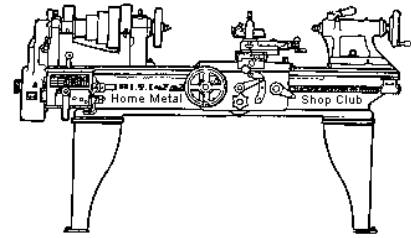




October 2019
Newsletter

Volume 24 - Number 10



<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 11154 subscribers located all over the world.

About the Upcoming 09 November 2019 Meeting

The next general meeting will be held on 09 November at 1:00 P. M. at the Bayland Community Center, 6400 Bissonnet Street, Houston, Texas 77074. A demonstration and discussion of a Triple Expansion Steam Engine will be conducted by Dick Kostelnicek

Visit our [website](#) for up-to-the-minute details, date, location maps, and presentation topic for the next 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](#).

Reminder: Annual dues of \$15.00 were due at the September meeting. [Treasurer Gary Toll](#) will accept cash or a check made payable to him.

Free for the taking are several items for casting metal. The caveat is that one must arrive by truck and have at least three able bodied persons to haul away the equipment. Available items are as follows: sand muller and four buckets of sand, furnace blower, wooden pattern stand, crucible tongs, and one dozen metal flasks.

The Good of the Land Fest will take place 26 October 2019 at 9:00 A.M. at the Texas Early Days Tractor and Engine Association Show Grounds, 1717 Eberhardt Road, Temple, Texas 76504.

Recap of the 12 October 2019 General Meeting

By Joe Sybille, with photos by Jan Rowland



Seventeen members attended the 1:00 P.M. meeting at the Bayland Community Center, 6400 Bissonnet Street, Houston, Texas 77074. There was one visitor, Piper Malick, who joined the club. Welcome to the club Piper. There are twenty members in good standing with the club.

President Brian Alley led the meeting (right

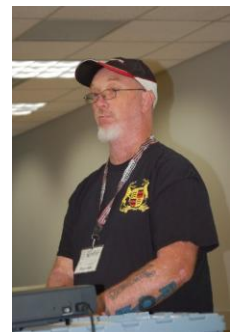


photo).

Presentation



Club member Joe Sybille gave a presentation on his visit aboard S/S Shieldhall home ported in Southampton, UK. After giving a summary of the size and original purpose of the ship, he showed three segments of a DVD describing the ship's history, engine room details, and engine room operations. Following the video segments, he showed and described pictures that he took while aboard the ship.

S/S Shieldhall is one of a few steam driven ships in operation today. Formerly, the ship served as a transport to dump sewage sludge into the sea 3 miles south of the Isle of Bute, off the western coast of Scotland, UK. It operated from 1955 until 1985 when environmental regulations discouraged the dumping of sewage sludge at sea. Plans to scrap the vessel were thwarted when a group of concerned citizens formed the Solent Steam Packet Limited charitable organization and bought the vessel to serve as a tribute to Britain's maritime heritage.

Today, S/S Shieldhall is a tourist attraction operated by dedicated volunteers. During the warmer months, fare paying passengers get the opportunity to sail for about three hours on a vessel that represents a bygone era. In addition to carrying passengers, S/S Shieldhall has served as a vintage nautical prop for period movies. While underway, visitors are encouraged to visit many areas of the vessel, including the bridge and the engine room. Unique about the ship's propulsion are the two 800 hp full power rated triple expansion engines of open crankcase design. Even though closed crankcase designs were common place during the construction of the ship, the owners opted for the open crankcase design. This proved to be a fortuitous decision, for no one could have foreseen the present day interest by tourists in this type of propulsion over fifty years later.

Pictures of S/S Shieldhall shown below were taken by Joe Sybille. More information on the ship is available at this website: www.ss-shieldhall.co.uk.

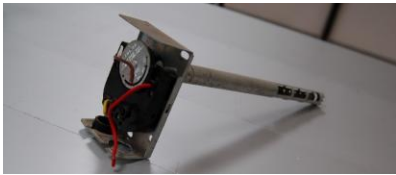


Safety Moment

The safety video shown today emphasized the silent danger of complacency when at work or in the home workshop. One must always be mindful of the task at hand.

A member shared another safety lesson with the group. While working on a live 220 volt circuit, the member momentarily forgot that he had one hand on the circuit fuse as he attempted with the other hand to crimp another section of the same wired circuit. The crimping tool used had no insulation and instantly the member became part of the circuit with 220 volts traversing his body and rendering him incapable of letting go of the circuit fuse or the crimping tool. Fortunately for him, he had the presence of mind to slide off the stool on which he sat. This caused him to fall to the floor taking with him the temporarily paralyzed hands. Save for the bruised hip on which he fell and the minor burns to his hands, the member lived to tell his story of the major lesson learned from this experience. Do not try to multi-task nor work alone if possible. As one advances in age, attempting to multi-task alone while working in the shop is an accident waiting to happen.

Show and Tell



Dick Kostelnicek showed a Honeywell Mfg. temperature/fan control containing a spiral bi-metal strip that controlled his former house furnace. It has three settable temperatures: currently set at 125 deg. F ON, 100 OFF, and 200 HIGH LIMIT. See left photo.

John Cooper showed a skate he made for moving a heavy power supply and a rack for collet storage. See right photos.



John Hoff displayed a cap he made to fit a plastic container to facilitate the flushing of the a/c compressor of his car. See left photo.

Richard Douglas showed several examples of the results of testing various solutions to remove rust and mill scale from hot-rolled steel. Solutions tested included hydrochloric acid, 3 % citric acid, Ospho Rust Remover, and Evapo-Rust. See photo at right.



Brian Alley exhibited an aluminum block formed by a shaper that he recently acquired. See photo at left.

Problems and Solutions

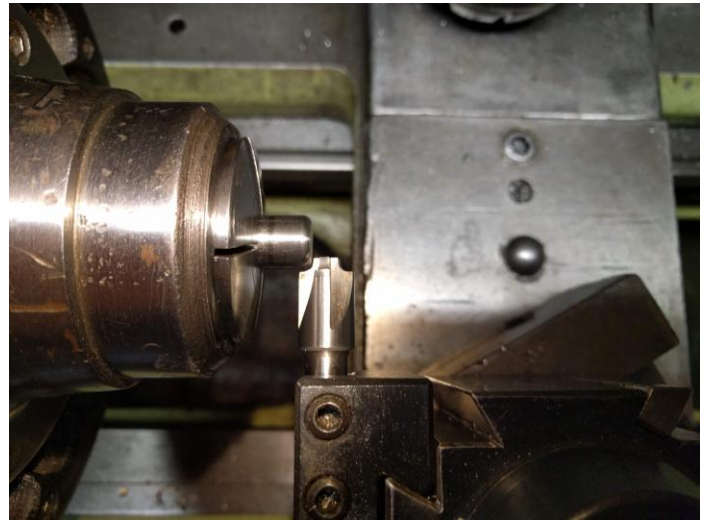
A member had trouble viewing some of the videos on the club's website. He discovered that Adobe is discontinuing updating and distributing Flash Media Player by the end of 2020. Several alternative computer software programs for viewing multimedia contents were suggested.

Articles

Cutting a Radius on a Lathe

By *Martin Kennedy*

Here's another way to cut a radius on stock in a lathe. If you don't have a ball turner or a specially ground profile cutter, you can use a corner rounding end mill. This type of cutter is ordinarily used in your mill to knock the corner off a machined part. They are available in various radiuses. I mounted the cutter in one of my AXA #2 tool holders. This holder has a groove in the bottom to hold round cutter shanks. I set the orientation of the tool by eye so that one of the four flutes was horizontal (see right photo). I slowly fed this into the stock until I had the desired rounded cut. If the radius is large, you may need to work the cut back and forth and the X and Z axis to minimize the engagement of the tool. Cutting along the entire radius would likely cause chatter.



I didn't try it, but I would guess that you could use a carbide cutter designed for wood for this. Some have a ball bearing, which would help in alignment. These cutters can be bought in inexpensive sets. I looked on Aliexpress.com, and found a four piece set for less than \$10 (see left photo).