



SCHSM

Southern California Home Shop Machinists

November 1, 2014

OFFICERS

President	Frank Kozlowski
Vice President	Charles Angelis
Secretary	Ken Rector
Treasurer	Jim Endsley

COMING EVENTS

Old Tool Swap Meet
November 15
Anderson Plywood
4220 Sepulveda Blvd
Culver City, CA

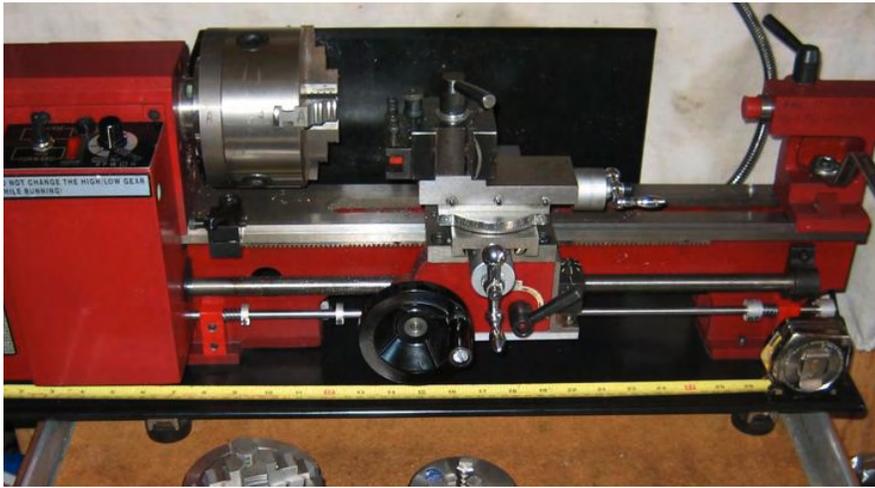
December Meeting
December 6
El Camino College

The October meeting of the Southern California Home Shop Machinists convened as usual at El Camino College on November 1st. The meeting was called to order by President Frank Kozlowski at 2:00 PM. There was one new visitor, Oliver May.

President Frank Kozlowsky spoke about our presence at the Little Machine Shop Open House on October 25th. Twelve members brought a variety of metal-working projects to display. Howard Weimer brought his IC engine collection, Norm Wells brought his collection of interesting shop made tools, Frank Schettini brought his steam engine models. Lewis Sullivan ran his Crusader .60 engine several times during the day. The club Farm Boy project engine, was displayed and ran for the entire day without problem. John Miller brought his 4 foot adjustable wrench. Mike Jacob ran a fairly large horizontal steam engine that he recently refurbished. Dan Snyder displayed his "Contrary Tool Bit" that is capable of cuts of .0004" on his 9" SB lathe. Frank Schettini brought canvas drop cloths for table covers to give the display tables a very nice appearance. The club compressor supplied a reliable quantity of air all day and the club banners and flyers identified us to visitors.

As the first speaker of the afternoon, Bob Heil gave an excellent presentation about his design process and implementation of an automatic stop system for his Mini-Lathe. After some extensive research, he identified 11 requirements he deemed necessary. He found several designs on the net that didn't satisfy his requirements. His final design uses an electro-mechanical implementation that includes dynamic braking and a series of relays for control based on operator settings and limit switches. The accompanying image shows the completed project. The stop mechanism is fitted as the lower horizontal shaft with the adjustable stop collars just below the lead screw. Bob's talk was accompanied by slides showing the various electrical and mechanical parts and the final installation. He showed a short video demonstration of the system in action.

Mike Jacob showed the horizontal steam engine that he had at the LMS open house. Mike thoroughly refurbished this engine from a rusty hulk into a sparkling well running machine. It is reversible and will run slowly at 4psi or quite fast at 50psi.



Michael Vulpillat showed a pair of inexpensive laser pointers from Harbor Freight that can be used as a centering device on a drill press or mill. The lasers project a rotatable line and two of them can be aligned to illuminate a point at the intersection that can then be used as a centering aid. The line resolution widens as the distance from the device increases so they may not be extremely accurate but it is an interesting application.

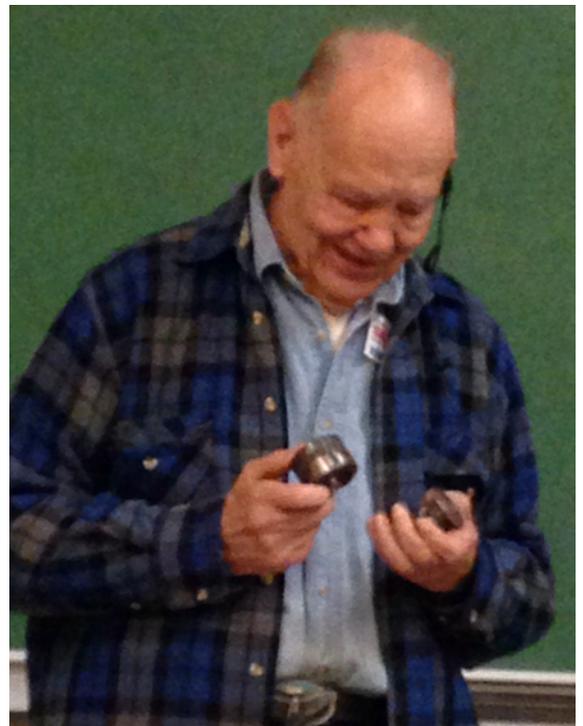
Larry McDavid gifted members with small eyedropper bottles that are useful in his shop for dispensing oil. Larry also suggested water bottles from REI where the top opens with a 1/4 turn.

Norm Wells gifted members with heavy duty rubber bands. He passed out copies of "How Yo Clean a Jacobs Chuck" and told of his effort to disassemble a Jacobs Like chuck made in China. He showed parts from the chuck and compared its quality to an American made chuck from Jacobs. There followed some discussion on the history of the Jacobs Chuck.

The Jacobs website includes the original patent drawings from September 1902, and the following brief history. More than one hundred years ago, at the end of the 19th century, Arthur I. Jacobs was working with an old style drill press, trying to hold the belt control with one hand, and applying the spanner wrench with the other to tighten a drill in the crude chuck. The wrench slipped and he badly battered his knuckles. A.I. knew there had to be a better way. In a matter of days, he had developed the first drill chuck with a toothed sleeve and key. A few months later, he founded what would become The Jacobs Chuck Manufacturing Company.

Also in the historical vein, Norm told how the Silver and Demming Company originated the design of large diameter drill bits with small diameter shafts before the adjustable chuck was available. The small shaft was a standard universal size that fit the tool holders of the drill presses of the day.

Dan Snyder told about a trip to the San Diego Air and Space Museum Annex in El Cajon, near Santee, in San Diego county. The museum occupies two hangers and some outside spaces at Gillespie Field, a small airport. One hanger is occupied by several antique aircraft, including a 1914 Bleriot XI monoplane. They also have a collection of antique piston engines from the 1920's and 30's. Also in that hanger is a home made helicopter built by two guys in their garage in 1958. It is named the Adams-Wilson Hobbycopter (FAA Registration N23P). It is powered by a 1958 650cc Triumph Motorcycle engine and incorporates many of



the Triumph frame parts. The other hanger holds several aircraft being restored, a complete machine shop and welding facility. This museum would be a great destination for anyone traveling near San Diego.

Don Huseman announced that he found Daily Saw in South Gate to offer band saw blade sharpening for \$6.36.

Marv Frankel is looking for help to make patterns for a hit and miss engine he wants to build. Marv would like to make lost foam patterns and have them cast in iron by a commercial foundry. He has plans from 1932 that he was given by Jerry Howell some years ago. The lost foam method for patterns created a lot of discussion.

John Miller showed a rack he cut for practice while building the movable jaw of his large scale Crescent Wrench. He described a couple of methods he tried for cutting the rack. There were an abundance of suggested alternative methods from the audience. John finished the rack and his adjustable wrench operates very smoothly with it.

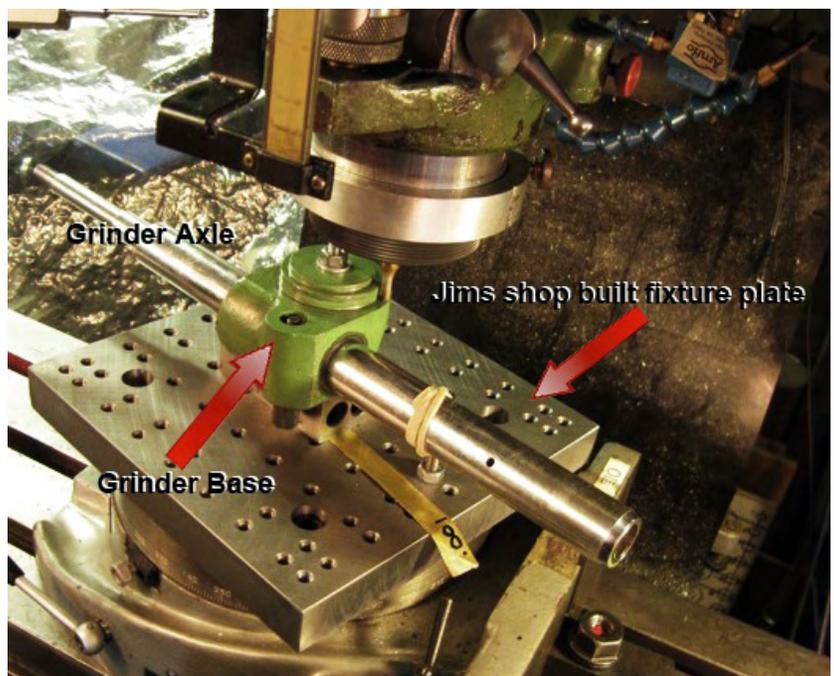
Jim Long suggested a newsletter department called, "What I'm Working On This Month". He envisions members contributing images and descriptions of projects they are working on that they may not be able to bring to the meeting show and tell sessions. So, here is the premier edition.

What I'm working On This Month

Jim Long has bought an asian made Deckel Tool and Cutter Grinder clone on sale from Northern Tool for a very good price. Upon delivery, Jim found the grinder in need of serious tuning. He has undertaken to bring the tool to respectable condition for use in his shop and he intends to write an article for HSM describing what he is doing. He has contributed the following images showing one of the machining setups he is using. Jim says, "With the use of a tool fixture that I built several years ago, I secured the part on the fixture to be parallel with the machines axis. With the help of shim stock I was able adjust the part, and dial in the axle to be parallel to my fixture. Bolting the part from it's middle, I rechecked the axle. Next I bolted the fixture to the rotary table and centered the part on the RT. Once I was sure the part was properly dialed in I machined off about .010" to make the correction."

The Anderson Plywood Old Tool Swap Meet will be held on November 15th in the lot behind 4020 Sepulveda Blvd, Culver City. Setup time is 4:30 and selling begins at 6:00 A.M. The swap meet will be held, rain or shine, as they setup inside the store if it is raining. This is an opportunity to find just that rare tool you have been looking for and to mingle with other members and people with like interests.

The meeting ended at 4:30pm.



The club 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 Frank Kozlowski to make arrangements to give a presentation.

The SCHSM meets in Communications Building (COMM) basement classroom COM101, of El Camino College, 16007 Crenshaw Blvd. Torrance California, on the first Saturday of every month. The building is near Parking Lot C. Enter the campus on Manhattan Beach Blvd.

If you would like to contribute an article, or suggest an improvement 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.

