



SCHSM

Southern California Home Shop Machinists

November 7, 2015

OFFICERS

President Michael Vulpillat
Vice President Paul Chretien
Secretary Ken Rector
Treasurer Jim Endsley

COMING EVENTS

Holdridge Shop Tour
November 14, 2015
2:00 P.m. <-----
15224 Figueroa St.
Gardena

Old Tool Swap Meet
Nov. 21st. 2015
6:00AM-NOON
4020 Sepulveda Blvd.
Culver City

December Meeting
December 5, 2015
2:00 P.M.
El Camino College

Preface

The November monthly meeting of the Southern California Home Shop Machinists convened at 2:00 P.M. on Saturday, November 7, 2015 in classroom AJ115 on the first floor of the Industry and Technology Building at El Camino College in Torrance California. There were 33 people in attendance. There were no new visitors this day.

President Michael Vulpillat called the meeting to order and asked if there was any club business to discuss. Ed Hoffman told about the student robot exhibition in progress at that time at the school. A flyer promoting the Gunther's Yard event was distributed and there was some discussion about what a great event it is, and what interesting things are presented there.

Holdridge Manufacturing Tour

Doug Walker reminded us of the tour of the Holdridge Manufacturing Company shops on Saturday, November 14th. The time for the tour has been changed. We will meet at 2:00 P.M. at the entrance at 15224 Figueroa Street in Gardena. Holdridge manufactures a well regarded radius turning attachment widely used by industry.

LMS Open House

Vice-President Paul Chretien gave a summary of the Little Machine Shop Open House event last October 21st. Eighteen members of SCHSM brought displays to the event and three or four other members attended. Paul reported very positive feedback from the LMS staff about our participation. They declared their intention to invite us back next year. A large number of visitors to the Open House viewed our displays and expressed interest in our club and our projects. Several members took a lot of pictures at the open house and have put them in the files section of our SCHSM Yahoo Group.



Gear Selection For Model Engines

Dan Snyder gave a presentation on Gears for Model Engines, and how to select them. Dan described some gear parameters such as Pitch Circle, Diametral Pitch, Number of teeth and center to center spacing. He told about involute gear cutters which have the involute tooth shape ground into the cutter. Involute cutters are made in sets of eight for the standard



diametral pitch sizes. He showed slides depicting how he used an Arduino microcomputer controlled indexer to generate spur gears. He pointed out that one can choose gears to match the cutters available as long as the ratio of the gears is the same. Dan also mentioned the hobbing method for gear generation. A gear hob cutter has straight cutter teeth and generates gear teeth of the proper involute shape by simultaneously rotating the cutter and gear blank. The hobbing method is used in industry but not much in the home shop. However, Dan is working on a computer controlled system with encoder feed back to synchronize the hob cutter rpm with the rotating gear blank.

Spotting Scope Mount

Jim Endsley told about how he built a spotting scope mount to use at the shooting range. Jim presented background information about using a spotting scope and some commercial products including floor and bench mounted tripods. He gave some price/performance data and told about the pros and cons of his requirements. He then showed us a sturdy table mount that he made that clamps to the shooting bench. Jim adapted an inexpensive HF bar clamp to a thrift store tripod camera mount. He finished the mount with two coats of a bright red powder coat finish. He told about how he does powder coating using a toaster oven and HF applicator with readily available colors from HF and other outlets.

Show and Tell

Jim Long donated a BP type power feed for auction for the benefit of the club. The machine went for \$30. Thanks Jim!

Graham Hollis showed a time lapse camera carriage he made with 3d printed parts. Although Graham's demonstration model was about three feet long, the carriage rails are made of electrical conduit and can be extended to up to ten feet in length. The carriage is moved by a stepper motor and a timing belt and the carriage/camera system is controlled by a Raspberry Pi that receives commands from a Bluetooth keyboard app on his phone. Graham plans to use the system for motion time lapse photography effects and for photo frame stacking. This is a very neat high tech project. Graham showed a short video demonstrating time lapse moving camera effects and explained several techniques using the device.

Larry McDavid gave away a pair of very nice Fisher scissors.

Butch Sherrick showed an Intramatic grooving head manufactured by Nobur Mfg of North Hollywood. This tool can be used to make inside chamfers and o-ring grooves.

Our club Farm Boy engine stopped running late in the afternoon at the LMS Open House and Dan Snyder volunteered to take it home to investigate possible ignition problems. Dan found the ignition system was producing spark and he thought the problem might be in the spark plug. The counter bore in the head of the Farm Boy was too small in diameter to accept an off the shelf socket, so he thinned down an 8mm socket to fit. Dan made a very nice 1/4" drive tee handle to turn the socket. Dan reports that the Farm Boy is running fine after cleaning the plug.



Paul Chretien passed around photos of Jerry Brown and some other members from years past. He reported on the LMS Open House and thanked Willie Jordan and Lewis Sullivan for their effort to coordinate getting our equipment together for the afternoon. Paul told about adapting a MT2 end mill holder to hold a 3/4" shank end mill using a boring bar with indexable insert from LMS.

Fred Kerpse spoke about his and Linda's upcoming move to Tonapah, Nevada where life is a little easier for a guy with a lot of equipment. Fred brought in a Mamod Steam Roller that he recently acquired. This is a live steam model that uses

solid alcohol pellets for heat. Fred fired up the boiler and ran the roller back and forth on a table.

Old Tool Swap Meet

The quarterly Old Tool Swap Meet will be held on November 21st in the parking lot behind Anderson Plywood at 4020 Sepulveda Blvd., Culver City. Sales start at 6:00 A.M. and the bargains are quickly swept up in the predawn rush. Lots of people come with their flashlights in the early morning darkness to prowl and poke through mysterious piles of old tools and other valuable items. You will find several of our members there taking advantage of the bargain junk and shooting the breeze through the morning. It is a lot of fun and you might see something unusual you can't live without.

The SCHSM welcomes presentations by members or guest speakers on any subject related to metal working activities. If you have some knowledge or experience you feel may be of interest to our members, or if you know someone that may have something interesting to relate, please consider making a presentation at a meeting. Presentations may be a little longer and more detailed than a show and tell and may be accompanied by slides or video, or physical displays. Probably every member has some experience they can share and this is the purpose of the SCHSM. Please contact President Michael Vulpillat to make arrangements to give a presentation.

The SCHSM meets in class room AJ115 on the first floor of the Industry and Technology building of El Camino College, 16007 Crenshaw Blvd. Torrance California, at 2:00P.M., on the first Saturday of every month. The building is near Parking Lot B. Enter the campus on Manhattan Beach Blvd.

If you would like to contribute an article, to this newsletter, please contact the editor, Ken Rector, via the SCHSM Yahoo Group, or at kdrhoo@yahoo.com.

Find us on the web at www.schsm.org.

