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

The Crank Calls

October 2011

President	Don Jones	(510) 566-3153	dj712@sbcglobal.net
Secretary	Bob Kradjian		bkradjian@comcast.net
Treasurer	Ken Hurst	(707) 257-2481	icengine@comcast.net
Events	Ken Hurst	(707) 257-2481	icengine@comcast.net
Tech Topics	Carl Wilson		toolcarl@comcast.net
Editor/Printer	Larry Zurbrick	(408) 448-5752	lz_m57@pacbell.net

MEMBERSHIP $25.00 US
Contact Ken Hurst at
(707) 257-2481
2650 Indiana Street
Napa, CA 94558

NEXT MEETING
October 15, 2011 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:
November 19, 2011
December 10, 2011

MEETING NOTES

September 17, 2011
Bob Kradjian, Secretary

President Don Jones called the meeting to order at 10:00 a.m.

New member: Welcome to James Freel. James has a 25-year background in machining at Moffett Field and the Ames Research Center. He's starting with an ambitious project, the new casting set for the Black Widow V-8. With Ken and Dwight for support, this should be a winner. He will have John Gilmore working alongside on his own Black Widow project.

Visitors: Welcome to visitor John Matsushima who met up with us at the Quail Lodge show in Carmel Valley. John is based in Sunnyvale and has a rich history in racing with the Toyota Motorsports F-1 Team where he is a senior engineer in advanced strategies and engine development. We look forward to his insights on racing engines.

Bill White a mold maker who in nearing retirement and is a friend of Don Jones has visited us before and is interested in getting into modeling. He says some of us look about the same; hey, that's good news.

John Palmer and Pat O'Connor reported on the San Jose old timer Auto Show and had some nifty slides to show us. There was terrific variety of old cars and particularly the 1911 National that won the second 500-mile race at Indianapolis in 1912. The driver was Joe Dawson. The engine is a huge four cylinder of about 460 cubic inches in a flat-head arrangement. It was just the next year that the Peugeot engine heralded the modern era of racing design. Anthony Rhodes was correct; the winner of the first Indy 500 was Ray Harroun in a 1911 Marmon.

The Pacific Coast Machine Tool Show last month was, sadly, very small and poorly attended.

Treasurer's Report: Ken Hurst reports that we are solvent. Speaking of money, our President, Don

Jones, tells us that he has a new position as Production Manager at Le Boulanger in Sunnyvale.

WEME 2011 Show Report: The following is short piece written by my brother-in-law who visited the show with his daughter.

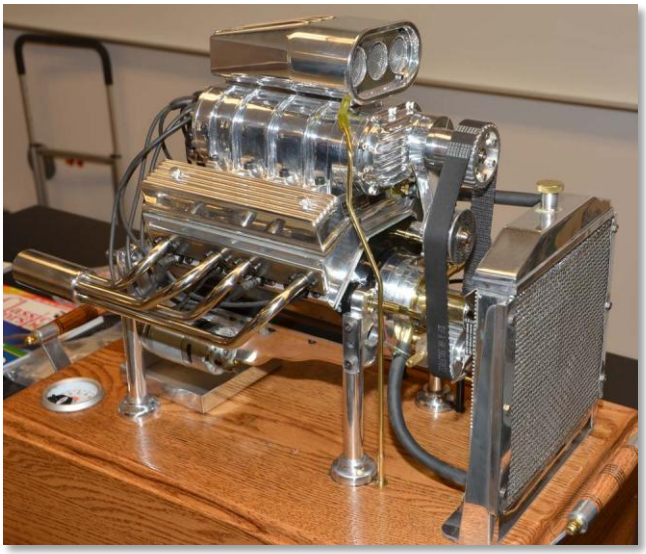
The Good Guys car show has thousands of amazing Rods of every imaginable shining configuration. But, the display that was clearly getting the most enthusiasm was the hall wherein dwelt the mighty minis of BAEM! Inside the hallowed hall one found dozens of amazing models and functional engines, and hundreds of grinning, enthused car and engine enthusiasts. The difference in the attitude between the outside areas where people were comparing fancy cars, to the mini-engine area where all were suddenly transformed to the realm of childhood, modeling and then blown away by the intricate and extraordinary nature of craftsmanship and effort. Bob says, for example, that the model of the 1932 Duesenberg car is one of the most extraordinary models in the world! That is some serious modeling and skill.

The club sincerely thanks Dwight Giles's daughter for donating the very clever and attractive pin-on badges.

Discussion about improved signs for next year and the issue of engine noise was discussed at some length. In the Agriculture Hall there is little opportunity to create a "quiet room" and the circus barker effect of a lusty V-8 is really our stock in trade. Probably some urging to keep the motor runs reasonably short is the best we're going to be able to accomplish.

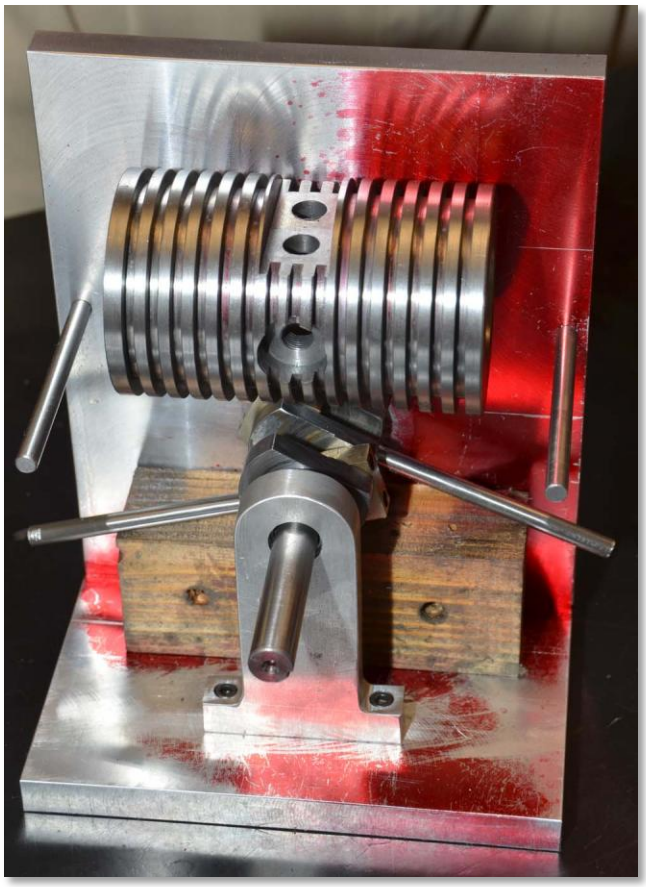
Pat O'Connor related a story in which the Rootes-Lister mock-up led to a pair of visitors becoming acquainted and joining forces. The latter visitors are attempting to restore a Rootes-Lister on the Hornet aircraft carrier and the initial visitor was an expert on those engines. BAEM is glad that we could be of help to the U.S. Navy!

BITS AND PIECES:



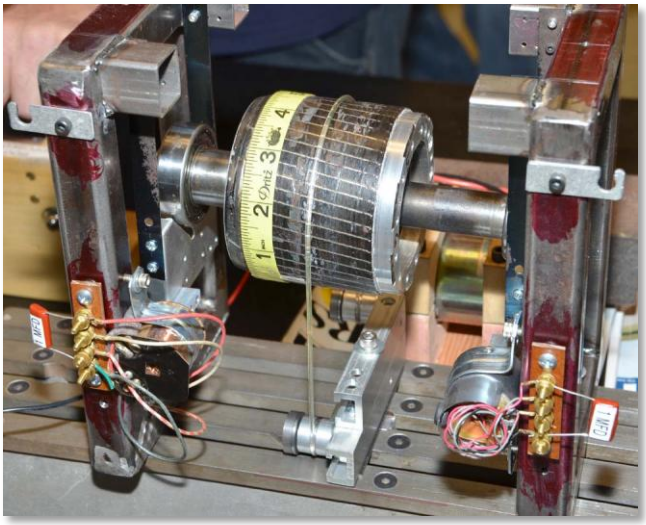
Ken Hurst and Dwight Giles gave us a running demo on the Black Widow V-8 after the meeting. (To see and hear this, go to YouTube under: lilenginebob.) After the WEME show, they disassembled the engine and corrected a smoking problem with green retainer seals and judicious use of Loctite. They plan to change the ratio on the

flywheel gear by going from 128 to 168 teeth. The engine requires some serious twisting it seems. It's going to be fun seeing these engines being built by other modelers.

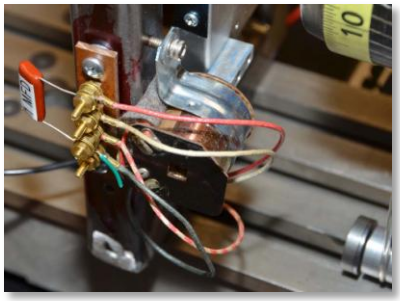


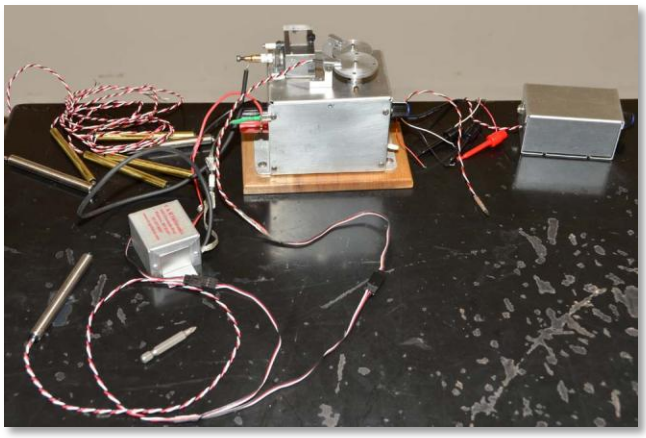
George Gravatt continues to amaze us with his originality and ambitious new projects. His latest is based on Pat O'Connor's Rootes-Lister opposed-piston simulator. The photo will give you an idea of the layout and the clear similarity of the two models. To get a feel for these unusual engines, please check out the many references under Rootes-Lister on Google. Probably the best for operating diagrams is: http://www.oldengine.org/members/diesel/Rootes-ListerTS3/TS3.htm. These devices were fiendishly complicated and clever, typically British y'know.

John Palmer intrigued us with a 1909-patented alligator wrench that set him back two dollars at a swap meet.



Carl Wilson gave a sophisticated and detailed report on his balancing device for electric motor rotors. It is necessary to balance the electric motor rotors so as to minimize the "chatter" on the cam lobes produced by his cam grinding machine. The electric motor vibration causes unwanted movement between the grinding wheel and the cam lobe being ground, resulting in valleys and ridges on the cam profile. The electric motor rotor and shaft bearings are supported in saddles suspended from a set of flexures. The rotor is spun by a separate electric motor driving the rotor to be balanced though a compliant drive belt (the clear O-ring in the photo above) Two telephone ringer solenoids <*See photo to the left. Think Ma Bell black rotary dial telephones – Ed.*> are the pickups for .detecting flexure motion. Carl says he is working on the electronics to trigger a strobe light to indicate the point where to remove material to balance the rotor. A surprise is that even expensive, name brand US-made motors can have severe balance deficiencies when considering high precision grinding operations.





Owen Gehlert has his new line of timing lights ready. <*The timing lights can be seen at the left edge of the photo above. – Ed.*>

Two versions are available. The dynamic version uses a 555 timer to generate a short pulse to flash a white LED from the timing sensor in a running engine. The static version uses an LED to set timing from the ignition sensor when the sensor opens/closes. He will furnish the dynamic version with a choice of bare wires, Deans connector, or Futaba connectors. He also has a universal adapter that will accommodate both.

He has also developed an ignition simulator with variable speed that will mirror a V-8 from idle to 4,000 rpm. <*Top center in photo above. – Ed.*> Hook-up is simple; the white is the sensor lead, red is positive, and black is negative. Another model will measure up to 15,000. Work on his ignition modules is progressing well. Many of us are looking forward to this system as some of the available modules are designed for single cylinder engines and have inadequate heat sinking for high speed, multi-cylinder engines. Owen tells us that one problem is locating a source for coils at a reasonable price. He estimates that the system will be priced in the 50 to 75 dollar range when completed. Information available from:

owen@gdautomation.com

Steve Jasik showed up photos of his milling machine ring light (or halo light). He reports that it works well and—of course—leaves no shadow. See dealextreme.com for more ideas. His relentless struggles to identify air leaks from his compressor will be detailed elsewhere.

CORRESPONDENCE:

Karen and Dave Palmer write:

Not sure if you've gotten an update yet on the GEARS show in Portland, OR, so Dave and I wanted to give you some information for the newsletter. As far as we know, BAEM exhibitors this year included Dave and Karen Palmer, Tom and Eunice Armstrong, Pat and Carolyn O'Connor, Ken Hurst and his wife, and Dwight Giles and his brother. If there was someone else and we didn't mention them, we apologize. BAEM members coming to see the show were Ken McDole, Carl Wilson, Gordon French, and a member from Sacramento whose name Dave did not get. Missing this year were Angela and Dario Mecchi, and Mike and Toni Rehmus. The show was wonderful as always. The GEARS committee said they had 200 more people come through the doors on Saturday than did the previous year. And there were lots of quilts hung in the quilt room as well. We always enjoy visiting and catching up with the clubs up there. And FYI, the dates for the 2012 GEARS show are September 29-30.

Both Dave and Ken Hurst were asked by the GEARS committee to go around to all the exhibits and pick out several to put on the Nominations Table. That did give Dave a chance to see everything, but he said it was one of the hardest things he ever had to do. There were so many beautiful and worthy models to choose from. But they did it.

TECH TOPIC:

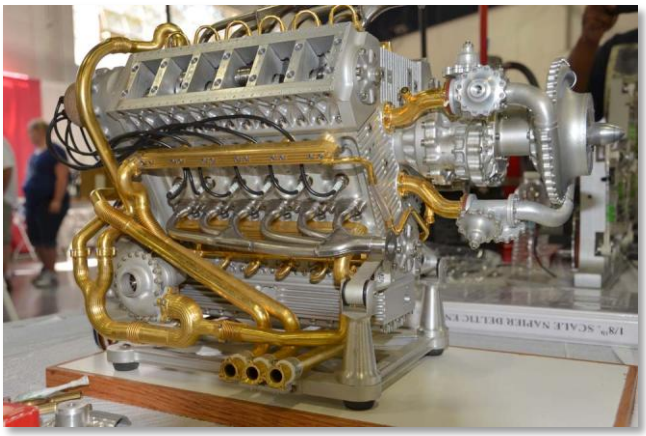
The genesis for this Tech Topic was a once per day cycling of Steve Jasik's shop air compressor when no air was being used. Steve was determined to find and remedy the source of the air leak.

Steve discussed the importance of checking every connection and fitting using either soapy water or a commercially available leak detection fluid such as "Snoop" as shown in the photo above. He mentioned that all fittings including the seal around the clear filter bowl and drain cock should be checked for air leaks. One source of a leak that may be overlooked is the check valve between the compressor and tank assembly pictured third from the left in the bottom row in the photo above.

Steve also recommends the following web site as an example of air compressor trouble shooting help:

http://www.portlandcompressor.com/compressor/trouble-shooting.aspx

WEME 2011 Photos




LittleMachineShop
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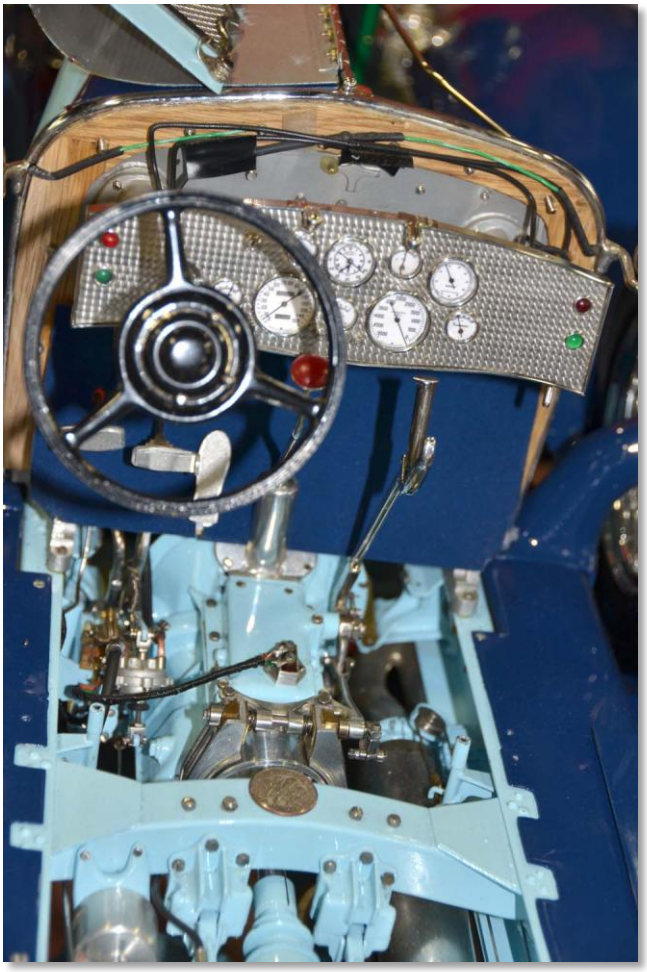


DUESENBERG