

The Crank Calls



June 2010

President	Don Jones	(510) 812-7006	dj712@sbcglobal.net
Secretary	Carl Wilson	(650) 967-7715	talleyho123@yahoo.com
Treasurer	Ken Hurst	(707) 257-2481	icengine@comcast.net
Events	Ken Hurst	(707) 257-2481	icengine@comcast.net
Editor	Larry Zurbrick	(408) 448-5752	lz_m57@pacbell.net
Printer	Larry Zurbrick	(408) 448-5752	lz_m57@pacbell.net

MEMBERSHIP

\$25.00 US

Contact
Ken Hurst at
(707) 257-2481

NEXT MEETING

June 19, 2010 at
Chabot College, **building 1500**
25555 Hesperian Blvd, Hayward 94545
Doors open at 9:00 AM
Meeting starts at 10:00 AM

Upcoming Events

EDGE&TA 50th Anniversary National Show, June 24-27,
Santa Margarita Ranch, CA www.edgeta2010national.com
Palo Alto Concours, June 27
Annual WEME Show July 10 & 11 Veterans Building,
Vallejo, CA
Good Guys Car Show Aug 27-28-29

MEETING NOTES

Carl Wilson 04-17-2010

Guests at the May meeting: Roger Blair and Jay Eitel.

Mike Rehmus brought in the last of the advertising for WEME 2010. He has done an enormous amount of work on the art for the poster, flyer, 6 x 9 card, and business card. It's now our turn to work at distributing these items.

First Pop honors go the Jaime Quevedo for his Sealion. Jaime said he had to make a new crankshaft because he accidentally reversed the first one.

The June meeting will be our annual Swap Meet. Bring the stuff you acquired last year and then decided that you didn't really need, or bring something that you just want to get rid of. And, be sure to go home with something new to you.

Also, the June meeting will be the MegaBirthday celebration for George Gravatt, Chris Leggo and John Palmer. Goodies for all of us to eat!

AND: The June meeting is the end of fiscal year 2009 and club officers will be elected.

WEME 2010: Pat O'Connor asks, maybe I should even say 'pleads:' "Please sign up to exhibit your engines." It takes time and effort to design the layout of the display of engines and it makes life very difficult for

Pat if you wait until the last minute, or even worse, just show up on Friday and say "where is my table".

I'll be putting my Facilities Manager hat on at 1 PM on Friday July 9. This year I will be revising the air system and about 2 PM I will need help for about 30-45 minutes from someone who doesn't mind crawling around on the floor. See me at the June meeting.



From Ken Hurst: This is Jim Kipp's version of a model engine in the photo on Page 1. What you are looking at is a 273 Cu. In. Ford Flathead engine, the block was made in France, the lower end is stronger. Engine was built by Art Crisman of So. Cal. It sounds like it looks. It has 12 volt MSD ignition and 2 single carbs. Jim has a real nice stand for his Ford Flathead with casters and a flawless powder coat of paint.



Members of Bay Area Engine Modelers displayed their engines at Roy Brizio's shop in South San Francisco. Al Aldrich, Dwight Giles and Bob Kradjian are seen in this photo,

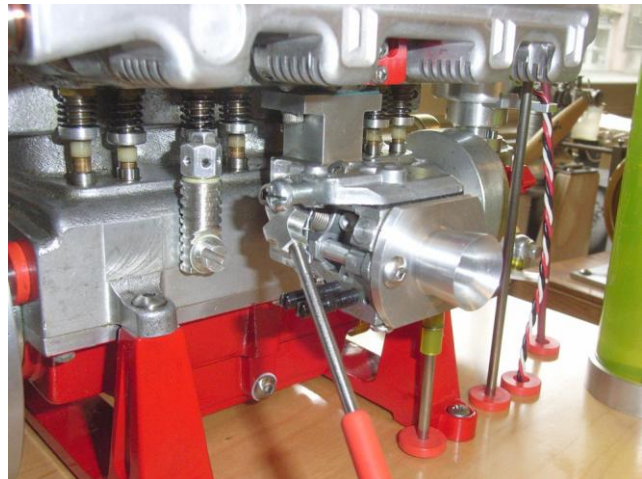


and George Gravatt in this one. Note the location of the tables for BAEM. It was a short trip to the "10000."

Bits and Pieces

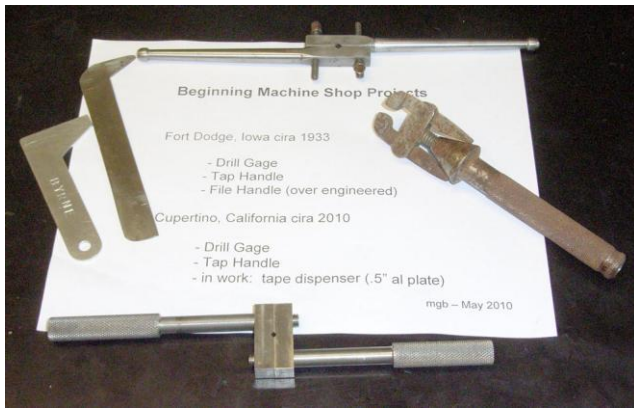


Dick Pretel has once again worked his magic on an engine built by someone else: this time a Wall 4 by Frank Kurtz, an Ampex machinist, now deceased, and a member of BAEM. Dick installed a C&H electronic ignition, a scavenge oil pump feeding into a tank, and a pressure oil pump feeding the bearings in the engine.



This view of the manifold side of the engine shows Dick's meticulous workmanship. The radiator and cooling fan are inside the mounting box.

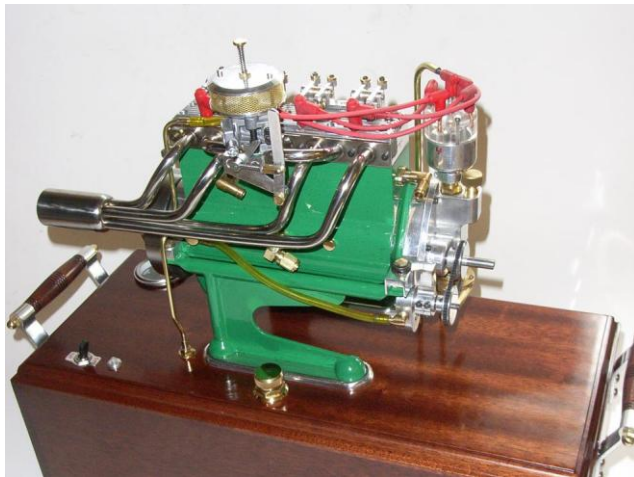




Mike Byrne was given the three uppermost tools by his uncle. Counter-clockwise from the right: an unusual file handle, a tap wrench, and a drill grinding gauge. Mike took some of the machine tool classes at DeAnza Community College and made the drill gauge (far left) and the tap handle at the bottom.



Bob Kradjian owns this “Hoglett” built by Randall Cox. The engine needed some improvements and those were performed by Dwight Giles. Dwight made new pistons and rings to replace the original pistons with Viton O-rings which tended to swell. He also repaired the kick starter, made a new bell for the carburetor and added a fuel tank made by Paul Bennett.



Dwight Giles said that he is a radiator short of a First Pop try on his ½ Black Widow. He has completed the extensive “infrastructure” inside the case and is almost ready to go. Those bright red ignition wires? Custom made by Dwight from test lead wire and a moldable flexible plastic. Dwight made metal patterns for the ends, plastic molds from the patterns, and poured a flexible plastic to form the insulator ends.



Joe Tochtrop acquired a set of drawings for this Leja 4 stroke overhead valve engine, made the patterns and

machined the castings. This engine features a 1 1/8" bore on a 1" stroke for a displacement of 0.99 cu in. Rated at 12500 rpm it delivers a maximum of 0.88 hp.

Announcing
THE
LEJA 4 CYCLE
"The Finest Precision Gas Engine"

★ **DEPENDABLE**
 It starts easy.
 It runs on pure gasoline.

★ **RELIABLE**
 It has undiluted lubrication, and un-polluted carburetion.

★ **POWERFUL**
 Cooler running, higher compression ratio, greater carburetor flexibility at all speeds.



PATENTS PENDING

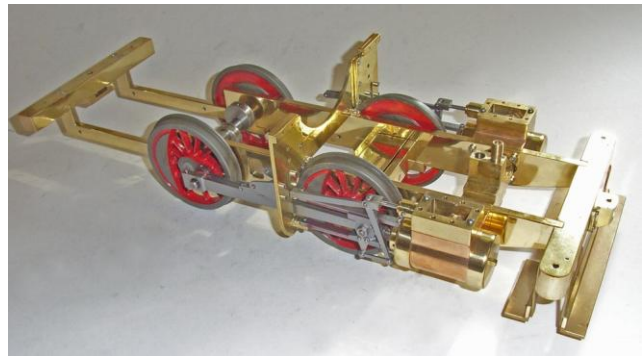
TYPE Valve-in-head
 Valves set at 60° angle. STROKE 1"
 BORE 1.125" WEIGHT 16 oz.
 DISPLACEMENT .99" R.P.M. MAX. 12,500.
 HORSEPOWER .82 at 8,500 R.P.M.

SPECIAL FEATURES

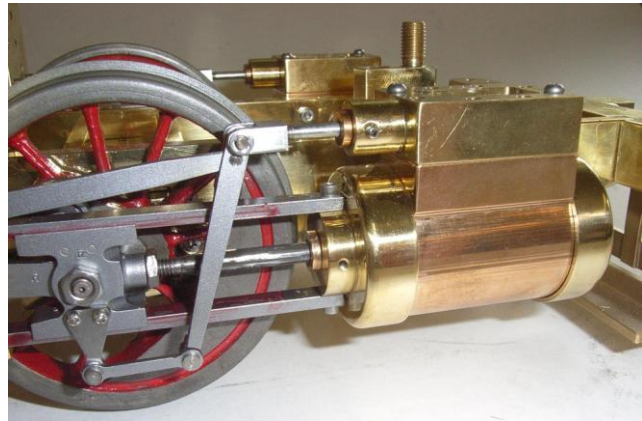
Special Ferrous Alloy Liner. One Piece Cylinder and Crankcase. Hardened and Ground Crankshaft. Crankcase, Cylinder Head, Crankshaft Housing Are All Cast of "Tensulum." All Parts Are Precision "Mated." Simple In Design. Easy to Service.

The LEJA FOUR CYCLE engine was developed after more than 20 years of pioneering in the Model Field. Our experience has served the country in time of need by manufacturing vital engine and aircraft parts. Now we are ready to give you the benefit of our knowledge and experience by producing . . . "The finest precision gas engine."

LEJA ENGINES, Inc.
 2743 West 95th Street Evergreen Park, Ill.



John Gilmore keeps adding parts to his Pennsy A3 switcher. I was going to say that he was "trucking" along but that's not the right word- there are no trucks under it yet; how about "loco-ing" along. He's been accused of being "nuts" (over hot rods) so being loco over locomotives is another possible diagnosis.



John said the making all of the 0.078" diameter pins with 0.012" wide grooves for snap rings was a bit tedious. It's looking good, John.



Ken Hurst took a walk down memory lane with us and described his first engine - a Stirling hot air engine with an 1" bore power cylinder and an 1 1/2" displacer. The displacer cylinder is a Ronson butane can and together the pistons run the engine at 600 rpm. The design was from Home Shop Machinist magazine.

Tech Topic



I left the two photos in close proximity to emphasize that this custom engineered Corvair Monza is a “Q-ship!” The sheet metal and cabin interior looks like a stock Corvair, but open the trunk and hang onto your jaw ‘cause it’s going to drop open! That’s a Jaguar V-12 in the trunk! But the Corvair is a rear-engine car. So rush around and open the engine compartment lid, and hang on again ‘cause you probably will not recognize the transmission and rear end: a Chevrolet factory special 4 speed Pontiac Tempest transaxle and drive shaft originally built for racing.

I’ve introduced the car, time to introduce the builder: Jay Eitel, retired mechanical engineer and a major designer of man-lift equipment aka “Zoom Booms”. Jay designed and built this special in his ‘80’s – now that’s what retirement should be.

Jay liked the appearance of the 1967 Corvair Monza when it appeared on the dealer’s showroom so he bought one. But the rear engine, low performance, and chassis flexibility did not really satisfy him. So late in life he very thoroughly re-engineered and rebuilt it the way that it should have been built in the first place. Well, maybe a V-12 engine jamming out 370 hp at

about 6000 rpm is a bit over the top for this small car. But putting the engine in the front and the transaxle in the rear optimized the weight distribution, and redesigning the suspension reduced the chassis flexibility.

Ignition, engine controls, and OBD system are from a Buick V-6 engine – two of ‘em, one for each cylinder bank.

Jay wanted the car to appear original and the cabin interior and exterior sheet metal remain unchanged. The additional instrumentation for the Jag engine are in a swing-away panel mounted in the glove compartment and are thus hideable. He also wanted the sound of a 6 cylinder engine. A V-8 would not have sounded correct and that drove the choice of the Jag 12 cylinder. It has been a very successful conversion.

Member Profile: John Palmer



Long-time BAEM member, John Palmer, was born just over 90 years ago in Kennett Square, Pennsylvania. His father was a farmer who also worked in a rifle factory during W.W. I. His first memory of a family car as a youngster was his grandfather’s Stanley

Steamer. As a youngster, John became adept at firing a gasoline burner to heat a flash boiler on the Stanley while simultaneously firing a kerosene flame to keep the whole thing going. He could get the Stanley rolling "in four or five minutes". His grandfather thought the future of the automobile was in electric power and that gasoline was only a "stepping stone".

In 1938 after High School, John bought a 1933 Ford Model B and drove, by himself, across the U.S. (by way of Yellowstone) to California where his brother and sister had moved. He took a course in welding and machining at the Warren School in Los Angeles and found his first job as tube bender and welder in a shop that made brass foot rests for bar patrons as well as beauty shop fixtures.

After accumulating enough money to buy an Indian 45 cubic inch flat head, he began exploring the Southwest on his motorcycle and later made a solo trip across the country again, returning to Pennsylvania. For a time, he had a four-cylinder Henderson until it coughed up a rod. He left it in a friend's barn. The Henderson was replaced by a 74 cubic inch Harley-Davidson and he made two more solo trips across the country. Who knew our John was a biker?

Returning to California, he worked at the Indian motorcycle agency in San Jose for three years. The draft caught John, he was classified 1B, but spent a year in the California National Guard. After this service, he worked in a brake lining company in Santa Clara for five years. He recalls being covered in asbestos dust daily. He next worked in a company maintaining and fabricating machines for processing food. This led to a 26-year long career of working in a company that converted paper pulp into plates, cups, and trays. His specialty was inventing, fabricating, and maintaining the complicated machinery required.

John had always loved the farm engines that he knew as a youngster, and while at a farm implement show in the late 70's he saw his first miniature engine. It was the single-cylinder Cole hit and miss engine. He bought the castings and made his first engine, which you've all seen. It now powers the famous Executive Pencil Sharpener! At one of the shows, Betty Cole recognized the engine and introduced herself to John.

His next engine was a monster hit and miss engine of his own design. When one viewer said that he couldn't hope to build such a large engine with his smaller lathe, John designed the "J and E Jr." This remarkable design can be made with a 12 inch lathe, a drill press, and welding equipment. John has sold about 400 sets of plans, and there are about 50 of these sturdy engines built by home machinists in the U.S., Australia, New

Zealand, England, and Germany. I've got a dandy version made by our own George Gravatt.

John's next project was the magnificent quarter-scale Rumely Oil-Pull Tractor that we've all seen at shows around the country. He also made a separate Rumely engine with a hefty 10 inch bore and a 12-inch stroke. John likes big stuff. The larger Rumely engine that he built was half-scale.

In 1995, Stanley Hiller asked John to build a Wright Model B. Hiller paid for the expenses, but John and his friends donated their time. He eventually built three of these amazing engines. One is on permanent display at the Hiller Aircraft Museum at the San Carlos Airport. If you haven't seen it, that engine alone is worth a trip to the Hiller. The second engine is on display at a museum in Maine and the third is displayed at the Centennial College Park museum in Virginia. The Virginia engine is the one that John fired up at Paul Bennett's shop some years ago. It is loud! At Bennett's, the engine was anchored to bolts drilled in the concrete floor. Our photo shows it in an earlier stage at a BAEM meeting. John found that it could be operated safely without any anchoring except for the friction of 2 x4 skids.

We are fortunate to have the unique John Palmer, and his wife of 65 years, in our group. We love his sunny disposition, his endless energy, abundant skill, good humor, and optimism.

Respectfully submitted,

Bob Kradjian