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March	The MRCS Officers	2019	
President:	Vice-President:	Secretary:	
Roger Wilfong	Ken Myers	Lynn Morgan	
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Dave Stacer	Bill Brown, Jr.	Ken Myers	
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Northville, MI 48167	Northville, MI 48168	Commerce Twp., MI 48390	
Phone: 248.924.2324	Phone: 313.268.4167	Phone: 248.669.8124	
<b>Newsletter Editor:</b> Ken Myers	Next Meeting: Date: Wednesday, March 6 Time: 7:30 Dec. Social Meeting, EAA Building		
What's In This Issue: Your Midwest Dues Are Due Now! - The February Meeting - February Meeting Presentation - Indoor			

Flying Season Info - Membership Application Posted - Upcoming Events

Your Midwest Dues Are Due Now! From Lynn Morgan, Secretary

Hello All Midwest Members,

I thought I would send out this friendly reminder that our Midwest RC Society membership dues are due by the March 6th club meeting. We hope you are considering rejoining Midwest for the 2019 flying season!

This year we are planning to have the altitude limited glider competition at the field (schedule is TBD, probably the same as last year). Larry Markey is heading this event, it was a lot of fun last summer... consider coming out and participating!

FYI.... Please remember that Club Dues are batch processed one month at a time. Checks are handed over to the Club Treasurer at the first Wednesday meeting of the following month. Checks are then typically deposited within a week that the Treasurer receives them.

The February Meeting

From Roger Wilfong, President via email

Arthur Deane gave a good presentation on 3D printing. He brought a foam Decathelon that he had enhanced by incorporating 3D printed structural, aerodynamic and detail components. I'll have to leave it to Arthur to supply some pics, as I forgot to take any.

Roger

# **February Meeting Presentation**

**Arthur Deane** made a presentation on using 3D printing for RC models. He explained that he chose a foam board model that made extensive use of 3D printed parts to gain experience in the new technology.

He started with an explanation of the 3D process. This is a technology that is

Helicopter Frequencies 21,27,29,39,41 Sailplane Frequencies 11,12

# March

2019

rapidly becoming a mainstream commodity.

Proponents claim that in a short time service parts or special tools will be supplied as a CAD file from which users will arrange local printing. Potential local Northville 3D printing resources were identified. 3D printing has the ability to fabricate parts with special features not available with traditional manufacturing. Examples of aerospace parts incorporating major optimization and weight reductions were shown.

The development process from CAD drawing to final printed part was discussed. The relative merits of current free CAD programs (TinkerCAD and SketchUp) suitable for hobbyists was discussed.

In various discussions it was pointed out that Fusion360 CAD program had superior CAE/CAM features. However this program costs \$500 a year and is beyond hobbyist use without additional uses. The ability of the technology to rapidly and cheaply scan existing parts was highlighted Examples were shown where broken and obsolete auto parts could be scanned and replaced with new 3D printed parts.



Arthur then discussed some of the 3D printed parts he has produced. He has developed a dummy radial engine for a Waco biplane and a Sopwith Pup. To demonstrate the simplicity of using current CAD programs the detail steps used to prepare the design were illustrated.

### Designing the radial engine





Start with a semicircle. Add slightly smaller semicircle. "Group" into single entity Copy, group, copy, group until correct height stack is achieved. Copy 7 times, rotate and join to hub





A 3D design for WACO engine blisters was also shown. The use of simple and cheap 3D produced consistent parts and eliminated the tedious process of sanding individual parts.

Arthur's main project this winter build season has been to explore foam board construction. He chose a Decathlon design by Mike Robey, available on FliteTest. This design had the added advantage that it had 18 3D printed parts. The complete nose and battery access hatch are assembled for 3D printed parts. The lessons learned in working with local printing sources was discussed.

# March

Decathlon 3D Printed Parts



In conclusion Arthur pointed out that while the design of curved surfaces parts was beyond the capability of the average modeler the simplicity of current CAD programs would allow modelers to incorporate simple 3D printed shapes into their models.



Monitor Newsletter 2019 Ref: FliteTest, Miles Magister, designed by Mike Robey



In researching FliteTest the speaker came across an interesting 3D printing project. This is 3D printed handles added to standard transmitter sticks to overcome issues with shaking hands. As we are all getting older this concept may be of interest to some of our members.

Indoor Flying 2019 Ultimate Soccer Arenas 867 South Blvd. Pontiac, MI 48341

Single Flying Session - \$10 Any 5 Session Punch Card - \$40 25 Session Season Pass - \$120 All pilots MUST have proof of AMA Membership Note: If you are not an Academy of Model Aeronautics member, a special 3 month trial AMA membership is available. https://www.modelaircraft.org/membership/enroll

> Spectators Welcomed Trainer Planes on Site Come Check it Out! Resister Online at http://www.skymasters.org

or Call Fred at 248-770-3239 Support your local hobby shop because they support us!

Wednesdays, November 7 through April 24, 12:30 p.m. - 2:30 p.m.

Legacy Center 9299 Goble Drive Brighton, MI 48116 Drop in Flying Session - \$10 Spectators Welcomed and free

Keep up to date by checking their website. Hamburg Flyers Radio Control Club http://hamburgflyers.org/forum/

To change your email address contact Ken Myers at kmyersefo@mac.com	The 2019 Membership Application Posted http://www.theampeer.org/midwest/currentapp.pdf
The 2019 membership application is available at the club Web site, http://www.midwestrcsociety.org, for downloading with the link on the homepage.	The Midwest RC Society 2019 Membership Application has been posted to our Website.
Upcoming Events: Tuesdays - 10 am - 1 pm, Ultimate Soccer Arenas, Pontiac, MI (info in this issue)	Please download it soon, fill it out, make a copy of your AMA card and then send that all to our club secretary or bring it to any meeting through March. Please make that sooner, rather than later. The
Wednesdays - 12:30 pm - 2:30 pm, Legacy Center, Brighton, MI (info in this issue)	February meeting would be really good. :-)
Wednesday, March 6, Midwest monthly meeting, 7:00 p.m. aviation related video, 7:30 Meeting, Guest Speaker: Mark Freeland	
Friday - Sunday. April 5th - 7th, 2019, 65th Toledo RC Expo, Segate Center, 401 Jefferson Ave., Toledo, OH	
Sat. & Sunday, July 13 & 14, 35th Annual Mid- America Electric Flies, at Midwest, (details on Website)	

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

> The Next Meeting: Date: Wednesday, March 6, 2019 Time: 7:00 p.m. Video, 7:30 meeting Place: EAA building, Mettetal Airport