Bay Area Engine Modelers Club, Branch 57 of EDGE&TA

The Crank Calls

August 2014

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MEMBERSHIP $25.00 US
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NEXT MEETING
August 16, 2014 at
Chabot College, building 1500
25555 Hesperian Blvd, Hayward 94545
Doors open at **9:00 AM**
Meeting starts at **10:00 AM**

Upcoming Events

BAEM meetings: 3rd Saturday of the month
Remember our club meeting on August 16th to get ready for our August 22nd to 24th WEME show!

WEME Show at Goodguys at the Pleasanton Fairgrounds - August 22 - 24

MEETING NOTES

July 19, 2014
Bob Kradjian

President, Don Jones called the meeting to order. He gave us a brief run-down on his absence at the last meeting. It seems his rev limiter "got stuck on off" and ran away. Not only that, his manifold pressure red lined. A pit stop for appropriate IV meds and he's back in service, good as new.

VISITORS: George Spain made the trip down from Napa and he, and his engine, will be reported below.

FIRST POPS: There were no first pops, but there was a first whizz. See Wes Wagnon's report below.

Webmaster Issue - Jim Piazza needed relief as web master after many years of devoted work. Mike Byrne has the computer skills and a giving heart. He has stepped up to spell Jim. Many thanks to both!

EVENTS: Only the WEME show in late August is scheduled at present. John will automatically assign last year's table spaces to make the sign-up easier. All new table requests will be welcome. Randall Cox and John Vietti all the way from Wyoming will be welcomed. Mike Cooper will be back with a new sculpture. It is reported to be ten feet long and to have multiple engines. What?

John Gilmore is in contact with the Good Guy's folks. They are pleased that the tank group will be back with ten small tanks for the kids to bash around.

Following our showing at the Blackhawk Auto Museum on Father's Day, the museum directors have invited us back for their Post Pebble Beach Open House. This is a nice event; we have participated in three previous years. The date is: Monday August 18. This would be two days after our August pre-WEME club meeting and just two days before Pleasanton WEME set up. A busy time for sure. Is anybody interested?

Al Aldrich, George Gravatt, and Ken Hurst made a successful appearance at a recent Napa show.

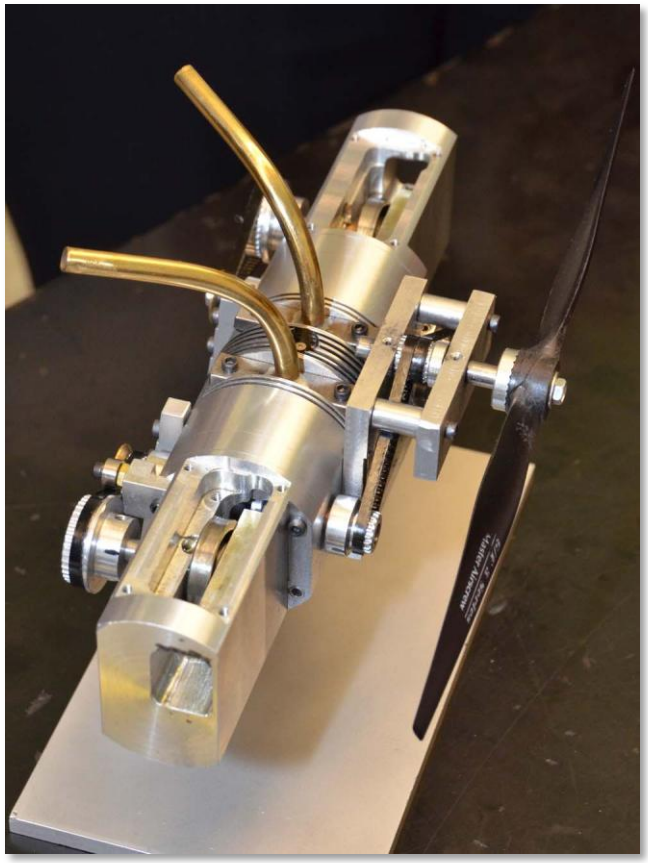
Another reminder, the Ironstone Concours d'Elegance on September 27, following our WEME show has invited our participation again. This show is in Murphys, California. It would require an overnight stay to avoid an early morning trip from the Bay Area. If interested, please let Bob Kradjian know.

TREASURER'S REPORT:. As reported last month, the insurance issue has been resolved. Thanks to John Gilmore and Mike Rehmus for their efforts.

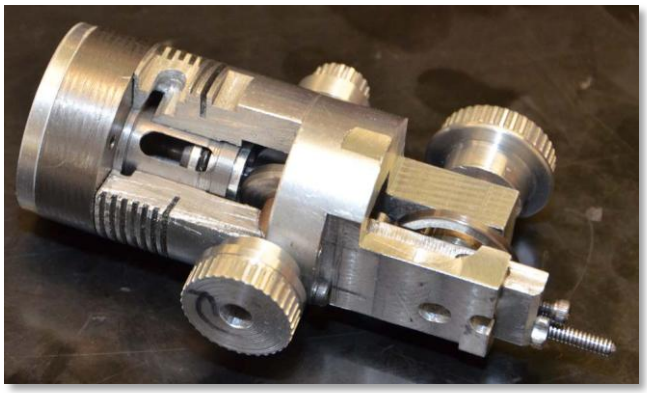
Club dues are payable. Please remit dues to treasurer John Gilmore at 1414 Linton Place, Martinez, 94553.

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

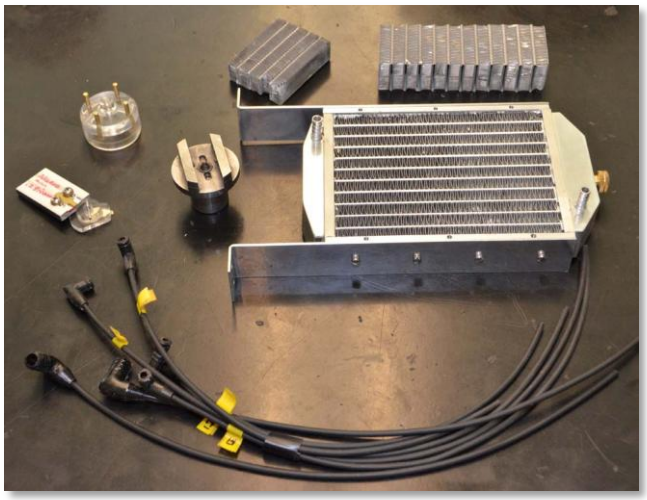
BITS AND PIECES:



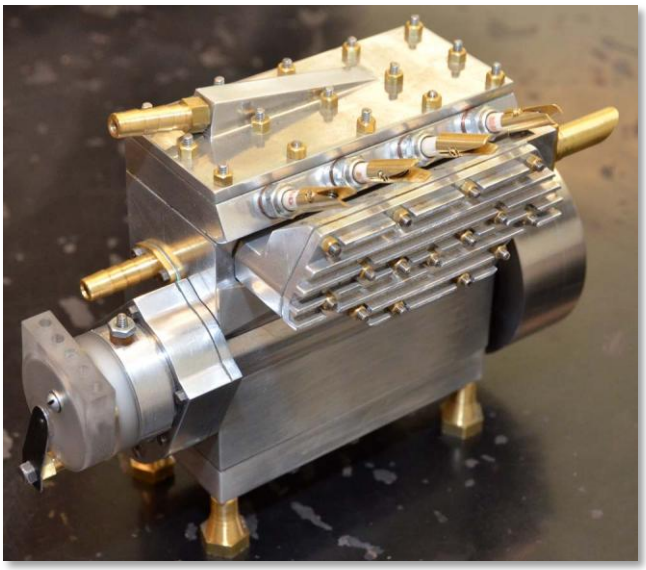
George Spain made his first visit a memorable one. He is a mechanic who started his craft at age thirteen. His first engine project is an ambitious one. It is an original, opposed-piston, sleeve-valve engine with desmodromic actuation of the sleeves.



The desmodromic feature uses a disc with a slot the thickness of the follower to actuate the sleeve movement. A spring-load presses the valve against the cam with only a 0.002" heel gap. George plans to use a Traxxas carburetor with an Amal-style slide. Secretary's note: I believe that all the Traxxas engines are two-cycle and nitro-based. These carburetors are composites of metal and plastic. If the plastic is the same as that in the Perry carburetors, the use of gasoline will cause the rapid swelling of the plastic body. Those of us who are using Perry carbs had to machine an aluminum body to house the internal components.

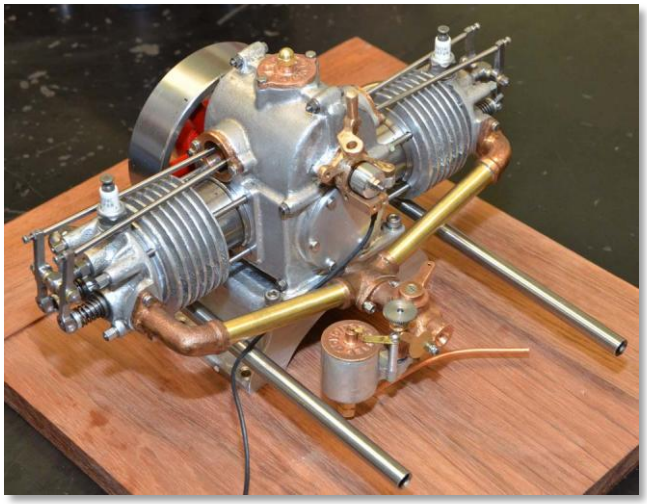


Dwight Giles has built another radiator "all glued together" with LockTite HP-120. These tiny marvels require no soldering or brazing. The temperature range is more than adequate and these adhesives represent a modern solution to an old problem. These epoxies require some learning and a special applicator.



Joel Cohen continues his steady progress on the 15 cc Seal engine, this one machined from solid. It is developing into a lovely engine. His fit and finish is excellent. He is working on a carburetor now based on a gifted carb from Dick Pretel. When completed, this will be a largely original engine based on the English design.

Jim Freel told us of his cam grinding experiences at Dwight's shop with additional supervision by John Gilmore. The cam is for his ongoing Black Widow V-8 build. He showed us the very nice air cleaner box and wondered how he could keep the high gloss intact on the polished aluminum. He was given a clear recommendation from the group to chrome plate the aluminum pieces. An alternate suggestion would be to use a clear anodize, but that process would change the color. The blower is nicely anodized in black. The linkage works smoothly with stainless steel and shoulder bolts. A check valve in the fuel line and a provision for priming the engine was suggested.

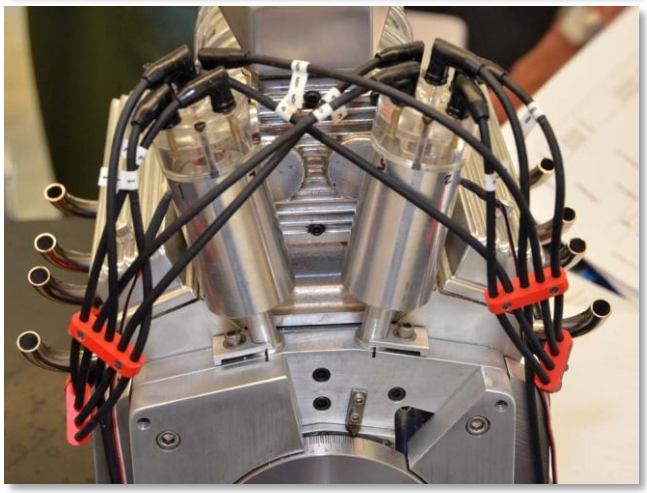


Paul Denham is now using O-Rings on his Coles' twin engine after problems with cast iron rings. He says: "It runs!" However, the compression is not great. He is also having problems with sealing his valves. He tried several grinding compounds and finally settled on "Bar Keeper's Friend" which seems to work well. Green and yellow "Timesaver" compounds were discussed. This is available from McMasters or MSC. A cork float for the carb provided an adventure that he finally solved with a gas-proof coating paint. The carburetor does not allow for any mid range transition. He is using a CDI ignition and a wasted spark arrangement that works well. The engine does run but will need more refinement. The problem of needle valve taper was broached. It seems that sharp tapers create less critical settings than a very long and gentle taper.

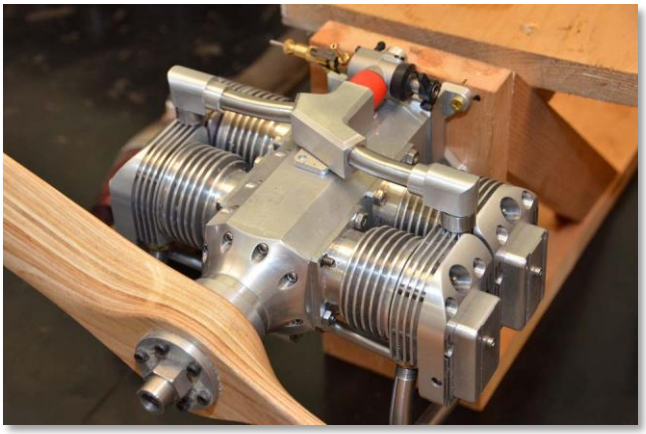
Last meeting, Steve Jasik showed us a 20X magnifier he bought on-line from dx.com. These are very inexpensive, less than $10.00, and ships from Hong Kong. I decided to try it, so consider this a product review. The item cost came to less than six dollars, post paid. It arrived, rather crumpled, in a flimsy paper envelope in about two weeks. The Catalog number is: NO. 9892A-II. The actual device was only slightly damaged despite the inadequate

packing. Two small and surprisingly bright LED's are flanking the two oculars. These "eyeflaps" hinge upward independently. The eyepieces also slide left and right to adjust for inter pupillary distance. Now, does it work? No, not really! The focal length for the 20X lens is about 5/8ths of an inch. Any hope for binocular, stereovision is only a dream. However, its limited field is, indeed, 20 X, and sharp. Conclusion, buy only as a curiosity and for the two nice little lights. A question for all of us--- how can they build this stuff, send it halfway around the world, and still make a profit?

Mike Byrne showed us his pulse jet, a relic from many years ago. So long ago, that he was in high school at the time! It cost only three dollars, but that was because of a long defect in the pipe. A grizzled old welder simply welded the defect in the paper-thin material. Following this, he was able to coax a few flights out of it, but was counseled by the police concerning the noise level. I recall hearing and seeing a Dyna Jet fly in Lakewood, California in 1948. It was on a lighted softball diamond in the evening after the game. The sound was so incredibly loud that lights were flashing on in all the surrounding homes, followed shortly by red lights and sirens. No more jets in Lakewood after that memorable evening!

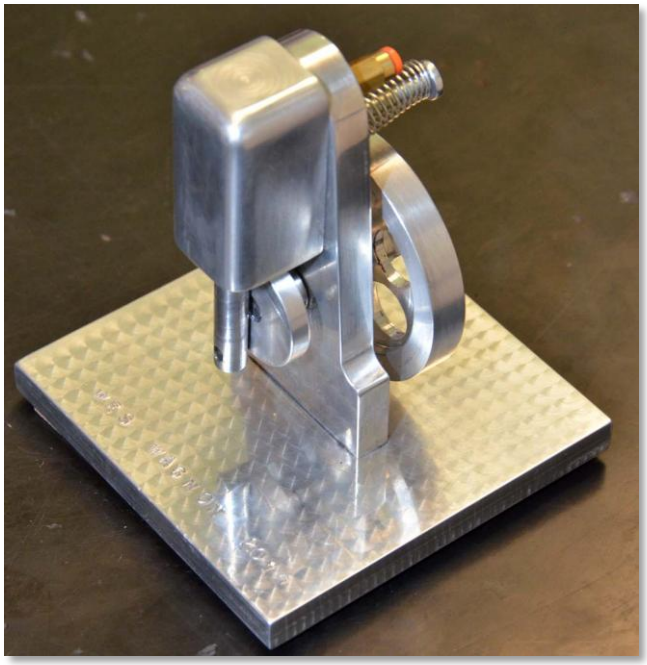


John Gilmore's V-8 project is getting close to the finish line. He spun the engine with a drill and was pleased to find that there was no interference and it turns freely. He is using a borrowed blower from Ken and Dwight to get the correct fittings and clearances. The twin distributor feature caused a good bit of added difficulty, but he was able to finally settle the timing features. Jim Freel is working on the blower that will be eventually fitted to John's engine. The whole project is impressive!

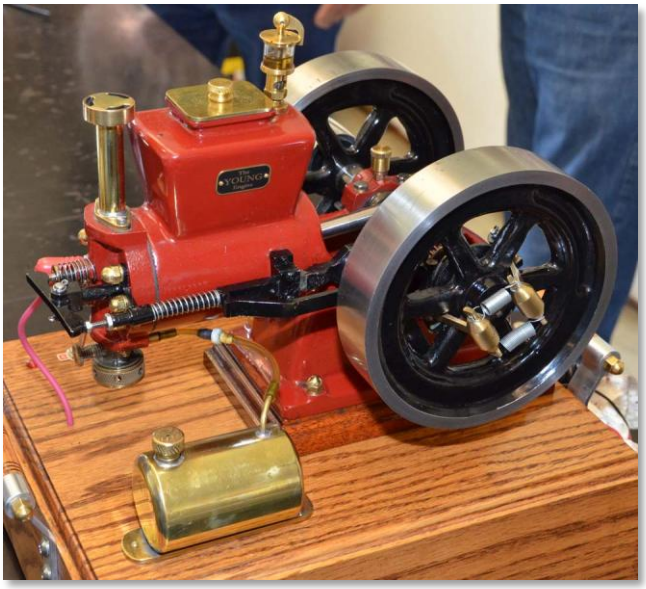


Jaime Quevedo has deftly re-engineered a German flat six air-cooled "boxer" into a four-cylinder version. Bore and stroke are both 25 mm. The internal tolerances are very close in this compact aircraft style engine. He used the designer's protocol for piston rings, but has not been happy with the results so far. The design uses a unique split crankshaft. The split in the crank is cradled and supported within the center bearing.

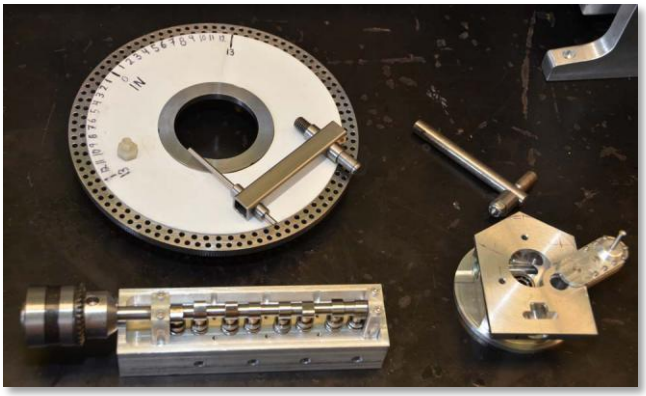
John Meridith is tackling two Eric Whittle designs at the same time. One is a flat four with a half-inch bore. The other is a single cylinder. Since they share a good deal of the parts, he is building them simultaneously. He needed 64 pitch and 32 pitch gears. He consulted with Jim Moyers at our last WEME show who recommended making a hobber and then cutting gears in his own shop. Jim also told John of the S.I.C. article detailing the process. He modified a thread cutting bit with a carbide grinder. This bit worked for all the gears. Both of these tiny engines are at John's usual very high standard of fit and finish. Those of us who recall the PRIME shows in Eugene were treated to the sight and sound of Eric Whittle's tiny engines just screaming at 10,000 rpm or more.



Wes Wagnon has finished his first engine, an air-powered "wobbler". He even furnished an engine turned base for a nice appearance. He fired it up with a compressed air can. He recommends such a simple engine for a pleasant first project. Welcome to the club, Wes!



Don Jones ran his "raffle engine" for us. This engine was donated to the club by a member in Modesto. Dwight and George completely rebuilt it and it was then auctioned to our group where Don purchased it. Don has shown it at most of our engine shows. It's a sweet runner that will chuff away all day with only an occasional spark plug change.



Peter Lawrence has resurfaced! This time, with a more modest four-cylinder proofing version of his longstanding Merlin V-12 project. He completed a camshaft for the four and related his original methods for fashioning it. He elected to go with two, instead of four, valves per cylinder. He has not completely abandoned the V-12, developing the "wheel case" for the supercharger drive. He is developing a camshaft grinder based on member Hettinger's design. This was made on a lathe using a Dumore grinder and indexing the camshaft being held by a collet and supported by a tailstock. Discussion centered around angling tool post grinding wheels for clearance, coolant for grinding the lobes, and finishing jigs for final filing of lobe contours.

Don Jones told us his of his woes with stale gasoline. It caused major disruptions in his "weed-whacker' and mower engines. Both requiring carb rebuilds or in two cases, replacement. A spirited discussion concerning the deficiencies of modern auto fuels followed. It seems that our current supply will result in degradation and gumming with clogging in much less than a year.

ERC (Engine Research Company of San Leandro) was mentioned as a source of custom fuels. These can be leaded or non-leaded, and the octane ratings range from 94 to 118. For details, see: ercracingfuels.com.

On the Peninsula, Sunoco racing fuels are available at King's Union 76 at 975 Woodside Road, Redwood City. Phone: (650) 364-9620.

Another 76 station with racing fuel is at Almaden Expressway and Foxworthy. Be prepared to part with seven to eight dollars per gallon for these elixirs.

Dick Pretel has done a good bit of research on these fuels several years ago. He even consulted with a racing fuel engineer. That expert said that our engine requirements are not for high octane. He prefers the lower octane fuels blended with one to two ounces per gallon of Red Line Fuel Injector Cleaner, Techron, or Marvel Mystery Oil.

Remember our club meeting on August 16th to get ready for our August 22nd to 24th WEME show!

WESTERN ENGINE & MODEL EXHIBITION

Print this form, fill it in and send it to:

WEME
1521 Queenstown Ct.
Sunnyvale, CA 94087

If you have any questions please contact the Exhibit Coordinator at
opoconnor@aol.com or 408-733-3710

Name: _____

Address: _____

City _____ State_____ ZIP_____

Telephone _____ _____

Email Address _____

Guest Name _____(Limit one per exhibitor)

Are you a member of a club? _____

If yes, which club_____

Check the amount of table space you will need. Tables are approximately 8 feet long and 30 inches wide.

____Half Table ____One Table ____One and a half Tables ____Two Tables ____Three tables

note that the show management reserves the right to limit the amount of space for each exhibitor.

Additional needs: _____Air _____Electricity _____Other

Please indicate the type of models you will be displaying

_____

_____

Please read the WEME Exhibitor Information pages at **http://www.wemeshow.com/**