President  Don Jones  (510) 566-3153 dj712@sbcglobal.net
Secretary  Bob Kradjian  bkradjian@comcast.net
Treasurer  Ken Hurst  (707) 257-2481 icengine@comcast.net
Events  Ken Hurst  (707) 257-2481 icengine@comcast.net
Editor  Larry Zurbrick  (408) 448-5752 lz_m57@pacbell.net
Printer  Larry Zurbrick  (408) 448-5752 lz_m57@pacbell.net

NEXT MEETING
February 19, 2011 at
Chabot College, building 1500
25555 Hesperian Blvd, Hayward 94545
Doors open at 9:00 AM
Meeting starts at 10:00 AM

MEETING NOTES
Bob Kradjian
January 15, 2011

Acting president Ken Hurst called the meeting to order at 09:50. Due to a minor glitch we met in the courtyard, but we had a terrific outdoor meeting in absolutely perfect weather. For the really old timers in the club, this was reminiscent of the fourth club meeting (March 1994), which was to be held at the Aerospace Museum library at the Oakland airport. Our contact was supposed to open the library, but was AWOL. The meeting was rather short as the temperature was around 40 degrees. However, our fledgling club survived and continues to thrive nearly 18 years later.

The Good Guys West Coast Nationals event for late August was discussed. Their staff will provide us with passes for members showing engines or helping with the show.

Guests:
Bill Allen (who is featured below in Bits and Pieces)
Don Reggio is a lifelong machinist and is considering getting into the little stuff with a Stirling engine. Don has a great deal of experience and
access to the latest in technology including EDM and micro welding.

Tom Ginty visited and told us his father-in-law’s old Challenger build and needs advice on how to get it running.

**Shows:**

The Palo Alto Concours d’Elegance will be held at the Stanford campus on June 26. We will exhibit there again this year for the third time in recent years. We formerly showed there four times in the 1990’s. Members O’Conner, Hurst, Meyers, Al Aldrich, and Kradjian have already committed. For you flathead enthusiasts, there will be a bunch of old Ford flatties there. The Concours is honoring the venerable Fords as well as BMW’s.

**BITS AND PIECES**

Mike Stimmann brought his new “Economy” hit and miss engine. This, of course, was built from BAEM member Joel Tochtrop’s casting set. Mike put the engine on the tarmac of the patio, gave it one spin, and off it went! It was finished with red powder coating. Mike used a kit from Harbor Freight for the coating. If he was repeating the process, he says he would use multiple coats to gain more depth and luster. He found a used ten-dollar electric oven that gave him exactly the 400 degrees that he needed to cure the powder. Ignition was CH and an automotive coil. We remember Mike’s very nice Duclos hit and miss gearless engine from the December show.

Bill Allen dazzled all of us with a lovely scratch-built Double Fairlie locomotive. This was accomplished in only four months and without plans! This unusual locomotive was articulated and used on narrow gauge, hilly tracks. It has two separate engines of ½” bore and 0.800” stroke. He had only photos to work from, and none of the photos were from the broad side. The scale is 1/16th. All of this is accomplished in live steam and is radio controlled. He has incorporated seven servos for forward, reverse, throttle, whistles, and can even open cylinder drain cocks. The task was complicated by the need for two boilers that required equalization. Fuel for this model is supplied by butane. Bill Allen is a member of the Bay Area Railway Society. Dennis Mead joined him in this ambitious project. Congratulations to both. (Dennis claims only 10% of the work.) He provided a fabulous web site with details and excellent photos. Do not miss this web site!

John Gilmore updated us on his Pennsylvania A3 Switcher. He disassembled and polished all components. It was dazzling. But, when he reassembled it, it was bound up. Two more attempts at fitting and assembly-disassembly followed; and now it performs perfectly. John described his polishing technique using Eastwood wheels and buffing compounds. He then coated the polished parts with McMaster Carr’s Catalog #7688T73 clear lacquer. (We used to call this “trombone juice”). It costs about $12.00 per spray can.

The little “Show Wobbler”, also known as the Radlett II, featured in previous issues of Crank Calls continues in development. Carl Wilson told us that it runs nicely for hours on ten pounds of air pressure. An offset rotary broach was used at one point in its construction. John Palmer solves that broach problem by taking a common Allen wrench key, turning the tip to fit the pilot hole and then cutting a small amount of relief in the four “flutes”. This will last for a few broach cuts; then it’s time to cut it back, sharpen, and start again.

Ken showed us his ManSon miniature lathe. They were made in Los Angeles from 1946 to 1960, and were patterned after the Monarch EE. These tiny lathes have a mighty two-inch swing and three inches between centers. The lathe is really a collector’s item or a toy. With a light duty motor and “O” rings, I doubt if it would cut anything harder than wood or perhaps light cuts on soft metal. Initial pricing was $49.75. One reviewer said it would cut 0.006” but only if the tool was “really sharp”. The web site is:

[http://www.lathes.co.uk/manson/index.html](http://www.lathes.co.uk/manson/index.html)
This engine was designed by Malcolm Beak (Radlett is the name of the small town in England where he was born) and was featured in issue number 21 of Model Engine Builder. It is an “open source” design that clearly is being nicely developed. This also is the engine project that kicked off our lively club discussions on zinc metal casting.

Joel Cohen showed us his very nice Sanderson (1846) rocking beam steam engine. It came from an English casting set that was in his possession for over 38 years! Now that he is retired, he has had the time to finish it. However, there were problems. One was that the ancient plans were badly faded. The other was that the flywheel was a ten incher and his lathe was a seven incher. Joel solved this by finishing his flywheel on a milling machine. Where the plans were vague or faded, Joel used his new-fangled CAD to fill in the missing bits. The engine runs nicely on compressed air. What to do for a base? Joel looked around his shop and spotted his high school drafting table. It is now the base for the engine and it looks just fine.

Please remember the 2011 Dues!

**Errata**

Bob Kradjian writes: In a previous Crank Calls Newsletter (March 2003) I wrote a history of the Challenger V-8 engine. I mistakenly wrote that Mr. Clayton Thoms; one of the designers and the pattern-maker, was deceased. We gladly received the news from his grandson, R.J. Thoms, that he is enjoying a quiet retirement! I regret the error and am delighted that this talented craftsman is alive and well. Many hundreds of people have enjoyed his wonderful engine and have heard its unique sound. *(The March 2003 Crank Calls Newsletter has been corrected – Ed.)*

**Return of Tape**

Mike Rehmus asks if any member borrowed a video tape from him on Machine Tool Accuracy. He would like it back, please, so he can convert it to DVD. It may be the last copy in the world so it is important. The tape was made at Lawrence Livermore Laboratories.