

# Bay Area Engine Modelers Club, Branch 57 of EDGE&TA

## The Crank Calls



May 2013

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### **MEMBERSHIP \$25.00 US**

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### **NEXT MEETING**

May 18, 2013 at  
Chabot College, building 1500  
25555 Hesperian Blvd, Hayward 94545  
Doors open at 9:00 AM  
Meeting starts at 10:00 AM

### **Upcoming Events**

BAEM meetings:  
May 18, 2013  
June 15, 2013

### **MEETING NOTES**

April 20, 2013

Bob Kradjian, Secretary

President Don Jones called the meeting to order at 10:00 am.

**Guests:** Ron Francis found us on the Sherline Website and is enjoying the meeting discussion.

**New Member:** Welcome to Chris Wright who was referred to the club by a friend.

#### **EVENTS:**

John Palmer made another appearance last month at the Dream Machines Show with his fine display. He showed his J & E Junior and Senior. I didn't know that he had built the Senior, he says: "It's the only one". Of course the Rumely tractor was there, too.

**GEARS:** We have learned that GEARS will reappear this year! The dates will be: September 27-29 at the Oregon Rail Heritage Center in Downtown Portland, Oregon. This will be in a new site, at a railroad museum no less.

The Palo Alto Concours will be also be at a new site this year, June 30 at the San Mateo Fairgrounds. We plan to make a club appearance again. See <http://paconcours.com> for details.

The Hillsborough Concours d'Elegance last year was scheduled in direct conflict with our August WEME date. This year, they are on for July 21 at the Crystal Springs Golf Course near Hwy. 280 and Black Mountain Road. We need to decide whether to approach them for a club showing or not.

WEME is for schedule for late August and John Gilmore urges all of us to plan to bring engines even if you can't stay for the full three days. We had several empty tables last year. However, the Goodguys boss---Gary Meador---loves our exhibits and is a strong supporter.

**TREASURER'S REPORT:** We are solvent. Current EDGE & TA badges and membership cards are now available to all members. After many years of faithful and devoted service to the club as Treasurer, Ken Hurst is turning over the treasurer's

duties to Larry Zurbrick. We owe a tremendous thanks to Ken, not only for his duties as treasurer, but also as events manager and a stalwart at all of our engine shows. All this is in addition to being a principal in the ground breaking new Black Widow V-8.

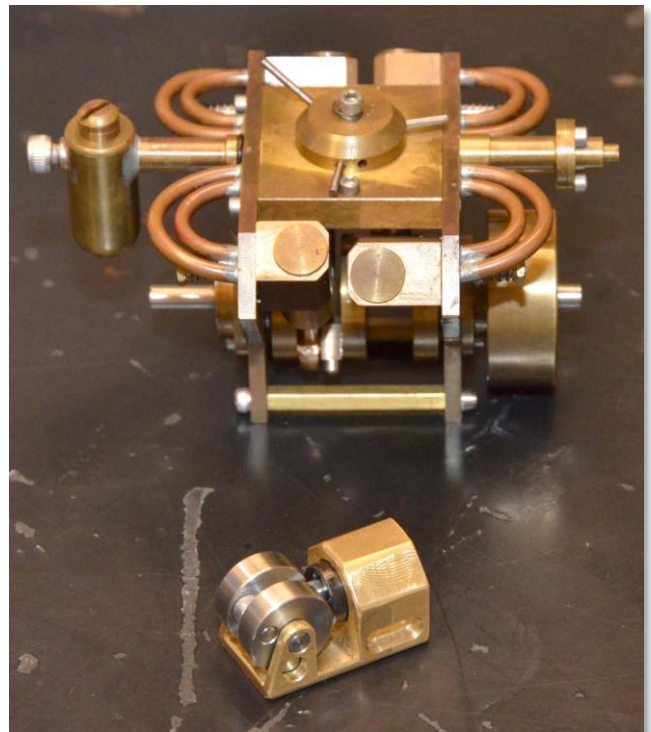
**FIRST POPS:** There were no first pops, but we had “first sparks” from Ray Fontaine’s electric engine. See more details below.

**BITS AND PIECES:**



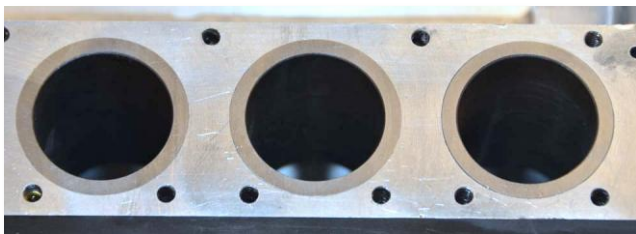
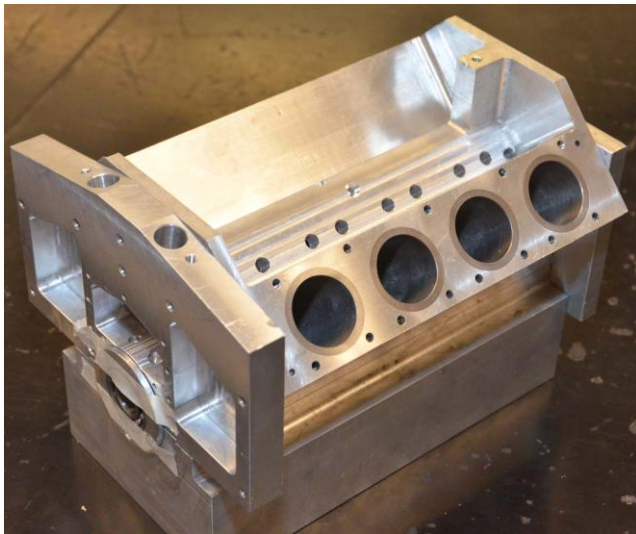
Paul Denham brought in a lovely steam engine scratch-built by his father in about 1955. It has a lovely patina and is constructed to very high standard. The design is from an article in a very detailed Popular Science article.

He made some important comments about the heritage we develop when we leave behind a well-constructed engine. Will it become a family heirloom or simply an object to discard or for someone to sell for profit?

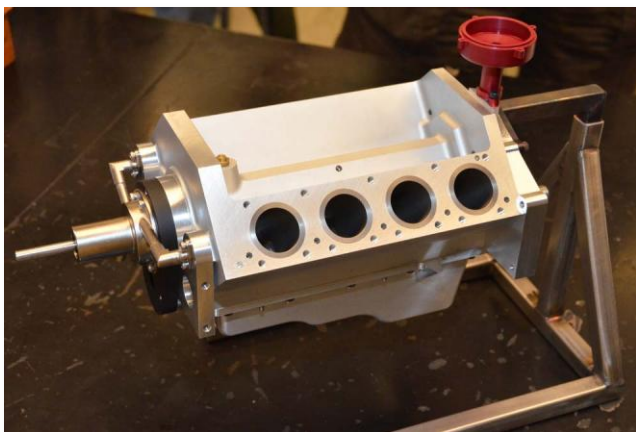


Paul also constructed a very nice V-4 Oscillating engine with many of his own modifications. (At the top of the photo above) It was constructed from plans in “Steam and Stirling-Engines You Can Build, Book 1” by William C. Fitt. Fitt was the editor; the actual designer of the several engines may have been others. He later published Book 2 and Book 3. These are still available at Amazon and elsewhere on the Internet. Paul built his V-4 to his usual fine finish.

A friend made a series of 13 “machinist’s worry beads” and gave one to Paul. (At the bottom of the photo above) It’s a tiny gizmo that you can twiddle with your fingers. It’s reminiscent of the Philip Duclos brilliant “Huff ‘n Puff” engine.

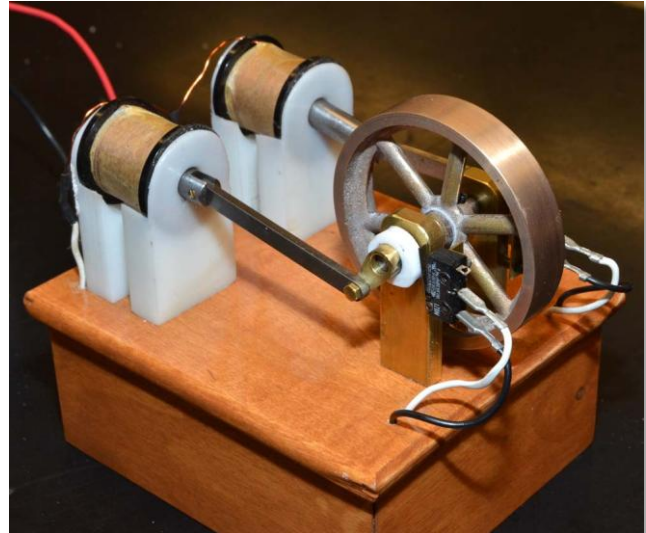


John Gilmore made the sleeves (twelve of them) out of cast iron, found eight that worked. Then eight hours using Dwight's hone was needed to finish them. This was a tedious and dirty job using an expanding hone detailed in Model Engine Builder. It employs a brass lap with diamond paste compound. He left two-tenths tolerance and then "Loctited" them in. The crankshaft is probably next (stress proof 1144 steel) and he says: "the block is getting lighter".



Jim Freel said: "The same block as John's" as he showed his version of the Black Widow. He finished the rear bulkhead and rear bearing cage. He also pinned the pan and the rear backplate. He

used a Sunnen hone for the cylinders. The bearings are in place with a dummy shaft that spins freely. Water pump and distributor are both in. He plans to Loctite the sleeves in. Dwight says to use a bead of 290 wicking material on the heated block (120 degrees) to prevent a possible leak of oil into the coolant chamber when installing the sleeves.



Ray Fontaine changed the pace with an electric motor he put together with coils from an old high-fidelity "woofer". It fired up with flip of the switch. The switching is from a cam actuating a micro-switch. The motor speed is simply determined by the input voltage.



Dwight Giles showed a beautiful set of headers for the Black Widow made for Jim Kipp in Southern California. The aircraft stainless steel tubing with 0.028" walls is from "Aircraft Spruce". The flanges are 303 stainless made on a CNC machine in Southern California and pre-polished before assembly. A problem cropped up when it was necessary to "stagger" the pipes 5/16" to

compensate for the offset in the cylinders of a V-8. The correction allows for equal pipe length.

Roger Butzen is moving to Texas. He has donated to the club a "Miser" Stirling engine kit from Jerry Howell as well as a half-scale Miser, a "Putt-Putt" boat kit, and a Bob Shores "Hercules" casting set with partial plans. All these will be available for sale or bid at our swap meet session probably in June. Thanks, Roger.

Mike Rehms reported on the tricky problems involved with getting Model Engine Builder converted to a digital format. Mike also showed photos of the Mare Island Museum with vintage photos of George Gravatt and Dwight Giles. The photos included 120-foot lathes and other useful items for the home machinist. Speaking of George Gravatt, we were delighted to see him back in action after successful shoulder joint replacement surgery.

Ken Hurst showed us a television clip from "My Classic Cars" with Dennis Gage as the host. You know, the guy with the waxed handlebar mustache. The video gives an admiring look at Ken, Dwight, and George's engines.

The good news is that you can see this for yourself at: [myclassiccar.com](http://myclassiccar.com). Search for: Season 17, Episode 11. Listed as the Napa Main Street Reunion Car Show. This is more evidence of the appeal of this hobby and the significance of the enhanced V-8 design developed by Ken and Dwight.

Mike mentioned a health film that made a deep impression on him. It was "Forks over Knives". It has relevance to a club that is devoted to making engines only because so many of our members and fellow enthusiasts have been victims of poor health or even premature loss of life. The easiest path to investigate this topic is to go to YouTube and type in: Forks Over Knives. It's well worth consideration and could extend your years in the workshop.