

# The Crank Calls



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**MEMBERSHIP \$25.00 US**

Contact Paul Denham at  
pedenham@comcast.net

**NEXT MEETING**

**Saturday, April 17, 2021 at the  
Golden Gate Live Steamers clubhouse in  
Tilden Park, Orinda, CA**

Gate opens at 9:00 am

Meeting starts at 10:00 am

Meeting will be outdoors, masks required.

Social distancing will be observed.

**Upcoming Events**

BAEM meetings are usually 3rd Saturday of the month except December. Upcoming meetings:

- April 17, 2021 at GGLS
- May 15, 2021 at GGLS
- June 19, 2021 at GGLS

Watch Crank Calls, BAEM emails and BAEM web page for updates.

**MEETING NOTES**

March 20, 2021

BAEM members enjoyed a beautiful Spring day. The meeting site was again held in the sunny area of the parking lot. Display tables were set up and appropriately spaced chairs provided comfortable, Covid-safe seating. This worked well. See below for Mike Byrne's report of the meeting details.

Paul also reported that Dwight Giles seems to be doing well after his knee replacement.

**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**

The 2021 dues of \$25 have been due since the beginning of the year. Pay now if you haven't already. Give your check to Paul Denham. Dues can also be

mailed to Deirdre Denham at 1937 Merchant St, Crockett, CA 94525. Make checks payable to "BAEM".

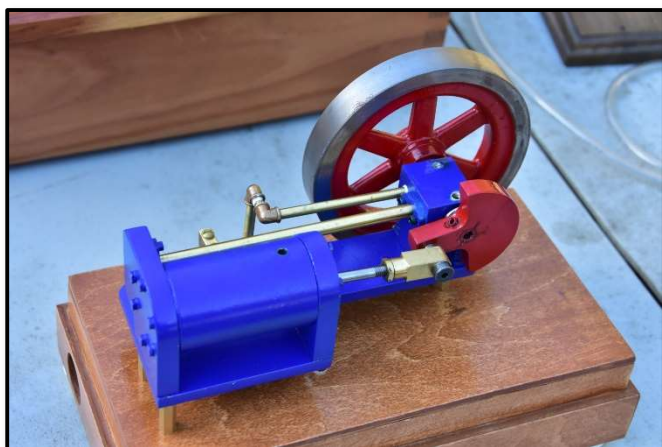
The BAEM club is solvent. Current balance is \$6409.07. Recent contributions to the club treasury have been generated by sales of engine construction "kits" (and other items) by Dwight Giles. The club thanks Dwight for generating these contributions.

## CLUB BADGES

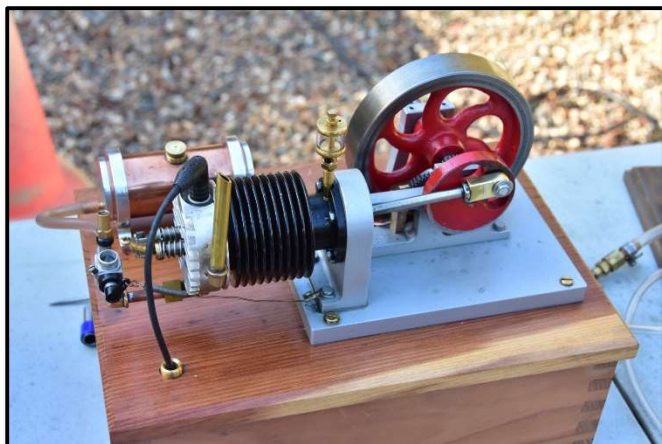
If you are a member in need a badge, contact Mike Rehmus (mrehmus@byvideo.com) who has offered to produce them.

## FIRST POPS

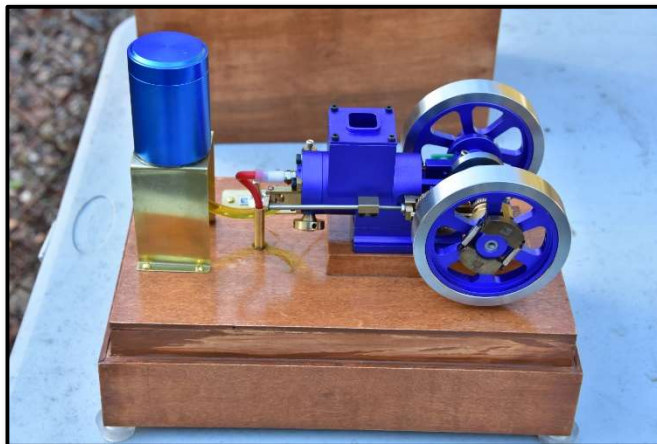
BAEM member Ray Fontaine brought in three very nice running engines, two of which should be considered "First Pops." One was a compressed air engine from a design published in the Sep/Oct 2020 issue of Live Steam magazine. An interesting feature was the spherical piston.



Ray then retrofit his Howell "PowerHouse" 4-cycle gas engine with a spherical piston and got it to run as well.



Ray's third engine was a Chinese Kerzel hit and miss engine.



All engines were set up on nice wooden bases with box covers. Nice work Ray! Thanks for sharing these.

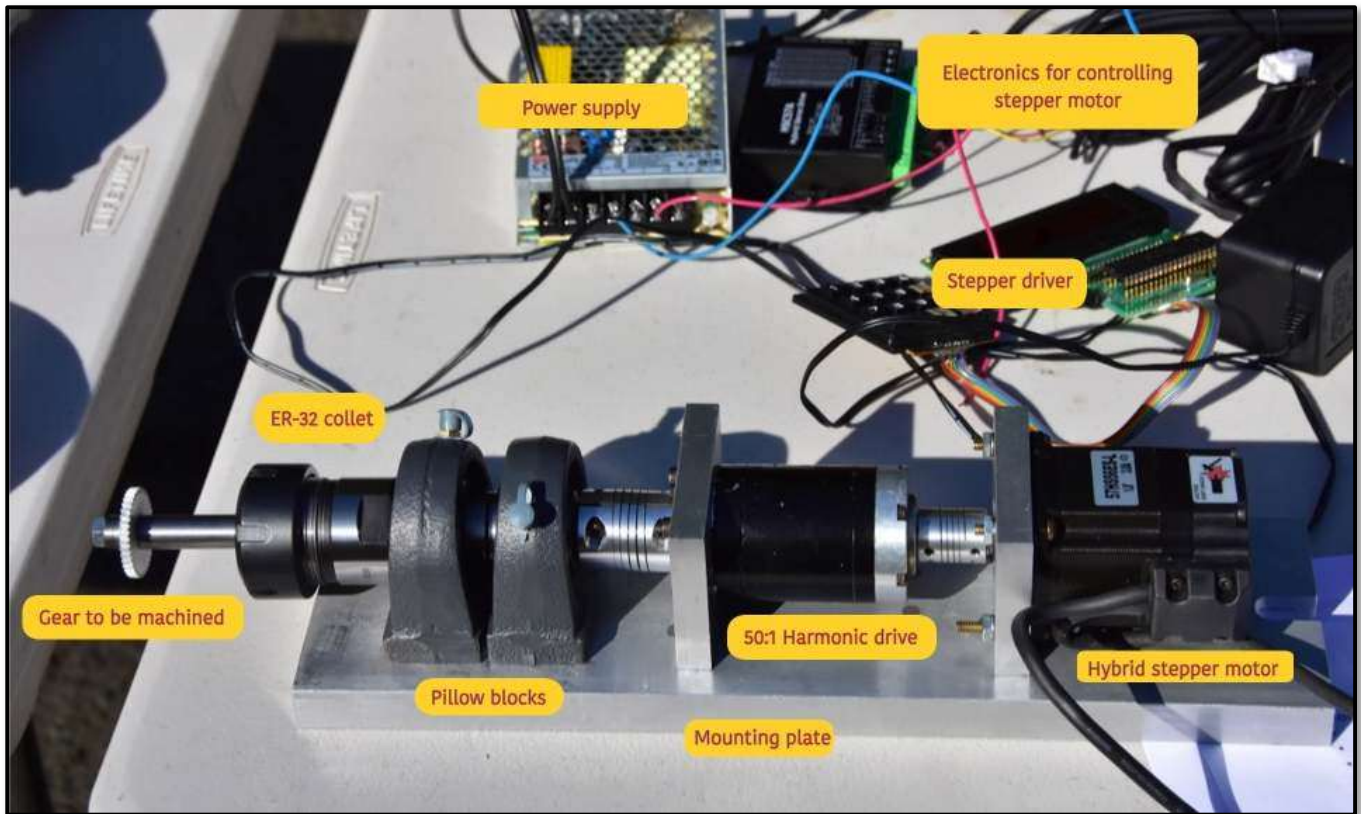
## BITS AND PIECES

Paul Denham brought in the flywheel and upright castings for the Red Devil casting kit he bought himself for Christmas. This engine is a vertical hit and miss engine with an open-sided crankcase, a side-shaft with its wobble-plate cam on top, and a fly-ball governor. <https://www.shelfpetmodels.com/>

Paul also described some 4 cylinder engine painting issues and project tweaks with a small oil pressure gage and fuel pump tuning.

Jerry Franklin showed his progress on a Little Devil engine by Bob Shore. He described new parts and challenges he faced getting the cam lifter to fit.





Mike Byrne brought in his rotary indexer project. Pictured above, its primary application will be for small gear cutting, traditionally done using a divider plate for indexing. Instead, Mike's device uses a stepper motor to turn the workpiece in precise angular increments. The stepper motor is electronically controlled. It uses the Ward controller (<https://www.worldofward.com/rotarycontroller>) software using a Microchip 18F4520 microprocessor. Paul Denham reversed engineered the printed circuit board from an early Ward design. A hybrid stepper/driver was obtained from EBay. The workpiece is held by an ER-32 collet, securely mounted via a pair of pillow block bearings.

Wes Wagon briefed on his home shop electro plating activities. He is using Caswell kits (<https://caswellplating.com>) which are available for plating, anodizing, and black oxide. Wes noted that nickel plating can be done with more modest electrical power (.07 amps per square inch of surface to be plated).

A few years back, BAEM member Jim Moyer built a spectacular 1/6 scale Chevy 327 Corvette V8,

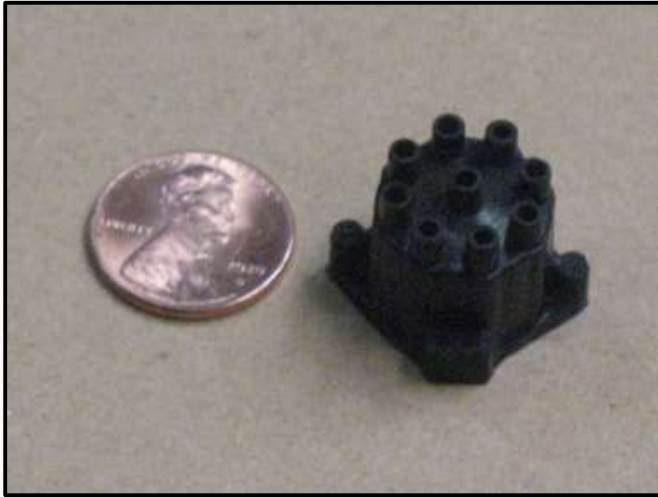
precisely duplicating each individual part of the full-sized engine.



*Moyer's Miniature Chevy 327 Specifications:*  
 Scale: 1/6<sup>th</sup> -- Displacement: 1.10ci  
 Bore: 0.600-inch -- Stroke: 0.487-inch  
 Construction: Machined billet  
 Build Start: 1998 -- First run: 11/03/2005

You must see this engine, to appreciate its tiny size, not much larger than a softball. Jim recently sent Paul an extra distributor cap he made for this nicely

running engine. This photo will give you an idea of the size of this model:



*Distributor cap for Moyer V8*

There's a fine article about Jim here:  
<https://www.craftsmanshipmuseum.com/Moyer.htm>.  
BAEM member Steve Hazelton has shared some video of this engine on YouTube. Jump ahead to timecode 1:35 to view. This link should take you there.  
<https://youtu.be/b80o5j5Ines?t=95>

## RAMBLINGS

Haven't heard any this month. If you have some to contribute, send along.

## FOR SALE

Dwight Giles has some stuff he is offering:

**-Castings & Drawings for Örkenrud 340 V8.** This is the same casting kit Wes is using for his build. Price is \$100 donation to club.

**-1.5 hp electric motor.** 1750 rpm. 110/220v AC single phase. Heavy! Price: Free!

**-Engine Mount Box.** Beautiful wooden box for mounting your larger engine. Perfect for a Black Widow V8. 3 available. Price is \$200 donation to club.

Contact Dwight at [jig313@aol.com](mailto:jig313@aol.com)  
or phone: 707-648-1481

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Also, Paul Denham mentioned that he had received an e-mail from someone saying he had a Unimat 3 available. If interested, ask Paul for contact details.

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

## NEWSLETTER CONTRIBUTIONS

In the past, this newsletter largely focused on reporting about the most recent BAEM club meeting. With our meetings being somewhat inconsistent due to Covid regulations, we need appropriate content to include in upcoming newsletters. Workshop reports, tech articles, reviews, historical pieces: 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](mailto:mgbyrne3@comcast.net)

-Wes Wagnon at [weswag@ix.netcom.com](mailto:weswag@ix.netcom.com)

