

# The Crank Calls



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**MEMBERSHIP \$25.00 US**

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**NEXT MEETING**

**Saturday, January 21, 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**

- Jan 21: BAEM meeting at GGLS
- Feb 18: BAEM meeting at GGLS
- Mar 18: 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**

BAEM tradition is to combine the December club meeting with a potluck luncheon. The tradition continued, and 16 members with 4 guests gathered at the Golden Gate Live Steamers on December 10, 2022.

GGLS was operating under Instrument Flight Rules during the meeting, due to a strong storm with heavy rain in the San Francisco Bay area and feet of snow in the Sierras. The GGLS wood burning stove was much appreciated during the meeting.

**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 welcomed attendees and reported the club remains solvent. Club treasurer Dee Denham made a personal appearance and seemed to be coordinating the lunch preparations. The 2023 club 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

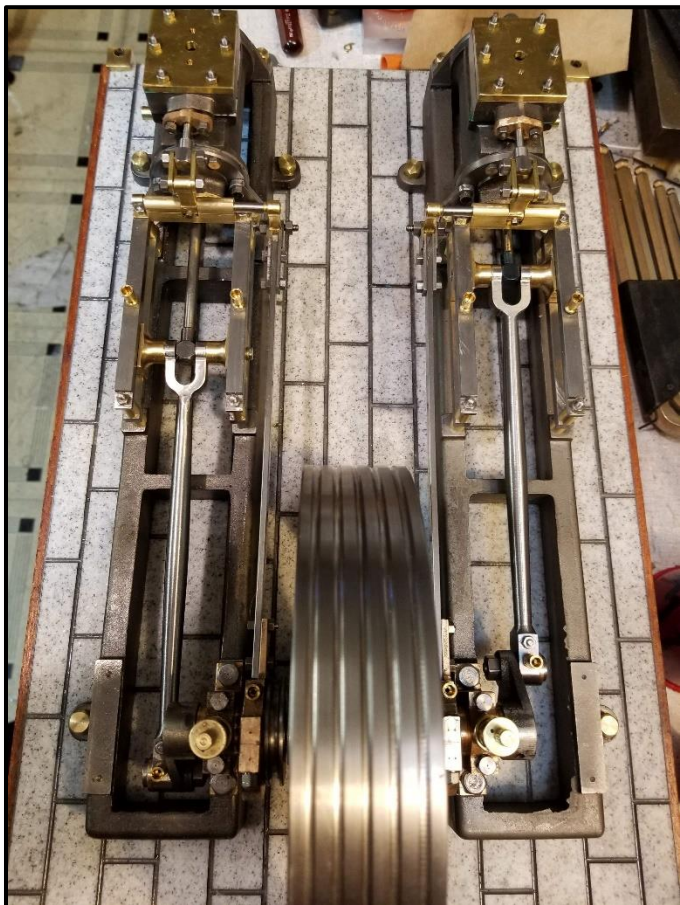
No shows are currently pending.

## FIRST POPS

No reported first pops.

## BITS AND PIECES

Paul Denham continues work on the Stuart Twin Victoria steam engine he showed at the November meeting. He had hoped to get the engine running for this meeting but didn't quite make it.

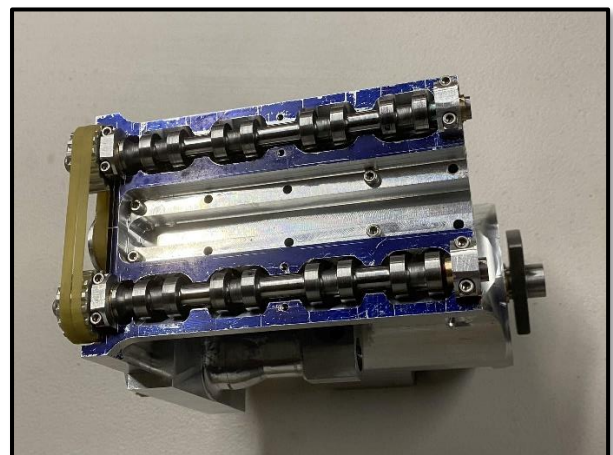


*Paul's Stuart Twin Victoria steam engine*

Peter Lawrence continues to make progress on the "half" Duesenberg, a 4 cylinder version of a quarter scale model of a 1932 Duesenberg straight 8. He described some of his experience on cutting 132 starter gear teeth on the flywheel with a manual mill and an involute cutter. Dwight Giles contrasted that to his Black Widow production setup which cut three 162 tooth starter gears at a time using his Sherline CNC indexer.



*Peter describes his cutting gear teeth adventures*



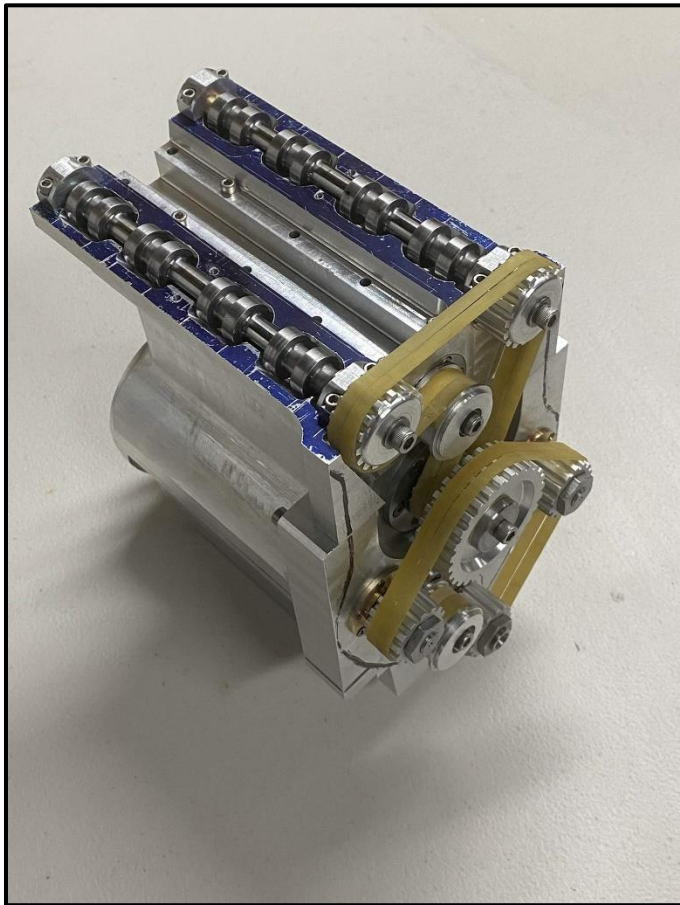
*Peter's 4-cylinder Dusenbergs*

Since we didn't have much to report from our meeting, we invited Peter to tell us more about the early stages of his Duesenberg project, including the search for drawings, photos and technical details, and the decision regarding what scale to use when building his model.

Peter writes:

*It was from someone in BAEM that I first heard of "Duesenberg" cars, and out of curiosity googled them and soon became hooked. Not only are the cars beautiful, but each of the engines was also a masterpiece.*

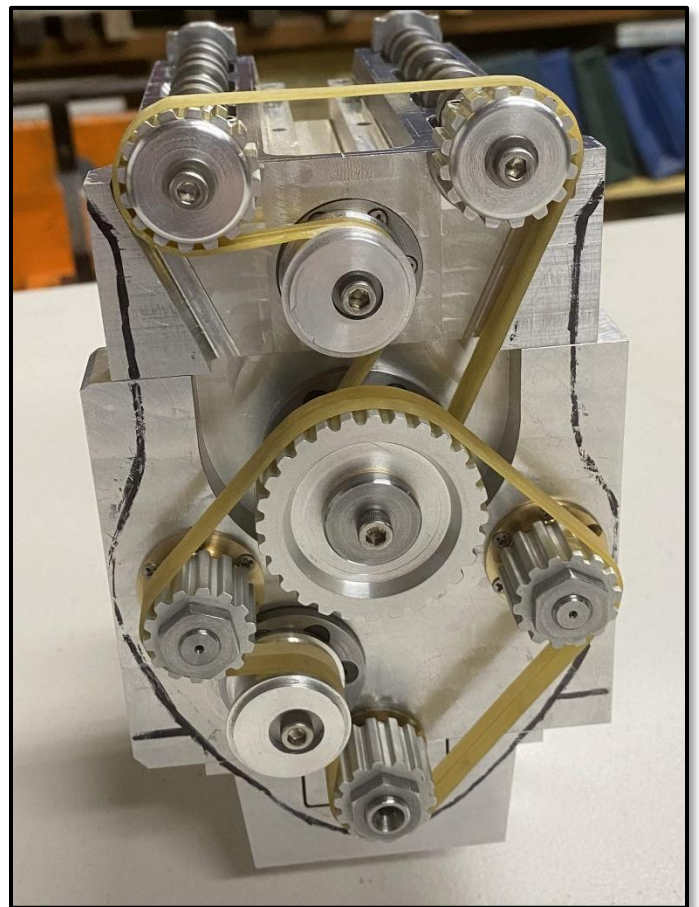
*The Duesenberg brothers Fred and Augie had been designing airplane engines for WW-I but when that ended, they decided to make America's finest automobile, to compete with Roll-Royce, Bentley, etc. They also built winning racing car engines. Theirs was the first four-valve-per-cylinder, dual-overhead-cam, automobile engine in the U.S.A. and its power wasn't matched until the "Hemi" came out decades later.*



*Peter's Duesenberg*

*I started toying with the idea of modeling the engine, and of course found Lou Chenot's sixth scale engine and car. (<https://craftsmanshipmuseum.com/artisan/louis-chenot/>) I contacted him, and he said he never made complete drawings and didn't keep the few drawings he had created.*

*Lou did have a set of CDs containing some original factory drawings that had been scanned into JPEG by some college industrial arts students some time ago. Lou had based his model on these drawings, along with some close-up engine photos he took of one of Jay Leno's Duesenbergs. Lou kindly shared these materials with me. That plus some online photos of people overhauling their Duesy engines have been all I've needed so far. Sometime in the future I'd like to visit Randy Ema, who is the current owner of all things Duesenberg.*



*Duesenberg timing belts*

*It took a while to settle on quarter scale. Sixth was out of the question, but at quarter the valves are the*

same size as in my Merlin, so I decided I could make things that small once again. Then came the decision about a full 8 inline cylinders verses something more convenient (e.g., not requiring me to acquire bigger dial calipers). A four-cylinder version turned out to have a 6" block, so that's what I'm building.

Some days, I still regret not going all the way and building a full 8-cylinder model. Then I remind myself how long it would take to make another 16 valves, 16 guides, 16 caps, 16 cap guides, and do all that lapping and compression testing.

-Pete

Mike and Tony Rehmus have moved into the CalVet Veterans Home in Yountville. They seemed very pleased with the move and Mike described some of the amenities. Of interest to BAEM members, he was able to relocate some of this shop to the Veterans Home hobby shop. They had room for CNC desktop mills and 3D printers, but the Bridgeport didn't make the move.

Mike also shared that he is waiting for Dwight to finish building the GEMini vertical engine so Mike can update the drawings, take the photographs, and roll them into Model Engine Builder Vol 40. Dwight showed two partially complete prototype versions at the November meeting.

Although not discussed, there was an interesting box of Black Widow V8 parts in a box on the sideline. Lon Keith acquired one of the blocks that John Gilmore had fabricated with an electronic discharge machine. The original Black Widow projects use casting sets from molds by Dwight Giles and Ken Hurst. Lon is making his engine from bar stock and needed to reverse engineer the dimensions he needs from some of the cast parts. Interesting parts in the box, including several of Dwight's starter gears.



Brunch time!

## RAMBLINGS

A week or so after the club meeting, Paul Denham reported progress on his Stuart Twin Victoria steam engine:

*First hisses yesterday. Just wanted to share, video with governor soon, I hope. Completed the valve linkage. After timing and valve adjustment I couldn't resist.*

*Even without any intake ports I blew air with my air nozzle just in the vicinity of the steam chest large hole and even with open blow down ports it ran on either cylinder. I have the blow down piping done but I*

*am waiting for a \*8-40 tap for the blow down valves. It is nice and free but there is no packing on the piston rods or valve rods.*

*A nice improvement I made is the plans call for a 1/16" pin to hold the valve con rod on its shaft. What holds it in? A press fit? If so, then any work would be a real PITA so I took the time and tapped a 1-72 hole. I have some nice hex head bolts that I inherited.*

*Just governor and piping left to go.*

*-Paul*

Interesting note: Dwight Giles reached an agreement with Martin Models who are marketing Black Widow V8 casting kits made from Dwight's patterns.

<https://www.martinmodel.com/collections/model-engine-casting-sets/products/v8-black-widow-engine>

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](mailto:mgbyrne3@comcast.net)

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

