



# SCHSM

Southern California Home Shop Machinists

March 5, 2016

## OFFICERS

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

## COMING EVENTS

April Meeting  
 April 2, 2016  
 2:00 P.M.  
 El Camino College

May Meeting  
 May 7, 2016  
 2:00 P.M.  
 El Camino College

Picnic  
 June 11, 2016  
 Alondra Park

## Preface

The March monthly meeting of the Southern California Home Shop Machinists convened at 2:00 P.M. on Saturday, March 5, 2016 in classroom AJ115 on the first floor of the Industry and Technology Building at El Camino College in Torrance California. There were 37 people in attendance. There were no new visitors

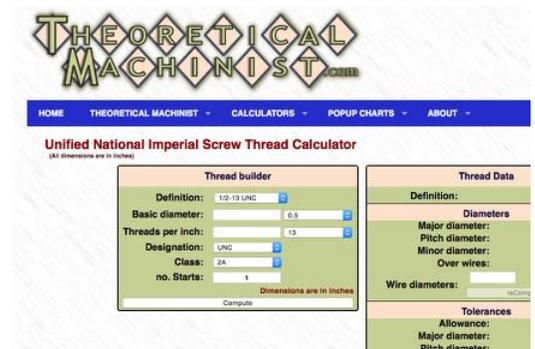
President Michael Vulpillat called the meeting to order. There was no club business to present.

Mike Jacob brought in two vices for auction for the benefit of the club. The proceeds provided thirty five dollars to the treasury.

## Presentations

Dan Snyder gave a presentation on 'Calibrating a Threading Tool' with slides and information about single point threading in the lathe. He told about when specialized threads may be required - for a non standard diameter or when threading to a shoulder for example. He described basic thread parameters and classes of fit. The internet is a very good source for threading information and Dan mentioned <http://theoreticalmachinist.com> which has a very good thread parameter calculator. The calculator accepts basic diameter, thread pitch and class and calculates tolerances, and diameter over wires.

Dan also described making a threading tool calibration test bar using a known diameter and plunging your tool a known depth. Then measure over wires to calibrate the actual tool size. The benefit of this is to eliminate worry over cutting too far and to reduce cut and try methods for internal threads. For external threads Dan recommends to use wires to obtain accurate results. As usual, there was a lot of discussion about Dan's subject.



## Club Project

The club project to build a model of the Anderson Ericksen Wickstrom sterling engine led by Fred Bertsche is gathering momentum. Fred discussed the progress since last month and mentioned a couple of tasks that still need to have an owner. Three members brought in parts to show what they have accomplished so far. Ron Gerlach showed how he machined the piston and connector from the rough aluminum castings. He showed images of the lathe and mill setups, how he located the parts and the finished pieces.

Lewis Sullivan told about fabricating the outer shroud from stainless steel and the burner unit. He first made the burner from inner and outer rings with cover plates and welding this together. He was not satisfied with this as it was heavy and required considerable handwork to finish the welded seams. He was much happier with his second attempt where he machined the inner and outer rings and one face from a single billet with only the second face to be welded in place. Lewis told how he drilled the fuel orifices at a 10° angle with a #67 drill. Lewis also told about his experiences in metal spinning a cover for the burner flue.

John Miller described how he machined the mounting bracket casting.

## Show and Tell

In response to recent meeting discussions about mounting a three jaw chuck, Eldon Barkley showed a lucite demonstration chuck with metal innards to illustrate how the scroll and jaw system works. This is a set-true type chuck that shows the four set screws to adjust runout.

Larry McDavid had several things to tell about this month. Larry had asked on our Yahoo group about suggestions for methods to cut a slit in a 1" diameter copper tube. He got together with Ron Gerlach and they made some clamps from 2x4 limber to clamp the tube on the mill table. They cut the tube with a .020" slitting saw. Larry also showed a small sanding tool for finishing work he obtained from Amazon.com at a much lower cost than one available from Micro-Mark Tools. He also showed a base he made for an insulated glass flask used to hold liquid nitrogen. The base is made from a maple turning blank obtained from Rockler Woodworking and Hardware. Larry then showed a couple of lazy susan bearing plates. One from Home Depot made of sheet metal and another much nicer one from VBX Bearing Company made from aluminum castings.

Norm Wells showed some pocket reference books published by the Morse Cutting Tool Co. with a wealth of technical information.

Phill Potter announced that Harold Chambers has passed away. Harold was a membebr of SCHSM for many years and a life long friend of Jerry Brown. He and Jerry regularly attended meetings and contributed to show and tell with interesting and informative comments. Harold's daughter is disposing of his extensive book collection and would welcome interested members to inquire. It seems that Harold made the metal working books from his library available to the club a few years ago, so there may not be many of these in the collection. Any one interested in Harold's books can contact Phill Potter.

Pat Dobbins showed the equivalent of a swiss army knife of pens which had many interesting features.

\*\*\*\*\*

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](mailto:kdrhoo@yahoo.com).