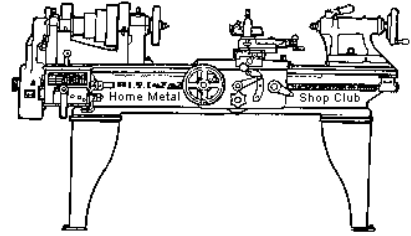




May 2021

Newsletter

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<http://www.homemetalshopclub.org/>

The Home Metal Shop Club has brought together metal workers from all over the Southeast Texas area since its founding by John Korman in 1996.

Our members' interests include Model Engineering, Casting, Blacksmithing, Gunsmithing, Sheet Metal Fabrication, Robotics, CNC, Welding, Metal Art, and others. Members enjoy getting together and talking about their craft and shops. Shops range from full machine shops to those limited to a bench vise and hacksaw.

If you like to make things, run metal working machines, or just talk about tools, this is your place. Meetings generally consist of **general announcements**, an **extended presentation** with Q&A, a **safety moment**, **show and tell** where attendees share their work and experiences, and **problems and solutions** where attendees can get answers to their questions or describe how they approached a problem. The meeting ends with **free discussion** and a **novice group** activity, where metal working techniques are demonstrated on a small lathe, grinders, and other metal shop equipment.

President <i>Brian Alley</i>	Vice President <i>Ray Thompson</i>	Secretary <i>Joe Sybille</i>	Treasurer <i>Gary Toll</i>	Librarian <i>Ray Thompson</i>
Webmaster/Editor <i>Dick Kostelnicek</i>	Photographer <i>Jan Rowland</i>	CNC SIG <i>Martin Kennedy</i>	Casting SIG <i>Tom Moore</i>	Novice SIG <i>John Cooper</i>

This newsletter is available as an electronic subscription from the front page of our [website](#). We currently have over 1027 subscribers located all over the world.

About the Upcoming 12 June 2021 Meeting

The next general meeting will be held on 12 June 2021 at 1:00 P. M. on-line at Zoom.us. A week before the meeting invitees will receive from the webmaster the meeting ID and passcode to join the on-line meeting.

General Announcements

[Videos of recent meetings](#) can be viewed on the HMSC website.

The HMSC has a large library of metal shop related books and videos available for members to check out at each meeting. These books can be quite costly and are not usually available at local public libraries. Access to the library is one of the many benefits of club membership. The club has funds to purchase new books for the library. If you have suggestions, contact the [Librarian Ray Thompson](#).

We need more articles for the monthly newsletter! If you would like to write an article, or would like to discuss writing an article, please contact the [Webmaster Dick Kostelnicek](#). Think about your last project. Was it a success, with perhaps a few 'uh ohs' along the way? If so, others would like to read about it. And, as a reward for providing an article, you'll receive a free year's membership the next renewal cycle!

Ideas for programs at our monthly meeting are always welcomed. If you have an idea for a meeting topic, or if you know someone that could make a presentation, please contact [Vice-President Ray Thompson](#).

Members are requested to submit to the club secretary the name, address, telephone number, and website address, if any, of any metal or other material stock supplier with whom the member has had any favorable dealings. A listing of the suppliers will appear on the homepage of the club website. Suppliers will be added from time to time as appropriate.

The club is looking for a member to serve as webmaster. After over ten years of service, our current webmaster would like to pass the webmaster torch to a successor.

Reminder: Officer elections are held in June of each year. At the next virtual meeting, members should be prepared to cast your vote for the candidate of your choice.

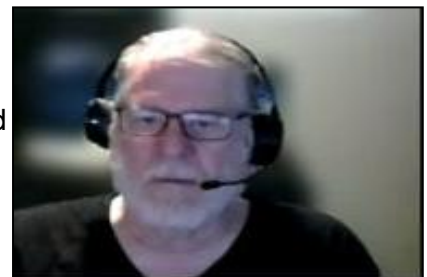
Recap of the 08 May 2021 General Meeting

By Joe Sybille



Fifteen participants attended the 1:00 P.M. virtual meeting. There were four visitors, Wilfred Nijs, Hudson Smith, PinkCNC, and George Marsden.

President-emeritus. Vance Burns, led the meeting (right photo).



Presentation

There was no formal presentation today.

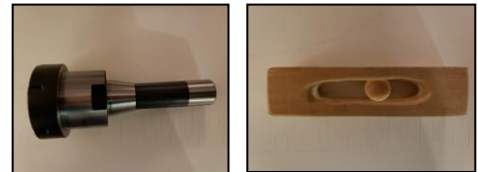
Safety Moment

A member mentioned the importance of wearing two levels of eye protection when using an electric sander-grinder to wire brush surface rust from carbon steel. Many times the wire filaments from the brush will fly off and, if not protected properly, could injure the operator. Can the reader spot the two levels of eye protection in the photo at right?

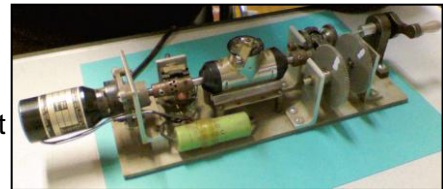


Show and Tell

Richard Douglas showed recently acquired ER40 collet to R8 adapter and wood carving of a captured ball made by his ninety-nine year old aunt. See photos at right.



Dick Kostelnicek exhibited a set of spot drills and a prototype of a mechanism used to adjust the synchronization of a machine to make flexible a/c ductwork. See photo at left and one at right.



Norm Berls displayed the 7th edition of American Machinist Handbook published in 1940. His brother acquired the book at a garage sale.

PinkCNC showed a video of the tinning of a printed circuit board (PCB) using a solution containing muriatic acid.

Joe Sybille displayed two gears salvaged from the transmission of a vintage washing machine. See photo at right.



Problems and Solutions

A participant had a problem with electric machine tools remaining on after work in the shop had ended. The participant solved the problem by connecting remote shut on/shut off controls to the electric tools and to lights for those tools.

Another participant had trouble cutting vinyl and solved the problem by using a CB09 knife found on the internet.

Another participant used refrigerator magnets attached to the side of the microwave oven to stop an annoying sheet metal vibration when the oven was in use. The phenomenon was new to the participant and the solution appeared by accident when the participant noticed there was no vibration present when magnets were attached to the oven.

Articles

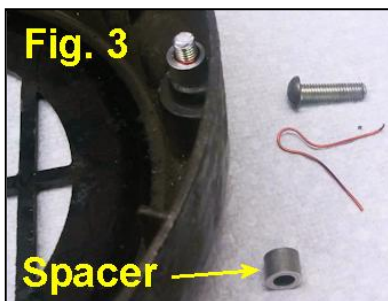
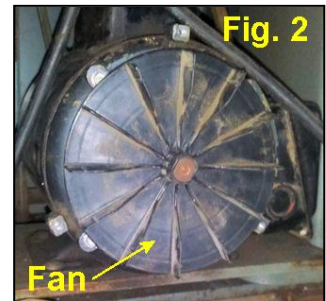
3rd Hand Not Needed

By Dick Kostelnicek



The TEFC (Totally Enclosed Fan Cooled) electric motor powering my lathe has served faithfully for 50+ years (Fig. 1). Through two floods, bearing replacement, and lack of use during the recent virus pandemic it has been a survivor. Well, I'm back in the shop full time and that motor started making a scraping noise that annoyed me enough to do something about it.

It's the warped plastic centrifugal fan (Fig. 2) pressed on to the motor's shaft that's hitting the fan shroud (Fig. 1). The amount of warpage changes daily and probably depends on motor temperature and humidity. I've dealt with it in the past, several times! It is not true that all things got cheapened in recent times. That 50+ year old motor should have had a metal fan rather than a cheap plastic one. In the past I've used a hot air gun to flatten and straighten it out, but time continues to warp this plastic fan



So, here is my solution and it should be good for the rest of my lifetime. Since I couldn't move the fan closer to the motor body, I moved the shroud away from the warped fan blade by ¼ inch with spacers (Fig. 3). Now you need more than 2 hands to secure the shroud to the motor with spacers on its 3 mounting screws. And all this is to be done in the prone position with head inside an access port holding a flashlight in your mouth. I prevented the spacers from falling off the mounting screws by twisting a short length of copper magnet wire around the screws (Fig. 4). Those annoying wire



twist-ums that close the plastic bags containing loafs of store-bought bread would also work!

Well, that went well!