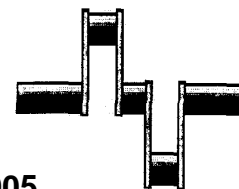


# The Crank Calls



July 2005

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**NEXT MEETING July 16, 2005 At  
Robert Schutz's Shop, 366 40th St. Oakland, CA  
Doors open at 9AM  
Close at noon**

**TO JOIN THIS CLUB OR  
RENEW YOUR MEMBERSHIP**

Contact Lewis Throop at  
27272 Byrne Park Ln.  
Los Altos Hills 94022-4324  
Phone 650-941-8223  
Email: lthroop@aol.com

## Meeting Notes

June 18, 2005

Bob Kradjian, Secretary

Last month's meeting was a swap meet. There was no formal program. So instead of the usual secretary's minutes, I thought you might fancy an update on the activities of some of our members.

**Carmin Adams** is dividing his time between fighting termites and restoring another antique machine. This time it's a K.O. Lee all-purpose grinder (1946 vintage) that "just jumped into his truck". It had been stored outside, under a tarp, and was dirty and rusty. However, it was complete and Carmin says that it cleaned up beautifully and is now ready for paint. When not working on the grinder, Carmin plugs along on the three-cylinder Morse.

**John Palmer** has just restored a "Simplicity" hit and miss engine for a friend. This one was used as a motor for an agricultural sprayer by the John Bean company of San Jose in the early 1900's. John had to build a carburetor for the three and a half inch bore engine. An unusual feature of the Simplicity is that it has a hollow connecting rod. An opening near the wrist pin end transfers the oil mist down to the crankshaft journal.

Down in Southern California, our two stellar members **Roger Butzen** and **Bob Haagenon** are very productive.

Roger is well into a very ambitious project. This is a 426 cu. in. "Hemi" in one-quarter scale. He's whittled out the block from solid, finished the sleeves, and babbited the main bearings. The end plates will have robust roller bearings. Roger obtained books and manuals from Dodge to document and scale the engine. He also is using a plastic display model for reference. He hopes to have it run-

ning in less than a year.

**Bob Haagenon** is cranking out engines like no one else! He finished a tiny, original design, V-8 with a 5/8 "by 5/8" bore and stroke. This engine has overhead valves, pushrod activated. He is sorting out leaky valves, which are a terrific problem in engines of that size.

If that isn't enough, Bob has also finished a "Wall Banger" which is his version of what the venerable Wall Four really should be. This flat-head engine is 1 1/4" bore; 1" stroke, and---according to Roger Butzen---"really rips." He is using an unmodified Walbro-type carburetor with a small throat.

Not done yet, Bob is finishing up a Bob Shores "Little Devil" from castings Ken furnished. This one is not yet running.

Bob and Roger have been putting on engine shows down South to complement the BAEM work up here! On July 9 and 10 they will display at the Cable Airport in Upland. This event is called the Pomona Valley Air Fair and this year will mark their third appearance. On August 13, they will put on a display at a Big Bear Lake auto show. We're proud of the accomplishments of Bob and Roger.

**Lew Throop** is following Roger Butzen's example and is building a Harley-Davidson. He didn't start with the crankcase, but is shaping the cylinders now. He has completed the pistons, con-rods, and rings.

Continued on Page 3



Castings for the 4-cylinder made from the new V-8.



New 4-cylinder from the crankshaft end



Chris, John, and George



Pat O'Connor's Wall 4 Cylin-

Photos By Mike Rehmus



Roaming the Tables

Check out the BAEM Web Site at [www.baemclub.com](http://www.baemclub.com)  
Send your project photos to the  
Web Master Jim Piazza.  
Phone: 408-446-4825  
Email: [jpiazza@ix.netcom.com](mailto:jpiazza@ix.netcom.com)

**WANTED** a Wall side draft carburetor with float to restore old engine. Also a bronze casting to hold ignition points. These were used on many wall singles.

I also need some 1 1/4 piston rings .065. to .070 wide to restore a old engine.

Dick Pretel 408 732 6507

**FOR SALE**

Tree Journeyman 310 – 3 Axis CNC Mill  
DynaPath - Delta 10M Control  
Table 10" X 44"  
Spindle Taper 30NMTB With some tooling & manuals  
\$4500.00

David Palmer 707-938-2181  
Brian Palmer [bdpalmer@sonic.net](mailto:bdpalmer@sonic.net)

Continued from Page 1.

**Dick Pretel** is rebuilding a Ken Brenneman single. This engine is similar to a Wall single with overhead valves in a hemi-head. Dick is rebuilding the head. Brenneman and our Ed DeGear were formerly competitors in tether-boat racing at the Spreckel's Lake with these engines. Dick is also working on exhaust manifolds for his amazing four-cam V-8.

**Pat O'Connor** has been spending his time on the computer trying to decide where to locate the two Rootes type blowers on his twin crank, opposed piston four. He is also doing a redesign of a 2-cylinder inline for a friend.

**Jim Moyer** in Washington State is soldiering along on his tiny (1/6<sup>th</sup> scale) small-block Chevy V-8. He has finished the distributor and is now making his own 00-90 pan bolts. Jim is a patient builder and took around seven years to complete his amazing little four-cylinder gem.

**Shannon Lile** found a 1960's Craftsman Commercial 12" lathe in Redwood City. He is completing the clean up and refitting on the machine and working on a 1/4 scale Nova from Pacific Model Designs (Bob Bromps).

**Dick Remington** is also cleaning up an Emco-Maier Maximat Super II lathe. He found this in a private sale and it has very little wear. A trip to the Emco web site confirms that this is a very fine piece of machinery.

**George Gravatt** is finishing the Galloway 1/3 scale. He has had it running and it only needs a stand. The castings are from Alan Shelley; the original engine developed 5 horsepower.

**Dwight Giles** is completing the Upshur Marine Motor for the third issue of Model Engine Builder Magazine. This single-cylinder engine uses a T-Head arrangement. Dwight is also modifying Ken Hurst's cam grinder with a half horsepower motor to give it more "oomph".

**Ken Hurst** is working on his crankshafts for the five main bearing V-8 and very busy with his backflow valve work.

Our wonderful English member, **Clen Tomlinson** has his Deltic engine "up together." That is, everything except the finishing touches on a complicated ignition system. He has completed a six element infra-red optical unit and three dual low-tension distributors. To be done are eighteen high-tension coils and six CD units in a miniaturized "black box." If that isn't enough, he is roughing out the CNC "waxes" for an even more complicated Napier engine. In his spare time he is working on a sports car restoration and a motorcycle re-build!

Let me know of your projects, we can feature them in future newsletters.

### **TECH TOPICS:**

July's Tech Topic will be presented by Steve Jasik.

He will show and describe the uses of his Accu-Finish Series 1 portable tool grinder.

Accu-Finish Sharpens:

Carbide



Ceramics

Cermets

High Speed Steel and many PCD/CBN

Interesting late 1930s "WALL FOUR" information.  
 Provided by Ken Hurst

## THE WALL FOUR

<p>Displacement 50 CC</p>  <p>4 Cylinder — 4 Cycle L Head — O. H. V. 1 1/2 H. P. Approx. Weight 6 1/2 Pounds 6000 R. P. M. to 9000</p> <p>1" Bore 1" Stroke</p>	<p>Displacement 30 CC</p>  <p>3/8 Bore 3/4 Stroke Compression Ratio 65</p>
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### SPECIAL FEATURES

The liberal use of aluminum throughout makes this engine ideal for model airplane and motorboat uses. It will develop approx. 1 1/2 h.p. at 6,000 R.P.M. Its performance will delight any model engineer, as these engines are very smooth and quiet in operation. The four cylinders are cast enblock and steel liners are inserted after the machining of the block is completed. The L head type engine has a pressure feed oiling system. The oil is delivered by a small plunger pump driven by an eccentric cam in the center of the camshaft. These engines have been featured in Science & Mechanics Magazine.

### LIST OF CASTINGS

<p><b>Aluminum:</b> Cylinder Block Crankcase Cylinder Head Bearing Plates Gearcase Cover Manifolds Oil Pan Pistons</p>	<p><b>Brass and Bronze</b> Exhaust Nipples Connecting Rods Push Rod Guides Distrib. Bracket Distrib. Shaft Bearing Timer Body Complete Pump Cast Oil Pump and center bearing Valve Guides</p>
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### CAST NICKEL IRON

Flywheel Cylinder Liners

The list of castings for the overhead valve engine are the same except that no oil or water pump are used.

### CARBURETORS

New Single Jet

### PRICES

**DRAWINGS** for engine and carburetor for 50 CC...\$7.00  
**DRAWINGS** for engine and carburetor for 30 CC...\$6.00  
**CASTINGS and DRAWINGS** for engine and carburetor for 50 CC.....\$32.50  
**CASTINGS and DRAWINGS** for engine and carburetor for 30 CC.....\$30.50

- Copy of LATE 1930s BROCHURE -

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**Upcoming 2005 Events**

By Dick Pretel,  
Events Coordinator

**West Coast Engine Exhibitions For 2005**

3<sup>rd</sup> Annual Men, Metal, & Machines!  
Visalia Conventions Center, Visalia, CA  
October 22 & 23, 2005. Phone: 1-800-789-5068.  
Web Site: [www.cabinfeverexpo.com/MMM](http://www.cabinfeverexpo.com/MMM)

**GEARS 2005**

September 24-25, 2005  
in Portland Oregon

**BAEM is invited to the following events**

By Dick Pretel, Events Coordinator

Gotelli car show Saturday Sept 27, 2005, 9AM-5PM

Good Guy's West Coast Nationals, Pleasanton  
August 26-28, 2005

Historic's at Monterey, TBA

**Model Crankshafts and Camshafts**

**By Roger Slocum**

Hardened and ground alloy steel crankshafts

Web Site [www.cranksandcams.com](http://www.cranksandcams.com)

Email: [roger@cranksandcams.com](mailto:roger@cranksandcams.com).

**FOR SALE**

Emco/Mier CNC lathe for sale. Compact 5  
with automatic six position indexing head  
and all accessories for operation.  
Mounted on roll around stand. Lathe has  
hardly been used and is tape  
driven. Lathe can be updated with a new  
board and software to accept G codes  
from your computer. Original cost was  
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