SCHSM

Southern California Home Shop Machinists March 7, 2020

OFFICERS

President	Doug Walker
Vice President	John Miller
Secretary	Ron Gerlach
Treasurer	Jim Endsley

COMING EVENTS

April Meeting

Suspended until further notice

El Camino College

PREFACE -
The March meeting of the Southern California Home Shop Machinists was called to order a little past 2:00 p.m. on Saturday, March 7, 2020. We met in classroom AJ115 on the first floor of the Industry and Technology Building at El Camino College in Torrance, California. There were 27 members in attendance.

CLUB BUSINESS –
Charlie was there to help get the newly elected club president, Doug Walker, up and going for his first meeting. There was a brief lag but things soon smoothed out and Doug took the reins. When presented with the normal gavel by Charlie, Doug pulled out what he jokingly called a "real gavel" which was about ten times the size of the normal one. We have to presume that this was a gag and he will not be using this for monthly meetings.

A new member was present. His name was Sherman Foy. He lives in Orange and is relatively new to the machining world. He has a Unimat, a 24" finger brake and the usual assortment of shop tools.

John Miller, our recently elected Vice President, got up and announced that he was soon retreating to his home in Corona armed with sufficient food and supplies to wait out the impending spread of the COVID-19 virus. He did not intend to be at the next couple of meetings. This led to a brief discussion about what should be done with the monthly meetings. It was suggested that we go to an on-line format but that was not met with much enthusiasm. It was decided that if a collective decision was made by the club officers to suspend meetings or if the school chose to shut down, thus eliminating the use of classroom AJ115, then an email would be sent out informing all members of the decision. A show of hands was requested to identify anyone that was not currently receiving email messages. The names identified were Lewis Sullivan, Phil Potter.

A brief discussion ensued about the two website domains. It was pointed out that Mike had initiated the transfer of the two domain names from Graham to himself. The only remaining question was whether or not the fees were paid to renew them both. The secretary committed to contact Mike and get an answer.

Jim Endsley got up to apologize for some scheduling snafu that prevented his step granddaughter from being able to attend the meeting and discuss the UCR Engineering Department car making group. Jim stated that it might happen in April; he will advise when he

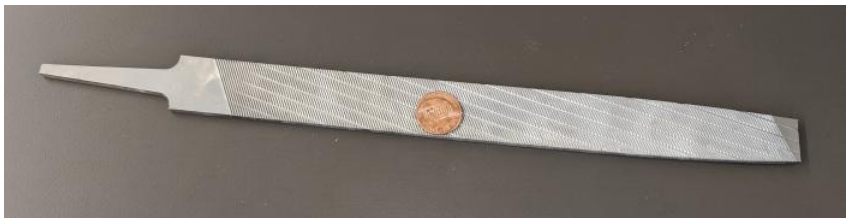
gets more details.

The June 20th picnic date was reconfirmed. The site has been prepaid, so the if the picnic is canceled due to the COVID-19 virus there will be no refund to the club. The picnic is still on until instructed otherwise. Doug was informed that it was his responsibility to plan for this picnic.

PRESENTATIONS – Harry Boggs (Visitor) –File Sharpening–
Harry Boggs, the owner of Boggs tooling, came to the meeting to make a presentation on sharpening files. The presentation started out a little shaky and brief with limited information other than to describe his company's process as liquid honing. He then opened up the presentation for questions from the members. What started out as a questionable presentation turned into one of the most fascinating discussions in a long time. The process uses an abrasive loaded steam jet directed at the precise location of the teeth where the effect will be most helpful. Details of the "how" were a bit lacking but the discussion of what could be renewed, and the cost associated with the process were clearly described. He passed around a couple of examples of freshly sharpened files:

The company is Boggs Tool & File Sharpening Company and is located at 14100 Orange Ave, Paramount, CA 90723. The company was started in 1932 by Harry's grandfather and has passed on to each generation since. He took over the reins from his father in 1971. The company gets files of all sizes from all over the US. At a rate of 22 cents per inch it is a viable alternative to buying new files especially for quality files such as Nicholson, Simonds, Bahco, Vallorbe and Kearney & Foot (K&F).

A trick Harry showed the group was a way to determine if a file was sharp. The technique consisted of taking a penny, pressing it against the face of the file and then turning the file over so the penny is facing down. A sharp file will dig into the face of the penny enough to keep it in place and it will remain in place when the penny is facing down. Doing this with a dull file will result in the penny falling away from the file face when it is turned up-side down.



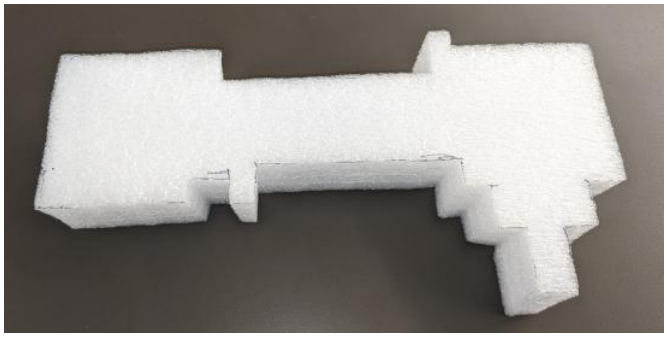
Several members brought in their old worn out files. One fine example was a very large square bastard file that was at least 18" long and was the largest of that style Harry had ever seen.

Large files can be sharpened multiple times. Smaller files may only be good for one or two sharpening's, depending on the files style and the degree of wear. Files that are dropped off or sent in can be sharpened and then shipped back.

Those that are not capable of being sharpened are returned with a 25 cent per file charge.
A tentative plan was setup for a visit to his facility for a tour. The date chosen was Saturday March 21st.

SHOW and TELL

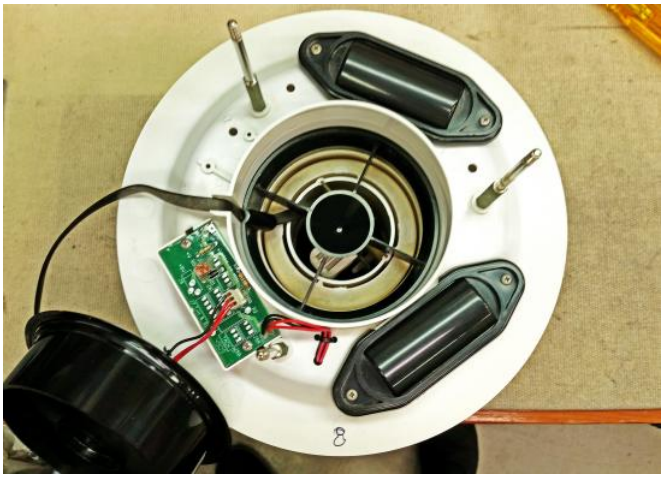
Larry McDavid brought in some cut out pieces of 2" polyethylene foam that were left over from his microscope packing project. This was a supplement to the presentation he gave at last months meeting.



Next, he discussed the service he performed on his weather station. It is a forced air system with the temperature and humidity sensors located under a radiation shield so that the effects of direct sunlight and dead air space are minimized. The fan and electronics are powered by solar

cells during daylight hours. At night the fan runs on the charged NiCad battery and the electronics run on the charge in a supercapacitor. This constant flow of ambient air means there is an accumulation of stuff inside the unit. He had to do a complete tear down of the enclosure to perform a proper cleaning, which he repeats every 18 months. He took multiple photos during this process to aid with assembly. He was

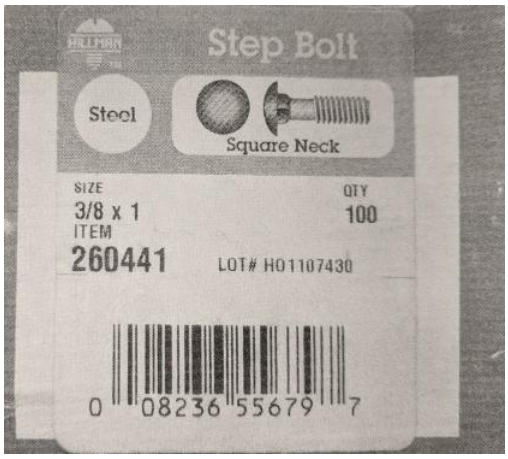
sharing these photos and giving the club a glimpse of the internal workings of the unit. The above image gives a partial view of the tipping bucket mechanism used for metering rain fall. The image below shows the fan removed from its mounting location. Below that is a shot of the weather station all reassembled and located in his back yard next to a calibrated rain gauge.



Ron Gerlach brought in a set of some of the HSS valve seat cutters he recently sharpened on his tool and cutter grinder.

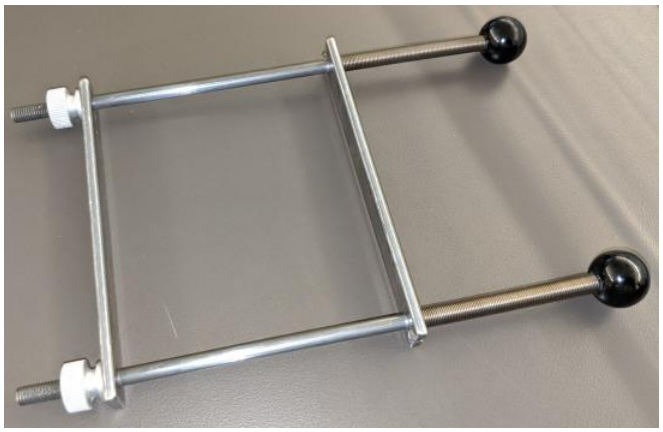
The valve seat cutters were old school tools from the automotive repair industry made by Kwik-Way. Though old school, they are still very effective tools, especially with freshly ground cutting edges. There are a variety of carbide valve seat cutters available these days but they are quite pricey so these were a cost effective option.
He also brought in two valves he fabricated for his current hit n miss engine refurbishment. They were from a Fuller & Johnson Farm Pump Engine. The old vales were in very bad and unusable condition. The new valves were made from O1 drill rod for the stems and cast iron for the heads. The stems are pressed into the heads and the protruding ends are peened over to perform a permanent attachment.

Larry Lee brought in a sample of the Step Bolts he had mentioned at the last meeting. They are like carriage bolts but with wider heads. Note the wide head of the step bolt on the left compared to the more common carriage bolt on the right.



He also brought in a live-center chuck he made by affixing a Jacobs chuck to an old live center. He turned the ID of the chuck rear end to match a protruding section of the live center and then pressed the two together.

Larry then showed a spring-loaded parallel separator he made for his 3" mill vise. It looked well made and should do a good job of keeping the parallels up against the jaws and not falling down as the vise is opened. There were tension springs on each arm between the black knobs and the



sliding cross piece. The two cross pieces would be placed within the jaws of the vise, pressing outward on the parallels, thus keeping them firmly in place as the jaws are moved.

Sherman brought in an old Azimuth Indicator he is working on for his current project. It needs an internal spline cut to mate up to a flex drive line. Apparently, due to the age of the unit and the lack of demand, the parts are no longer available. This is proving to be challenging because the size and nature of the product. He also talked about making a swage tool to insert and secure electrical terminals into a PCB for another one of his projects.

Michael Vulpillat got up to ask some questions about optical center punches. These are the type with a removable eye piece that get replaced with an actual punch once the cross hairs of the eye piece line up the unit on the desired point. He was questioning how accurate and useful they were.

Don Huseman brought in a set of hardness testing files made by Tsubosan. His set cost around $98

Pat Dobbins made the announcement that she is prepared to sell some of her prized Stuart engines. She will be placing them on eBay but wanted to mention it to club members first.

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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, video, or physical displays. Probably every member has some experience they can share, and this is the purpose of SCHSM. Please contact President Charlie Angelis to make arrangements to give a presentation.

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

If you would like to contribute an article to this newsletter, or make a comment, contact the editor, Fred Bertsche. He can be reached via the SCHSM Yahoo Group, or at fbschsm@yahoo.com.

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