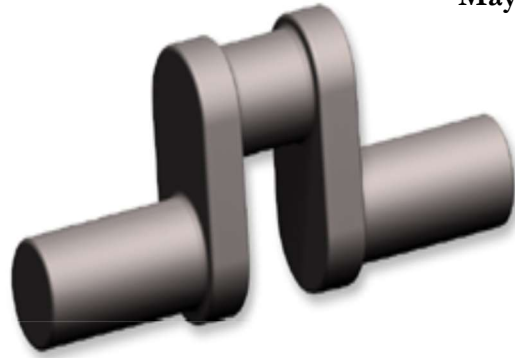


The Crank Calls



President	Paul Denham	pedenham@comcast.net
Secretary	Your name here!	Please consider volunteering
Treasurer	Deirdre Denham	pedenham@comcast.net
Events Coordinator	Steve Hazelton	steve.hzltn@gmail.com
Webmaster	Mike Byrne	mgbyrne3@comcast.net
Editor/Printer	Wes Wagon	weswag@ix.netcom.com

MEMBERSHIP \$25.00 US

Contact Paul Denham at
pedenham@comcast.net

NEXT MEETING

**Saturday, May 21, 2022, 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

Meeting will be inside, without masks.

Upcoming Events

- May 21: BAEM mtg and GGLS Spring Meet
- May 22: GGLS Spring Meet/Open House
- June 18: BAEM meeting at GGLS
- July 16: 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

The monthly Bay Area Engine Modelers meeting was held at the Golden Gate Live Steamers site on April 16, 2022. Twenty-one members and two guests were present. Carl Peterman was introduced as a new BAEM member. Welcome Carl!

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

BAEM president Paul Denham reported that club is financially solvent. The biannual renewal web hosting fees for www.baemclub.com were paid this month. That site includes the CrankCalls newsletter archive starting with November 2000.

Reminder: 2022 dues of \$25 are due. Give your check to Paul Denham at the next club meeting, or mail to Deirdre Denham at 1937 Merchant St, Crockett, CA 94525. Make checks payable to "BAEM".

CLUB BADGES

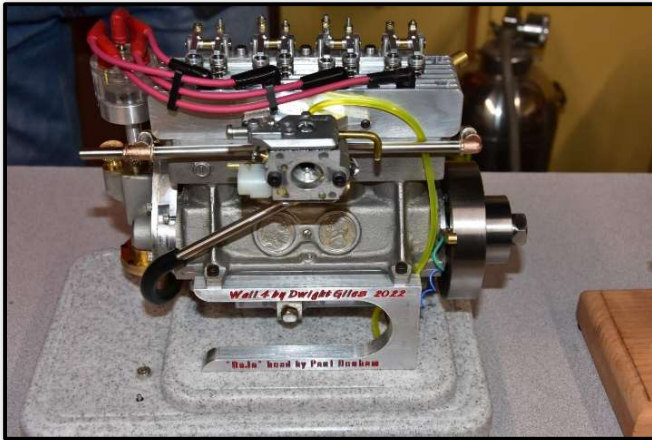
If you are a member in need a badge, contact Mike Rehms (mrehms@byvideo.com) who has offered to produce them.

Upcoming shows/events:

Golden Gate Live Steamers spring meet is May 21-22. Open house is on May 22. BAEM members will be showing engines. Bring yours to show!

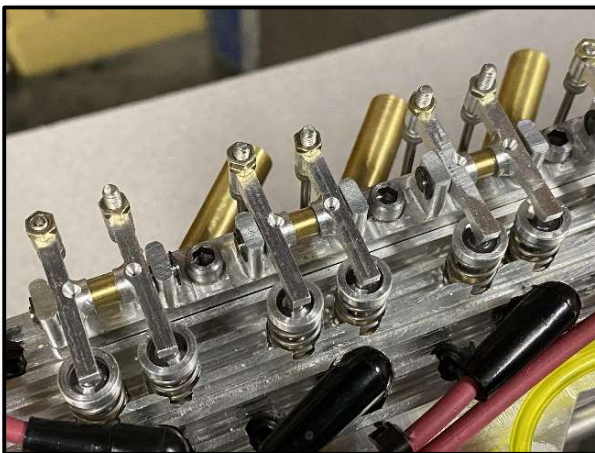
FIRST POPS

Paul Denham ran his Wall 4. Dwight Giles started the project. Paul added the head, valve gear, ignition, carburetor, and a Corian base.



Paul Denham's Wall 4

Paul shared some problems he encountered adapting the Walbro carburetor by modifying the self-contained fuel pump for 4-cycle use. He also needed to recut the valve seats using a Dick Pretel cutter he was given by Bob Kradjian.



Close view of Paul's awesome machine work on the head.



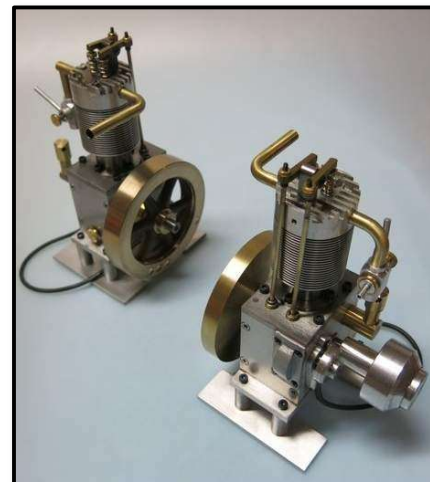
Nickel port covers. A nice touch.

The engine includes block inspection port covers made from 5-cent pieces, with dates close to Paul and Dwight's birth years.

BAEM member Jim Piazza couldn't attend last month's meeting, so he sent in this "First Pop" report:

I just finished two Upshur Vertical Singles that I started back in 2003. The parts have been sitting in my shop since then. I figured it's about time to finish them.

I made parts for 4 engines. I completed one in 2011 that had point ignition. These two are using C&H CDI ignition. I made many modifications such as putting the spark plug on top of the head. I used a flange on the bottom of the cylinder, threaded it 7/8-32 and Loctited it to the flange. It uses a 4 bolt hold down. The fins are 1/32" x 1/32". Dwight Giles made the rings for me. The original cams were made by Roger Slocum.



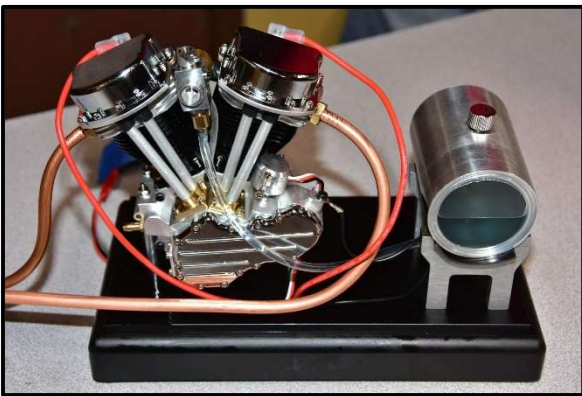
*Jim Piazza's Upshur Vertical Singles
[Plans for this engine were published in Strictly IC, issues 63-66. Engine features dual pushrods operating overhead valves and wet sump lubrication.]*

BITS AND PIECES

Longtime BAEM member Bob Kradjian brought in two very interesting “ready to run” engines (Bob admitted he was suffering from “lack of machine shop itus”). The first was a Cison two-cylinder V engine patterned after a Haley Davidson pan head motorcycle engine.



Bob Kradjian



Cison two-cylinder V engine

The second was a very small single cylinder throttle governed engine offered on Banggood, an Eachine ET5 Mini Gasoline Engine. Bob thought the model was adapted to spark ignition from a German Derks diesel. Both models ran well.



Eachine ET5 Mini Gasoline Engine

Dwight Giles brought in example model spark plug ignition wires and fixture to cast integral plug caps. He had just accepted an order for 10 sets of Black Widow V8 ignition sets (9 wires each). His production tooling includes brass mold patterns, molds, brass end contact fittings. He also bought in his fixture for cutting Teflon wires to size and soldering end fittings. Plug caps are cast from urethane rubber. The specific product used was 75-60 RTV Liquid Urethane Mold Rubber from www.uscomposites.com.

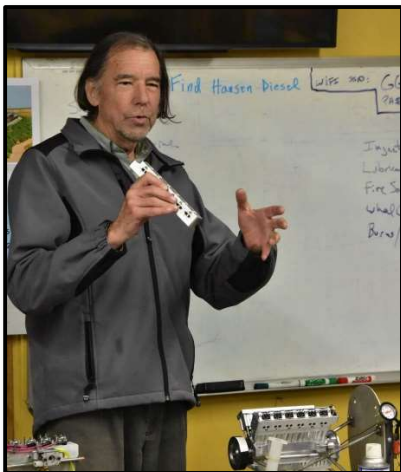


*Right: finished molded spark plug boot.
Left: 10000 volt insulated wire soldered to spark plug clip, with stainless jig. The jig holds it in the molding fixture, as well as serving as a space-filling core that creates the inner hole which fits over the spark plug.*



*Left: pattern used to create molding fixture.
Right: two-part molding fixture cast with resin, including stainless jig used to hold wire in correct orientation for molding. Wire/clip/jig assembly is placed in mold, liquid urethane is poured into conical hole in top of mold. Multiple molding fixtures can be cast from the pattern, permitting production of multiple rubber spark plug boots at the same time.*

Peter Lawrence reported significant progress in getting his Merlin V12 cam shafts to rotate freely (and reported a sore wrist from spinning the flywheel). With this accomplishment he was able to install pistons and valves and discovered that valve seats did not seal and he was unable to create the necessary compression. The cylinder heads were the first Merlin parts he made when starting this project in 2009. He attributes the problem to his own experience level and the lack of repeatability in his desktop mill.

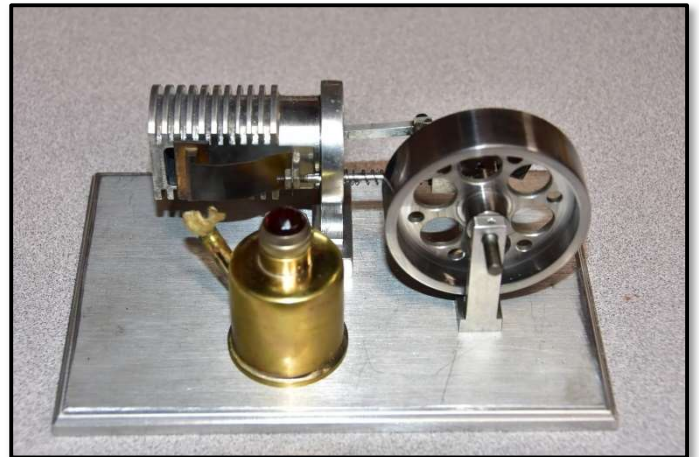


Peter describes compression problem

One recovery option he is considering is to make integral valve cages with guides and seat as a single unit. Since the Merlin has 12 cylinders each with 4 valves, that is a lot of new valve cages. *Post meeting update: Peter tried lapping the valve seats with tooth paste and valves sealed!*

Peter is also looking ahead to a new project. Since he apparently finds his Merlin only modestly challenging, he is intrigued by an A-frame diesel engine by Find Hansen of Denmark that he found on YouTube (<https://www.youtube.com/watch?v=oZlxQDWvmoY>). Since plans are apparently not available, Peter intends to reverse engineer a design for his version.

Charlie Reiter acquired a flame eater engine and added a base and burner. Charlie passed the flame eater to Karl Petermann which may have helped motivate Karl to join BAEM. Karl has the flame eater running.



Flame eater

Charlie also brought his Shay locomotive and set it up in Golden Gate Live Steamers yard. This Shay is a freelance model following the guidelines of the 4 left hand Shays that were built for central Mexican mineral mines. Charlie created the plans from a single builder's photo and knowledge of how these locomotives were built. "Rusty" burns propane for fuel and runs very well.

Jerry Franklin reported continued progress on his Little Devil vertical hit and miss engine. He had the base machined and crankshaft installed with ball bearings. Flywheels are clamped to crank shaft with taper fittings. He also described a collet like fitting he found that allowed him to turn between centers by using the fitting to mount a dead center in his 5C chuck.

Mike Rehmus and Dwight Giles are working on replacement gears used in a recreation vehicle to slide room expansion panels in and out. They used Gearotic to draft up gear dimension for the Russian gears and an automated Sherline rotary indexer to cut the part with a shop made fly cutter. They showed steel versions of the gear and pinion. Dwight had to apply some of his tuning "magic" to get the gears to smoothly mesh.



Russian gear copy

GGLS guest Christopher Smith showed a model Case 65 steam tractor (1/4 scale?). Chris is hydrotesting the boiler on his way to get it running.



Case 65 steam tractor

RAMBLINGS

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.

WANTED

BAEM member Larry Bunch wants to purchase a Logan 11 x 36 Lathe and asks that anyone who knows of one for sale please contact him.

Larry Bunch 209-404-6700
wendyrocky2@gmail.com

FOR SALE

Machinist/Woodworker Estate Sale

Paul Denham is assisting a widow with the sale of her late husband's workshop:

My good friend passed recently, and his wife asked me to help liquidate his shop machinery.

Machinery:

1. ZAY7045FG Mill/Drill. It has the base, and DRO. Cost new was \$1400
2. A vintage heavy 10 South Bend lathe. Looks good for a 1930-40 lathe. No motor connected but available, I think. It is an engine lathe and looks in good condition. I think "free" to someone wanting it.
3. 2 grinders: 1 Craftsman, 1 tool grinder diamond wheel Chinese clone.
4. Big Arbor press. Phase 2.

Wood working tools: All Sold.

-Paul Denham

Phone: 925-917-1987

Email: pedenham@comcast.net

--+--

Dick Pretel has a number of model engine connecting rods available for sale. Rods are for Wall 4 and Challenger V8. Wrist pins are included. Price is \$12 per rod. Contact Dick via email (rpm11K@att.net) with questions or orders. Drawings at <http://www.damgood.com/product-model.html>

--+--

Dwight Giles has a vintage motor he is offering:
-1.5 hp electric motor. 1750 rpm. 110/220v AC single phase. Heavy! Price: Free!
Contact Dwight at jig313@aol.com
or phone: 707-648-1481

--+--

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 Wagon at weswag@ix.netcom.com



LAST WORD

Forwarded by Mike Rehmus...

