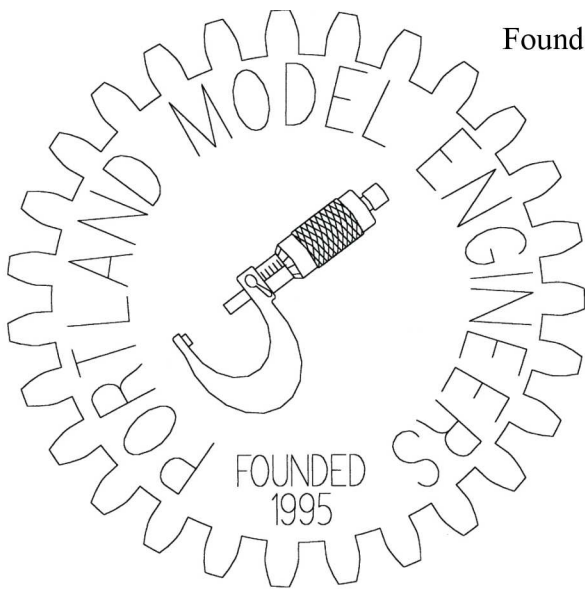


Founded by Dave and Beth Carr in 1995

January 2007



<http://www.portlandmodelengineers.org>

President: Greg Dermer	(503) 281 9238	depcco@easystreet.com
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For The Beginner #36 by Wes Ramsey

FITS, Part IV

GEOMETRIC DIMINSION & TOLERANCEING

Controlling the size of a particular individual part is very important. The form and position of a part or assembly is equally important. This relates directly to the ability to interchange individual parts and assemblies. For example, you have undoubtedly purchased standard replacement parts for your auto from many different sources. In many cases, these may be made by manufactures other than the original maker of your auto. However, they fit and function exactly as the original equipment. To make this kind of interface possible, the manufacturing and engineering community has developed a system of geometric dimensioning and tolerancing that helps a manufacturer control form and position of parts and assemblies. This ends the section on Tolerances and fits.

At the December meeting, new officers were elected to serve for the coming year. They are:

President: Greg Dermer
Vice President: Roger Rudert
Treasurer: Bud Statton
Membership: Carl Petterson

Your editor was unable to attend the meeting but excellent reporting and photography was handled by Jim Pfaltzgraff, Bill Miller and Roger Rudert.

Next month we will meet at Grant Carson's shop on Saturday, January 13th, 1:00pm. Thanks, Grant, for providing a great place to meet! The address is:

A & G Products
7360 SW Bonita Road, Unit C
Tigard, OR 97224

Remember to bring a metal-related project -- complete or not. There are refreshments as always and a chance to talk to some fine folks who share similar interests.

With the new year, comes a chance to renew your support for this fine organization. Please renew your 2007 membership. Send a check for \$12 to:

PME Membership Renewal
c/o Carl Petterson
1631 SW Pendleton St.
Portland, OR 97239

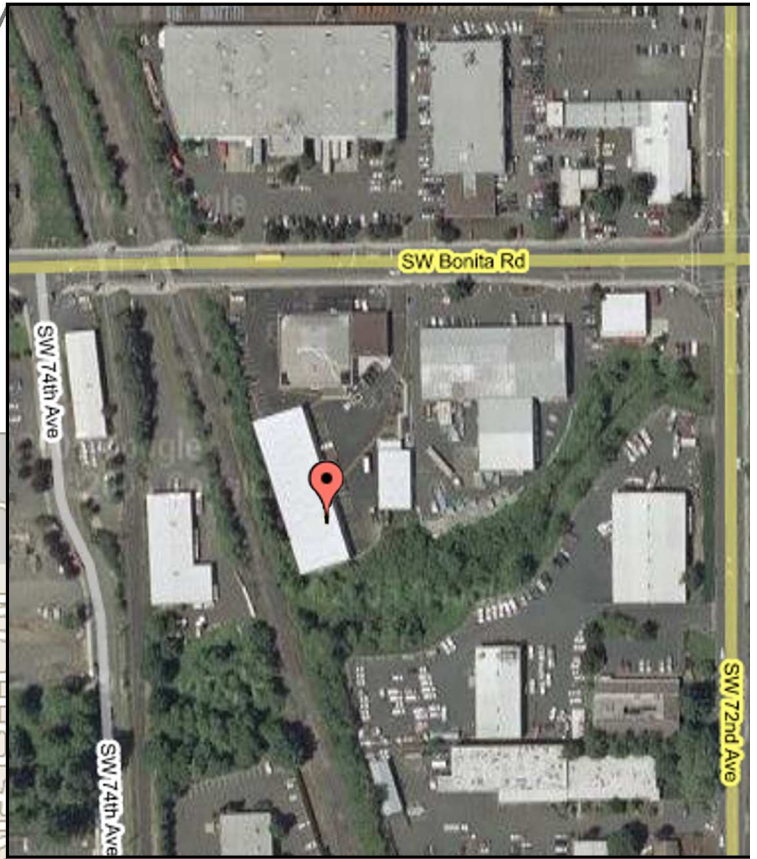
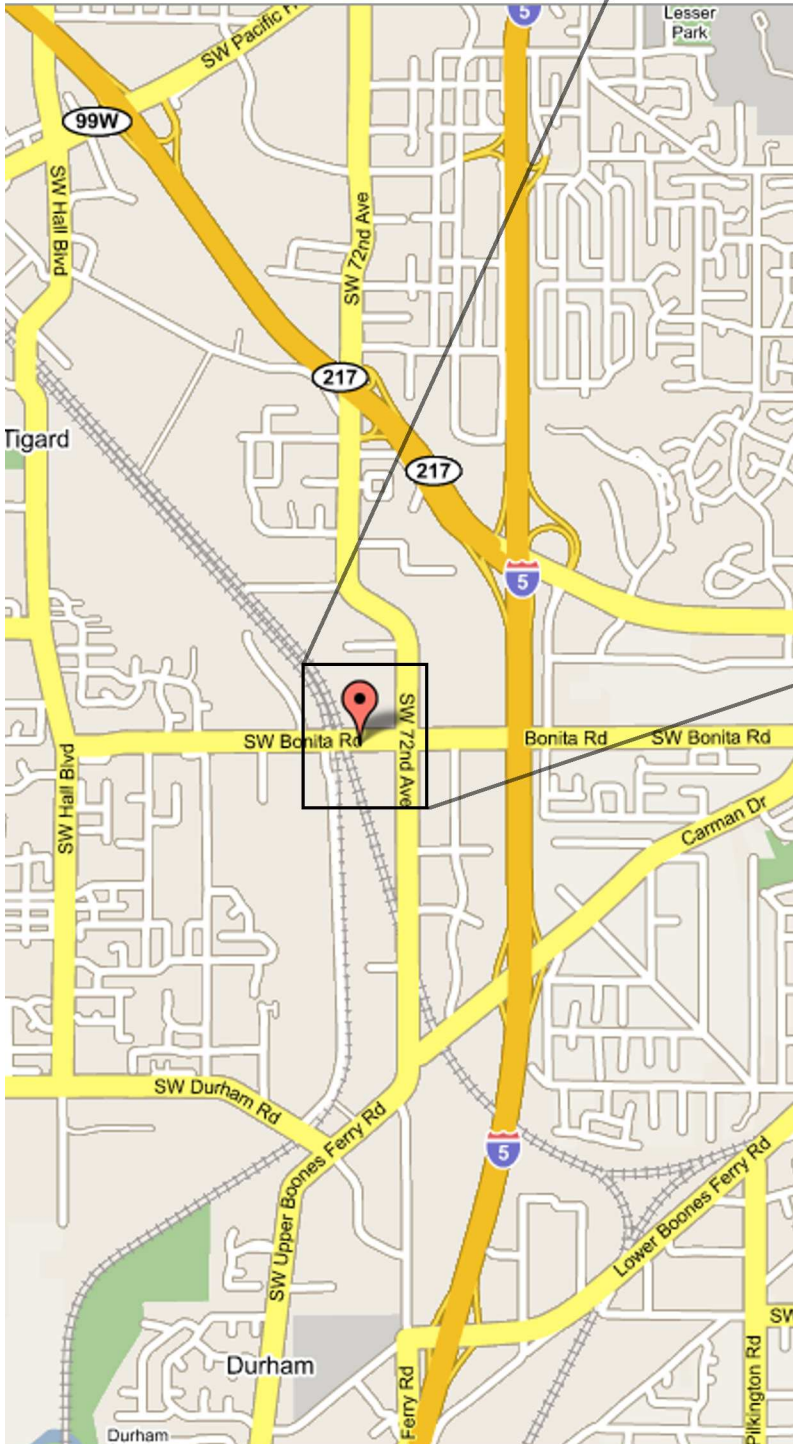


Above Greg Dermer goes over business details.

A & G PRODUCTS

Saturday, January 13th, 2007
Meeting, 1:00pm

A & G Products
7360 SW Bonita Road, Unit C
Tigard, OR 97224



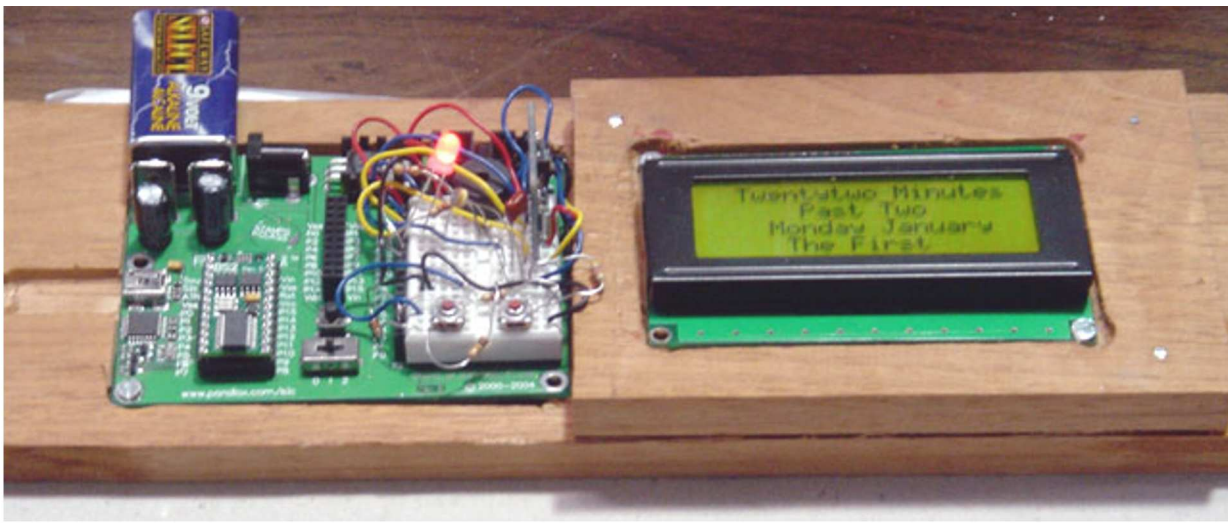
Directions to Grant's

From I-5:

Use exit 292 to Hwy 217, go north about 1/4 mile toward Beaverton to SW 72nd exit. Turn left onto SW 72nd Ave, go about 3/4 mile to Bonita Road, turn right. A & G will be on your left.

From Hwy 99 (Pacific Ave):

Turn south onto SW 72nd Ave, proceed about 1-1/2 miles to Bonita Road, turn right. A & G will be on your left.



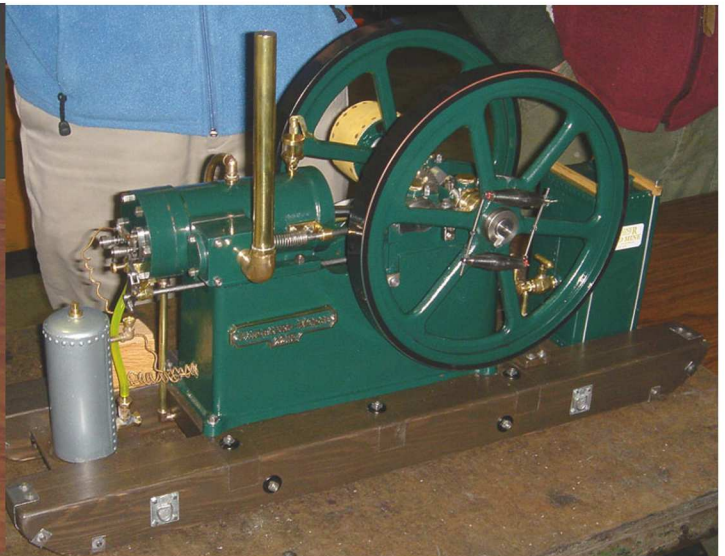
Above is the microprocessor-controlled LCD clock that Henry Casson is using to get acquainted with PIC chip technology. This paves the way for controlling all manner of motors and sensors for the rapid-prototyping project.



Here Henry is describing his creation. To the right are steam engine patterns by Al Pohlpetter.



To the left are some brass plaques created by Bud Statton for family and friends. Much effort went into adapting the gating and runners to the flow characteristics of the material. The results show it was quite worth it. The grey patterns on the right are the forward housing for his flamethrower reproduction project.



There were a number of steam engines. Going CCW from top right:

Fairbanks Morse 22HP model rebuilt by Wayne Austin for a customer in Ca. to be given to his father.

Wobbler engine by Gary Hart from a kit by Cole's (who are apparently going out of business).

And a small opposed piston steam engine by Mike Cotsifas.

Hans Stangier and Grant Carson discuss a project.

Jim Pfaltzgraff shows the progress on his pillar tool.





Going CCW from the top right, we have:

A propane burner and mix chamber casting by Rex Bosse. The design show some similarities to those in Michael Porter's book on burner design.

Vince Kurpan explaining his ball tuner made from quick change boring bar holder.

Splitting blade from portable log splitter by John and Trudy Benjamin.

Rivett lathe tailstock, bike valve adapters and bike stand clamp sleeve by Brett Fleming.

