

the

Monitor

March

The MRCS Officers

2020

President:

Roger Wilfong
24380 Hampton Hill
Novi, MI 48375
Phone: 248-349-9079

Vice-President:

Ken Myers
1911 Bradshaw Ct.
Commerce Twp., MI 48390
Phone: 248.669.8124

Secretary:

Lynn Morgan
15790 Penn
Livonia, MI 48150
Phone: 734.679.8468

Treasurer:

Dave Stacer
PO Box 75313
Salem, MI 48175
Phone: 313-318-3288

Safety Officer:

Bill Brown, Jr.
18659 Fox Hollow Ct
Northville, MI 48168
Phone: 313.268.4167

Head Flight Instructor:

Ken Myers
1911 Bradshaw Ct.
Commerce Twp., MI 48390
Phone: 248.669.8124

Newsletter Editor:

Ken Myers

Next Meeting: Date: Wednesday, March 4

Time: 7 p.m. video, 7:30 meeting, EAA Building

What's In This Issue:

Midwest's Website Presentation - How To Calculate Oddly Shaped Wing Areas - The February Meeting - Models of the Month - Indoor Flying/Driving/Pontiac - Legacy Center Indoor Flying/Brighton - Upcoming Keith Shaw Birthday Electric Fly-in - Upcoming Mid-Am - Upcoming Events

The February 5th Video

Once again, a very interesting video on soaring was shown.

This time the focus was on physically setting up the aircraft linkages really well so only a small amount of the set up needed to be done with the transmitter.

Ken Myers Presented Information On How to Navigate our Club Website and the Resources Available on the Site

<http://www.midwestrcsociety.org>

Ken noted that when you are on your device's Internet browser and go to <http://midwestrcsociety.org/> you are on our Club's Website's homepage.

He showed us that at the top of the homepage you will see the information about upcoming meetings and occasionally important Club notices.

The next section on the homepage contains a link to the Site Table of Contents, link to our Facebook page and a link to a weather site for our flying field.

The next section contains information about the flying field and whether it is open or not.

Scrolling down the page shows information about learning to fly at Midwest.

Below that section is a listing of the current Midwest Officers and their contact information.

Next is a section that tells about our club and finally there is the Site Table of Contents for our Website.

Using the Site Table of Contents at the bottom of the homepage, or clicking on the Site Table of Contents link near the top of the page, opens up the, are you ready for it, Site Table of Contents.

The sections of the Table of Contents includes;

Club Information: Return to Welcome Page (to return to the homepage from anywhere), Current Newsletter (opens the

Helicopter Frequencies

21, 27, 29, 39, 41

Sailplane Frequencies

11, 12

page where the current newsletter is posted in pdf format and HTML format. The pdf is set up for best printing and the HTML format for view online with active links and videos.), Newsletter Archive (links to all previous newsletters in pdf format), and Area Events (a list of all events, swap shops, etc., taking place in our area).

Getting Started in Model Aviation: Free RC Flight Instruction Info (shows what we offer to beginner's to model aviation), Our Flight Instructor List (list of current flight instructors), Map to MRCS Flying Field (field map and more), and A Typical Day at the Flying Field (demonstrates who we are and what we do).

Club Services & Documents: Current Membership Application in Acrobat .pdf format (can be printed and turned in to become or retain membership), Buy, sell, swap or trade (under utilized page on our Website - please let Ken know of any of those types of items that you may have), Article Archive (how-tos, hints, articles and more), Show and Tell & Club Events (links to page with links for all of our past show and tells & a few older events), MRCS's By-Laws in Acrobat .pdf format (what it says), and MRCS's Field Rules (what it says).

Related Web Sites: Links to the AMA Website and the Website of the Electric Flyers Only (EFO).

Ken was asked if swap meet dates and events were posted to the Website. He said that all of the area events, that he knows about, are listed in the current newsletter as well as on the Area Events page of the Website.

Please be sure to get any information for an upcoming newsletter to Ken by the 15th of the month.

Go to our Website, learn stuff, relive the past and have fun!

How To Calculate Oddly Shaped Wing Areas

By Ken Myers

Many modelers find knowing the wing area of a model, in conjunction with the airplane's flying weight in ounces, useful.

For the most part, model airplane kits, and some almost ready to fly (ARF) planes, note the wing area in the model's specifications. Most ready to fly (RTF) planes do not note the wing area, as they are counting

on the designer to know what to do with that information, and it might add to information overload for beginners, who rely on RTFs.

Sometimes, even ARFs do not provide that information.

If the basic wing planform is a rectangle or rectangle with trapezoids, the wing area can be quite easily calculated from some simple measurements on the plans or physical wing and the use of some simple math formulas.



The wing area for oddly shaped wings, such as on the QIFENG QF008 787 that Ken used for demonstration, can be calculated fairly easily.

A medium such as foam board, or even plain printer paper for larger planes, can be used in conjunction with a scale that can measure in grams.

Ken showed his scientific triple beam balance scale that can measure to the closest gram, but that is not really necessary, since we really want more of a rough idea of the wing area than precisely to the square half inch or so.

I'm going to use foam board as a reference, but as Ken noted during the presentation, printer paper laid out and butting together will work for large wings.

Select or create a piece of foam board that the entire physical wing will fit onto. Measure and weigh that piece of foam board. Ken's original was 24" by 10" for 240 sq.in. of surface area. It weighed 44.4 grams.

The 787 wing was laid on the 24" by 10" piece of foam board and traced around with a pencil. The wing planform was cut from the foam board and the wing plan form weighed. It weighed 9.3 grams.

The Math:

$44.4\text{g} / 240 \text{ sq.in.} = 0.185 \text{ g/sq.in.}$

$9.3\text{g} / 0.185 \text{ g/sq.in.} = 50.27027 \text{ or } 50.3 \text{ sq.in.}$

What Can You Do Once the Square Inches Are Known?

The unit for wing area is square feet, not square inches.

$50.3 \text{ sq.in.} / 144 \text{ sq.in. (a square foot)} = 0.3493056 \text{ or } 0.35 \text{ sq.ft.}$

The flying weight of the 787 is 2.18 ounces.

The wing loading equals $2.18 \text{ oz.} / 0.35 \text{ sq.ft.} = 6.2285714 \text{ or } 6.2 \text{ oz./sq.ft.}$

For those who use and understand wing cube loading.

$0.35^{1.5} = 0.2070628 \text{ or } 0.21$

WCL: $2.18 \text{ oz.} / 0.21 = 10.380952 \text{ or } 10.4$

WCL is a value with no units.

Most fliers have somewhat of a grasp on typical wing loadings expressed in ounces per square foot.

As a reminder for those who use, or want to use WCL, as another qualifier to predict a plane's flying characteristics, here is the chart.

WCL Range	Typical Type
0.0 - 2.99	Indoor
3.0 - 4.99	Backyard
5.0 - 6.99	Park Fliers
7.0 - 9.99	Sport Planes & Trainers
10.0 - 13.99	Advanced sport & some twins
14.0 - 16.99	Expert types
17.0+	Advanced Expert types

More information about using WCL instead of typical wing loading in predicting flight characteristics can be found at:

<http://theampeer.org/CWL/myers2018.htm>

The February 5th Meeting

Roger Wilfong, club president, called on our club treasurer, **Dave Stacer**.

Dave noted that our funds in Bank of America are not "working" for us, as there is no interest being paid on our monies.

After some discussion between the members present, **Dave Stacer**, club treasurer, made a motion to close our existing bank account at Bank of America and open a new one at Community Financial with the President, **Roger Wilfong**, vice-president, **Ken Myers**, and treasurer, **Dave Stacer** listed on the new

account. The new accounts will consists of a checking account and CDs, which will acquire interest. Adjustments will be made to those listed on the accounts whenever there is a change in the position of president, vice-president or treasurer of the Midwest RC Society.

The motion was seconded by **Denny Sumner**.

The motion passed unanimously.

Roger Wilfong then discussed the upcoming flying field entrance road improvements that will need to be made for the upcoming flying season.

He noted two particular areas of great concern.

The first one that he mentioned was where the rise comes down from between the horse corrals onto the track. Roger suggested a grid-type material to be placed in that area. He passed around pamphlets describing this type of material.

The other area of concern is the road between the track and the flying field.

Dave Stacer suggested looking for another way across the area from the track to the flying field so we do not have to cross at the low area we are now using. That could be a possible solution and bears further investigation

Roger really, really wants help in getting this road issue taken care of. He needs suggestions from someone who really has the knowledge to "fix" this ongoing problem.

Roger next brought up the topic of the FAA proposed rules and noted that the FAA comment period ended March 2.

Denny Sumner noted that he's been so very concerned about these proposed rules that he has submitted 25 comments during the open public comment period.

Right now, the FAA requires registration for the person but they want to change it so that each aircraft will have a unique identifier.

Roger also noted that we need to put our sign up at the field entrance, the entrance to land owner, Marty's, driveway.

Next Dave Stacer suggested that it was time for our Models of the Month presentation.

Models of the Month for February 2020



Bob McDonald brought in two beautifully completed models.

The first one he shared was a BMJR 1/2-scale Taurus.

<https://www.bmjrmmodels.com/radio-controlled/park-flyers/taurus-1-2>

The Taurus 1/2, by Paul Bradley, is a scaled-down version of the original by Ed Kazmirski.

The model has a wingspan of 36" with a wing area of 194 sq.in.

He said that he had first noticed it at the 2019 Toledo show and thought that it was flat out "cute".

He finished his in a beautiful red, white and blue color scheme using Ultracote and Parklite covering. He noted that the kit was "okay" to put together. It is powered by a Cobra brushless motor and 2S LiPo battery.



He noted that getting the radio system equipment into the the narrow fuselage was a bit of a challenge.



It weighs 15.3 ounces with the 2S LiPo onboard.

His second plane was a Sig Four-Star 60, which he built from a Sig kit. He had purchased the kit from Mike Russell.

<https://sigmfg.com/collections/sig-kits/products/sig-four-star-60-kit>

It is beautifully covered mostly in orange and white Ultracote. The bottom of the wing and horizontal stabilizer are covered in a checkerboard



pattern, with each black square cut out separately.

It is powered by a brand-new Saito 72SA. As with all of the Four-Star series of kits, this one builds easily and flies well. His weighs 7 lb. 11 ounces, but he noted that he had to add 7 oz. of nose weight to achieve the proper center of gravity (CG).

The specifications from the Sig Manufacturing Web site note:

Wingspan: 71"

Wing Area: 920 [sq.in.](#)

Flying Weight: 7 lb. - 8 lb.

Wing Loading: 17.5 oz./sq.ft to 20 oz./sq.ft

(WCL 6.9 - 7.9) That WCL indicates a great, easy flying sport plane can be expected, and all of the Sig Four-Stars are just that.



Ken Myers shared his QIFENG QF008 787. He said that it is made of EPP foam and comes as a kit. The airframe needs to be put together and the flight control/receiver needs to be installed.

https://www.amazon.com/gp/product/B07THSVB1V/ref=ppx_yo_dt_b_asin_title_o00_s00?ie=UTF8&psc=1

He said that he purchased this plane because it could be paired to his Jumper T16 Multi-protocol radio. He previewed this radio in the February Midwest RC Monitor.

<http://www.theampeer.org/midwest/news/mwfeb20.pdf>

With a 3-axis gyro onboard the flight controller, it is very easy to fly. It uses differential thrust to "steer" it through the air and it also has elevator for pitch control.

He feels that it would make a better trainer type plane than using a computer flight simulation program, as the plane is actually flying in a real sky, with real control inputs.

The plane has a wingspan of 22", wing area of 50.3 sq.in. and weighs 2.18 oz.

A complete review is planned for the April issue of this newsletter.

2020 Skymasters R/C Club Indoor Flying/Driving at the Ultimate Soccer Arenas

The Best Indoor Flying Venue Anywhere!

Join Us on Tuesdays*

At the Ultimate Soccer Arenas

Where It Is Always Warm and Dry!

Located at 867 South Blvd., Pontiac, MI 48341

October 29th through April 14th

From 10 AM through 1 PM*

Spectators Welcome and FREE

Trainer Planes on Site

Come Check It Out

Single Flying Session ONLY \$10

Any 5 Session Punch Card \$40

25 Season Season Pass \$120

Pay at the door or register online at:

<http://www.skymasters.org>

Have Any Questions?

Contact the Event Director at:

indoorfly@Skymasters.org

Or call Fred at 248-770-3239

All Pilots **MUST** Have Proof of Current AMA Membership

A Special 3 Month Trial AMA Membership is Available

* Consult the Schedule on the Skymasters' Website for Exact Times and Dates

Indoor Online registration is open at:

www.skymasters.org

Schedule:

FEBRUARY:

Tues. 18th

Tues. 25th

MARCH:

Tues. 3rd
 Tues. 10th
 Tues. 17th
 Tues. 24th
 Tue. 31st

APRIL

Tues. 7th
 Tues. 14h

Dates & Times Subject To Change.

Please note that a special area is set aside for electric RC Drivers. Did you note that Driving was added to the title?

Costs and dates are the same for drivers as fliers.

Indoor Flying at the Legacy Center in Brighton, MI

Start Date: Wednesday November 6

Time: 12 p.m.- 2 p.m.

Place: Legacy Center Sports Complex
 9299 Goble Dr, Brighton, MI 48116

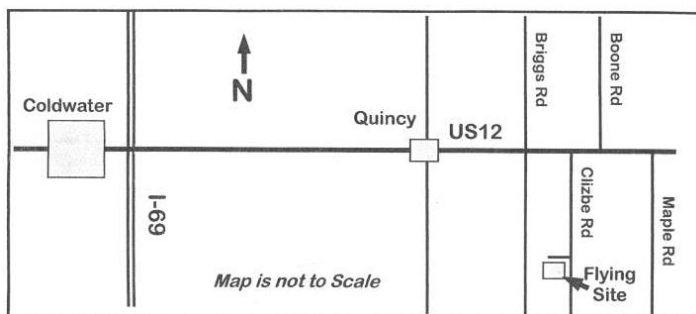
Cost: \$10 cost per session

Don't let the cold keep you from flying

For More Information Visit the Hamburg Flyers

Website

<http://hamburgflyers.org/forum/>



The Upcoming Keith Shaw Birthday Party Electric Fly-in 2020

The Balsa Butchers are hosting the "Keith Shaw Birthday Party Electric Fly-In", for the 18th year, at their field near Coldwater, MI. The event takes place

on Saturday, May 30, 2020. It is a one day event again this year.

The event consists of Open Electric Flying with a "Special Guest of Honor Theme", Happy Birthday Keith Shaw [June 6].

Enjoy a day with the "Pioneering Master of Electric R/C Flight". 8 a.m. - 5 p.m., Saturday. NO LANDING FEE! Donations for field maintenance and lunch appreciated.

For additional information contact;

Dave Watson 517-250-6190 or

flybuddy619@yahoo.com

Contest Director: Dave Grife - E-mail:

grifesd@yahoo.com or Phone: 517-279-8445

Please e-mail or call with any questions.

The field will be open for guests to fly on Sunday as well.

Upcoming 2020 36th Annual Mid-America Electric Flies

The 36th Annual Mid-America Electric Flies are scheduled for July 11 and 12, 2020 at the Midwest RC Society 7 Mile Road flying field.

More details will be available in next month's issue of the Monitor.

An Important Message From Roger Wilfong

Here is Horizon's response to the FAA RID proposed rule making. It is one of the best reasoned responses I've seen. Consider pasting or paraphrasing parts in your responses.

The FAA may turn a deaf ear to such comments, but I believe the points may receive a better reception with representatives and senators - the potential loss of thousands of jobs, closing of small businesses and killing an entry pathway for STEM programs, usually gets their attention.

<https://www.horizonhobby.com/content/rc-information?fbclid=IwAR3oaKkKuwO1ijuz-glQhACaF6pjZlzze9zw5ZiYm0U-wYkUBp30FeTQpbQ>

All responses need to be filed by March 2,2020.

Roger

To change your email address contact Ken Myers at kmyersefo@mac.com

**The 2020 membership application is available at the club Web site,
<http://www.midwestrcsociety.org>,
for downloading with the link on the homepage.**

Upcoming Events:

Oct. 29 - Apr 14, mostly Tuesdays, Indoor Flying at the Ultimate Soccer Arenas (details in this issue)

November 6 and on:

Indoor flying at the Legacy Center in Brighton, MI, (details in this issue)

March 4, Wednesday, Midwest RC Society Monthly meeting, 7:30 p.m. meeting, EAA Building Mettetal Airport, everyone with an interest is welcome

May 30, Saturday, Keith Shaw Birthday Party Electric Fly-in 2020 (details in this issue)

July 11 & 12, Saturday and Sunday, 36th Annual Mid-America Electric Flies, AKA the Mid-Am. More details to be published soon.

Midwest RC Monitor
Editor: Ken Myers
1911 Bradshaw Ct.
Commerce Twp., MI 48390

The Next Meeting:

Date: Wednesday, March 4, 2020

Time: 7 p.m. video, 7:30 Meeting

Place: EAA Building, Mettetal Airport