

The Crank Calls



June 2012

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MEMBERSHIP \$25.00 US

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NEXT MEETING

June 16, 2012 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:
June 16, 2012
July 21, 2012
Palo Alto Concours, June 24
WEME August 24-26, 2012 @Goodguys

MEETING NOTES

May 19, 2012

Bob Kradjian, Secretary

President Don Jones called the meeting to order promptly at 10 am.

NEW MEMBERS:

There were no visitors or new members

ACTIVITIES:

The Palo Alto Concours is just around the corner at June 24. We have not received the passes as of this writing. Last year we simply identified ourselves at the gate and received our passes and lanyard. We hope to have Jay Eitel's beautiful little 1937 Ford original car on the field and hopefully near our tables. I'll be in touch with the exhibitors as the date approaches.

WEME Report:

The WEME registration forms are available. Fill one out early to spare our workers congestion in the last few days. These forms are also available on line. Go to (wemeshow.com).

The boat pond project has been shelved for this year.

Mike Rehmus has suggested a time limit for running the larger, noisier engines during the show. Fifteen seconds total, only five seconds at high throttle settings (also known as: Vroom, Vroom, Vroom!). Mike is not the bad guy on this issue; there have been many complaints from all corners. It is true that all conversations are on hold when the "big dogs bark".

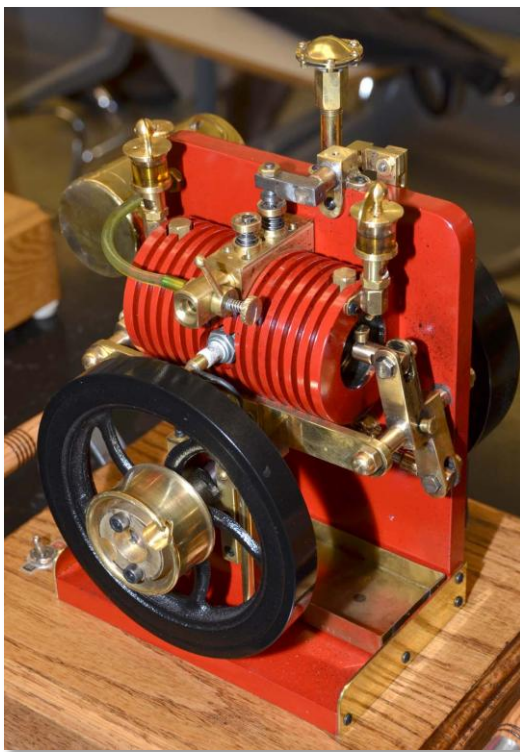
After much consideration Jim Moyer has decided that he will not be able to attend the August show. We would love to have him next year with his fabulous, tiny engines. Mike may make up posters with his little V-8 on it.

Gary Conley is still weighing his options on coming to the show.



Carl Wilson's highly popular "Wooden Wobbler" is being revised for the show. Possibly, a plastic cylinder, or even a foot-powered oscillating bellows for the kids to operate is being considered.

BITS AND PIECES



George Gravatt's opposed-piston four-cycle engine promptly fired up and idled down nicely. Recall that this was an entirely original design, but based on a

Rootes opposed-piston display that Pat O'Connor built. You just have to see this beauty to fully appreciate it. It's bright red with huge black flywheels and a lot of polished brass. All of this rests on his usual fine oak box with finger-jointed corners.

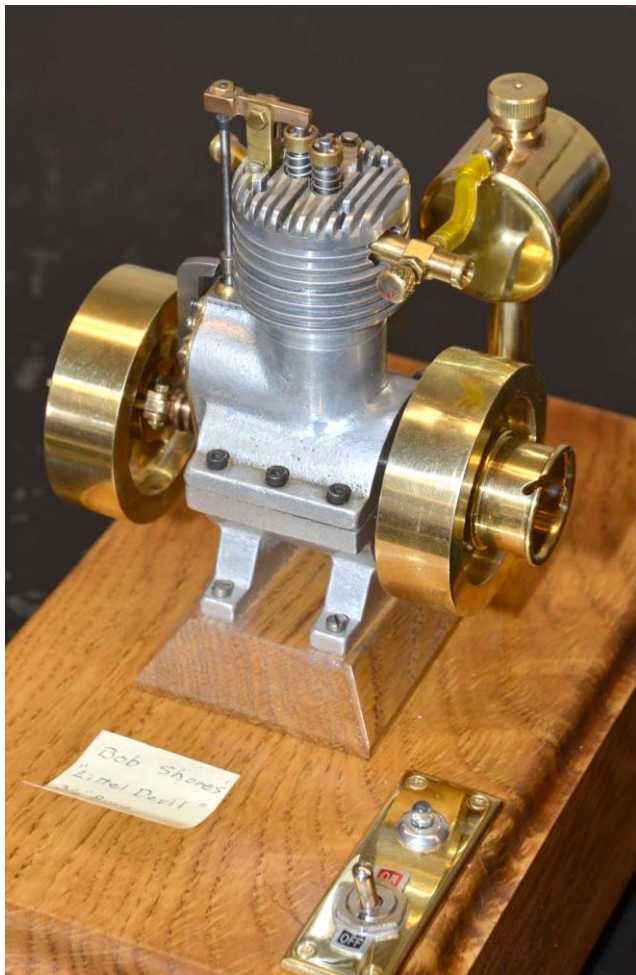


Jim Freel displayed his beautiful sub-assemblies for the Black Widow V-8. This included a very pretty six-bladed fan with red anodized blades.

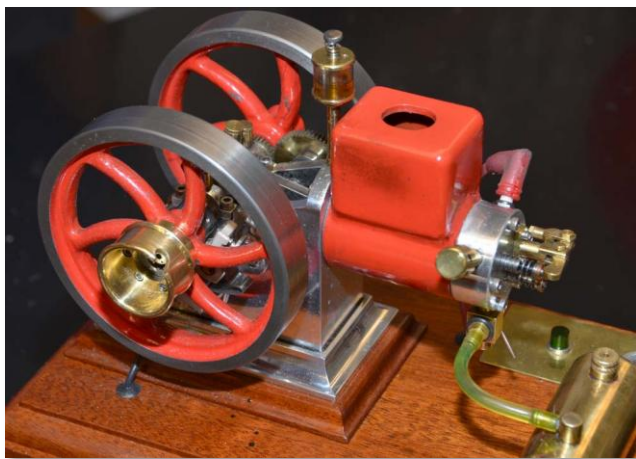
The other assembly is the piston, connecting rod, and wrist pin. The rod is anodized blue.



The wrist pin has nice Teflon pads at each end. He has also finished valves, guides, and seats. His philosophy seems to be that if he does all the small stuff first, he's more likely to finish the entire project. He uses old-fashioned high-speed steel for his cutting tools.

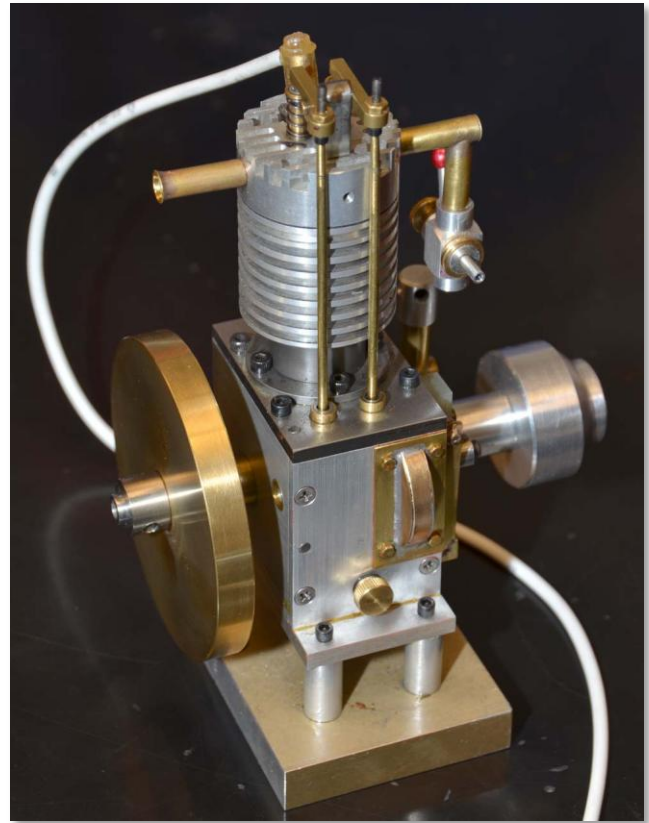


Dwight Giles built a Bob Shore's design back in 2005. He built a new gas tank and modified the flyweights. The only remaining work to be done is the Hall-Effect timer and electrics.

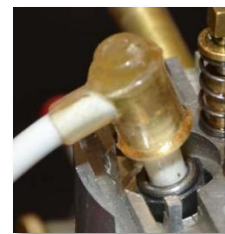
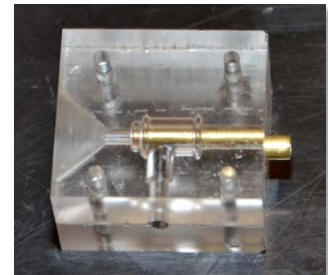


John Gilmore showed his nifty Upshur Farm Engine, a horizontal single. He consulted with our hit and miss specialist, George Gravatt, for modifications that made it a solid runner. The

changes were mainly in the electrical system. Although this was his first miniature IC engine, it has the fine finish we've come to expect from John.



Jim Piazza displayed another Upshur design, this one a vertical single. He fashioned a new fuel tank. It's a good runner and uses Dwight's piston rings.



Jim made a mold for the spark plug boot of a rubber material from U.S. Composites labeled 7560. He used Polease 2300 mold release. He used a vacuum cleaner for a suction device.

Steve Jasik fashioned a pair of aluminum "Spiders" for a six-inch three-jaw chuck. It has three imbedded magnets to hold it in correct position on the chuck face. This saves one from endless fiddling with parallels. Steve built two, one for himself, and the other for sale. It promptly was sold during the meeting.

TECH TOPIC

Carl Wilson



Dwight Giles needed two small eye bolts to anchor the ends of the governor springs on his hit-n-miss engine by Bob Shores. Unfortunately the eye bolt is not oriented very well in this photo so you might not recognize it immediately. It is the insert in the photo above. These notes will detail the construction of the eye bolt in such a way that you can mentally envision its finished shape.

An eye bolt needs a threaded end and Dwight started with a stainless steel 2-56 flat head machine screw. He used a 5/32" ball end mill to form a part spherical surface in the screw head. This is visible at the left in the photo below. Next he flattened a bit of 1/32" diameter silver solder and cut it into small squares. The eye was made from a stock brass ball. Dwight made the body of the screw from stainless steel for strength and the eye of brass for appearance.

The bits and pieces were assembled with silver solder and can be seen a bit to the left of center in both photos in soldered and cleaned up condition. A bit of flux was placed on the pieces and they were assembled vertically – with the ball on top of the screw and the little square of silver solder between. Dwight held the torch some distance away until the flux had dried – this prevents the high velocity gas from blowing the ball off the screw. When the silver melts the ball settles gracefully into its seat and all is well.

A bit of machining was next: two parallel flats were milled on the head of the eye bolt to leave a ball shaped tab and a hole was drilled through the

center of the tab. Job complete and it made a neat spring anchor.

