And the transmitter antenna should be positioned so the tip of it is not pointed directly at the plane in the air.



Larry Boulet has been making custom decals for many years.



So Joe, what does the signal strength look like on our transmitter and receiver antennas?

A null condition is a situation where the RF can bounce back and blocks any RF getting to the receiver. The plane receiver then goes to a failsafe condition. Be very careful and think through your failsafe strategy. Be careful, refer to your manual, and implement failsafe accordingly. Each vendor implements failsafe differently and it can also vary within a specific manufacturer depending on which receiver and/or firmware you have installed. If you have a Spektrum radio, you may need to send it back to Horizon for a free software update. You can also check Horizon's web site to see which firmware level is the most current. If using a DX6 transmitter, make sure it is set for the US as it can also be set for European standards which have a lower output power limit.

If you have to replace the transmitter antenna on your Spektrum radio, make sure you do not bend the tip of the antenna so it lays back

at a 180 degree angle. If this happens, it will not transmit properly. Joe also demonstrated how to use a small piece of fuel tubing to help protect the receiver antenna. The Spektrum antenna has a tendency to break on the stress point where the antenna exits the receiver case.

Suggested radio preventive maintenance? Futaba suggests if your radio has more than 100 hours of service in a season, send it in annually. If less than 100 hours per season, send it in every two years. Spektrum has no suggested preventive maintenance schedule. If the Spektrum system range checks and it works ok, then you are good to go. Joe Hass suggested if you have a "hard" landing such as in CRASH – then you should send it

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in for a check up. At this time, Spektrum will also update the firmware to the latest available.

This evening proved to be a great night with presentations from Joe and Chris Hass, George Maiorana, and Larry Boulet. Our thanks go out to these individuals for their hard work and time put into their presentations.

Fred Engelman won \$50 in the 50/50 drawing and there were many items handed out in the general raffle courtesy of our sponsors. Thanks very much to Hobbico (Electrify), Hobby Lobby, Horizon (Park Zone), Flight Line, Prop Shop, RC Hobbies and AirLandSeaHobby.Com

The next meeting is February 10 at Larsen Middle School which will be an evening with Retro RC (*rescheduled to 4/14 due to the snow day*). Local modeler and designer Mark Freeland has created a variety of kits and accessories with a decidedly "retro" look using the latest building techniques. The kits are phenomenal and the "Wire Wheels" will amaze you.

Submitted by:

Dan Stolz, Skymasters Secretary



Three happy pilots who took home the big prizes from Hobbico (Electrify), Hobby Lobby and Horizon (Park Zone). Thanks to all three for their great support of Skymasters!

Upcoming Area Club Events

Sponsor Club: **Weak Signals**

The Weak Signals R/C Expo - Friday - Sunday, April 9, 10, 11, 2010

Seagate Centre, 401 Jefferson Avenue, Toledo, OH - 9:00 AM

"The Toledo Show!" Show hours: Fri/Sat 9am to 5pm - Sun 9am to 3pm. Admission is only \$8.00 per person per day, and as always kids 12 and under are FREE! Vendor exhibits, swap shop, symposiums, and more!

Website: <http://www.toledoshow.com>

Sponsor Club: **RCCD**

Watts over Wetzel - Sunday, May 2, 2010

RCCD Flying Field in Wetzel State Park - 9:00 AM

RCCD's Annual Electric Fly-In has grown leaps and bounds over the years, boasting: a large number of pilots, an awesome flying site, great food, 50/50 raffles, plane raffle, vendors and a ton of prizes donated by Castle Creations! Scott Pavlock - RCCD member & Castle Creations representative - and Contest Director Mike Pavlock invite you to a day of fun, filled with electric flying, friends, and plenty of prizes to take home!

NEW THIS YEAR - Dedicated Helicopter Flying Area!!! - Win a 40 Size Electric Power system!!! (Motor, Battery, ESC and more)

Website: <http://www.rccd.org>

Contact: **Mike Pavlock** Phone: (586) 295-3053

Email: wattsoverwetzel@gmail.com

Sponsor Club: **RCCD**

Great Lakes Combat Championships - Saturday/Sunday, May 22-23, 2010

RCCD Flying Field in Wetzel State Park - 8:30 AM

Times: Registration starts at 8:30am Pilots' Meeting at 9:45am Practice Starts at 10:00am Contest starts at 10:30am Flying ends approx 4:00pm Format: RCCA Limited "B" - 6 rounds (Saturday) RCCA Open "B" - 6 rounds (3 on Saturday, 3 on Sunday) RCCA SSC class - 6 rounds (Sunday)

Website: <http://www.rccd.org>

Contact: **Don Veres** Phone: (586) 778-7362

Email: donveres@comcast.net

Sponsor Club: **RCCD**

Big Bird Fly-in - Saturday, June 12, 2010

RCCD Flying Field in Wetzel State Park - 9:00 AM

Open to any AMA member to fly Giant Scale models. (1/4 scale or bigger; or minimum wingspan of 80in for monoplanes; 60in for bi-planes; or length plus wingspan of 140in for jets.

Website: <http://www.rccd.org>

Sponsor Club: **RCCD**

2 by 2 Fly-in - Sunday, June 13, 2010

RCCD Flying Field in Wetzel State Park - 9:00 AM

A fly-in open to any AMA member, for models with two or more wings and/or two or more engines.

Website: <http://www.rccd.org>

Sponsor Club: **RCCD**

Great Lakes Scale - Sunday, June 27, 2010

RCCD Flying Field in Wetzel State Park - 9:00 AM

A fly-in open to any AMA member, for models of full-scale aircraft, with optional judged flying.

Website: <http://www.rccd.org>



Skymasters R/C Club

We'll Teach You To Fly!

Join the Skymasters Radio Control Club for an R/C Symposium

An Evening with Horizon

Wednesday April 7, 2010 – 7PM



Featuring a discussion with Representatives from Horizon Hobby
For a

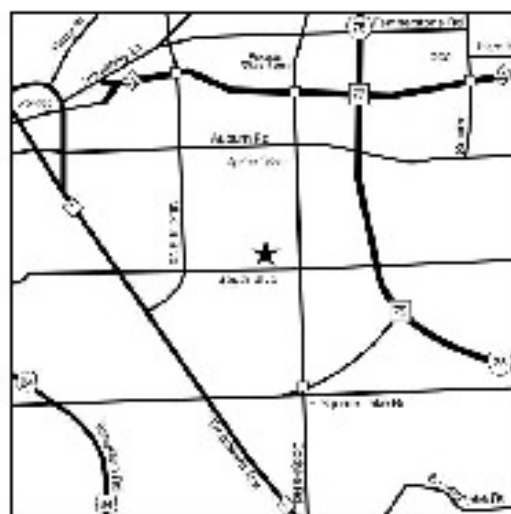


Toledo "Sneak Peek"!



Ultimate Soccer Arena
867 South Blvd, Pontiac, MI
Restaurant open before and after meeting for dinner/drinks!

Free Admission!
All Welcome!!!



For more information call Joe Hass 248-321-7934
Visit our website at www.skymasters.org

Winter Weather Reminder

Our meetings are dependent on the status of the Troy School District. If Troy Schools are closed - or cancel after school activities, our events are cancelled as well. Please check local radio and TV stations for status. We will update the site as soon as possible in the event of a cancellation.

Winter Indoor Flying! - Tuesdays Thru the Winter**Ultimate Soccer Arena, 867 South Blvd, Pontiac, MI - 11:00 AM**

Located just west of Opdyke, on the north side of South Blvd - a 365 ft by 260 ft facility with ceilings from 45 to 75 ft available for indoor flying from 11am to 1 pm!! Ample room for concurrent flying of 3D, Heli, and Sport. Purchase 5 sessions for just \$30 or season pass for all 23 sessions for just \$100(available at event) Single sessions available for \$15. Temperature controlled, well lit. Restaurant on site.

Retiree and Want'A Be's Breakfast - Monday, March 1, 2010**The Red-Olive Restaurant, 1194 Walton Blvd, Rochester - 9:00 AM**

First and third Monday of each month throughout the winter - Join us for breakfast and R/C talk. (located in the new strip mall directly across the street from Crittenton Hospital on Walton Blvd. just east of Livernois.) Restaurant features a \$3.59 breakfast special and all of their omelets are \$3.95 on weekday mornings. Contact Sherman Dickson or Fred Engleman for more information.

Skymasters Meeting - Wednesday, March 10, 2010**Larson Middle School. 2222 E. Long Lake Road, Troy - 7:00 PM**

Skymaster and noted IMAC competitor Tom Wheeler discusses Prop Tip Speed. Some call it "going supersonic". Some call it "ripping". Tom will explain where that extra sound is coming from, how to predict it and what to do to eliminate it.

Retiree and Want'A Be's Breakfast - Monday, March 15, 2010**The Red-Olive Restaurant, 1194 Walton Blvd, Rochester - 9:00 AM**

First and third Monday of each month throughout the winter - Join us for breakfast and R/C talk. (located in the new strip mall directly across the street from Crittenton Hospital on Walton Blvd. just east of Livernois.) Restaurant features a \$3.59 breakfast special and all of their omelets are \$3.95 on weekday mornings. Contact Sherman Dickson or Fred Engleman for more information.

Skymasters Meeting - Wednesday, March 24, 2010**Larson Middle School. 2222 E. Long Lake Road, Troy - 7:00 PM**

Our annual 'In the Bones' event. Bring in your 'in progress' models and share what you are working on with us! Nice to see the insides before they are covered up.

Retiree and Want'A Be's Breakfast - Monday, April 5, 2010**The Red-Olive Restaurant, 1194 Walton Blvd, Rochester - 9:00 AM**

First and third Monday of each month throughout the winter - Join us for breakfast and R/C talk. (located in the new strip mall directly across the street from Crittenton Hospital on Walton Blvd. just east of Livernois.) Restaurant features a \$3.59 breakfast special and all of their omelets are \$3.95 on weekday mornings. Contact Sherman Dickson or Fred Engleman for more information.

Skymasters Meeting - Wednesday, April 7, 2010 - NOTE EXTRA MEETING!**Ultimate Soccer Arena, 867 South Blvd, Pontiac - 7:00 PM**

An Evening with Horizon - Representatives from Horizon Hobby will join us on their way to the Toledo Expo! Come join us and see a sneak peek of Toledo! The restaurant will be open before and after the meeting for dinner and drinks.

Skymasters Meeting - Wednesday, April 14, 2010**Larson Middle School. 2222 E. Long Lake Road, Troy - 7:00 PM**

An evening with Retro RC and ICBIM Products- Local modeler and designer Mark Freeland of Retro RC has created a variety of kits and accessories with a decidedly "retro" look but with the latest building techniques. ICBIM owner Larry Ber- man provides a wide variety of laser cut gaskets for our engines. See the latest in this important engine accessories.

Bald Mountain Involvement Day - Saturday, April 17, 2010**Park Headquarters, Greenshield Road - 9:00 AM**

A day we give to the Park each year - to help get the Park ready for spring. Projects for everyone, from painting signs, re- pairing picnic tables, roofing shelters, wood splitting, etc. Come out and support your club - and the Park we fly in!!



SKYMASTERS RADIO CONTROL CLUB OF MICHIGAN

Pete Foss
562 Tanview Dr.
Oxford, MI. 48371

Web site: www.skymasters.org
Email: newsletter@skymasters.org



PHOTOGRAPHY by
Greg Cardillo



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 is 94 dBa at 10 feet—this noise rule is strictly enforced.

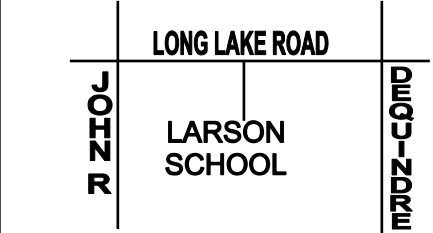
In the summer, Wednesday evenings are Student Nights and there are usually instruc-

tors around all night is also a pot luck buffet, 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 (586) 977-1404.

SCRIPPS ROAD FIELD



WINTER MEETINGS



From June to August, Club meetings are held at the field, on the second Wednesday of

the month at 8 PM . 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 7:00 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!