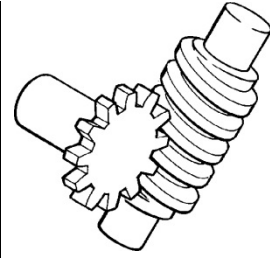


METRO DETROIT METALWORKING CLUB

January 2013



Treasury report:

Balance: \$767.05

Contacts:

President: Rick Chownyk

Vice Pres: Emil Cafarelli

Treasurer: Ken Hunt

Secretary: Bob Farr

Webmaster: Steve/Doug Huck

Next meeting:

February 13, 2013 7p.m.

Tech-Shop, Inc.

800 Republic Dr.

Allen Park, Mich. 48101

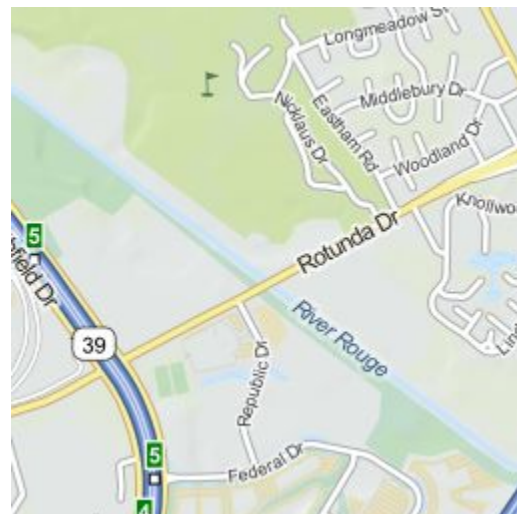
President's report: Greetings to all!
First and foremost, the February meeting will be a field trip. We will be meeting at the TechShop, Inc. in Allen Park, Michigan –

there about 7:00 pm Wednesday evening and after a quick meeting we will be given a tour of the facility (map link) – <http://goo.gl/dOygU>

www.techshop.ws/ts_detroit.html

This is an awesome chain of shops around the country that you can become a member and use some great machinery!

MDMC Member (and past President) John Osborn is a TechShop member and has arranged for us to host our meeting there. We will be meeting



I am sure there will be lots of questions for them. The shop is stocked with the usual machinery, but also has a water-jet cutter which I am personally interested in seeing! John had contacted me a few weeks ago about this but I was not sure if the weather was going to be good enough so I didn't want to announce it until I was sure we could do it.

So just to say it again, we will NOT be meeting at Macomb College this week. Instead we will be meeting at the TechShop, Inc. in Allen Park.

If you have any "show and tells," please feel free to bring them along! I have two that I would like to share with the club.

Another of my favorite things to do is go to Hamfests! Not only do they usually have neat old radio stuff, but I have got some great deals on tools, motors and electronics over the years. The next one is this Sunday in Livonia. Even my wife enjoys going!

<http://www.livoniaarc.com/index.php?page=swapshop>

As always the field trip meeting is for members and anybody else they might like to bring along! I'll have coffee and doughnuts to keep you warm and full! Hope to see ya there!

Rick

Show-and-Tell: George Waterman is making steady progress on a multi-fuel, multi-cylinder, water cooled sterling engine of his own design. Shown here are one of his cylinders, a piston and the Teflon rings –



During the meeting George discussed the difficulties of securely holding a finished-machined piston so that internal snap ring grooves could be accurately cut to retain the piston pin. He developed this mandrel, which he reported worked well –



Kevin Thomas suggested using an expanding arbor within the piston pin hole. This method would improve concentricity between the pin axis and snap ring groove.

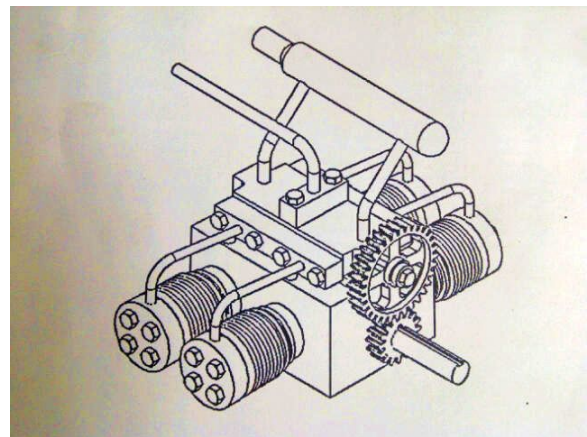
George also developed this device to assist with installation of the delicate Teflon piston rings during assembly –



George explained in a post-meeting email that “the thin section allows the seal to pass over the wear ring groove, the plastic bottle piece with slots is the "pusher".”

Well done George, and thank you for sharing these adaptable solutions with us. We look forward to your next update!

Charles Schwarzwald is proposing a group build project for the MDMC members and any others who would like to participate. He suggested a version of the Liney four-cylinder –



Each participant would make one part multiple times based on the total number of participants (plus one for a traveling showpiece), and then parts are exchanged so that each participant gets a finished engine.

Charles also suggested that there will be many ways to participate, such as directly machining parts, providing machine time to others lacking the appropriate machine to make their assigned part, donating material or money to purchase materials, etc. Search www.groups.yahoo.com for “groupbuildproject” for more info.

Brian Lawson demonstrated a sterling engine which runs smoothly on the very low temperature differential created by a small cooler ice pack or cup of tea. The engine is a kit from Lee Valley tools and sells for \$150 - www.leevalley.com

I neglected to get a picture of Brian's before he left, but here is one from the Lee Valley web site –



The kit appears to be complete –



Thanks Brian!

Oldest tool “competition” – Rick challenged our members to bring their oldest tools to the January meeting and there was a wide variety of interesting entries.

Kevin Thomas shared this WWI-era soldier's knife –



The sheath has brass ‘wipers’ which secure the knife from slipping out. This tool was manufactured in 1918 and was in very good condition. Thanks for sharing it with us Kevin –



Bob (my apology, your last name escapes me at the moment) shared this cross-cut saw maintenance tool –



It has multiple functions as a hammer, tooth bender for adjusting the “kerf” (width of the cut), gage, sharpening guide and probably other uses. It was patented in 1885 and probably commonplace in Michigan’s logging heyday –



Jim Peters demonstrated a pendulum clock for us, which he built “a long time ago,” so I put it in this section. Unfortunately he disappeared before I grabbed a photograph of the *ancient* instrument. It sat on the edge of the table with its pendulum and chains hanging over and ticked a perfect beat, just as we’ve come to expect from all of Jim’s excellent work.

The grand-daddy tool of them all, however, was Kurt Schulz’s Snap-On scraper/soapstone. It’s still as reliable as a rock despite its “437 B.C.” birth date –



Thanks to Kurt Schulz and Dick Triemstra for again bringing cut offs, literature, tooling and other candy to share with the members.

Want to Buy – Karl Gross, Mike Danko and I recently met with the Michigan Scale Model Boat Club in preparation for NAMES 2013. Several of their members are currently shopping for machinery or looking for some info that our members might be able to help with, so I offered to post some details in our newsletter.

MSMBC member Steve Robertson would like to buy a lathe of about 15-inch turning capacity, preferably of American manufacture. He also has some information to share about an Index vertical milling machine for sale if one of our members is interested. The mill is Bridgeport size, with a table in the 9x50 range. Steve can be reached by telephone at (248) 528-3445, or by email at donna.robertson@att.net

MSMBC member Andy Paris is searching for info about where he can find a NC contouring mill capable of handling a pine core 10'x1'x1.5'. Yes, those dimensions are in *feet*! He can provide the code, he just needs the machine. Andy can be reached at techtrainer1@wowway.com

Andy's need for this big mill is quite interesting. The pine core is to be

contoured into a hull plug for the battle cruiser "Alaska" –



At full scale she is 808'6" long and displaced over 34,000 tons loaded for combat. Powered by four steam turbines, top speed was 38mph, cruise range was 14,000 miles, and she even carried catapult-launched seaplanes: there *must* have been a very cool machine shop somewhere inside her hull!

I've invited Steve and Andy to visit our meetings. Please contact them if you can help with their search. Also, take a look at the interesting work being done by their club members –

<http://www.rcgroups.com/forums/showthread.php?t=1032466>

Bob