This month is a fantastic one with our Midwest Regional Float Fly at Seven Lake State Park in Holly coming up in just a few days. If you've not already registered and gotten your campsite for September 8-9 in Holly head to MWRFF Registration and do it now.

On Saturday September 22, will be our Annual Club Fun Fly. PMAC has their Scale Fly on Saturday the 15th.

Last month was amazing for our club.

We put on an air show during the week for a group of wonderful individuals that visited from New Horizons. It is a non-profit company that service’s individuals with special needs. They assist them in their training for employment. They also have many other programs as well. They've started to do more community inclusion programs for their individuals which has them trying to find activities that the folk would like to be a part of. They are planning a visit to our club again and looking forward to a visit to Indoor Flying at some point. Check

(Continued on page 2)
them out at www.newhorizonsrehab.org. We truly enjoyed their visit and I appreciate all the great Skymasters who came out and put on one heck of a show for these great visitors. They were applauding and happy to see each flight. Made me proud of our club and our great members!

We had another incredible Warbirds and Scale for the record book! We participated in the Oakland County International Airport Open House and Airshow with PMAC and had an impressive static display. There were also participants from UFO and RCCD flying clubs.

We had another grand Family Corn Roast and congratulations to our Chief Flight Instructor Ken Gutelius for winning Top Gun 2018. I want to thank Ken for being a great part of our club and not only our previous club president (2 years in a row) but someone who is always there to advise me when I need good advice.

I cannot fail to mention how fantastic our Wednesday potluck dinners and Student nights have been all summer, and though they have officially ended as of Labor Day, we are still grilling and flying students. A huge shout out to Ivan Dulskij, and Patricia and Richard Webb. They made our potluck dinner a feast this year and kept all of us fed well and made things run so smoothly. Because of them the Skymasters hospitality was in full force... thank you!

Another huge thank you is to our Skymasters Flight Instructors... somehow, we again managed to train another batch of awesome new pilots and kept the flight line full and airspace somewhat orderly. I got great compliments repeatedly from our students and new pilots on our flight instruction program... not sure why I get those compliments, but job well done guys and gals! We have great members!!

I cannot leave this subject without one more observation. We had a great number of families and young people at our field this summer. That is wonderful! We had so many young people running around the pavilion and sometimes the pit area we made sure we were being safe! It was an awesome problem/issue. That is so wonderful to see the young people at our field excited and enthusiastic about being at our field. Thanks to all the parent and grandparents who make the effort and take the time to get them there.

Finally... our expansion of our southern field is a huge success. Many days it's a great confusion when I hear airplanes on the main field and I say wait why am I hearing an engine behind me flying and there's a crew of people and airplanes flying off the new control line field. That field continues to grow in popularity and use. So far, we've invested about three hundred pounds of grass seed into that area and hours and hours of Skymaster members sweat and that's all, to get it to a very nice area to fly.

Next month we'll have a club meeting and will resume Meetings at the Orion Center. In November we'll be electing club officers. Remember we will be raising our club dues this year (at election time). Myself and our club Treasurer Jim Satawa have great facts as to why this is necessary. The board (EOC) has already agreed on the increase (somewhere between $10-20 annually). You as the club membership the need to approve increase and that will be done at the November club meeting by a vote.

Thanks for being a great part of Skymasters and I am looking forward to some of the best flying weather months. Fred is already pushing those buttons about Indoor, but we have lots of great outdoor weather flying yet. We are putting together a plan for a club Octoberfest family day that will go into a night fly bonfire. See you at the field. I cannot wait to see a control line night flyer!

See you at the Midwest Regional Float Fly this weekend!

Bob Chapdelaine, President, Skymasters RC

Front Cover
Tim Toutant's beautiful A-10 Wart Hog at the Corn Roast and Top Gun. The model includes a VERY realistic sound system with start up, run and shut down sequences, all synched to the throttle. The fans are so quiet, all you hear is the sound system. Bill Pesch photo
In the past two articles we went over the selection of an airfoil for a model design and the top view shape of a wing and why you might choose one shape over another.

This month we will get into the heart of the aerodynamic design. As in all of my articles we will be avoiding the need to do a lot of calculations. That is not to say that no calculations will be done. Instead, we will use some very easy to use online calculators to handle the math chores.

So how do we determine the proportions of our new model design that will result in a model that has good flight characteristics? Frankly, the easiest way to do this is to copy these proportions from a model that is known to fly well. There are thousands of design drawings available for free download from the internet. One such site that I like is https://outerzone.co.uk/ That site allows you to search for particular types of models. A particular model will have downloadable drawings and in many cases you can also download the magazine construction article. Armed with this information you can make changes to the design to personalize it. We generally call this process as “bashing” a design. You can also buy a kit that you like and bash it any way you like.

The next way to proceed with the design is to use the TLAR (that looks about right) technique. We have all seen a lot of models and I think it is safe to say that there are many similarities between successful designs. So, we can “eyeball” a new design using our estimate of the models’ proportions.

Another way of doing this is to use published proportions that can be found on line. Often this information comes from people who have designed a lot of models and have found certain proportions work well FOR THEM. Another designer may have a different view of what works best. If you research this I think you will find that while there are differences of opinion on what works best they are not wildly different from one another. So, let’s identify a set of proportions as our starting point and drop them into our online calculators and see how they work out.

Note that what we are talking about right now are PROPORTIONS not dimensions. We’ll get to the dimensions issue a little later. So, here are the proportions I like. They are similar to what you can find online. For our purposes here we will be considering the proportions of a 4 channel “sport” type model.

- Wing aspect ratio (last month article) should be about 6.
- The aileron area should be about 15% of the wing area.
- Fuselage length should be about 70% of the wing span.
- The nose length from the wing m.a.c (last month’s article) to the back of the propeller should be about 33% of the fuselage length.
- The tail length from the wing m.a.c to the rudder hinge line should be about 66% of the fuselage length.
- The horizontal stabilizer area including the elevators should be about 25% of the wing area.
- Horizontal stabilizer aspect ratio = 3 (TLAR)
- The elevator area should be about 25% of the total horizontal stabilizer area.
- The vertical stabilizer should be about 40% of the horizontal stabilizer area.
- The rudder area should be about 33% of the total vertical stabilizer area.

These are starting points and as we will see there are interactions between these proportions. For example: suppose we have a reason we want to have a shorter tail length. That is perfectly ok. BUT, a shorter tail length means that the stabilizers are going to be closer to the wing m.a.c which can have an adverse effect on stability. So, we need to adjust the stabilizer areas to compensate.

To go further we need actual design dimensions. To establish those dimensions we need to determine the general size of the model. For our purposes we will assume (Continued on page 4)
that this is a .40 -.46 size sport model. I've designed and built several of this class of model and like a wing area of 550 square inches and a weight of no more than 88oz. That will yield a wing loading (weight divided by wing area) of 23oz. per sq. ft....not a floater and not a brick. So let's flesh out the dimensions based on the rules of thumb.

Wing aspect ratio (last month) = 6.
Wing area = 550
Wing taper ratio = 0.7 (last month)
Wing root chord = 11.25in.
Wing tip chord = 7.875in
Mean wing chord = 9.56
Wingspan = 57.5in
Aileron total area = 82.5 sq.in.
Fuselage length = 40.25in.
Nose length = 13.25in
Tail length = 26.5in
Horizontal stabilizer aspect ratio = 3
Horizontal stabilizer taper ratio = .7 (same as wing)
Horizontal stabilizer area = 137.5 sq.in.
Horizontal stabilizer span = 20.31in.
Mean horizontal stabilizer chord = 6.78in.
Horizontal stabilizer root chord length = 7.97in
Horizontal stabilizer tip chord length = 5.58in.
Total elevator area 37.375 sq.in.
Vertical stabilizer area = 55 sq.in.
Rudder area = 18.15 sq.in.
Distance from leading edge of wing to leading edge of horizontal stabilizer = 23.4in.
Static stability margin is assumed to be 10% (see explanation below).

All of the above numbers are based on the listed proportions and simple arithmetic calculations based on the overall size of the airplane (.40 -.46 engine and 550 sq.in. wing area). Very simple to get to this point and we can certainly draw an airplane with these numbers. All done right? Well not quite. We need to make sure that the airplane designed to those numbers will fly ok and be stable. So how do we determine that? One of the big issues for flying right is the c/g location. It has been my observation that many people are very careless with this especially when we’re talking about ARF’s. The c/g in the assembly manual is often incorrect leading to a first flight crash. Furthermore if you seek advice on the forums you can get wildly differing opinions on the c/g location. So how do you figure this out? On a trainer type airplane with a straight (without taper) wing and a conventional airfoil it is safe to put the c/g 25% back from the leading edge. So a 12in chord wing will have its c/g 3in back from the leading edge. If you have any other shape wing, be safe, take some simple measurements and use an online calculator like this one: https://rcplanes.online/cg_calc.htm or this one: https://rcplanes.online/cg4_calc.htm

The first one deals with simpler wings whereas the second can deal with more complex wing top views. For our purposes we will be using the first one.

IMPORTANT...these calculators will give you the location of where the c/g should be how you build the model and locate components will determine where the initial c/g is. It is up to you to shift components around or add nose/tail weight to get the actual c/g where it should be according to the calculator results.

There is another important input that will change the required c/g location and will determine how the model will fly. That input is called the “static stability margin” we’ll talk about this in a minute. But first let’s look at the input page of the calculator.

C/G and stability margin calculator

The right hand side has a depiction of the dimensions and their relationship to the wing and tail of an arbitrary airplane.

(Continued from page 3)
Enlarged view of c/g calculator illustration section

Notic that on the wing centerline there are 3 locator marks labeled AC, CF, NP. We need to understand what those are.

*AC* stands for *Aerodynamic Center*. Every airfoil has a pitching moment which defines whether the airfoil has a tendency to want to nose up or down on its own. There is a location of the aerodynamic center where the pitching moment does not change with the angle of attack. That point is usually at or near the thickest part of the airfoil (simplified definition).

*CG* stands for *Center of Gravity*. This is the “balance point” of the airplane when it is not flying. It is the point through which the *WEIGHT* of the plane acts. It is a location that is easily found using simple means. See my article on building a c/g machine called a Vanessa in the August 2016 issue of the Skywriter newsletter. It is very simple to make and is very accurate.

*NP* stands for *Neutral Point*. If the c/g of the airplane is located on the neutral point, the airplane has neutral aerodynamic stability. In flight, the airplane will not have a tendency to climb or dive on its own. It goes where you point it until you point it in another direction. This is a characteristic of competitive aerobatic planes. If the c/g is ahead of the neutral point it will tend to want to recover from disturbances on its own, i.e. it is stable. The further forward the c/g is from the NP the more stable it is. Moving the c/g behind the NP causes the airplane to be unstable where a disturbance will tend to increase on its own. Very few pilots can handle an unstable airplane without the assistance of a very good fast response gyro. Negative stability must be avoided at all costs.

In the case where the c/g is ahead of the neutral point, (stable configuration) the distance between them is called the Static Stability Margin. It is a value expressed as a percentage of the mean aerodynamic chord (m.a.c.). A dimension is calculated from the percentage and the m.a.c. This dimension is added to the calculated neutral point and defines the location of the c/g. For our models it is generally somewhere between 5% and 15%. In our example we will use 10%.

So let’s look at the input section of the c/g calculator:

![CG calculator Input section](Continued on page 6)
We can fill in all of the values for our sample plane except for the stabilizer efficiency. This factor defines in broad terms how effective the horizontal stabilizer is based on its location relative to the disturbed air flowing off of the wing; in this example we will have the stabilizer mounted in line with the wing centerline so we will select “low”.

Let’s now look at the calculator output section.

There are only two numbers of importance for us: the c-g location and the tail volume ratio (sometimes called the tail volume coefficient). The c-g location importance is pretty obvious but what the heck is the tail volume ratio and why should I care about it?

The tail volume ratio is mathematically related to almost all of the input variables in the calculator and has a strong influence on the location of the neutral point and along with the stability margin, the c-g. It is a measure of the effectiveness of the horizontal stabilizer in stabilizing the airplane. The two most influential factors in the tail volume ratio are the horizontal stabilizer area and its distance from the c-g (the tail moment arm). If the tail volume ratio is too small, your model’s pitch behavior will be very sensitive to the c-g location. It will also show poor tendency to resist gusts or other upsets, and generally “wander” in pitch attitude, making precise pitch control difficult. If it is too large, your model will be slow or sluggish to respond and will require large elevator movements for normal flight maneuvers. On a maiden flight you not have sufficient elevator trim. So what should this value be? I consider the tail volume ratio a “soft” number in that there isn’t a single value that is good and all other numbers are bad so here are some ranges that have been published:

<table>
<thead>
<tr>
<th>Model Type</th>
<th>Tail Volume Ratio Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trainer</td>
<td>0.5 to 0.9</td>
</tr>
<tr>
<td>Sport</td>
<td>0.4 to 0.7</td>
</tr>
<tr>
<td>Aerobatic</td>
<td>0.3 to 0.6</td>
</tr>
<tr>
<td>Glider</td>
<td>0.5 to 0.8</td>
</tr>
</tbody>
</table>

So with all of the above information let’s put the values into the calculator and see what we get.

(Continued on page 7)
Ok, one problem shows up: the c-g is too far back. Normally we would like it to be in the 25% to 30% range (2.81 in. to 3.37 in). in our case the airfoil we chose has its maximum thickness a little further back than usual (30%) so we will be ok with a c-g from 27% and 32% (3.03 in. to 3.6 in.)

To remedy the c-g problem I did 2 things:

I reduced the horizontal stabilizer area slightly
I shortened the tail length.

Here is the resulting calculation.

| Wing Root Chord (A): | 11.25 |
| Wing Tip Chord (B): | 7.875 |
| Wing Sweep Distance (S): | 1.68 |
| Wing Half Span (Y): | 28.75 |
| Stabilizer Root Chord (AA): | 7 |
| Stabilizer Tip Chord (BB): | 5 |
| Stabilizer Sweep Distance (SS): | 2 |
| Stabilizer Half Span (YY): | 10 |
| Distance between both LE’s (D): | 20 |
| Stabilizer Efficiency: | Low |

Enter Static Margin, then Click 10 %

| Mean Aerodynamic Chord MAC = | 9.66 |
| Sweep Distance at MAC (C) | 0.79 |
| From Root Chord to MAC (d) | 13.53 |
| From Wing Root LE to AC | 3.21 |
| From Wing Root LE to NP | 4.28 |
| From Wing Root LE to CG | 3.32 |
| Wing Area | 549.8 |
| Stabilizer Area | 120 |
| Wing Aspect Ratio | 6.01 |
| Tail Volume Ratio | 0.43 |

The new configuration gives us a c-g value in the middle of the range and a tail volume ratio on the responsive end of the sport model range.

Keep in mind that the above calculator is a highly simplified approach to a very complicated math problem. It gives a good starting point for your design. The input proportions are based on other successful presumably good flying models. As the designer you can do whatever you want and fix problems as you go along. Guys who design their own pattern (F3A) planes typically build a mule plane first to test the design. They see things that they want to improve and tear the mule apart and replace wings and/or tails, change moment arms etc. until they like the results. Only then do they build their competition ships.

If I haven’t put you to sleep you might ask why we didn’t calculate a vertical stabilizer volume ratio. It is certainly something we could do. I personally don’t worry too much about it because the published values lead to a fairly small vertical stabilizer. The guideline at the beginning of this article results in a pretty generous size. In our r/c models a larger size is more desirable for the horizon to horizon knife edge pass, to prevent tail wag in stall turns and help create quick snap rolls.

That’s it for this month. Next month we will get into the structural design. We will cover a couple of engineering principles that will guide our design decision making.

Steve Kretschmer
New South flying area is now open
By Steve Kretschmer

On August 5th at the conclusion of the 2018 Scale and Warbirds a small ceremony was held to commemorate the opening of the new Skymasters South flying field. The grand opening was officiated by the Skymasters President Bob Chapdelaine who performed the ribbon cutting.

I’m sure everyone is aware of the work that was done in this new area over the summer. Dozens of Skymasters members participated in turning a ¾ acre farm field into the new flying area that is reserved for helicopter, multi-rotor, multi-rotor FPV and control line aircraft. Fixed wing aircraft will only be flown on the main runway to the north. New interim operating rules have been written for the Skymasters South field to manage the flying there and establish safety standards. Final rules will be established when the club Leadership Team resumes their regular meetings over the winter.

Skymasters South field interim operating rules
The Area
The new South field is the area previously referred to as the “heli field” and most recently as the control line, heli, multi-rotor and FPV field. The area is the expanded flying area south of the existing parking area. This flying area will be used exclusively by pilots flying control line aircraft, helicopters, multi-rotor aircraft and multi-rotor FPV aircraft. Fixed wing radio controlled aircraft are not to use this area. The South flight line is marked by a white line running in a generally East to West direction extending to infinity in both directions and vertically. All authorized flight operations shall be conducted south of that flight line. A second flight line is also marked by a white line which runs generally North to South and is located approximately 30ft. from the east edge of the mowed area. Control lines and control lines will be stored east of the flight line between flights. When control lines or people are using the east flight line that flight line must be honored by all aircraft and people. There are three flight stations associated with the flight lines; two traditional pvc pipe constructed flight stations and one approximately 5ft. diameter crushed stone circle to be used for control line flights only. It is permissible to violate the east flight line if there are no control line aircraft or people present there.

Flight Operations

(Continued on page 9)
Pilots, helpers and spectators must remain outside of the flight area except for control line operations where the pilot (and instructor) can occupy the control line flight station. A helper can be on the flight area to assist in launching and retrieving a control line model. After launching a control line model the helper should move behind the East flight line. A helicopter pilot and helper can be on the field during the start-up of a fuel helicopter but must go to a flight station prior to lift-off. All rotorcraft pilots must be behind a flight station before lift-off. Pilots or helpers must announce their intention to take off, land or enter the flight area to retrieve their aircraft. During a control line flight no other type of aircraft can fly until the field is clear of the control line plane and people.

Warning: In the event that a model lands off of the mowed area and in the planted crops, extreme care must be taken when entering the crop area so as to not damage the crop. Failure to heed this warning can result in the loss of this flying area!

General Safety

- AMA general safety rules apply to operations from the south field.
- Skymasters safety and training rules apply.
- Common sense must always be used.

Control Line Safety

- Control line control handles must be equipped with a safety thong connecting the handle to the pilots’ wrist.
- Control line models, including flying wires, line connectors and safety thongs must have passed a pull test in accordance with the applicable AMA competition rules:
  - Before the first flight of a new aircraft
  - Before the first flight of a repaired aircraft
  - Before the first flight of a purchased aircraft
- All control line models must be physically restrained by either a helper or a properly secured “stooze” any time that the engine is running or the electric power system is armed until the pilot has the control handle in his hand and is ready to take-off.
- While a control line aircraft is in flight, the pilot must be standing within the approximately 5ft diameter crushed stone flight station.
- During a “slack line” incident the pilot must maintain a situational awareness of where the flight lines are and avoid attempting recovery of control by running toward the flight lines and possible flight beyond a flight line.
- Control line models are limited to flying on 60ft. lines or shorter.
- U-Reely control handles are permitted if equipped with a functioning crank lock pin that is engaged before flight.
2018 “Wing It” competition Fly Off

Click anywhere in the collage to view the entire photo album on the Skymasters web
Warbirds & Scale

Click anywhere in the collage to view the entire photo album on the Skymasters web
Corn Roast and Top Gun competition

Click anywhere in the collage to view the entire photo album on the Skymasters web
Five Minutes on Safety

Random Thoughts

Range check

- It is a good idea (that many of us ignore) to do a range check before each new flying session. A known good radio system can fail, and you never know when that might happen.

Prop safety

- ALWAYS treat the propeller on an electric aircraft like a loaded gun whenever the battery is connected.
- ALWAYS treat the propeller on a fuel powered aircraft with extreme respect when the engine is running. Take extra time to think it through when making any needle valve or engine adjustments with the engine running.
- ALWAYS make sure that any cords or cable (like remote glow starters and starter power cords) are well clear before starting the engine.

Throttle Hold switch

- ALWAYS program, understand and USE a throttle hold switch on your transmitter if the transmitter includes that function. A THROTTLE HOLD switch is different than a THROTTLE KILL switch and is useful on both fuel powered and electric aircraft.
- The THROTTLE HOLD switch locks the throttle channel to idle (fuel powered) or zero throttle (electric) and prevents the throttle from advancing unless the switch is placed in the “non-hold” position.

Battery disconnect

- Electric aircraft are MUCH safer if they are equipped with a master battery disconnect switch, accessible from the outside of the aircraft with all hatches closed / in place. The disconnect usually takes the form of a shorting plug that can be seen and when NOT inserted, you know for sure that the motor is disabled. This is even more important if the battery plug is not easily accessible in an emergency.

Taxi safely

- It is good practice when taxiing not to aim directly at an opening between flight stations. When taxiing back to the pits, I angle towards a flight station until I get close and then I taxi parallel to the flightline until I reach the opening where I am standing. While still aiming east or west (ie., NOT towards the pits) I shut the motor down and then carry or tail walk the aircraft back to the pits.
Help Wanted at Skymasters

Website Content Editor Updater

Looking for a club member who can keep our club website calendar and website events updated. Requires a little skill getting around but most of it is automated. Training provided and most of the information is provided for you to add to the site. If you are interested let Bob, club president or Greg, webmaster know. Email: president@skymasters.org or webmasters@skymasters.org. Thanks!

Club Email System Notice

We have a great club email system. Just an FYI, when you have something to sell or list for sale (or looking for something) please use the "classifieds@skymasters.org". I encourage use of this email mail list system. Our member to member email address “members@skymasters.org” is for general communications between our members. We have several other great email addresses (actually many) such as the “indoorfly@skymasters.org”, floatfly@skymasters.org, and many other email lists that you may be on by default. For a complete list, click this link (you will need to log in with your Skymasters credentials to view the addresses). Each mail list has a specific purpose for our very active club and you’ll see that the emails that come as official club communications, i.e. club leadership, event directors or club officers, etc. are marked that way… either way you have control over the emails you receive or don’t want to receive… by going to your member profile in your Skymasters Profile and “edit my profile” and then “Edit Email Subscriptions/Options:” I would really advise you to NOT change these unless there is some problem. Email is the primary way we communicate what is happening in our club! NOTE: to communicate TO the club you must use the email address you registered with on the site. Also, it is great when you log into the Skymasters website too! www.skymasters.org.
Skymasters
Midwest Regional
Float Fly

SEPTEMBER 8–9, 2018
SEVEN LAKES STATE PARK–HOLLY MICHIGAN

LARGEST FLOAT FLY IN THE MIDWEST
LARGER BEACH AREA AND PARKING CLOSE TO BEACH

Event Registration: www.skymasters.org/mwrff
State Campsite Reservations: www.midnrreservations.com

*Make your reservation 6 months in advance to ensure you will get a campsite for event*

EMAIL: FLOATFLY@SKYMASTERS.ORG FOR MORE INFORMATION
OR CALL DAVE WENDT (313) 938-3854 OR 248-805-1404
Skymasters Indoor Flying

Oct. 30th thru April 16th*

Join us on Tuesdays* from 10 AM – 1 PM

At Ultimate Soccer Arenas.
Where it’s always warm and dry!
Located at 867 South Blvd., Pontiac, MI 48341

Single Flying Session $10
Any 5 Session Punch Card $40
Season Pass $120

All Pilots must have proof of current AMA Membership
A Special 3 Month Trial AMA Membership is Available
Spectators welcomed at no charge. Come in and walk around.

Check us out at: www.Skymasters.org

Support your local hobby shops:

* Indoor Schedule of Dates and Times Subject To Change
2018 CLUB EVENTS
SKYMASTERS RC CLUB – LAKE ORION, MI

April 2018
Saturday April 21 — Involvement Day – Bald Mountain

May 2018
Saturday May 12 – Field Opening/Work Day – Scripps Road Flying Field; Lake Orion
Sunday May 20 — Chet Brady - Spring Float Fly – Bald Mountain Trout Lake; Lake Orion
Wednesday May 30 – Student Flight Training & Potluck begins – Scripps Road Flying Field; LO

June 2018
Saturday June 9 — Night Fly (evening) – Scripps Road Flying Field; Lake Orion
Sunday Jun 10 – Electric Fly – Scripps Road Flying Field; Lake Orion
Saturday June 16 — Control Line Fly In – Scripps Road Flying Field; Lake Orion

July 2018
Saturday July 14 – Open House Air Show 2018 - Recreation 101 – Scripps Road Flying Field
Saturday July 28 – Flightline Wing It Contest Fly – Scripps Road Flying Field; Lake Orion

August 2018
Sunday August 5— Warbirds and Scale Fly In - Scripps Road Flying Field; Lake Orion
Sunday August 12 – OCIA Airshow & Open House at Pontiac Oakland International Airport
Sunday August 19— Corn Roast and Top Gun Flying - Scripps Road Flying Field; Lake Orion

September 2018
Sat. – Sun. September 8-9 - Midwest Regional Float Fly – Seven Lakes State Park Rec. Area, Holly
Saturday September 22- Skymasters Fun Fly - Scripps Road Flying Field; Lake Orion

October 2018
Indoor Flying Season Begins – Ultimate Soccer Arenas; Auburn Hills

December 2018
Christmas Party – Orion Center; Lake Orion
Monday 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 Breakfast  
(Everyone is welcome)  
First and Third Monday of each month  
through the summer... and beyond!  
9AM  
Red Olive restaurant  
In the strip mall on Walton  
across from Crittenton Hospital  
Rochester MI

Mowing the Flying Field 2018

As we all know mowing of our field is essential to keeping it beautiful and practical for flying. We want to be sure that all members are aware of the mowing schedule, and possible variations thereof.

We are planning on mowing the runway and pit area every Monday at approximately 1-3 p.m. It typically takes 1.5 to 2.0 hours to mow these areas. Also, during the wetter part of the flying season when the grass grows quickly, or when we have an official event the coming weekend, we will also be mowing the runway again on Thursday night or Friday afternoon.

Weather can have a factor on mowing days and times. If we have inclement weather on a regularly scheduled mowing day, the runway will be mowed at the next opportunity. These changes in schedule may not always be communicated to the club, therefore, plan your trips to the flying field accordingly if you think the regular mowing schedule may have altered due to weather.
## September 2018

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<td></td>
<td><strong>Saturday Breakfast</strong>&lt;br&gt;8:30AM&lt;br&gt;Iris Café</td>
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<td><strong>Skymasters Breakfast</strong>&lt;br&gt;9AM&lt;br&gt;Red Olive, Rochester Hills</td>
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<td><strong>Float Fly</strong>&lt;br&gt;9AM&lt;br&gt;Addison Oaks</td>
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<td><strong>Saturday Breakfast</strong>&lt;br&gt;8:30AM&lt;br&gt;Iris Café&lt;br&gt;MWRFF&lt;br&gt;9AM&lt;br&gt;Seven Lake State Park</td>
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<td><strong>Cub Scouts Rocket Fly</strong>&lt;br&gt;6:30PM&lt;br&gt;Scripps field</td>
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<td><strong>Saturday Breakfast</strong>&lt;br&gt;8:30AM&lt;br&gt;Iris Café&lt;br&gt;Skymasters FunFly&lt;br&gt;10:30AM&lt;br&gt;Scripps field</td>
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The Skywriter 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.

Student Instruction & Pot Luck
Every Wednesday, May through September. Flying any time but we eat at 6:00 p.m. - rain or shine, literally! For those participating we ask that you bring something for the grill - enough to feed (at least) you and your guests -OR- bring a dish to pass -OR- bring your own (non-alcoholic) beverage. Something for the grill: The obvious choices are burgers, sausages/brats and hotdogs - but other alternatives are welcome. If you bring it we will cook it! We've cooked pork tenderloin and chops, salmon, venison burgers, steaks and more. Don't forget the buns.
We start cooking about 5:30 p.m. - having grill items by then helps us get everything ready on time.

Potluck dish to pass: Don't know what to bring, working late? Each week we'll let you know what is needed for the next week from plates to condiments, charcoal, etc. Pick one of the needed items to bring instead! Not one to cook? A quick stop at local supermarket deli for a side salad, or bakery for dessert always works!

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. 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!