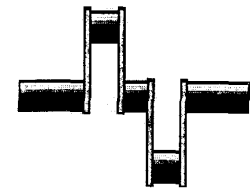


The Crank Calls

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September 2003

**Check out the BAEM Web Site at www.baemclub.com
Send your project photos to the Web Master Jim Piazza.
Phone: 408-446-4825
Email: jpiazza@ix.netcom.**

**NEXT MEETING
September 20, 2003, 10 AM
At
Robert Schutz's Shop**

Our regularly scheduled October 18 meeting will be held at the Blackhawk Auto Museum as it was last year.

Meeting Notes
August 16, 2003
Bob Kradjian, Secretary

President Ken Hurst called the 46 members to attention at 10:02 am.

There were no visitors, BUT we had a wonderful TV crew from KOVR (Channel 13) in Sacramento. Reporter John Iander and cameraman Marty Hernandez spent the entire morning with us and seemed to fully enjoy the proceedings. John had seen the Hot Rod Magazine article on Ken Hurst's V-8's, and hooked up with Ken to do some photo work in his shop. John appreciates engine work as he used to work on a drag racer. The TV segment is due to air in Sacramento and possibly in syndication thereafter. They will provide us a tape when available. Does anyone have a portable VHS/TV setup?

Secretary's report: An update on club showings was given. All that now remain are *PRIME* (Sept 26-28) and *Men, Metal, and Machines* (October 25-26).

Treasurer's Report: Lew Throop tells us that our bills are paid and we have \$1200 in the kitty.

Carl Wilson told the group of an Australian Live Steam video. It's a bit pricey at \$76 for two videos (240 minutes) post paid. If you are interested, write Australian Live Steam at P.O. Box 120, Terramurra, NSW 2074, Australia. Be sure to ask if it's compatible with US playback machines.

Carl also provided a dramatic demonstration of a new rust removal product. *Evapo-Rust* is a non-

toxic, non-corrosive, non-acid solution. It works on the principle of chelation, for you chemistry buffs. Carl dunked a very rusty piece of steel into the fluid at the beginning of the meeting and by the end of said meeting; he pulled out a rust-free item! Very impressive, indeed. It is available from Harris International Laboratories, Inc. 2200 S. Old Missouri Rd., Suite M, Springdale, AR 72766. Telephone (888) 329-9877. One gallon will de-rust up to 300 pounds of heavily rusted steel. It works on all metals. Price is about \$20 per gallon. It comes in quantities of 1gal, 5gals, and 55 gals.

We had a lively Swap Meet. A number of useful items changed hands and there were a lot of smiles. One member said, "I spent \$600 and got some great deals."

Bits and Pieces:

Dario Mecchi showed a very nicely done coil winder. Based on a design by Bob Shores, the winder does a good job, and counts the number of wire turns. The attractive "wrinkle" finish intrigued me. Dario bakes a heavy coating of the paint at 180 degrees for 30 minutes.

Steve Jasik showed a Stuart oilfield pump (the "nodding donkey") in progress.



It will be a beautiful piece when finished. For details, see Model Engineer vol. 166 for a 17 part series.

John Vlavianos brought in his wooden pattern for a cast-



up crankshaft to go with the new five main-bearing V-8 project. He describes it as a "jig saw puzzle." The plan is to cast it in 4130 or 4140 steel with full counterbalances. Connecting rods, complete with balance tabs, are also planned.

The always ingenious Al Vassalo had a Sirius-type 2 cylinder steam engine that he built more than 60 years ago! As with all of Al's engines, this was an original design.



Lew Throop had his Ron Colonna "Offy" 270. It is close to completion. Another member, Bob



Haagenson, has completed one of these ambitious projects. I understand that he converted it from a 4-valve to a 2-valve engine in order

to get a reliable run. Send us some details, Bob.

Lew also discussed the copper plating technique that he used to build up an intake manifold for a 1/4 Model "A" Ford. This resulted in a *Strictly I.C.* article. The Ford engine is a handsome piece that appears to be about 90% completed.



Lew's final display was his CNC milling machine. He bought a Harbor Freight mini-mill for about \$500. He then equipped it with steppers and drives followed by his own electronics. It works well, and was accompanied with nice examples of work produced.

George Gravette's 8-cycle *Aerometer* was on display and running well. This engine, like many others, required a good bit of modification before it would run reliably.



Pat O'Connor had a novelty engine. This tiny, single cylinder, compressed air engine uses an acrylic ball (from TAP plastic) for a piston.



Another unique engine was his Bourke scotch-yoke 2-cycle, 2-cylinder engine. Since there is a sealed crankcase, the



straight connecting rods pass through seals. There are only three moving parts making for easy maintenance and overhaul. See the web site; <http://bourke-engine.com> for a great deal of information about the early years of the Bourke and the more recent Melvin Vaux reincarnation of the Bourke.



Dick Pretel brought in his V-8 project; steady progress is made on this very ambitious build. This will be one of the few four-cam home built V-8's. There are a lot of 4 cam Schillings around, but they are glow-plug engines and not known as strong runners.

The August 18th Pebble Beach Open House at the Blackhawk Auto Museum is now history. It was a rousing success. Members Hurst, Gravatt, Giles, and Kradjian showed over 20 engines to an enthusiastic group of knowledgeable car enthusiasts in a lovely setting.

We also appeared at a Street Rod show just after the August meeting. This was in San Mateo and we enjoyed a good reception. Pretel, Throop, O'Connor and Kradjian ran engines.

The big one, the GoodGuy's West Coast Nationals is also history. We had crowds three and four deep clustered around our six large showcases during the peak hours on Saturday. I am sure that over 5,000 people visited our display. I also suspect we may have garnered a few new members during the weekend.

We heard the usual, comments many times. The best ones were: "I didn't know this hobby existed" and, "You guys are the hit of the show."

The tedious ones were: "What do they cost?", "How fast do they go?", "How much horsepower?", "What do you do with them?", and of course, the ever popular----"How long does it take to build one?"

Exhibiting were Ken Hurst, George Gravatt, Dwight Giles, Eugene and Mrs. Corl, Steve Meyers, Irene and Shannon Lile, Pat O'Connor, Bill Nickels, Steve Jasik, and your humble scribe.

We missed the participation of the Southern California crew, Haagenson and Butzen. We hope you'll come back next year; there were far fewer problems with the load-up process at the end of the show.

We received two invitations for further showings. One of these may materialize in November. Details will be provided as they become available.

A reminder; our regularly scheduled October 18 meeting will be held at the Blackhawk Auto Museum as it was last year.

A sad note: We have learned of the death of our long-term and greatly esteemed member, Chick Cecchetti of Alameda. Chick was an aviation mechanic who worked on the China Clippers in the early days of aviation in the Pacific. He was a generous and kind man who was also a long-term supporter of control-line flying. He taught hundreds of youngsters the elements of model building and flying and was a founder of the Alameda flying field. He will be missed.

Photos By Bill Nickels and Ken Hurst

Good-Guy's West Coast Nationals
August 22-24, 2003



Check out this web site: HotRod HotLine Pleasanton Good Guys Show 2003

<http://hotrodhotline.com/feature/03pleagg/page6.php>

TECH TOPICS

BY PAT O'CONNOR

At the September meet we will have a talk by John Servin, of HS&S, on the rewards and pitfalls of buying used machinery, how to recognize a serious problem, and the methods/costs of repairing your new jewel.

TECH TOPIC

THE BAY AREA ENGINE MODELERS HUMAN TUNE UP MANUAL

August 16, 2003

(Subtitle: Where do you plan to live if your body breaks?)

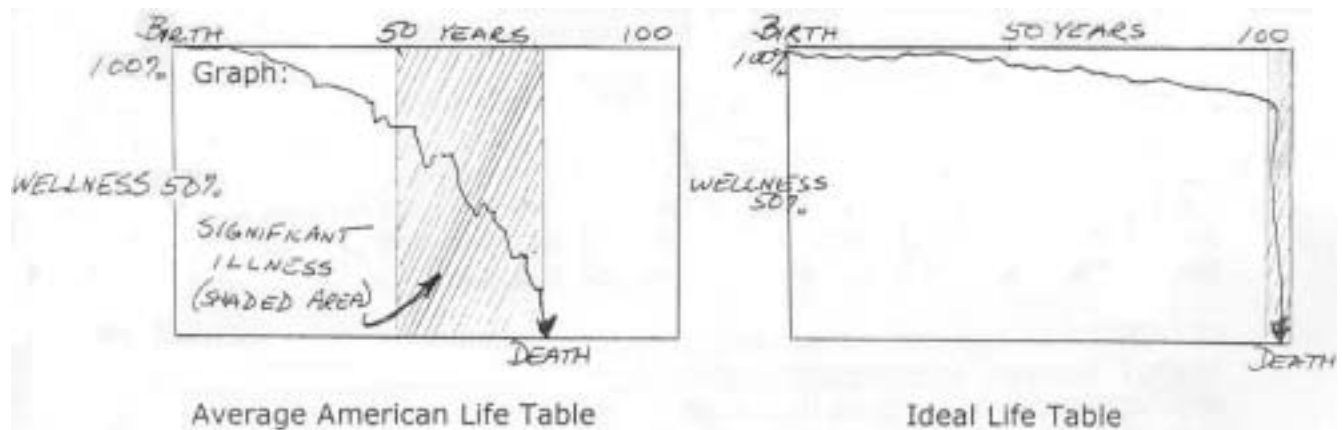
BAEM Secretary, Bob Kradjian, M.D.

WHAT'S THE **GOAL** of this talk? It's to increase "Healthspan".
We want not only a long life, but also a vibrantly healthy life.

Sadly, it's normal to eventually die; our concern is to not die prematurely.

Here's a true example of such a premature death gleaned from an Internet college alumni site:

"XXXX died suddenly at age 34 of a massive heart attack after attending a friend's wedding; he left behind his wife Gloria and two young children, Andrew and Kristina."



THE EASY STUFF: Let's get it out of the way.

Rule No. 1 Don't smoke

Rule No. 2 Avoid excessive alcohol

Rule No. 3 Don't get fat

Rule No. 4 Keep physically active

Rule No. 5 Men, get a PSA blood test from time to time

Now, the important stuff:

The great majority of Americans die of three, maybe four, diseases. They are:

Heart disease

Cancer

Stroke

Diabetes

CONCEPT #1: These are not part of normal aging. All four are degenerative diseases and, thus, can be avoided.

CONCEPT #1: THE MAIN CAUSE OF DEGENERATIVE DISEASE AND EARLY DEATH IN AMERICA IS-----OUR DIET

THE REASON? It is simply the WRONG FUEL for our bodies

QUESTION: What would happen if you ran your car (or your Wall Four) on kerosene, or diesel fuel, or jet fuel? Answer: *All sorts* of things would go wrong and eventually there would be a disaster. This is essentially what we have in the United States where 80% of us die of heart disease, cancer, and stroke because we take in the wrong fuel over a lifetime.

NEXT QUESTION: What is wrong with the American diet? Ans. It's just way out of balance. It has **far too much** fat, protein, hydrogenated oils, salt, and fat. It has **far too little** of the protective phytochemicals—that are found in all plant foods. These substances serve to prevent heart disease, cancer, and other degenerative diseases. The American diet is exactly backwards; it is animal-based, not plant-based.

CONCEPT #2: How can we accurately identify the diet that *best supports health*? Answer: International epidemiology. Studies of foreign populations clearly teach us that a plant-based diet, (chiefly complex carbohydrates, with the addition of vegetables and fruit) is the optimal fuel for a human being. Animal tissue and dairy products are best minimized or avoided. A tip: DO NOT depend on the food industry to give you advice on what is best to eat! You can be assured of a profit-motivated answer if you do. (Got Milk, anyone?)

This is essentially a "peasant" diet or a "poor man's" diet. This doesn't sit well with Americans who feel they deserve a King's banquet 21 times a week, and besides they can afford it---so why not? We instinctively love rich diets, but that's too big a subject to get into now.

OTHER ISSUES:

DAIRY PRODUCTS (or, what to drink?).

Question: How much milk, butter, cheese, yogurt, etc. is optimal for best health? Answer: NONE. There is only one fluid that best sustains adult human health following the weaning of an infant----- and that fluid is, you guessed it-----WATER. For details on this dreary subject see my “Milk Letter” on the Internet. (Just type in “Robert Kradjian” on Google and look for the “Milk Letter.”) I wrote this bit of doggerel ten years ago and, to my amazement, it has become an underground classic published in dozens of countries and languages. It’s worth taking a look, a money back guarantee on this one.

The main reason intelligent people use dairy products is to aid in the prevention of osteoporosis. Yes indeed, milk is *loaded* with calcium. Unfortunately, the data shows that people who drink milk have MORE osteoporosis than similar non-milk drinkers. How is this possible? It is simply that the protein overload that accompanies milk creates a chronic metabolic acidosis that requires skeletal calcium to buffer, or neutralize, the acid condition.

Another way to look at this problem is this: there has never been described a naturally living group of human beings with a calcium-deficient diet.

OBESITY

There are only three primary biologic drives. The first is the absolute necessity to BREATHE. The second is the absolute necessity to DRINK (water, that is). The third is the absolute necessity to EAT.

We have absolutely no trouble in not breathing too much, or not drinking too much. But we have a world of trouble in not EATING too much? The reason? Is our body designed incorrectly? Do we have “too little will power?” No, we are simply eating the wrong food. Populations eating a plant-based diet never have an obesity problem.

Overview

The main problem is the fuel-body imbalance. Our bodies are simply not designed for the fuel we are taking in. Make the appropriate corrections.

How to correct?

Avoid animal-based foods (Minimize anything that ever had a face or a mother.)

Base your diet on food that grows from the ground.

Minimize calories when possible. This is the concept of longevity by caloric restriction. (See any book by Roy Wolford, M.D.)

Eat like our ancient ancestors. Paleolithic man’s diet, and more recently, the Asian diets support health well.

Do what you can. It’s not an “all or nothing” plan. The more you do, the more you gain. It’s not

easy to go against the food culture.

These strategies are health issues, not moral issues. If you choose to follow a non-health promoting style, that's fine. Just be aware of what you are choosing. Exceptions are always made for "festive occasions" such as BAEM meetings.

There are many other important topics that cannot be discussed for lack of time. They include weight loss programs, vitamins and supplements, cancer screening, cancer avoidance strategies, the near-total failure of the "war on cancer", meal plans and recipes, exercise regimens, as well as a host of others.

Finally: Remain mentally active and optimistic. I recommend the hobby of building miniature engines. It can be so frustrating that even if you don't live longer---it'll seem like it!

For additional information, one place to look is drmcDougall.com. His book "The McDougall Program, Twelve Days to Dynamic Health" is excellent. Also useful are Books by Julian Whitaker, Dean Ornish, or Nathan Pritikin.

My book, "Save Yourself From Breast Cancer", is available for (sob) as little as 38 cents on Amazon.com! It is not a book for women only; it is also a plan for avoiding prostate cancer, heart disease, diabetes, and obesity. It contains many details not provided in a short presentation such as this. When I wrote the book in the early 1990's, it was considered radical. Now, it's mainstream. Ah well, you can always spot the pioneers; they're the ones with the arrows sticking through their shirts.

FOR SALE

Craftsman 6 x 18 Lathe. See photo below.
3 jaw chuck, 1/3 H.P. reversing motor
Table/wheels \$375

Rototiller 5 HP in Good condition \$150

Contact Jim Piazza 408-446-4825
Email: jpiazza@ix.netcom.com



WANTED

Vertical Band Saw for metal cutting
Contact Bill Nickels, 408-739-2407
Email: whnickels@aol.com

WANTED

1. Three jaw chuck, 1/2 X 20 with backplate.
2. Zero taper drill chuck

Contact Dick Pretel, 408-732-6507
Email: RPM10K@SONIC.NET

FOR SALE

Caroline Tool & Eq. HD-10 horizontal/vertical bandsaw, 3/4" blade \$250.

Contact Pat O'Connor 408-733-3710
Email: pat1650@yahoo.com