Bay Area Engine Modelers Club

The Crank Calls

February 2019

President	Paul Denham	pedenham@comcast.net
Secretary	Bob Kradjian	bkradjian@aol.com
Treasurer	Deirdre Denham	pedenham@comcast.net
Events Coordinator	Steve Hazelton	steve.hzltn@gmail.com
Webmaster	Mike Byrne	mgbyrne3@comcast.net
Editor/Printer	Larry Zurbrick	baem_editor @pacbell.net

MEMBERSHIP $25.00 US
Contact Paul Denham at
pedenham@comcast.net

NEXT MEETING
February 16, 2019 at
Golden Gate Live Steamers
Tilden Park
Berkeley, CA
Doors open at 9:00 AM
Meeting starts at 10:00 AM

Upcoming Events

BAEM meetings 3rd Saturday of the month

- February 16, 2019 @GGLS, Tilden Park
- March 16, 2019 @GGLS, Tilden Park
- April 20, 2019 @ MoAH, Palo Alto

MEETING PLACE FOR February 16th

We will meet this month (February) at the Golden Gate Live Steamers meeting room in Tilden Regional Park, Berkeley, CA.

MEETING NOTES

January 19, 2019

Mike Byrne standing in for Bob Kradjian

BAEM meeting was held at the Museum of American History (MOAH) in Palo Alto.

Paul has exchanged email with Bob Kradjian and we understand Bob is slowly recovering and hopes to be able to attend the April meeting.

Look ahead schedule showing meeting locations thru 2019 has also been posted.

VISITORS: There were no visitors or new members at the January meeting..

FIRST POPS: None to report..

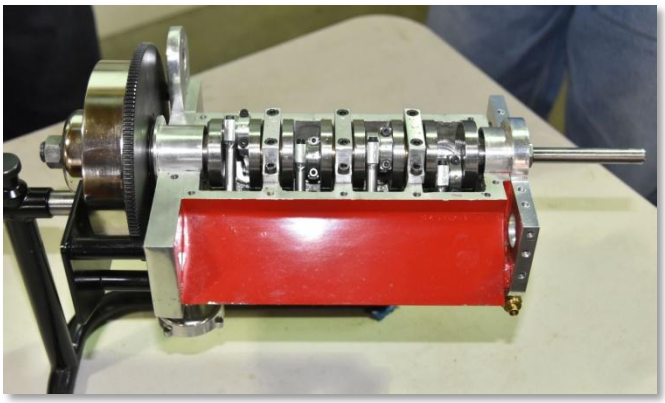
TREASURER'S REPORT:

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

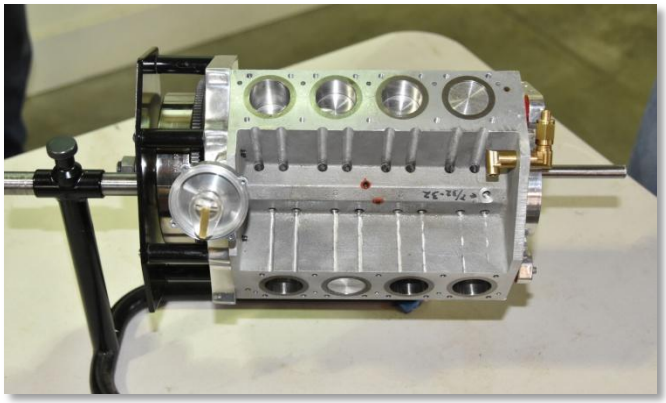
Paul mentioned that MOAH had not been "charging" for use of the meeting room but that the club had made a donation. It was suggested and agreed that we send the $300 for 2019 (works out to $50 per meeting)..

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

BITS AND PIECES



Dwight had a V-8 project well underway that he passed it on to Paul for completion. Paul brought it in and described some of his cleanup efforts.

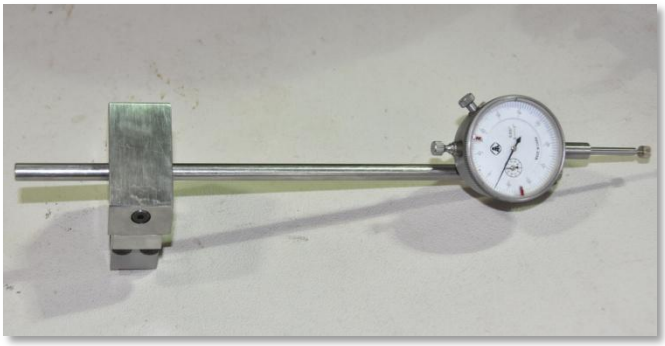


Dwight's V8 "valley view".

Carl Wilson showed a spin indexer he had reworked by reversing the spindle for better operability.

Ken Brunshill showed a set of tap/hole charts that he had made and had laminated. PDF of the charts set is available on the club web site (www.baemclub.com/Images/brunshill_drill_guide.pdf). Copy is attached.

Mike Rehmus passed out a flyer regarding a Napa machine shop that is liquidating.



Jerry Franklin showed a shop made clamp fixture for holding a dial indicator for measuring lathe carriage movement.

TECH TOPIC

Steve Hazelton and Mike Rehmus suggested a tech topic on ways to transfer large computer files such as videos. Mike Byrne provided a short briefing on using operating system utilities, web browsers, file transfer protocol, and cloud servers to overcome 25 megabyte limitations of some email servers.

KEN'S TAP/CLEARANCE DRILL CHART 1/20/2019

	Thread	Actual size (.XX mm) Max O.D. Inch	Max O.D. mm	Tap Drill 50% Inch	Tap Drill 50% SAE Drill	Tap Drill 50% Metric Drill	Sizes are standard commercially available drill sizes. (Predominantly Inch sizes.) Tap Drill 75% Inch	Tap Drill 75% SAE Drill	Tap Drill 75% Metric Drill	Clearance Hole Size Inch	Clearance Hole Size SAE Drill	Clearance Hole Size Metric Drill	Close Fit Hole size Inch	Close Fit Hole size SAE Drill	Close Fit Hole size Metric Drill
MODEL	3/16-40 MPT	0.1875	4.76	Not Recommended			0.1540	#23	.390 mm	0.2040	#6	4.50 mm	0.1850	#13	4.70 mm
USS NC	10-24	0.1900	4.83 mm	0.1610	#20	4.10 mm	0.1610	#20	4.10 mm	0.2040	#6	5.20 mm	0.1935	#10	5.00 mm
SAE NF	10-32			0.1700	#18	4.30 mm	0.1590	#21							
METRIC	M5 X 1.0	0.1969	5.00 mm	0.1719	11/64"	4.40 mm	0.1590	#21	4.10 mm	0.1850	#13	4.70 mm	0.1770	#16	4.50 mm
	M5 X .9			0.1730	#17		0.1610	#20							
	M5 X .8			0.1770	#16	4.50 mm	0.1660	#19	4.20 mm						
USS NC	12-24	0.2160	5.49 mm	0.1890	#12	4.80 mm	0.1770	#16	4.50 mm	0.2280	#1	5.80 mm	0.2210	#2	5.60 mm
SAE NF	12-28			0.1935	#10	5.00 mm	0.1820	#14	4.70 mm						
METRIC	M6 X 1.0	0.2362	6.00 mm	0.2090	#4	5.30 mm	0.1990	#8	5.10 mm	0.2570	F	6.50 mm	0.2420	C	6.20 mm
	M6 X .75			0.2187	7/32"	5.50 mm	0.2090	#4	5.30 mm						
USS NC	1/4-20	0.2500	6.35 mm	0.2187	7/32"	5.50 mm	0.2010	#7	5.30 mm	0.2656	17/64"	6.80 mm	0.2570	F	6.40 mm
SAE NF	1/4-24			0.2280	#1	5.80 mm	0.2130	#3	5.40 mm						
MODEL	1/4-40 MPT	0.2500	6.35 mm	Not Recommended			0.2055	#5	5.20 mm	0.2656	17/64"	6.80 mm	0.2570	F	6.40 mm
METRIC	M7 X 1.0	0.2756	7.00 mm	0.2500	E - 1/4"	6.40 mm	0.2380	B	6.00 mm	0.3020	L	7.70 mm	0.2810	K	7.20 mm
	M7 X .75			0.2570	F	6.50 mm	0.2460	D	6.30 mm						
USS NC	5/16-18	0.3125	7.90 mm	0.2770	J	7.00 mm	0.2570	F	6.50 mm	0.3320	Q	8.50 mm	0.3230	P	8.20 mm
SAE NF	5/16-24			0.2812	9/32"	7.20 mm	0.2720	I	6.90 mm						
MODEL	5/16-27 MPT	0.3125	7.94 mm	Not Recommended			0.2570	F	6.40 mm	0.3320	Q	8.50 mm	0.3230	P	8.20 mm
METRIC	M8 X 1.25	0.3150	8.00 mm	0.2770	J	7.00 mm	0.2660	H	6.80 mm	0.3281	21/64"	8.20 mm	0.3230	P	8.20 mm
	M8 X 1.0			0.2900	L	7.40 mm	0.2770	J	7.00 mm						
	M9 X 1.25	0.3543	9.00 mm	0.3230	P	8.20 mm	0.3020	N	8.20 mm	0.3750	3/8"	9.50 mm	0.3680	U	9.40 mm
	M9 X 1.0			0.3281	21/64"	8.10 mm	0.3160	O	8.00 mm						
USS NC	3/8-16	0.3750	9.53 mm	0.3320	Q	8.50 mm	0.3125	5/16"	8.00 mm	0.3970	X	10.10 mm	0.3770	V	9.60 mm
SAE NF	3/8-24			0.3480	S	8.80 mm	0.3320	Q	8.50 mm						
METRIC	M10 X 1.5	0.3937	10.00 mm	0.3580	T	9.10 mm	0.3390	R	8.60 mm	0.4219	27/64"	10.70 mm	0.4130	Z	10.50 mm
	M10 X 1.25			0.3594	23/64"		0.3437	11/32"	8.70 mm						
	M10 X 1.0			0.3680	U	9.40 mm	0.3580	T	9.10 mm						
	M11 X 1.5	0.4331	11	0.3970	X	10.00 mm	0.3750	3/8"	9.50 mm	0.4687	15/32"	11.90 mm	0.4531	29/64"	11.60 mm
USS NC	7/16-14	0.4375	11.11 mm	0.3906	25/64"	9.90 mm	0.3680	U	9.40 mm	0.4687	15/32"	11.90 mm	0.4531	29/64"	11.40 mm
SAE NF	7/16-20			0.4062	13/32"	10.30 mm	0.3906	25/64"	9.90 mm						
METRIC	M12 X 1.75	.4724 mm	12.00 mm	0.4219	27/64"	10.70 mm	0.4062	13/32"	10.30 mm	0.5000	1/2"	12.70 mm	0.4375	7/16"	11.10 mm
	M12 X 1.5			0.4375	7/16"	10.80 mm	0.4130	Z	10.50 mm						
	M12 X 1.25						0.4219	27/64"	10.70 mm						
USS NC	1/2-13	0.5000	12.70 mm	0.4531	29/64"	11.50 mm	0.4219	27/64"	10.70 mm	0.5312	17/32"	13.50 mm	0.5156	33/64"	13.10 mm
SAE NF	1/2-20			0.4687	15/32"	11.90 mm	0.4531	29/64"	11.50 mm						

Tap Drill sizes as recommended

Selections made from:
Little Machine Shop 2019
C.W. Mardel 1960
Greenfield Drill 2019
21st Machinerys Handbook
Ken's experience

Clerance Drill sizes:
Clearance avg +.010-.015
Close Fit avg +.005-.010