

SKYMASTERS RADIO CONTROL CLUB
OF MICHIGAN

AMA Chartered Club #970
23 Year Gold Leader Club

www.skymasters.org



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From the President...



Hello Skymasters!

February 2016, the new year is flying by quickly. We've had two great club meetings (in January) on lithium batteries and battery safety. We learned a lot and there was excellent discussion. Andy Lows' presentation was superb and very informative and then Paul Goelz and Joe Rubinstein did a great job last week on battery care and safety. For both meetings the room was packed full!

We voted at our last club meeting to amend our club bylaws to reflect changes to our club registration and renewal (to coincide with the AMA changes to your renewal month and when new members register). Essentially, when someone joins mid-year now we no longer pro-rate the membership after July 1. The date you join is your renewal month each year. There won't be any impact to the existing membership if you renew within the 60-day grace period, those

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memberships will remain January 1, through December 31.

These changes really highlight our policy we implemented last summer of having members display their membership card when flying, either on their transmitter, flight stand, or preferable on your shirt or hat. (note that pilots using 72mhz need to continue to place their card in the frequency box when they pull the appropriate pin). The whole idea is that we can know who is a member and who is not. It will be more important than ever that we all have our membership card visible at the field (if you are flying or in the pit area). I also want to comment how great it was that we had almost 100% compliance with this requirement. I want to thank the EOC for putting in a lot of work to debate and discuss this whole issue, and coming up with a solution. The board did their due diligence and made their recommendation to the club and the bylaw changes were approved as recommended.

Indoor flying is in full swing and the three-hour block of time is working very well. Participation is great and on March 8, Skymasters will be honoring Veterans at Indoor Flying with Bill Dezur coordinating a local VFW visiting Ultimate Soccer Arenas and enjoying great static displays, the arena flying and then a wonderful meal.

Congratulations to Bill Dezur for receiving the Carl Goldberg Vital Achievement Award awhile back. We have *so many* wonderful and hard-working givers in our club that give a lot of time and talent to the club. It is nice that Bill received this great award.

The ten-week kit building seminar sponsored by Skymasters and Flightline Hobby Shop has begun with the class full and is going very well. Thanks to Joe Rubinstein and John Hoover and other Skymasters for conducting this great building workshop. The sessions are held at the Orion Center.

In two weeks, February 11, for our club meeting Joe Fialka and George Dzahristos will be our guest presenters. They will share with us some warbird building techniques. Joe and George are both members of PMAC (Pontiac Miniature Aircraft Club), our neighboring club and we are looking forward to hearing from them.

Our fourth Thursday of the month, February 25, Jim Young of T&J Models, www.tnjmodels.rchomepage.com, will be our presenter. Jim will share about CAD design and have some of his models to show. Don't miss this great opportunity. All our club meetings are open to the public!

SWAP SHOP, SWAP MEET, SWAP, SWAP SSSSWWWAAAAPPPP TIME!!! In three weeks (Saturday February 20) we will hold our annual Skymasters Swap Shop at the CERC in Lake Orion. The location of the swap meet is just about 1 mile (east) from our field on East Scripps, East of M-24 just before Lake Orion High School. This will be our fourth year at this great location and I hope you already have your table, and have the date on your calendar. Skymasters members are needed at 7:00 a.m. to set up and those who have pre-paid/reserved tables are allowed in at 8:00 (no early entry, please) if they have proof of their early registration (the email/form that you print out when you complete your [online registration](#)). Doors open at 9:00 a.m. and we will have coffee, donuts and lunch around 11:00 a.m. Clean out your hanger and support our club swap meet. Thanks for your help ahead of time.

It's time to renew your club membership. Everything can be done online now and if you need anything you can contact Jim Satawa, our club Membership Director at membership@skymasters.org. In the next few weeks our annual club mailing will go out, so watch for it in your mail box. There will be one minor change, though, the mailing won't contain your membership card unless you've specially requested it from Jim. The reason is that you can now print out your own personal membership card online once you renew. The membership card will have your name in big print so we can see one another's name as we stroll around the field. The card will also have your AMA number if it is current and valid. It will also have your pilot, instructor or student ratings on the card. You can print out one card for your wallet and one to wear (visible) in the plastic clip on pouch at the field or keep in your flight box.

Just a reminder too, that now the FAA/AMA is requiring us to register with them if we fly any RC controlled air-

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Front Cover:

A surprise visit from some young soccer kids and their parents to our indoor flying. They were fascinated!

Paul Goelz photo

(Continued from page 2)

craft weighing more than 250 grams *outdoors*. I don't need to go into what a crazy and convoluted situation this is and how frustrating I think this situation is. But, the bottom line is that fact that we all need to pay the \$5.00 and complete the form on the FAA, website and then they will issue you a registration code that you are to have somewhere easily accessible on your aircraft. At this time, we have no intent of tracking or enforcing this as a club. We will continue to watch this situation and see how the AMA continues to work with the government on this issue. It is between you and the FAA. I am sure all the characters doing bad things with their "drones" will be the first to sign up and put their number on their drone. We'll be erecting the control tower at our flying field next to call in take offs and landings. Online registration can be accomplished on the FAA webpage at, RegisterMyUAS.faa.gov.

In the coming months we will have our In The Bones meeting, we'll have the Navy Design project review too. I hope that you're having a great winter, building a lot and getting ready for the summer flying season. Don't forget we have the Toledo show coming up too! Keep warm and remember...it's another beautiful day at Skymasters!

Bob Chapdelaine

President, Skymasters RC



President's Note

Skymasters Members



2016 Meeting Attendance Drawing

From Hobbico



Tactic TTX850 Transmitter

Drawing May 12, 2016

Earn 1 Entry per Club Meeting Attended and 1 Entry per Show and Tell

Entries must be filled out at each meeting and submitted then. Official Entry Tickets available from President Only. Limit 2 per meeting maximum.

Other ways to earn entries are to submit and have published an article for our club newsletter, volunteer for a club activity or event between now and May 12. Entries may also be given randomly to a member at the President's discretion for performing tasks that directly contribute to club in ways that are positive and edifying.

rules subject to change without notice

Propwash

By
Joe Finkelstine
February 2016



"Our Place in History"

Hi All

This month I want to address some aviation history, and perhaps add some evidence that it continually repeats itself.

The history part was suggested to me in one of the many pilot's meeting I attend each week and it revolves around an aspect of the Wright brothers that many in RC and the public in general have never heard about. At the risk of repeating the history you know, we in the states remember the Wright brothers (Orville and Wilbur) as the two who are credited with the first powered flight of a heavier than air machine. The flight took place on December 17, 1903 near Kitty Hawk North Carolina. While there is always some controversy over the validity of their first flight (the French believe they were first) the detailed work and analysis the Wright Brothers did is presented as significant evidence that their powered flight was not blind luck, but the result of much testing and progress. - Most of us learned this history in our primary education and then moved on.

What many of us did not know about happened after this first flight and centered around the behavior of the Wright brothers in their efforts to cash in on this new technology of flying machines they believed they had exclusive rights to. The Wrights created a series of patents and vigorously defended these claiming anything other than a bird that flew violated their patents. They received their patents in 1906 and pursued any company trying to build powered aircraft in both the states and Europe. In particular, the brothers had a big patent war with another American aviation pioneer many of us know - Glen Curtiss. The Wright brother's patents centered on the control of airplanes and in an attempt to circumvent the Wright patents, Curtiss invented what he thought a better way than [wing warping](#) to control roll - He invented the Aileron. Unfortunately for Mr. Curtiss, the courts did not initially agree with him and the patent war continued for another 5-10 years. European countries eventually ignored his patents, but were delayed and many had to pay royalties to the Wright brothers every time they flew in the states. Interestingly, Curtiss also added to the patent count and between the two - Curtiss and the Wrights, they squashed almost all airplane development in the U.S.A. for well over a decade

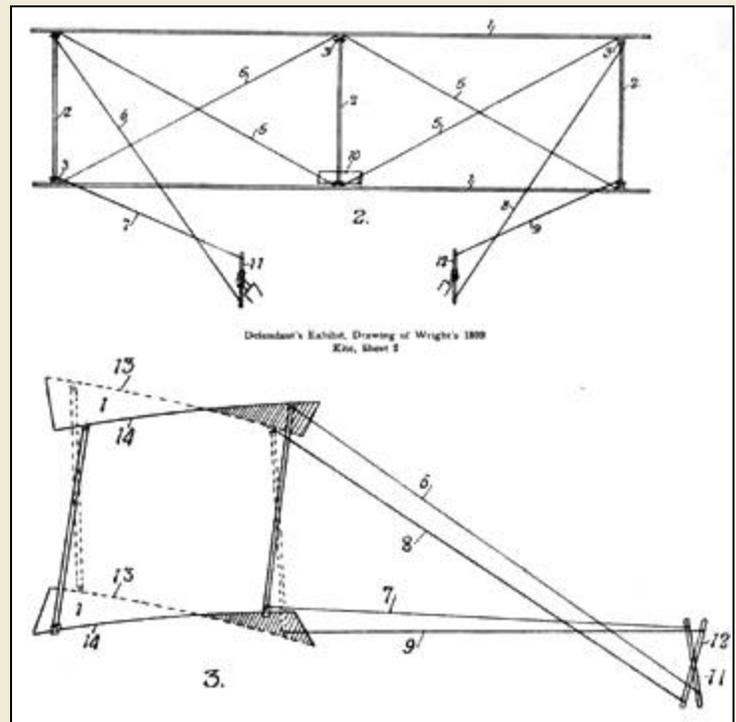


Diagram of the [Wright brothers' 1899 kite](#), showing wing bracing and strings attached to hand-held sticks used for warping the wing while in flight.

One key aspect of these patent wars and the vigorous enforcement of them was that when World War 1 broke out in 1914, we had no viable aircraft ready and nothing of any consequence even late into the war - Our American pilots (The U.S. did enter WW1 quite late BTW) flew the planes developed by the allies, nothing of any consequence was available from the greatest manufacturing country in the world at the time.

The US government finally saw the dangerous situation that occurred here once they saw how key these new-fangled

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flying machines were a crucial part of our nation's defense they decided to solve the problem in a creative manner. Our government formed an organization (named the "Manufacturer's Aircraft Association" - MAA) where all these patents were "pooled" and any company that wanted to develop commercial flying machines paid a small royalty into this new organization and they had relief from all of these potential patent lawsuits. It allowed for the development of our initial air force which we certainly needed in spades just a few short decades later when WW II broke out. Our aircraft at the beginning of WW II were mostly inferior to the axis powers (Zero and Me109 come to mind for example) and it took the urgency of our survival to accelerate our aircraft development that finally pushed us to develop and deliver superior aircraft to the war effort starting mid war.

This commercial behavior is still occurring today and most of us are not aware of it. If you look at the emerging field of genetic engineering, several companies in this field are trying to patent core techniques that would be very broad (like the Wright brothers) that have had similar dampening effects on progress. This has been ongoing for a while now and I have no idea how it will pan out.

Now, how does the history lesson still survive to this day?

Well, I can think of a few ways.

Almost all of us have electronics in our planes and stash that are copies of "brand name" RC electronics. These "clones" originate from countries that basically ignore intellectual property laws (including patents) and allow them to not incur R&D costs (if the word "China" has not come to mind, it should by now). If a company incurs minimal R&D costs with generally lower quality components and minimal quality assurance costs, they can make \$20 USD receivers and make money doing it.

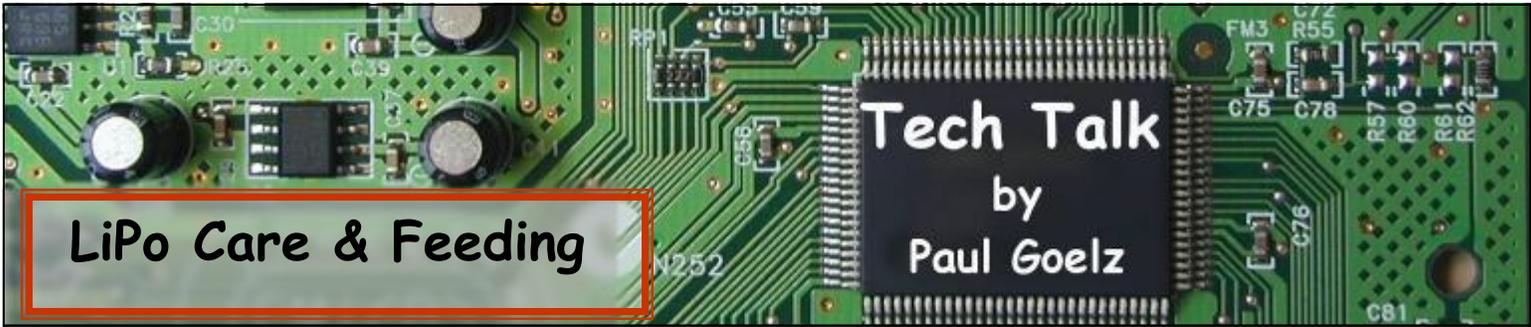
Now before you argue back that the brand name stuff is overpriced, that is not relevant here. I am pointing out basic business fact here, not making a judgment. Each of us makes our own decisions as to what to purchase. I am not trying to preach to anyone as to the "correct" or otherwise right way to proceed. I am just pointing out that our hobby is entangled in this patent behavior and you are participating regardless if you buy brand name or clone equipment.

Another approach that has emerged around this aspect is the one I discussed a few columns ago when I explained open source radio. Open source bypasses patents by forcing non ownership of the technology of any project and spreads much of the software development costs to be eliminated for anyone or any company wishing to offer products in this area. I would claim that one of the primary drivers for open source (anything, not just our radios) is the avoidance of patents and endless lawsuits.

The final one I want to discuss has nothing to do with lawyers or patents but deals with the tendency I see that most folks in R/C are amateur historians. Almost every one of us in this hobby has a love of things that fly coupled with a basic curiosity as to how a plane we admire originated. Anytime I see a scale plane at our field I can usually count on the owner knowing the history of the ship quite well. Wikipedia and Google have made life much easier to get the Cliff's notes style of history and with further digging, much more detail is available. While digging into the Wright brothers' patent war history, I encountered many fascinating things about Glen Curtiss, and his flying machines I was unaware of - If you fly anything that is scale, resisting the call to be an amateur historian is futile - enjoy it, I certainly do.

Joe Finkelstine





This month's column is a re-print of a presentation Joe Rubinstein and I gave at the recent (January 28th) Sky-masters meeting. We had several requests to include it in the newsletter so here 'tiz, with some additional comments.

Lipo Care and Feeding

With Paul Goelz and Joe Rubinstein

The following presentation is broken into two sections. The "**must know**" section consists of things you **MUST** be aware of in order to use lithium batteries safely. The "**should know**" section consists of things you should know if you want to get the best performance and service life from your lithium batteries. Consider this second section "optional".... The smaller lithium packs are inexpensive enough these days to be considered disposable if you don't want to invest the time and energy in learning how to maximize their service life.

Lithium.... You MUST know this

1. Lithium cells can be **DANGEROUS**. Unlike cellphone and laptop batteries, our RC packs have **NO** internal protection. This applies to small "indoor size" packs as well as large high power multi-cell packs. The only difference is that the smaller packs will make smaller fires if they ignite ;)
2. Lithium cells can ignite if overcharged, over discharged, physically damaged or punctured.
3. Once ignited, the resulting fire can be violent and difficult to extinguish.
4. A lithium cell is fully **CHARGED** at 4.2V and fully **DISCHARGED** at 3V. Below 3V and above 4.2V, chemical changes take place inside the cell and permanently damage it. In extreme cases, it can ignite.
5. **NEVER** charge a lithium battery with anything other than a charger specifically designed to charge lithium cells. Chargers not designed for lithium cells do not

limit the cell voltage and can start a fire.

6. Always **ALWAYS** use a balance charger for >1S packs. If multi cell packs are charged on a charger that does not sense the voltage of each cell during the charge, the cells can end up at dangerous voltages during charge and start a fire.

7. Never charge completely unattended. If something fails in the charger, the pack can ignite.

8. Never charge on anything except a fireproof surface.

9. Always store lithium batteries in a flameproof container. Ammo cans are popular and very flame proof but should have vent holes to release gasses in the event of a battery fire.

10. Any cell reading less than 3V or more than 4.2V at any time under any circumstances is permanently degraded and potentially dangerous.

11. Add voltages together for cells connected in **SERIES**.

12. Add current capacity for cells connected in parallel.

13. To determine pack voltage, it is simpler to use 4.2V per cell, not some "nominal" voltage. This will reflect the maximum pack voltage at full charge.

14. A non-balancing charger senses only the pack voltage. It is unaware of the individual cell voltages. If the cells start or end at differing voltages, the charger can continue the charge until one or more cells reaches a dangerous voltage.

A balancing charger connects to the pack's balance port and senses the individual cell voltages. It will actively keep all cells at the same voltage during charge.

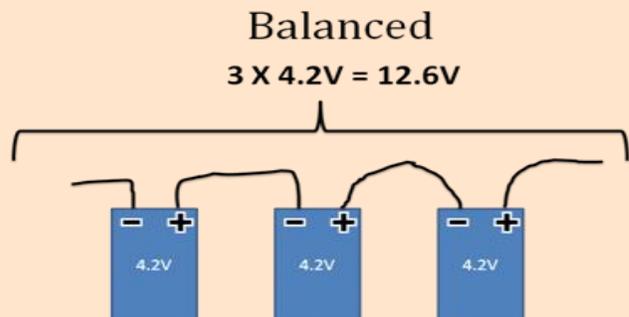


Figure 1 (pack with balanced cell voltages)

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In the example series connected pack in figure 1 (above), the pack voltage is the sum of the individual cell voltages. In this pack, the cell voltages are "balanced" (ie., all three cells have the same voltage). A non-balancing charger set for a three cell pack will charge until the pack reaches 4.2V X 3 or 12.6V and all is well.

In the example series connected pack in figure 2 (below), the pack voltage is once again the sum of the individual cell voltages. However, in this pack the cell voltages are NOT "balanced" (ie., the three cells are at different voltages). A non balancing charger set for a three cell pack will still charge until the whole pack reaches 4.2V X 3 or 12.6V. If all cells in the pack are not at the same voltage as in this example, a non-balancing charger will be blissfully unaware of this condition. As the charge ends, the highest cell will now be above 4.2V. This will permanently damage the cell(s) and can even start a fire if the imbalance is severe enough. **For this reason, a balancing charger should ALWAYS be used on packs consisting of more than one cell.**

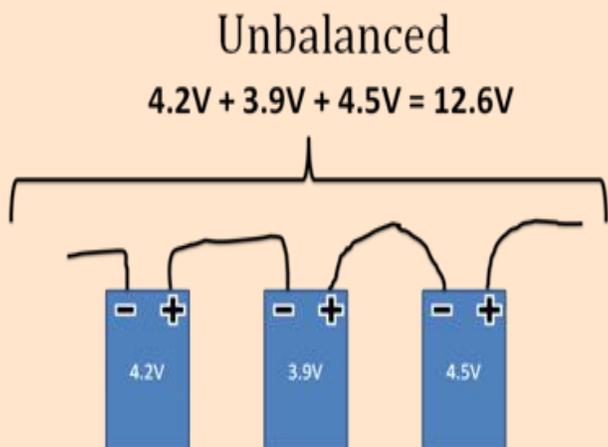


Figure 2 (pack with unbalanced cell voltages)

Lithium.... You SHOULD know this

1. EVERYTHING degrades a lithium cell. Time, elevated temperature, charging, discharging..... they ALL degrade the cell
2. Degradation is minimized above 3.3V and below 4.1V
3. Degradation is minimized at lower charge currents. Even packs rated for more than a 1C charge will benefit from keeping the charge current at or below 1C.
4. Degradation is minimized at lower discharge currents.

Degradation is minimized at lower storage temperatures EXCEPT for fully charged cells. Since the full charge voltage is 4.1V below 50 degrees F, a cell charged to 4.2V at room temperature is considered overcharged

below 50 degrees F.

Discussion

1. Resting voltage AFTER a flight is NOT representative of minimum voltage DURING a flight.... you may still have damaged a cell under load in flight even if it shows a reasonable voltage after the flight. Telemetry or on-board data recording is the only way to be sure you are not overstressing the pack in flight.
2. Manufacturer-supplied connectors are NOT always the best choice. In particular, the popular red "JST" connectors are a poor choice for many applications where they are commonly used. I replace ALL JST connectors where found with either Micro Deans (very small single cell batteries) or XT30s (larger two cell batteries).
3. "C" ratings and snake oil salesmen..... Recent research is showing that the "C" rating for most packs is often vastly overstated for marketing purposes. See <http://www.rcgroups.com/forums/showpost.php?p=24942455&postcount=507>
4. Batch to batch variations and outright cell supplier changes from the same vendor are common. See <http://www.rcgroups.com/forums/showpost.php?p=29245882&postcount=1783>

And finally.... during the presentation, we were asked about whether there were any battery improvements on the horizon. Turns out that HobbyKing is about to release an interesting line of LiPo cells based on [graphene](#) that look like they will provide much longer service life and consistent performance during their lifetime compared to current LiPo technology. See <http://www.rcgroups.com/forums/showthread.php?t=2592234>

So there you have it.... Our lithium presentation from January 28th, 2016. We hope it raised fewer questions than it answered ;) But feel free to ask any questions!

Paul Goelz and Joe Rubinstein

Indoor at Ultimate Soccer for January

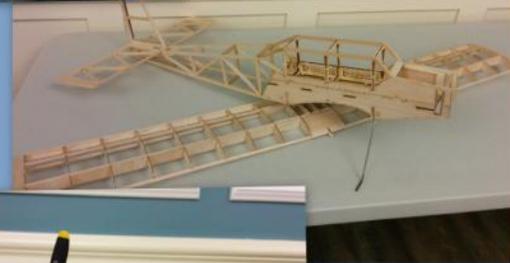
Click anywhere in the collage to view the entire photo album on the Skymasters web site



Skymasters meeting, January 14th

Click anywhere in the collage to view the entire photo album on the Skymasters web site

For the January 14th meeting, we had a great technical presentation by [Andy Low from ElectroDynamics](#). Andy went over lots of useful information about rechargeable batteries and LiPo packs in particular.



Skymasters meeting, January 28th

Click anywhere in the collage to view the entire photo album on the Skymasters web site

For the January 28th meeting, we had a presentation by Paul Goelz and Joe Rubinstein. Paul and Joe built on the previous meeting's presentation and covered the more "grass roots" aspects of Lipo care and safety.





Skymasters R/C Club

Indoor Electric Flying

at **Ultimate Soccer Arenas**
867 South Blvd., Pontiac, MI 48341

Tuesdays from 10 AM to 1 PM
November 3, 2015 thru April 19, 2016
26 – 3 Hour Flying Sessions

Season Pass \$100 – 78 Hours of Flying!

Single Flying Session \$10.00

5 - Session Punch Card \$35.00

Largest Indoor Flying Venue in the Tri-County Area with an average of 75 Pilots per session. Note: Ultimate Soccer Arenas expanded our flying time to 3 hours per session.

All Pilots must have proof of current AMA Membership

Schedule Subject to Change.

Sport, 3D, Micro, Heli & Quads flying concurrently in different areas of the arena. See rules for size and weight limits.

Support your local hobby shops:



Visit Skymasters web site at www.skymasters.org AMA web site at www.modelaircraft.org

For more information email: indoorfly@skymasters.org or call Fred E. at 248-770-3239

Skymasters RC Club of Michigan presents:

Airplanes, boats, gliders, helicopters, quadcopters, rockets, cars, trucks and lots, lots more!

Super Swap Meet 2016

Saturday February 20, 2016 | 9:00-1:00



Lake Orion Community Schools — CERC

Community Education Resource Center

455 East Scripps Road — Lake Orion, MI 48360

4.5 miles north of the Palace of Auburn Hills

Take I-75 to exit 81 (Lapeer Road) go north 4.2 miles turn right on East Scripps Road for 1/4 mile-destination will be on left

- ✦ \$5.00 entry fee
- ✦ Over 100 tables
- ✦ Food and Refreshments
- ✦ Dealers and Vendors welcome
- ✦ Tables: \$20 / \$25 outer wall, incl. 1 entry
- ✦ Set up at 8:00 a.m.—no early entry!
- ✦ Active military, women & children (under 12) free
- ✦ Website: www.skymasters.org

Please register online for tables: <http://www.skymasters.org/index.php?page=register>

Call: 248-805-1404 or email: superswap@skymasters.org for more information

Navy Design Contest

Sponsored by John Hoover / Flightline Hobby

Goal: To design a fixed wing aircraft to compete in a club level fun fly. Can be finished as any Naval power. Scratch build, Kit or ARF design does not matter as long as the model is powered only by motor type below.

"Must have" to meet Navy design specs and compete in this event:

- Rimfire .32 Electric \$89.99 Contest = \$69.99 GPMG4700
- (or) Magnum .52 4 stroke Glow \$159.99 Contest = \$119.99 Hobby People 210851
- Great Planes 1-FLZA6611 Bomb drop \$5.00 and 1-FLZA6607 Bomb \$6.00
- Airplane Max span 72"
- Safe onboard place to fit GPS "Big 5" unit (1x2x3") Can be pocket or in a hatch

Models will be judged on:

- Fit and Finish
- Creativity
- Mystery Category
- Peoples choice

Note the flying contest will be broken into 2 classes based on skill. If you have ever placed at a fun fly 1-3rd you are in the expert category. If not you can fly in the Novice category.

Flying day events:

Round #1—Carrier Landing

A good Navy design has to make it back on the ship. 3 shots. Note the carrier is based on yellow rope pinned to the ground with rings in the corners. If you land outside the carrier you get you are: "Feet Wet" and get a zero for the round. If you land on the carrier but taxi off: zero for the round. Points are 20, 15, 10 each landing. You get 3 possible tries. Novice class has a 5 point the whole mowed area bonus. Hint: if you are next to a rope declare "Dead stick" and get the points so far versus zero for taxing off. A try is when you line up over the end of the runway. At that point you are committed for a pass. You can "Wave off" but this will count as a try. After 3 landings, or tries, you will take back off and climb for 20 seconds. Chop your throttle and land near to the spot landing ribbon which is graduated 1 point every foot for 25'. This will break the ties. You can not move the throttle after "Chop" is declared. If you do then there is a zero for the landing part but you will still get your flight points. Note: if you hook your tail wheel on the carrier rope it can damage your plane. Sorry, part of the game. (Don't do that J)

Round #2—Aircraft Performance

To be a good Navy design she has to perform. The model will be "proven" during this trial. With the GPS unit attached the model will take off from the carrier and climb to tree top height after passing through 360 degrees from takeoff past the flag person they will wave and then you will make a pass over the carrier at full speed. Speed will be recorded form "Big 5". Then land on the next pass (Does not have to be on the carrier). Next model will climb from takeoff for 30 seconds and then chop the throttle and glide. Max Altitude attained will be recorded by "Big 5". Try to hit the spot for extra points. If you move the throttle at all you get a zero for the glide part.

Round #3—Bombing Accuracy

You need to be able to hit the target with your high explosive Flyzone ordnance. Take off and do two 360 orbits. On the 2nd pass drop the bomb. The target is the landing spot. We will use a 50' tape. You get 2 attempts so land after drop and rearm.

Round #4—The Limbo

Ok Maverick, fly under the limbo 3 times 20 first try 15 points the second and 10 for the third. After the limbo climb and do the spot landing. Same rules with landing as round # 1 For the hot dogs, double points any limbo pass inverted. For the Novice group 5 points for flying over the ribbon but between the poles (Judged from downfield)



2016 Club Meetings

SKYMASTERS RC CLUB – LAKE ORION, MI



EOC MTGS = 1ST THURSDAY/MONTH

CLUB MTGS = 2ND&4TH THURSDAY/MONTH

January 2016

Thursday January 14– Club Meeting Orion Center 6:45 p.m. – Room A

Thursday January 28– Club Meeting Orion Center 6:45 p.m. – Room A

February 2016

Thursday February 11– Club Meeting Orion Center 6:45 p.m. – Room A

Thursday February 25– Club Meeting Orion Center 6:45 p.m. – Room A

March 2016

Thursday March 10– Club Meeting Orion Center 6:45 p.m. – Room A

Thursday March 24– Club Meeting Orion Center 6:45 p.m. – Room A

April 2016

Thursday April 14– Club Meeting Orion Center 6:45 p.m. – Room A

Thursday April 28– Club Meeting Orion Center 6:45 p.m. – Room A

May 2016

Thursday May 12– Club Meeting – *Scripps Road Flying Field 7:00 p.m.

ALWAYS CHECK CLUB WEB SITE FOR THE LATEST INFORMATION AND CHANGES!! THIS INFORMATION SUBJECT TO CHANGE PLEASE REFER TO WEBSITE FOR CURRENT INFORMATION

Orion Center 1335 Joslyn Road – Lake Orion, MI 48360



2016 CLUB EVENTS

SKYMASTERS RC CLUB – LAKE ORION, MI



February 2016

Saturday February 20 – Swap Meet - CERC Building; Lake Orion

April 2016

Saturday April 30* – Involvement Day – Bald Mountain, Main Park

May 2016

Saturday May 14 – Field Opening/Work Day – Scripps Road Flying Field; Lake Orion

Sunday May 22 – Spring Float Fly [Chet Brady] – Bald Mountain Lake; Lake Orion

June 2016

Wednesday June 1 – Student Flight Training & Potluck begins – Scripps Road Flying Field; Lake Orion

Wednesday June 15 – Fish Fry Dinner & Member Appreciation – Scripps Road Flying Field; Lake Orion

Saturday June 25-26 – Electric & Night Fly In – Scripps Road Flying Field; Lake Orion

July 2016

Saturday July 16 – Open House - [Recreation 101] with FS helicopter landing – Scripps Road Flying Field; Lake Orion

August 2016

Sunday August 7 – Warbirds and Scale Fly In - Scripps Road Flying Field; Lake Orion

Sunday August 28 – Corn Roast and Top Gun Flying - Scripps Road Flying Field; Lake Orion

September 2016

Sat & Sunday September 10-11 – Midwest Regional Float Fly – Island Lake State Park; Brighton

Saturday September 24 – Skymasters Fun Fly - Scripps Road Flying Field; Lake Orion

November 2016

Tuesday November 1 – Indoor Flying Season Begins – Ultimate Soccer Arenas; Auburn Hills

December 2016

Thursday December 8 – Christmas Party – Orion Center; Lake Orion

Saturday December 31 – Krazy Snow Fly - Scripps Road Flying Field; Lake Orion

all dates subject to change – PLEASE always consult current information on website: www.skymasters.org



Skymasters – Red Olive Breakfast Schedule 2015-16



All flyers are welcome to join us at the Red-Olive Restaurant, 1194 Walton Blvd., Rochester – 9:00am for breakfast and talk R/C. The restaurant is located directly across the street in the strip mall from Crittenton Hospital on Walton Blvd. just east of Livernois.

Want'A Be's Breakfast

Monday, October 5, 2015

Monday, October 19, 2015

Monday, November 2, 2015

Monday, November 16, 2015

Monday, December 7, 2015

Monday, December 21, 2015

Monday, January 4, 2016

Monday, January 18, 2016

Monday, February 1, 2016

Monday, February 15, 2016

Monday, March 7, 2016

Monday, March 21, 2016

Monday, April 4, 2016

Monday, April 18, 2016

Monday, May 2, 2016

Monday, May 16, 2016

Reminder from the Membership Director....

Membership Renewals

For those of you who haven't done so already, it is time for you to renew your Skymasters membership! It is fast, easy and convenient. You can renew online using PayPal, or credit card. If you prefer, you can print a renewal form and send along with a check to the address below. Visit us at skymasters.org and go to the "Information" tab, followed by "Join or Renew Membership."

As previously communicated, we have changed our membership renewal policy from a 'calendar year' membership to a '12 month membership' policy, like the AMA has already done. Our bylaws have been updated to reflect this new policy.

How to Renew your Skymasters Membership

As you have in the past, you have the option of renewing your Skymasters membership online at www.skymasters.org (go to the "information" tab, or click "renew membership" in the upper left corner of the home page) using PayPal or credit card, or you can fill out & send an application (available to print from website or hard copy available from Membership Director) and personal check by mail, to the Membership Director.

Skymasters Membership Fees

We are holding steady with keeping the same membership fee schedule as we have for the past several years.

- Regular membership fee for members over 19 years of age is \$70.00, with an additional \$30.00 initiation fee in the first year of membership for new members.

Members up until age 19 are FREE and initiation fee is waived. (*Note: AMA membership is also FREE up until age 19 with AMA magazine optional*)

Skymasters Membership Cards

We are now encouraging Skymasters members to use the new self-service feature of printing their own membership card, through the Skymasters website.

To print your own card after renewal, simply go to Members>Skymasters Member Information>My Membership Card. Once there, you can view / print your card.

For those who would still prefer to have a card sent to them, or simply don't have the capability to print their own, a membership card can still be sent to you. By mid-February, I will determine which members have renewed online and have not printed their own card, and send them one. Also, anyone who renews by mail will automatically be sent a card once your membership has been processed, with mail-out beginning in mid-February.

Welcome Your Friends & Family to our Meetings, Flying Field and Events!

Invite your friends, family members, neighbors, work acquaintances or anyone of any age to our beautiful Bald Mountain State Park flying field, or to the Ultimate Soccer sessions in the winter months to see all types and sizes of radio-controlled model aircraft in action! Also, our bi-monthly meetings at the Orion Center (September- April) are a great way to meet and connect with members, learn new things from a variety of guest speakers, and see many interesting member projects.

If you have any questions or problems with renewing your membership, contact me and I will be happy to assist.

Blue Skies,

Jim Satawa

Skymasters Membership Director

539 N. Broadway St.

Lake Orion, MI 48362

586.719.2437

membership@skymasters.org

Join or renew AMA & Skymasters:

<http://www.skymasters.org/index.php?page=information&type=join>

ON THE WING

Skymasters Breakfast

(Everyone is welcome)

First and Third Monday of each month
through May

9AM

Red Olive restaurant
In the strip mall on Walton
across from Crittenton Hospital
Rochester MI

Skymasters Indoor Flying

Every Tuesday through March
See the Skymasters web site for details

10AM to 1PM (Yes, three hours)

At Ultimate Soccer,
Opdyke and South Blvd
Pontiac, MI



January Skymasters Meetings

Thursday, February 11th
and

Thursday, February 25th
6:30PM

at the Orion Center, 1335 Joslyn Road
(on the east side of Joslyn, just south of Clarkston
Road), Lake Orion, MI

Other local area indoor flying sessions

Premiere Sports Center

14901 23 mile, Shelby Twp, MI
(northwest corner of 23 mile and Hayes)

Every Thursday, 9AM to 3PM (yes, that's 6 hours)

Electric planes and helis (separate heli space)

\$10/session, AMA required

Info: Steve Durecki 586-246-4203 (text or voice)

<http://www.stevesindoorflying.com/>

Legacy Center

9299 Goble Dr.
Brighton, MI 48139

(Off of Winans Lake Road, between Rickett
Rd. and M23)

Thursdays 12PM—2PM November 5th through
April 30th

\$10/session

Sponsored by the Hamburg Flyers RC club

February 2016

Sun	Mon	Tue	Wed	Thu	Fri	Sat
	<p>1</p> <p>Skymasters Breakfast 9AM Red Olive, Rochester</p> <p>Kit Build 6:30PM Orion Center</p>	<p>2</p> <p>Indoor Flying 10AM-1PM Ultimate Soccer</p>	<p>3</p>	<p>4</p> <p>Indoor Flying 9AM-3PM Premier Sports Center, Shelby Twp</p> <p>Indoor Flying 12PM-2PM Legacy Center, Brighton</p>	<p>5</p>	<p>6</p>
<p>7</p>	<p>8</p> <p>Kit Build 6:30PM Orion Center</p>	<p>9</p> <p>Indoor Flying 10AM-1PM Ultimate Soccer</p>	<p>10</p>	<p>11</p> <p>Indoor Flying 9AM-3PM Premier Sports Center, Shelby Twp</p> <p>Indoor Flying 12PM-2PM Legacy Center, Brighton</p> <p>Skymasters Meeting, 6:45PM Orion Center</p>	<p>12</p>	<p>13</p>
<p>14</p> <p>Chesaning Swap 9AM New Lothrop</p>	<p>15</p> <p>Skymasters Breakfast 9AM Red Olive, Rochester</p> <p>Kit Build 6:30PM Orion Center</p>	<p>16</p> <p>Indoor Flying 10AM-1PM Ultimate Soccer</p>	<p>17</p>	<p>18</p> <p>Indoor Flying 9AM-3PM Premier Sports Center, Shelby Twp</p> <p>Indoor Flying 12PM-2PM Legacy Center, Brighton</p>	<p>19</p>	<p>20</p> <p>Skymasters Super Swap 9AM Lake Orion</p>
<p>21</p>	<p>22</p> <p>Kit Build 6:30PM Orion Center</p>	<p>23</p> <p>Indoor Flying 10AM-1PM Ultimate Soccer</p>	<p>24</p>	<p>25</p> <p>Indoor Flying 9AM-3PM Premier Sports Center, Shelby Twp</p> <p>Indoor Flying 12PM-2PM Legacy Center, Brighton</p> <p>Skymasters Meeting, 6:45PM Orion Center</p>	<p>26</p>	<p>27</p>
<p>28</p>	<p>29</p> <p>Kit Build 6:30PM Orion Center</p>					

Skymasters Information...

[The Skymasters field is located in Lake Orion, within the Bald Mountain Recreational Area](#) on Scripps Road, between M24 and Joslyn (see map). A recreation passport or sticker is required and can be obtained from the Park Headquarters located on Greenshield Road or you can check the box on your tab renewal for a "Recreational Passport".

Flying hours:

QUIET ELECTRICS ONLY from 8AM to 10AM and 8PM to 10PM.
The noise limit is 80dBa at ten feet.

Regular flying is permitted between 10 AM to 8 PM. **The noise limit is 94 dBa at 10 feet.** These noise

limits are enforced.

Wednesday evening (through August) is Family Night with flying and a pot luck buffet. Bring something for the grill & a dish to pass.

Wednesday 5PM to 8PM is also Student Night (through August) Meet the instructors and arrange for more instruction time together on other days. Our Chief Flight Instructor is Ken Gutelius, 248-892-2943, cfi@skymasters.org

From June through August, club meetings are held at the field, on the second and fourth Wednesday of the month at 8 PM. A great chance to fly and socialize. **Winter meetings**

(September through May) are held at the Orion Center, 1335 Joslyn, in Lake Orion. Check the calendar here or on the [web site](#) for specifics. Bring a model for Show and Tell, enjoy coffee and donuts and listen to the speaker of the evening.

The Skywriter newsletter is available online at the Skymasters web site and is free to all. It may also be printed from the web site if desired. All contributions are welcome. Please send photos and articles to newsletter@skymasters.org If you know of anyone who may be interested in R/C Aviation, please give them a link to this newsletter or give them a copy of an AMA magazine. It may spark their interest!



2016 Club Officers & Appointees...

President:	Bob Chapdelaine	Lake Orion	president@skymasters.org
Vice Pres.:	John Billinger	Troy	vicepresident@skymasters.org
Secretary:	Pete Foss	Oxford	secretary@skymasters.org
Treasurer:	Phil Saunders	Rochester Hills	treasurer@skymasters.org
Editor:	Paul Goelz	Rochester Hills	newsletter@skymasters.org
Membership:	Jim Satawa	Lake Orion	membership@skymasters.org
CFI	Ken Gutelius	Lake Orion	cfi@skymasters.org
EOC at large	Jim Satawa	Lake Orion	at.large2@skymasters.org
EOC at large	Jon Grigsby	Ortonville	at.large3@skymasters.org
EOC at large	Paul Goelz	Rochester Hills	at.large1@skymasters.org

Newsletter Submissions

Please send all articles, photos and announcements to the Skywriter editor at:

newsletter@skymasters.org
 Deadline is the 20th of each month.

The Skywriter newsletter is published monthly by the Skymasters Radio Control Club of Michigan

www.skymasters.org