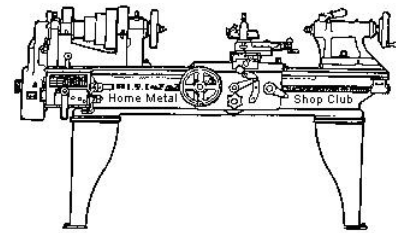




# Aug. 2005 Newsletter



Volume 10, No. 8

Visit Our Home Page  
[homemetalshopclub.org](http://homemetalshopclub.org)

**Statement of Purpose:** Membership is open to all those interested in machining metal and tinkering with machines. The club provides a forum for the exchanging of ideas and information. This includes, to a large degree, education in the art of machine tools and practices. Our web site endeavors to bring into the public domain written information that the hobbyist can understand and use. This makes an organization such as this even more important. -- Founder - *John Korman* (deceased)

President - *Doug Chartier*  
Vice President - *Jan Rowland*  
Secretary - *Steven Clay*  
Treasurer - *Emmett Carstens*  
Webmaster - *Gene Horr*  
Editor - *Mike Gamber*  
Librarian - *Dennis Cranston*  
SIG Coordinators - *Dennis Cranston*  
*Richard Pichler*

**Next meeting:** Sat. Aug. 13<sup>th</sup>, 2005 - 1:00pm - Collier Library, 6200 Pinemont - Houston, TX

## Minutes

July 9<sup>th</sup>, 2005  
by Steven Clay

### Business Meeting

Doug Chartier started a discussion about the newsletter. Topics discussed file size, format and general layout. Web hosts, services provided them and cost were talked about. Changes to "statement of purpose" were talked about briefly and it was decided it should be brought to the general members for decision. Dick Kostelnicek mentioned the need to be able to handle drawings better on the web site. A statement was made that the club hardware will be stored with Chuck West.

### General meeting

41 members attending, 5 Guests  
Dennis Borgman, Maurice Thomas, Buster Wilson, Tim Manning, Joe Hollar



Doug Chartier delivered "Machine Shop Trade Secrets" to those members who ordered them. He also discussed the proposed changes to the "statement of purpose". The changes to the "statement of purpose" were rejected by the membership for reason that it was written by the (now deceased) founder.

### Presentations

Vance Burns presented a couple of videos from the "Trade School" television show and a short about milling threads on a round wooden box.



Dick Kostelnicek did an encore presentation about making his sheet metal Bending Brake.



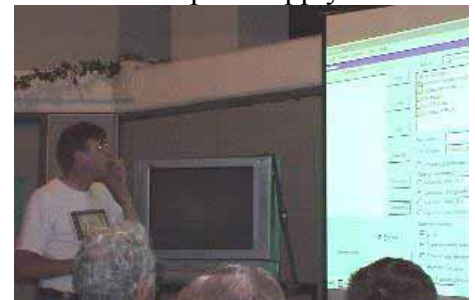
George Carlson had a couple of short presentations.



His home generator project...



...and his shop air supply.



## Show and tell

Doug Chartier was asking for ideas for mounting a laser pointer on a pocket revolver.



Joe Williams showed a vise lifting device.



Joseph Scott showed some sheet metal clips for holding plywood in window and door openings.



Joe Yeiser showed a threading bar he made.



Robert Mate has a very old, rather large "American" engine lathe that needs a good home.



## Novice SIG

Novice SIG now has a portable lathe!





## Featured Articles

### *Shop Helpers, Magnetic Pick-Ups*

by George Carlson

Here are a couple of devices that are inexpensive, but very handy around the shop. They are magnets that can pick up even the tiniest metal chip, then release at the pull of a handle. Basically they are built using several magnets grouped on a plate of steel. The plate is inside a non-magnetic container. A spring holds the magnets against the bottom of the container, until the operator pulls a handle lifting the magnets off the bottom of the container. Since the swarf picked up by the magnets is outside of the container, it falls away freely as soon as the handle is pulled.



These pick-up devices come in at least two sizes. Harbor freight, as well as others, sells the small handheld model. I found the extension model on eBay. Several vendors were selling them. The extended version makes it easy to grab the chips that fall behind and around the mill. The shorter version is great for quickly cleaning out the chip tray on the lathe. I also like the fact they will pick up the long swarf that tends to clog up the vacuum cleaner hose. They even do a nice job of picking up grinding dust.



**Now what we need is one that will pick up aluminum.**

## ***What do you do when you have to drill 170 holes in a big piece of 9/16" plate?***

by George Carlson

I built a worktable for the shop from a nice piece of 9/16" A36 steel plate. The plate is 36" x 72" and weights about 425 pounds. One of the things I wanted was a grid of 3/8-16 threaded holes for holding things to the table. Drilling all those holes was going to be a problem since the plate was too big for my Bridgeport, so I rented a Magnetic Drill Press from a local tool rental place. The machine was much larger than I anticipated. It must have weighted close to 100 pounds. It worked pretty well. It has a large electromagnet in the base that allows it to hold down to the plate with over 1000 pounds of force. I had center punched all the hole location beforehand, so it was just a process of dragging the machine in place, lowering the quill so that the point of the drill bit picks up the center punch. Then I turned on the magnet and started drilling. It took about 1 minute to locate and drill the hole, so it was less than 3 hours to drill all the holes. After I finished drilling the 5/16" holes, I drilled 8 more for tapping to 1/2-13 to hold the bench vise.

I tapped the 3/8-16 holes using a big Dewalt cordless drill and the 1/2" holes were tapped by hand. In both cases I used spiral pointed taps. The Magnetic Drill cost about \$50 to rent, but it was well worth it in the end.

