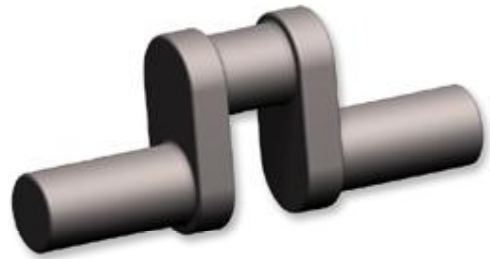


The Crank Calls



July 2015

President	Don Jones	(510) 566-3153	dj712@sbcglobal.net
Secretary	Bob Kradjian		bkradjian@aol.com
Treasurer	John Gilmore	(925) 228-8483	jgilmoreco@aol.com
Events	Ken Hurst	(707) 257-2481	icengine@comcast.net
Tech Topics	Carl Wilson		toolcarl@comcast.net
Editor/Printer	Larry Zurbrick	(408) 448-5752	baem_editor@pacbell.net

MEMBERSHIP \$25.00 US

Contact John Gilmore at
jgilmoreco@aol.com

NEXT MEETING

July 18, 2015 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: 3rd Saturday of the month

MEETING NOTES

June 20, 2015
Bob Kradjian

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

Don reported on the 10th Maker Faire show at the San Mateo Fairgrounds in mid-May. He reports that the huge 3D exhibits were the size of a football field! Chabot College is buying a device. Reports to come later. Also, be aware that the Maker folks are planning their very first "mini" Maker Faire in San Jose, September 6 at the History Park.

VISITORS: Facebook is paying off! Sam found us there and recalled that he had seen us 15 years ago in Oakland. Welcome back!

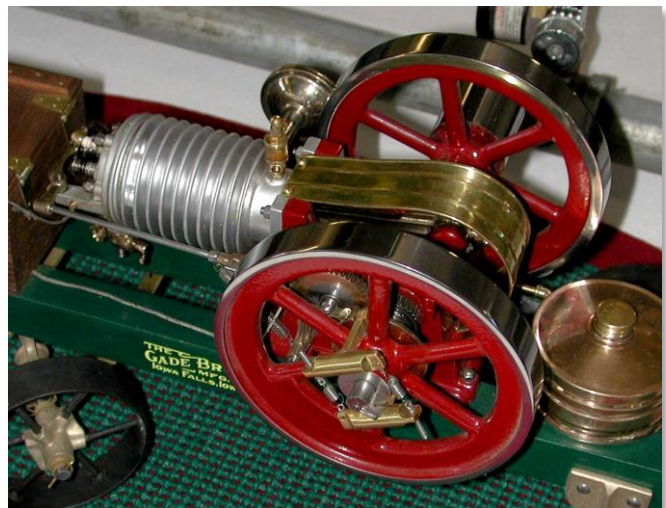
FIRST POPS: None reported.

AUCTION ALERT!

George Gravatt has kindly offered a casting set and plans to be auctioned at our July meeting. The proceeds will be donated to our club treasury.

The engine is the very nice 1/4 scale "Gade Model C" from Martin Models and Pattern in Portland. If you ever traveled to the latter Eugene, Oregon shows

the Morrison people had them for display and sale. They make a nice runner. The bore is 7/8" and the stroke 1 1/4". See the photos below for a finished engine and the casting parts for the engine. You Tube has a video of one running well. The castings and instructions retailed at \$265.00 when last checked. Machined gears and cam are \$57.00 as an option from Martin. The high quality iron castings are annealed and the bronze castings are lost wax. Thank you, George!

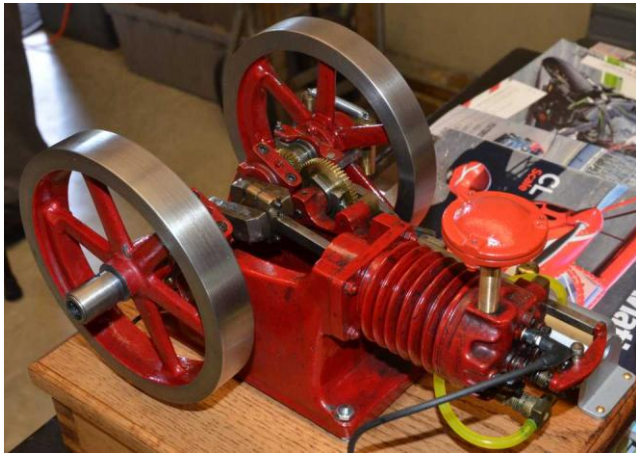




TREASURER'S REPORT: We are still solvent with no substantial change from last month's report.

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

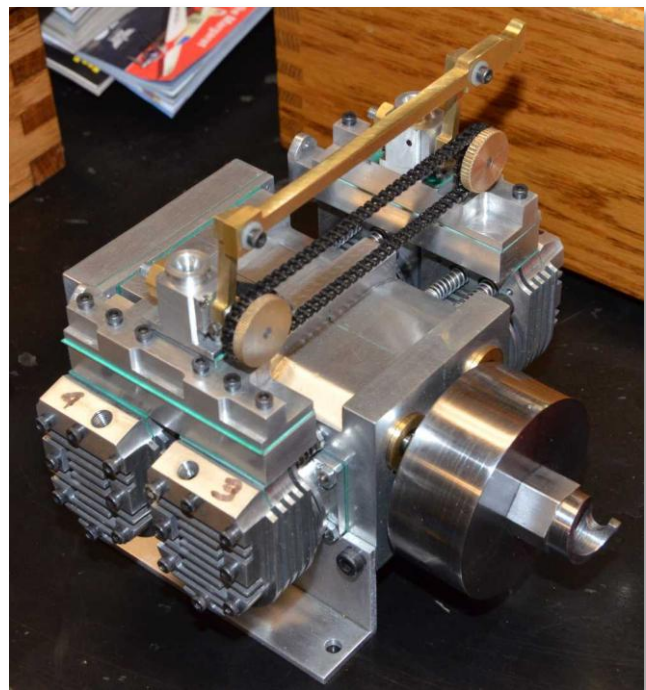
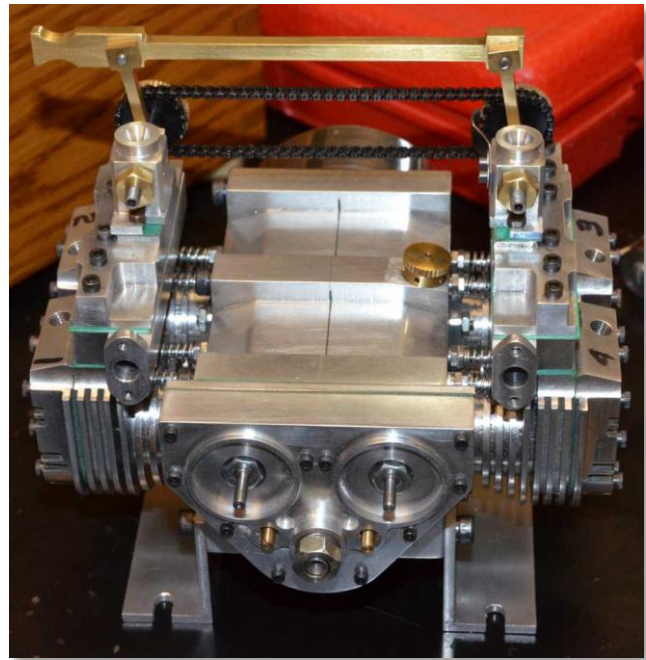
BITS AND PIECES:



Ray Fontaine showed us what I believe to be an air-cooled Paul Breisch "Lil Brother", a horizontal hit and miss single. There is a water-cooled version of "Lil Brother" with a traditional vertical water hopper and looks quite different when compared to Ray's air-cooled version. The bore is $\frac{3}{4}$ ", stroke 1", flywheels 4 and a half inches. Castings (\$249.95) and plans (\$24.95) are available for the water-cooled version from ministeam.com. Ray says it runs well but could use better flywheel balancing.

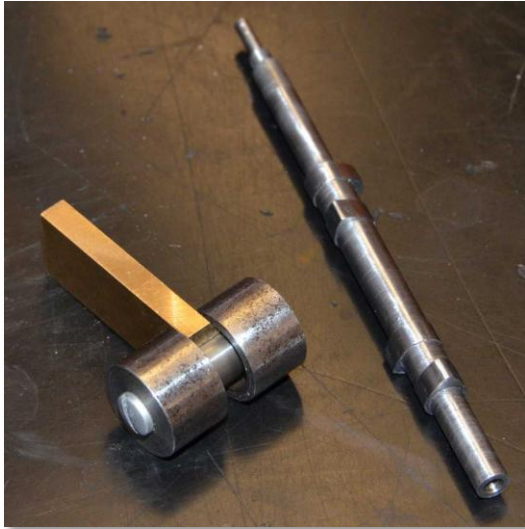
Ray also gave us an update on his Cox visible four crankshaft woes. You may recall that the shaft twisted slightly when he was running it at the Christmas meeting. He reassembled it using roll pins and taper pins to secure the various bits. Sadly, this twisted also. He next plans to make a solid

crankshaft. I had similar problems with my visible four, but the simple cinching of the bolts has been holding it nicely. For those who haven't seen these shafts, they are made of keyway stock and dowel pins bolted together with simple pinch joints.

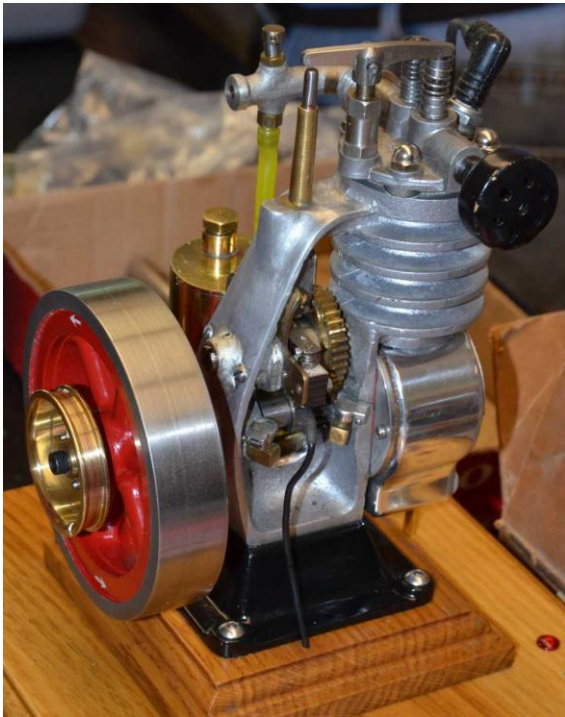


Joel Cohen is nearing completion on an original four cylinder, air-cooled "Boxer". It's a beauty! It is based loosely on the general dimensions of Edgar Westbury's twin-cylindered "Seagull", the bore was $\frac{3}{4}$ " and the stroke $\frac{11}{16}$ " with a displacement of

0.61 cu. in. The valve arrangement is side-valve. There was also a water-cooled version.



Joel's engine, which is made from the solid, looks a bit like Mason's "Mastiff" but has twin carburetors and twin camshafts and generally is better finished. The Mastiff uses a single camshaft. The connecting rods are not staggered and use a "blade" style arrangement at the big end (mockup on left in photo above). The ignition system is next on his building schedule.



Dwight showed us a John Sesson single cylinder engine that he and George Gravatt are rebuilding

for Jim Kipp. The date of the design is uncertain, but thought to be in the 1930's. This particular engine may have been a later version. It had a large 24-pitch gear that did not match properly with a smaller gear. Other problems included an eccentric that was machined improperly and the cylinder bore was not circular or straight. However it's a handsome engine and when Dwight and George are finished it should be a fine addition to Jim's collection. The carburetion was apparently fitted for a narrow rpm range with a small jet at the inlet.



Jim Piazza is continuing with various parts for a small scale Offenhauser 270 engine. This is the side-plate breather. It is nicely done with a bead blasted finish. The fins required a good bit of

programming for the correct tool paths. Still, “just parts”, not a whole engine.

Mike and Dwight tell us that scales for engine balancing are now more affordable than ever. A “Smart Weigh SWS 1KG” pocket scale is available on Amazon for \$9.99. This will handle up to one kilogram at increments of 0.1gram.

INDUCTION HEATERS TO HEAT CAMSHAFTS FOR TEMPERING: Fluxeon, Inc. is the company Mike and Dwight are dealing with at fluxeon.com. The “Roy 1500 MRO” model is \$741.21. It is advertised as capable of 1,500 watts. They also offer an “open source heater kit” for \$293.00. You add your own heat sink case. Another avenue is to look for plans on the Internet (for around \$50) and build your own unit.

Mike Rehmus reports an ignition article is ready for the next issue of “Model Engine Builder”. The CDI spark is a thinner, shorter spark. It requires about an 830 microsecond minimum spark to fire an auto engine reliably. The separate coil for each spark plug helps resolve the recharging time issue for extremely high rpm ranges.

IN REMEMBRANCE

You may have heard the sad news that Gary Moore passed away on February 1 from cancer. Gary was a tireless show manager during our Vallejo years, a long time modeler, and a wonderful human being always willing to lend a helping hand.