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



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January 2015

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MEMBERSHIP \$25.00 US Contact John Gilmore at jgilmoreco@aol.com

2015 Dues are now due!

#### NEXT MEETING

January 17, 2015 at Chabot College, building 1500 25555 Hesperian Blvd, Hayward 94545 Doors open at 9:00 AM Meeting starts at 10:00 AM

### **MEETING NOTES**

December 13, 2014 Bob Kradjian

The December meeting of the Bay Area Engine Modelers was called to order by president, Don Jones at 11am instead of the usual 10 am starting time. This was in preparation for our traditional Christmas potluck feast to follow.

VISITORS: Jamie Iriki came with Gene Ellerbusch and became our newest member at the meeting.

FIRST POPS: There were none reported.

EVENTS: There are no scheduled engine show events in this off-season.

TREASURER'S REPORT: John Gilmore says that we are solvent, but that dues are due. Please make your check out to "BAEM" and mail to:

> John Gilmore 1414 Linton Place Martinez, CA 94553.

CLUB BADGES: If you need a badge, contact Mike Rehmus (mrehmus@byvideo.com) who has offered to produce them.

#### **CORRESPONDENCE:**

**Upcoming Events** 



BAEM meetings: 3rd Saturday of the month

Jim Moyers is making good progress on the onesixth scale Chevy 409 engine build. It was only a roughed out blank of 6061 aluminum when he showed it at our 2013 WEME show.

## **BITS AND PIECES:**

Six engines were featured for our annual December "run and tell".



The first was a nicely done, inverted cylinder, hit and miss engine by Steve Ridgeway. It was the famous "Topsy Turvy" design from the late Phil Duclos. It used a buzz coil for ignition and ran well.



Don Jones showed his hit and miss engine that also ran well. This was an engine donated to the club several years ago, rehabilitated by George Gravatt



and Dwight Giles, then purchased by Don at a silent auction.



Ray Fontaine showed and ran his version of Randall Cox's visible four. A new camshaft solved most of the early running problems and now Ray is working out carburetion issues while modifying his model airplane carburetor and original intake manifold. He starts the engine with an electric drill mated to a Torrington-type bearing. He has replaced Randall's open distributor with a more conventional cap, and a design influenced by the "Snow" engine. He also experienced some crankshaft twisting toward the end of his runs. I had a similar experience with my Cox engine. Remember that the Cox crankshaft is

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simply bolted together dowel pins and keyway stock. Perhaps we should pin the dowels once the alignment is precisely located. Ray's flywheel was made on a CNC machine. The cam belt came from Small Parts.



Next, Paul Denham showed us his newly finished Atkinson Cycle engine. It's a beauty, based largely on the Ritter engine featured on You Tube. The most unusual feature is the visible combustion chamber. This was made using a glass syringe as a cylinder. The piston is made of graphite. The cutting of glass is by the use of a Dremel-sized emery cutting wheel in a device that rotates the cylinder while slowly advancing the cutter. A water drip is used for cooling and lubrication. Paul has done a great deal of work on digital ignitions and he showed us a video of the engine while it was running just the evening before the meeting. The coffin-shaped fuel tank is of the vapor variety and affords plenty of fuel for the single cylinder. It makes for a very fine desktop runner. Maybe some plans, Paul?



I showed a Seal Major (30 cc) that featured a newly installed ignition system. A weak Aero-Spark 3 volt was replaced by a Volkswagen 6 volt coil and condenser. There was a major difference in the starting, idling, and overall power with this single change. It is of interest that a mid-range carburetion lag problem was mysteriously cured with the hotter spark. This brings up the old hot-rodder's adage: "Most carburetion problems are really ignition problems". The new components were housed in

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an ancient H.H. Scott amplifier case, with room to spare.





camshaft. The flywheel was dynamically balanced. The entire engine is tilted 30 degrees to match a favorite Peugot. He used four separate carburetors with internal balancing to equalize pressures. He mentioned that the model airplane carburetors used, were modified for gasoline. This was accomplished by modifying the seat so that the needle can fully close. Airplane engines use methanol and usually don't fully close, since their flow rates are several fold greater than for gasoline carburetors.



Our annual potluck was a great success. It's also a time when we can relax and chat with each other. Thanks to all the members who brought delicious food in ample supply. It is a mystery as to how this works so well year after year without detailed planning. It's a tribute to the quality of the members and their families. Happy New Year to all!



Dick Pretel brought out his highly modified Wall Four. His version has an overhead cam, electric oil and water pumps, and a solid center mounted main bearing. He used Roger Slocum's crankshaft and