



SCHSM

Southern California Home Shop Machinists

October 1, 2016

OFFICERS

President	Michael Vulpillat
Vice President	Frank Schettini
Secretary	Ken Rector
Treasurer	Jim Endsley

COMING EVENTS

Old Tool Swap Meet
November 19, 2016
6:00 A.M. - Noon
Anderson Plywood
4020 Sepulveda Blvd.
Culver City

December Meeting
December 3, 2016
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 5, 2016 in classroom AJ115 on the first floor of the Industry and Technology Building at El Camino College in Torrance California. There were 33 members in attendance and 2 newcomers. One of the visitors was Bruce Biersborn from Simi Valley. Bruce has a Bridgeport mill and Hardinge lathe and is interested in model engines. The other visitor was Dick Kaneshiro.

The Treasurer reports we have 83 people on our roster.

President Michael Vulpillat reminded members that club officers will be selected in February. He urged members to seriously consider serving as an officer next year.

Eldon Barklay spoke about possible shop tours that he may be able to arrange - one to a metal forming company that does forming and metal spinning, and one to a die casting company. Members were enthusiastic about this and Eldon will proceed with arrangements.

Willie Jordan and Fred Bertsche spoke about our participation in the LMS Open House last October 15th. They worked with LMS and setup our club equipment for the event. The event was well attended and there was a lot of interest in our member's displays. Eleven members participated in the club display with projects from their shops to display. There were operating engines and shop made tool displays

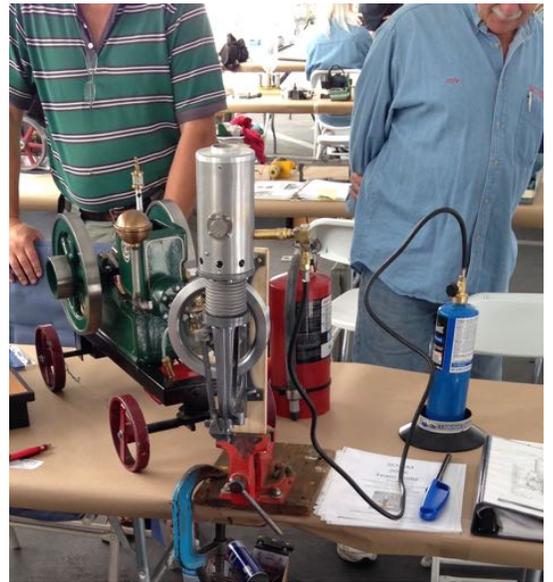


and works in progress. Fred Bertsche brought the club project Stirling engine and fired it up for the first time. Thank you Willie and Fred for your effort to make this a successful and enjoyable event for us.

Incremental Motion Encoder Presentation

Dan Snyder presented an interesting and well documented talk about installing a Custom Digital Read Out system for the X and Y axis on his Tree Mill. His system uses glass scales as measuring devices with low cost universal counter displays for output. Dan described the scale configuration, how they work to make linear measurements and the measurement resolution they provide. He also told about the features of the counter displays.

Dan described how he installed the equipment on the mill. Mounting the X axis scale to the table was not a problem as there were milled parallel surfaces on which to work. Mounting the Y axis scale was more difficult as it was to be attached to the knee and cross slide casting which had various draft angles to contend with. Through a series of slides and photos Dan showed how he carefully measured the mill and constructed 3D models of the components. From this information he made mounts for the encoder slide and adjusted these to obtain the required alignments. With the slides mounted he fabricated a mounting fixture and movable mounting arm to hold the digital displays. The DRO has resolution of .0001 and .0002 inches on the X and Y axis respectively.



Show and Tell

Butch Sherrick told about casting babbitt bearings in a set of 12" cast iron wheels. He showed slides and spoke about babbitt materials and where he purchased his supplies. He made a mandrel the size of the axle with an end cap at each end and a method to center it in the wheel. He used soot from a candle as a mold release agent. He preheated the wheels and melted the babbitt in a propane fired turkey fryer and poured the babbitt. The result was very good.



Larry McDavid showed a gear wrench he bought on Amazon after watching his plumber use one on his kitchen sink. This is a socket type wrench where the ratchet handle drives the socket on the outside circumference instead of an internal square hole. He passed around a catalog from Micro Mark and a pair of specialized pliers for use in bending wire and jewelry making.

Pat Oreilly asked members for advice on removing some ACC glue from the barrel of a micrometer. Some suggested hot water, others acetone.

Ron Gerlach described a line boring bar he made to bore the cylinder in the engine he is rebuilding. The bar uses the tool holder he showed last month to bore the 5" diameter cylinder. He also showed a Lysle cylinder hone he found on Ebay. He showed slides of the cylinder bore during boring and honing operations.

Fred Bertsche showed an E. T. Westbury designed marine I.C. engine he recently acquired. Fred also described work he has done to resolve problems with the club Farm Boy engine. The engine has lately begun to quit running after a few seconds and Fred found carbon buildup under the Oring which seemed to cause it

to expand and sieze up when warm. He believes this was caused by excessive wear on the wrist pin that allowed the piston to travel above its normal distance in the cylinder into an area of carbon buildup in the combustion region. Fred will work to correct these problems.

Old Tool Swap Meet

The quarterly Old Tool Swap Meet will be held on Saturday morning, November 19th at Anderson Plywood, 4020 Sepulveda Blvd in Culver City. The swap meet starts at 6:00 A.M. and continues until noon. You will find lots of vendors with an assortment of tools and related stuff of all kinds. There are wood working tools, metal working tools, automotive tools, gardening tools and general around the house tools in various conditions of abuse at above and below bargain prices. You will more than likely meet other club members there. Therr is coffee and donuts at a reasonable price that is donated to the Elks Club who allow us to use their parking lot. You should get there early as the real bargains go to the early birds that show up before dawn with flashlights.



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 or make a comment about the newsletter, contact the editor, Ken Rector, via the SCHSM Yahoo Group, or at kdrhoo@yahoo.com.