# Bay Area Engine Modelers Club www.baemclub.com



May 2019

President	Paul Denham	pedenham@comcast.net		I
Secretary	Bob Kradjian	bkradjian@aol.com		MEMBERSHIP \$25.00 US
Treasurer	Deirdre Denham	pedenham@comcast.net		Contact Paul Denham at pedenham@comcast.net
Events Coordinator	Steve Hazelton	steve.hzltn@gmail.com		
Webmaster	Mike Byrne	mgbyrne3@comcast.net		DUES are now due!
Editor/Printer	Larry Zurbrick	baem editor @pacbell.net		
NEXT MEETING			Upcoming Events	
May 18, 2019 at			BAEM meetings 3rd Saturday of the month	
Museum of American Heritage			· ·	
351 Homer Avenue			• May 18, 2019 @ MOAH, Palo Alto	
Palo Alto, CA			• June 15, 2019 @ GGLS, Tilden Park	
Doors open at 9:00 AM				
Meeting starts at 10:00 AM				

## **MEETING PLACE FOR May 18th**

We will meet this month (May) at the Museum of American Heritage in Palo Alto. The address is 351 Homer Avenue in Palo Alto. Go to: moah.org for driving instructions and information on this fine facility.

## MEETING NOTES

April 20, 2019 Mike Byrne

BAEM meeting on April 20, 2019 at the Museum of American History in Palo Alto.

**Check for meeting location updates!** Look ahead schedule showing meeting locations thru 2019 has also been posted on the www.baemclub.com website.

## **NEW MEMBERS/VISITORS:**

None. Bob Kradjian is feeling better and was able to attend this meeting. Welcome back Bob.

## **TREASURER'S REPORT:**

The 2019 dues of \$25 are due. Dues can also be mailed to Paul at 1937 Merchant St, Crockett, CA 94525.

The BAEM club is solvent.

**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:**

- GGLS Spring Meet, June 15 -16, all day (11 AM- 3 PM)
- Pengrove Power Up Show, July 13, 9 AM to 4 PM
- Good Guys Car Show, August 23, 24, 25.
- Gault Farm Show, tentative , first week of October

## LATE BREAKING NEWS

Mike Rehmus reports that Paul Knapp and associate are bringing back several of the Bob Shores engine kits and plans. See the website:

http://modelenginecastings.com/index.html

## FIRST POPS:



Dwight Giles built a V-8 that is not quite running. He handed it off to Paul Denham. Paul has been reworking some of the machining and brought in the engine with a newly installed radiator. Dwight built the core and Paul made the frame. Paul reported that he got a "pop" but it wouldn't run. He suspects RFI and ignition issues. (After the meeting Paul reported that the ignition failure was due to not installing a collapsing coil diode on the solenoid driven fuel pump.)

Dwight made 90% of the hard stuff. Paul fabricated the camshaft bearings, distributor gears, cam followers, push rods, roller rockers, oil pump, ignition, blower timing belt pulleys, water pump pulleys, 1 way starter clutch, special screws, blower mount, oil lines and water system. Paul also finished the intake manifold and connecting rods machining. Paul completed the sometimes difficult last 10%.



Paul also fabricated a clear Lexan valve cover for the V-8 to allow viewing the rocker arms. Paul commented that the valve cover looks better in person than in this photo.

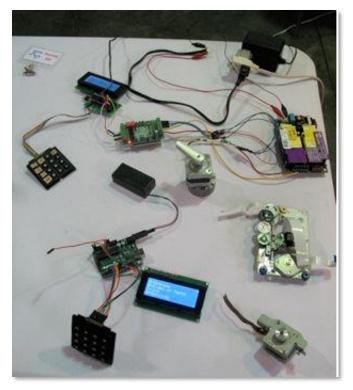
## **BITS AND PIECES**

Peter Lawrence has been sharing progress on his very ambitious Merlin aircraft engine. Recent focus has been on fabricating a scale magneto. After several prototype efforts encountered difficulties with distribution, Peter is now considering a nonworking scale distributor and a larger operating version.

#### Rotary Indexers

There has been some interest in assembling CNC controlled rotary indexers as way to bet into CNC. Gear cutting would be one application. There have been several build articles on rotary indexers. Arduino Rotary Table for Dummies on Home Model Engine Machinist forum is one example and an expanded build example with ongoing firmware development is at <a href="https://sites.google.com/site/lagadoacademy/mach\_ining--lathes-mills-etc/build---electronic-indexing-head">https://sites.google.com/site/lagadoacademy/mach\_ining--lathes-mills-etc/build---electronic-indexing-head</a>.

Steve Ward (<u>www.worldofward.com</u>) also has build site and offers a CNC controller design, parts, and firmware based on a PIC microprocessor. Paul Denham can create printed circuit boards as quickly as some people can create PowerPoint charts and he assembled a PIC prototype controller in response to club member interest. Paul had the controller at the March meeting.

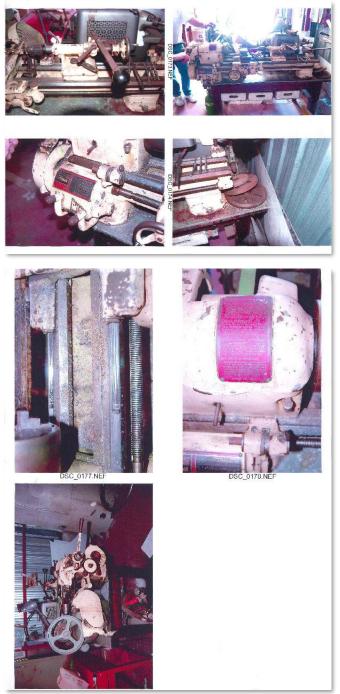


Paul passed his controller to Mike Byrne. Mike scrounged some NEMA stepper motors and acquired a stepper driver. Mike has end-to-end stepper control breadboards running with both the PIC and Arduino controllers. Components include a microprocessor controller with firmware connected to a liquid crystal display and keypad, a stepper motor controller, a stepper motor, and power supplies for the controller, driver, and motor.

## FOR SALE

Item for sale #1: Dick Pretel has decided to sell his home machine shop after several decades of successfully building multiple internal combustion model engines. Included are a Bridgeport Series 1 mill and Clausing 5914 lathe with DRO readout. Both are in excellent shape. The Bridgeport mill head has Barden 7 spindle bearings and was professionally rebuilt. There are numerous tooling pieces including end mills, reamers, etc. too numerous to list. Note that the entire machine shop is to be sold as a single lot. It will not be pieced out. Asking price is \$18K. If interested, contact Dick at 408-732-6507 or by email at <u>rpm11k@att.net</u>

Item for sale #2:



This is a South Bend lathe for sale by a friend of Dwight's. The lathe has lots of tooling. Contact Dwight Giles if interested at 707-648-1481.