

The Crank Calls



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MEMBERSHIP \$25.00 US

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NEXT MEETING

**Saturday, Apr 15, 2023, at the
Golden Gate Live Steamers clubhouse site in
Tilden Park, Orinda, CA**

Gate opens at 9:00 am
Meeting starts at 10:00 am

Upcoming Events

- Apr 15: BAEM meeting at GGLS
- Apr 22: STEAM Discovery Festival
- May 20: BAEM meeting at GGLS
- Jun 17: BAEM meeting at GGLS

See below for more details regarding events. Watch Crank Calls, BAEM emails and BAEM web page for updates. BAEM meetings are usually 3rd Saturday of the month except December.

MEETING NOTES

Bay Area Engine Modelers met at Golden Gate Live Steamers on March 18, 2023. Twenty-two members were present. President Paul Denham welcomed attendees and mentioned that he found the monthly BAEM meetings very motivational toward getting new engines to run and show.

NEW MEMBERS/VISITORS

BAEM members are reminded that visitors are welcome at our club meetings, and we're always looking for new members.

TREASURER'S REPORT

President Paul Denham reported club finances are "OK", 2023 dues of \$25 dollars are due, and checks can be mailed to Deirdre Denham at 1937 Merchant St, Crockett, CA 94525. Make checks payable to "BAEM".

CLUB BADGES

If you are a member in need a badge, contact Mike Rehmus (mrehmus@byvideo.com) who has offered to produce them.

UPCOMING SHOWS AND EVENTS

April 22 is the STEAM Discovery Festival from 10am to 4pm at the Solano Community College, 4000 Suisun Valley Road, Fairfield. STEAM stands for Science, Technology, Education, Arts, Mathematics. It is a makers type event. Website is:

<http://steamdiscoveryfestival.com>

Steve Hazelton (steve.hzlt@gmail.com) is coordinating our exhibit at the STEAM festival.

Ray Fontaine (rayfontaine2@att.net) (925) 784-5411) has coordinated our club's participation in EDGE&TA events. He is recovering from hip surgery, and his participation is limited. The Branch 13 website is here: <https://branch13edgeta.com/>. Check it out for their full calendar. Upcoming shows of interest are:

--May 19-20, 2023 **Rio Linda farm & Tractor Days**

Deacon VanDerostyne 209-810-5913

richardvanderostyne@gmail.com

--July 27-30, 2023 **Amador County Fairgrounds**

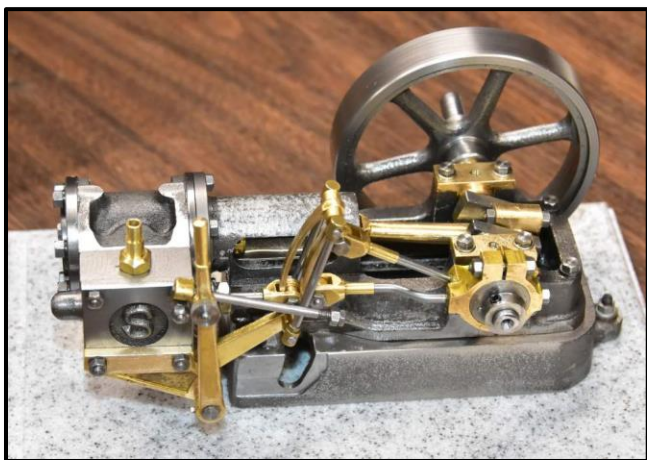
Robert Facino (916) 417-8732

rtsc@netzero.com

BAEM members interested in participating in these events should contact the person listed, and let Ray know as well.

FIRST POPS

George Spain reported that he had 10 seconds of first "pops" with his single cylinder vertical design. After first pops, he believes it's just a matter of fine tuning. Just ask Peter about his Merlin's V12 post first pop tuning . . .



Stuart 10H

Paul Denham brought in the Stuart 10H he machined from an old casting set he acquired from Dwight Giles. Of interest, the plans mentioned casting set cost £3 from Stuart. The current price from Stuart is £111.00. Paul had also acquired a partially machined reversing kit for a 10V £168.00 that he adapted for use on the 10H. The engine ran well on air. Paul is reworking a coffee machine boiler to run on steam. Paul found a web site with a detailed build description of both Stuart 10V and 10H using a lathe only (<https://homews.co.uk/page42.html>). Paul shared that the small engine machining was more challenging than he anticipated, even using a mill.

BITS AND PIECES

Lon Keeth is making a Black Widow V8 from bar stock starting with a block acquired from John Gilmore. He brought in the block with newly cut cooling slots that were sealed with aluminum sheet attached with electron beam welding. We look forward to Lon's regular reports as his build progresses.



Lon's Black Widow

Dwight Giles presented a "Tech Topic" on silver soldering band saw blades. He showed us the fixture he designed for holding the blade ends while grinding the overlapping tapers. He showed us another fixture for holding the blade ends together while soldering. His fixtures were designed to handle various blade widths. He described his process steps, including squaring the ends, grinding the tapers, pre-solder sanding, aligning the blade in the soldering fixture, fluxing, soldering, and

post-solder cleanup. He grinds an 8:1 taper. He uses 1/16 inch silver solder, grade 4 or 5. To heat the solder joint, Dwight uses an oxy-acetylene torch with a 00 tip. He heats the joint to medium dark red. A good joint will show solder flow through the joint on the back side of the blade.



Dwight's bandsaw blade soldering fixtures

Dwight also brought in a strange looking fixture that looked like a 3-jaw chuck with rollers instead of jaws. He explained that it was a tailstock fixture for swaging taper in brass tubes.



Fixture for swaging taper in brass tubing.

Charlie Reiter had a fascinating set of 150 spur gears ranging from 21 to 150 teeth. Diametral pitch is 48, with a 14.5-degree pressure angle. Of the various guesses regarding the function of the gears, the most informed came from Dwight, who speculated it was a set of change gears for a gear cutting hob machine. Further

speculation is that Charlie acquires many of his oddities via dumpster diving.



Charlie Reiter and mystery gears.

Larry Zurbrick has a 1941 Wall Wizard casting kit from Walls Model Engine Laboratory. This is a two-cylinder horizontally opposed engine with bore 1.25", stroke 1.125", that is expected to produce 1.0 HP at 5400 RPM. Larry shared his project notebook containing the *Mechanix Illustrated* build articles titled "Gas Engine for Modelmakers". Articles were published in June, July and August 1941 for 10 cents each.

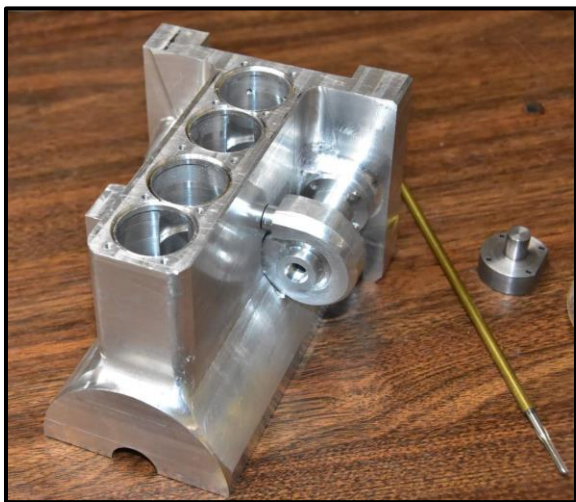
Larry also mentioned a recent visit to Industrial Metal Supply (formerly Campbell Metal Supply) in the South Bay, at 549 Charcot Ave, San Jose, CA. He noted they carry a large variety of metals and offered large stocks of pre-cut material and remnants sold by the pound. <https://www.industrialmetalsupply.com>

Ray Fontaine described his overhaul of his Open Crank 4 (based on the Randal Cox Open Crank 6 seen in Model Engine Builder issues 1-3). He got the engine running around 2014 and is now re-lapping the valves, replacing the head gasket, and reworking the distributor. He also wanted to replace the high-tension ignition wires. He borrowed Dwight's molds, and fabricated new wires with attractive insulated boots. Installation of a 12-volt electric starter and painting are also on the overhaul list.



Ray Fontaine describes casting spark plug boots.

Peter Lawrence continues his work on his version of the Hanson vertical diesel and his 4-cylinder Duesenberg. He milled the water pump shroud and mounted it on the block.



Peter's water pump, installed.

He showed his creative long reach tool to drill and tap the 4-40 mounting screws. He drilled a brass rod on both ends and used Loctite to hold the drill bit in one end and a tap in the other.

Finally, Paul Denham shared an interesting historical references: He brought in a bound volume of the 1892 American Machinist magazine. Paul had a reprint of an International Stationary Steam Engine Society publication titled The Last Years of Mill Engine Building by Arnold Throp. Paul is willing to loan it out if anyone would like to borrow this book. It would be an interesting reference for BAEM members considering model English steam engine builds in the 1000 horsepower range.

RAMBLINGS



Long time BAEM secretary Dr. Bob Kradjian just turned 92 and is still flying radio control airplanes. Happy Birthday Dr Bob!

Working on an interesting project? Got a great BAEM story? Share it with us here. Send us pics and project details, and your hard work will be shared with the entire club.

FOR SALE

Got something you'd like to sell? Your ad is free and will be seen by likely customers.

NEWSLETTER CONTRIBUTIONS

Your contributions to this newsletter are appreciated: workshop reports, tech articles, reviews, historical pieces, whatever. You contribute, we'll figure out how to post it. Send your contributions to either or both of us. Thanks!

-Mike Byrne at mgbyrne3@comcast.net

-Wes Wagnon at weswag@ix.netcom.com