

**Feature Vehicle of the Month:**  
**1956 Ford F-100 Pickup**  
**Owned by**  
**Lowell Reams**



Lowell first became interested in the fat fendered trucks of the '50's, especially the 1956 Ford with the wrap-around windshield, after reading a magazine in 1978 called "Peterson's Trucking Trends". Seven years later, in August 1985 while at his in-laws farm in Iowa, he bought his 1956 F-100 after seeing an ad in the Sunday Des Moines Iowa Register newspaper. Lowell purchased the truck for \$500 and stored it in his father-in-law's barn for 8 months before towing it 650 miles back to Detroit.

The truck was originally from San Diego where the owner had bought it while in the Marines and drove it back to Truro, Iowa. He eventually blew the 6-cylinder engine and had pushed the truck into a barn. The body was in fair shape except for the lower cowl area, running boards and the bottom of the fenders. The previous owner in California was a truck farmer because the rear springs had 6 regular leaves plus 3 overload leaves and coil spring overload shocks. The bed had been so overloaded that the bed supports were bowed over an inch!

Since the truck had no engine, Lowell decided to update it to a more modern powertrain. The truck now has a Ford 302 V8 engine with a C4 automatic transmission. The engine was bored .040-inch oversize and completely rebuilt with a mild Motorsport camshaft, new crankshaft, ported exhaust ports, Mustang shorty headers and a 450 cfm Holley 4-barrel carburetor. The carburetor was purchased from Mike Riemenschneider, a FMRCOA member.

The original front solid beam axle suspension was updated to independent torsion bar from a Dodge Aspen. Along with the suspension change, came power steering and power disc brakes. The

*Continued on page 8.*

**Feature Member:**  
**Harry McAuliffe**  
**by**  
**Bill Gipperich**

We as a club are privileged to have so many talented and knowledgeable members. They are a fantastic resource and conduit back to the days when many of our cars were new or like us, just a glimmer in the designers mind. I am pleased to share with you my recent conversation with Harry McAuliffe, our latest Member of the Month.



**Harry & Wife Bev (a few years ago!)**

*Continued on page 4.*

**Dundee Trip Well Attended**

"We had a great time on the Dundee trip on January 28!" said Roxanne Fontana. "The day started at 10 AM at the Dundee Motor Pool Museum in Dundee, MI with coffee and donuts." Over 60 FMRCOA members and guests attended the



**Al & Mike Fontana & Mike Yeck**

*Continued on page 6.*

# The Rotunda Times



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## FMRC

FORD AND MERCURY RESTORERS  
CLUB of AMERICA

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*The Ford & Mercury Restorers Club is a hobby organization whose purpose is to foster and promote the acquisition, preservation and use of all Ford vehicles, 25 years of age and older.*



## Editors Message

This month I'd like to thank Bill Gipperich the very interesting article about Harry McAuliffe, Lowell Reams for the material about his truck and himself, Roxanne Fontana for the material and photos from the Dundee trip, Clara Mooradian for her story and photos of the Ford Gyron, and Dan Davis for the early history of Ford electronic engine control!

We **really** do need these materials from you guys to keep coming. Articles on your various projects and car shows/trips would also be great! Likewise, if you see an article of interest, clip it and send it to me. Also, there is so much expertise in this club that should be shared via "how to"/technical articles – like Dan's in this newsletter. Just give me a call (734.717.5444), email me, or put something in the mailbox – we'll work on it together and it doesn't take much time on your part! We also need some more feature car materials – we're clean out in this category! Typically, it really doesn't take more than a 10-15 minute conversation to get great material for an article! **Consider the 20<sup>th</sup> of the month as a deadline for getting announcements or other materials to me for that month's newsletter.** In this manner we can get the material in and to the printer so you have it before next month's club meeting.

Thanks for your support!

**Steve Rohde, Editor**

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## The FMRC Membership Advantage!!!!!!

Your Board officers and Editors take extra effort to bring you FREE Classifieds and Schedule of Events found within your monthly newsletter. Take advantage of these benefits your membership provides. Post your schedule where you can refer to it easily. Submit your ads at a meeting or mail to Phil Lyon, our ad editor. For more information on becoming a member go to <http://www.fmrcoa.org/> or write to:

**FMRC Membership Secretary**

**P.O. Box 2938**

**Dearborn MI 48123**

**Dues are \$25 before & \$30.00 after DEC 31**



## PRESIDENT'S PAGE

February 2006

On Saturday, January 28, 2006 our club gathered at Mike Yeck's Military Museum in Dundee, Michigan. The event was hosted by Mike Fontana and Gene Johnson. The owner, Mike Yeck greeted us in his World War II uniform which still fits. Mike has Civil War items up through the Korean War, our guys had a great time browsing through all that military hardware, and Mike was thoroughly enjoying all the attention. He is 87 years old and looking great. We ended our stay with a presentation of a club donation to the museum. We moved to the Wilderness Bar and Restaurant for lunch on the club. All were free on their own to visit Cabella's, Russell Stover's Candy Shop, or any of the places of interest in the area. Many thanks to Mike Yeck, Mike Fontana and Gene Johnson for coordinating the event. See cover page for a more complete run down on the days activities. Thanks to Roxanne Fontana for the pictures and coverage.

While we are on the subject of activities, I am appealing for help from you out there to volunteer to coordinate an event. A couple of you can get together like Mike and Gene did, or if you have an idea let one of us on the Board know and we will help out.

The suggested tour to the Rouge Assembly Plant has not come together as yet because we need to know an exact number of seats to reserve so we can buy the tickets in advance. At the March meeting we will need a \$6.00 commitment from all members who want to go. Additional tickets will be \$12.00 each. Hopefully a flyer including a date will be presented at the next meeting. We are looking at a week day toward the end of March. Dave Woodburn is helping out on this event and is our liaison with "The Henry Ford". Seating is limited, so this is going to be a tough one to get going.

I have sent newsletters to the presidents of the Water Wonderland Thunderbird Club, The Early Ford V8 Chapter, The Lincoln Continental Owners Club Region, and the Mustang Owners Club of Southeast Michigan. I hope to open communications for the exchange of information and participate in events together for our mutual benefits. We have the Ford logo in common and I think this could be a first step that could benefit all of our clubs.

The club has had a mug with our logo made for all members to receive. We have given them out to members who attended the dinner dance, the January and February meetings and I had Larry Swanson mail out approximately 100 more to members who don't normally attend meetings. If you haven't got one yet, let me know at the next meeting and I will get you one. Remember, one to a customer. We have also been presenting a mug to the speakers at meetings.

If your newsletter is annotated with "this is your last issue", your membership has expired and your need to renew now.

We are trying to get a speaker in for the March meeting, but Autorama is competing with some of our candidates attention. Fortunately Steve is always at the ready with the new club projector if all else fails. Another hand for Steve please. So....Don't forget the next meeting on March 1<sup>st</sup> at the K of C Hall.

Till next time,

**Bob Guetschow**

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### WELCOME NEW AND RETURNING MEMBERS

#### New Members

**Danny Crowder**

43021 Fret Rd.  
Belleville, MI 48111  
734-699-3857

**Jeff Gniewek**

545 N. Martha  
Dearborn, MI 48128  
313-563-6549  
*1968 Mustang*

**Jerry Worful (Terry)**

6111 Greenview  
Detroit, MI 48228  
313-271-2017  
*1963 Fairlane 500*  
*1963 Fairlane Squire Wagon*

**Raymond V. Stout**

66568 Pine Road  
North Liberty, IN 46554



## FEATURE MEMBER

*ct'd. from page 1*

Harry grew up on the west side of Detroit and attended Catholic Central High School. After high school, Harry enlisted in the National Guard and served for 8 years. He and his wife Bev have been married for 48 years and have four sons and two grand daughters. Harry retired 6 years ago after 32 years with the Oxbow Machine Products Co. where he was a machinist.



**Harry's First Car (1950)**

The interest in cars always seems to start at a young age and usually involves buying or acquiring a junker for the first car. In Harry's case this was a '30 Model A coupe purchased for \$12 in 1950 while he was just in his early teens. "My friends and I pushed it a mile to my house"

Harry remembered. It

didn't run and so a second donor car was later purchased for the engine. "The local gas station allowed us to hang around and were helpful with the engine swap." Harry installed dual carbs on the original 4 banger before this car was traded for a '34 Tudor. Thus began the long list of Harry's rides over the next 6 decades.

To highlight some of these; they were a '51 Studebaker V8, '32 Model B Tudor, '32 pickup truck, a couple of '29 AV8 hot rods, some go-karts, a sling shot dragster (a club project of the Road Knights) and of course his customized 1940 Mercury



**Harry at the Drags (1968)**

convertible. Of these Harry still owns the '32 Tudor and pickup, one of the '29 A V8's and, until recently, the custom '40 Merc. The pickup is Harry's favorite to drive and along with the Tudor these two have a lot of sentimental value and he plans on keeping these. The Mercury, you may recall Harry telling us at a recent meeting, was sold. More on that later.

The Tudor was acquired in 1956 still in its original shape. "I drove with Bev to her home to meet her parents the first time in that car" recalled Harry. In later years "we used to get all four boys in the back seat of the '32 and take the car on trips" Harry recalled. Today the car has a mild chop and a 301 Chevy with an early Ford 3 speed top shifter transmission. The top was chopped by Harry around 1956 and he kept the original B model engine until a couple years later when a flathead V8 was installed. The current iteration (SBC) came to be in 1965.

It has been Harry's philosophy that his hobby and interest in cars should not take away from the family and so the boys grew up with

many of these cars and they participated as a family. In 1959 this would lead the family into go-karting where the boys could drive and Dad would wrench and occasionally take a turn at the wheel against some of the other father's. Racing was usually done at a local shopping center parking lot in those days but local ordinances soon outlawed this convenience and put restrictions on tracks until it just wasn't practical or fun anymore.

FMRC isn't the only club that benefits by Harry's membership. He has

been an active member of the Road Knights since 1951. The club became affiliated with the MHRA in its early days and Harry soon became involved with the Autorama car show. Also as a member working on a club project Harry was completely involved in



**Harry with '32 Sedan (1971)**

drag racing a fuel injected 301 C.I. SBC powered class C dragster for 13 years. "Usually we had one member do the driving but I did get to drive it once and ran 150 MPH in 10 something seconds" recalled Harry. "After that I had to promise my wife that I wouldn't drive the car and I kept my promise. But it was quite a thrill."

Another thrill for Harry was his ownership and restoration of a customized 1940 Mercury convertible. Since he first saw the car under construction he has followed it through several owners. Harry brought the car back from a state of deterioration and neglect to win the first ever preservation award presented by the MHRA at Autorama in 1992.

The real icing on the cake came via an invitation from Ken Gross, the automotive journalist, to show the car at the most prestigious of venues, Pebble Beach. This conversation with Ken led to an offer from a collector in Pennsylvania to buy the car. Knowing that this new owner could take the car to the level necessary for a good showing Harry agreed to sell. And so the new owner took 3<sup>rd</sup> in class last year at Pebble Beach. Harry is most pleased to be forever associated with this car and it's rise to stardom.

When asked what it meant to be honored by the club by being named the recipient of the Generator award Harry had this to say. "The

Generator award was really special. I never thought I'd receive it. There is always someone else contributing to the club too, who you think is more deserving." While he is very honored to have received it, he is also modest about it. People like



**1940 Merc at 2005 Pebble Beach**

Harry don't do what they do just to accumulate awards. It is not their motivation. They do it because they love to. His wife told me she and his family are very proud of Harry's accomplishments and this award has been the highlight of their year.



## YOUR CAR!

The Rotunda Times would like to feature your old car or truck in an upcoming issue. We are interested in how you came about finding your vehicle of choice, and what you have done to enhance its beauty, and / or mechanical condition. Simply mail or email us your article accompanied with a photo to:

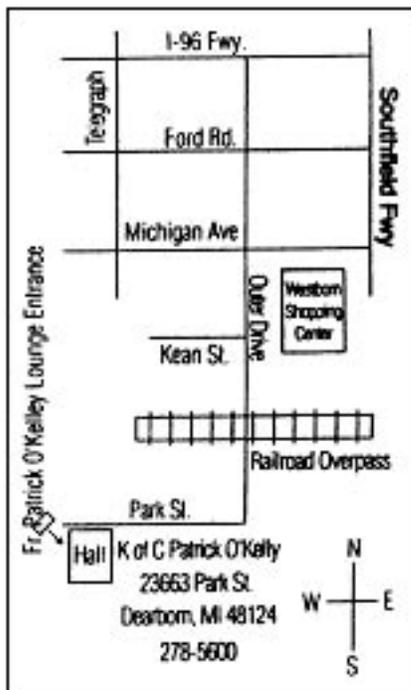
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## Club Meetings

The FMRC meets the first Wednesday of each month at the Knights of Columbus Patrick O'Kelley Hall in Dearborn (313.278.5600). Refreshments are served after the meeting!

Come and bring a friend!



## February Show & Tell: A Model in Our Club!

First off Clara Mooradian showed us some 8x10 pictures of a Ford concept car in the Rotunda (see article on page 10). The best part was that she was the model photographed in and next to the car!



Fact is that she was a secretary at the Rotunda and management thought that she was a terrific looking young girl and would make the concept car look great also. Clara will be signing autographs at the next meeting!

Next, Phil Lyon showed us some Ford material entitled "Fun Facts of the Auto Industry" printed by Ford Motor Company.

Bill Large displayed some photos taken at the 1955 Detroit Autorama along with an exhibitor pass from the same year ( 1955).



A proud Art Cervi showed us a wooden bust of Hernando DeSoto. This is the guy Chrysler named a car after. Art should have this as he owns one of those cars!



Tom Melhose displayed some chinaware from the Ford Rotunda and a steamship line which

were very ornate and quite collectable. Tom is a new club member. Thanks Tom.

I would like to again thank Clara for her presentation and encourage other members to bring in something of interest for us all to enjoy.



**Harry McAuliffe**

**Please participate in these events!**



## 2006 FMRC Meetings & Events Calendar

Below is the *tentative* table of meetings & events for 2006. New information will be posted each month as events and dates are “firmed” up. **Bold font represents club sponsored activities.** Also, if you have an idea for a Club event, please let a Board Member know!

|                   |  |
|-------------------|--|
| <b>March 1</b>    | <b>Club Meeting</b>                      |
| March 3-5         | Autorama                                 |
| <b>March</b>      | <b>Garage Tour TBA</b>                   |
| <b>April 5</b>    | <b>Club Meeting</b>                      |
| <b>April</b>      | <b>Garage Tour TBA</b>                   |
| <b>May 3</b>      | <b>Club Meeting</b>                      |
| <b>May 29</b>     | <b>Memorial Day Parade w/K of C Hall</b> |
| <b>June 7</b>     | <b>Club Meeting</b>                      |
| June 11           | Carnival of Cars                         |
| <b>June 11</b>    | <b>Wilson Barn Show</b>                  |
| June 17-18        | Motor Muster                             |
| June 25           | Downriver Cruise                         |
| <b>July 5</b>     | <b>Club Meeting</b>                      |
| <b>July 15-16</b> | <b>FMRCOA Swap Meet and Car Show</b>     |
| <b>July 23</b>    | <b>Club Picnic TBA</b>                   |
| <b>August 2</b>   | <b>Club Meeting</b>                      |
| August            | Dearborn Homecoming TBA                  |
| August 19         | Woodward Dream Cruise                    |
| <b>Sept. 2-4</b>  | <b>Overnighter TBA</b>                   |
| <b>Sept. 6</b>    | <b>Club Meeting</b>                      |
| Sept. 8-10        | Frankenmuth Auto Fest                    |
| <b>Oct. 4</b>     | <b>Club Meeting</b>                      |
| <b>Oct.</b>       | <b>Color Tour - TBA</b>                  |
| <b>Nov. 1</b>     | <b>Club Meeting</b>                      |
| <b>Dec. 6</b>     | <b>Club Meeting</b>                      |

## DUNDEE TRIP

*ct'd. from page 1*

museum which is privately owned by Mike Yeck.

“Mike is 87 yrs old and greeted his visitors wearing his original army uniform,” Roxanne commented. “I wish I could still wear the clothes I wore when I was 26 yrs old!” (Don’t we all!)



Mike was born in 1918. His father fought in WWI in Hungary and Mike joined the army in 1939 at his father’s suggestion serving his country for 5-1/2 yrs. Mike spoke fluent

German and served as an interpreter. He was stationed all over Europe -- wherever they needed his services.

The museum originally dealt in antique arms, but when that business began to dry up, Mike started collecting other military memorabilia. Mike said he had over 50 military vehicles, and lots



of “odds and ends” from the military world. These include gattling guns, civil war guns and memorabilia, flags, and WWII nose art.

Mike even had a WWII GI barracks set up in one of his rooms. He had another room set up for restoration in progress of a newly acquired MB Jeep. Another MB Jeep is mounted with



railroad wheels, and displayed on real rails! Besides these there was an occasional odd item here and there that just added to the character of the museum: a Band of Brothers Movie cutout, a child’s riding pony, a suit of armor, a Volkswagen, and a few older cars tucked in the back.



Our group spent a couple of hours walking through the museum and then they had a club sponsored lunch at the Wilderness Bar & Grill. Everyone split up after lunch and some spent the rest of the day wandering around Dundee at the Christmas Shop, Russell Stover Outlet, Jerky Store, St. Julian Winery, and Cabella’s.

# The Rotunda Times



## February Meeting Minutes of the FMRCOA

February 1, 2006

The second meeting of the year began on the first day of the month at promptly 7:05. Bob had a few lively conversations with some of our well known members before things really got underway. Clara, our official head counter, informed us that 102 members or guests were present!

There were several guests and new members in attendance who needed to be recognized. Dan Crowder, a new member, sold his 64 Ford and bought a 1955 Ford pickup truck. Jeff Gniewek owns a 1968 Mustang, and was welcomed. Jerry Worful is all set to join the club, and he has a Fairlane 500. He brought a friend along who has



Good turnout again for February!

a 63 Fairlane wagon. Clara Mooradian brought a guest along, Cecile Thompson, who is very interested in older automobiles.

Bob mentioned that membership cards are all filled out and signed and are ready to be picked up. He also reminded us that swap meet fliers are printed and ready to be passed out to the public. He encourages us to all do our part in their distribution to parts stores, auto garages, or anywhere they will get good exposure. The January meeting minutes were accepted, and the treasurer's report was read by Steve and it was likewise accepted, both by motions from the floor.

Mike Fontana gave us a rundown on the trip we had to the military museum and Cabelas. We treated the ladies who came with us right. After lunch at the Wilderness Bar and Grill, they got to go check out the shotguns at Cabelas.

Bob Assemacher, who was member number one hundred, received his thirty -five year badge. Congratulations Bob.

A tour to the Ford Rouge Plant is in the early planning stages. Dave Woodburn and Bob may be setting that up. It may be that we will do tat during the week, instead of the weekend.

Art Cervi reminded us of the R & M auction which will be the weekend of April 23<sup>rd</sup>. You are asked to contact Art if you have not done it before, but are interested.

Harry Knapp passed out some brochures, told us some information about the garage floor treatment, then showed us an interesting video presentation. He also donated a UCoat kit to be raffled off at next month's meeting.



Harry Knapp of UCoat It

There was no 50-50 raffle this month because someone absconded with the tickets and the container. (As of this writing your secretary is the guilty party. Sorry guys!).

We had a great Show and Tell and Steve showed us a Ford produced program introducing the 1940 Ford. It went a little longer than we expected, but was very interesting. After the lights came back on we adjourned the meeting and hit the chow line

Respectfully submitted,

Phil Lyon, Secretary



## Feature Vehicle,

*ct'd. from page 1*

rear axle is an 8-inch from a '72 Mustang and the exhaust system is all stainless with dual Borla mufflers installed by Watson Engineering.

As far as the outside appearance, Lowell kept everything stock looking except the ride height, which is considerably lower than stock. He assembled the truck after the bodywork and paint was done piece by piece by Chum's Custom & Collision in Belleville, Michigan. The paint color is "Crimson Red"-a Ford clear coat color. The interior



**Before Restoration**

is also stock except for a few filled holes in the dash, a tilt steering column, an oil pressure gage and a tachometer. The original seat was reupholstered, as were the door panels, kick panels and headliner.

While working on the truck years ago, Lowell took body shop classes at the Canton High School where he first met Bob Haas, a FMRCOA member, who was also taking the classes. Lowell repaired the rust spots and dents on all four fenders at these classes.

The truck was completed in August, 1996 and, finally, after 11 years of work Lowell started enjoying driving his '56 F-100! His wife also now thinks that maybe it was worth giving up her garage and scraping windows in the winter for many years!



**After Restoration**

The truck was built to be a driver and has been driven twice to Pigeon Forge, Tennessee; once to Carlisle, Pennsylvania; and once to St. Ignace, Michigan. On the trip to St. Ignace, a drive shaft universal joint went bad while going over the Mackinac Bridge. Lowell managed to slowly drive to the show. At the show he crawled under the truck to remove the driveshaft and then carried it over ½

mile to a NAPA store for a new joint bearing!

The truck was shown at the 1999 Cobo Hall Autorama in the Cavalcade of Customs area sponsored by Chuck Miller. The paint was just recently touched up after 9 years of scratches and stone chips.

Lowell's current project is a '57 Ford Custom 300 2-door sedan which needs a lot of work. He's building it as a street rod with a Ford 351 crate motor and AOD transmission. His wife says he won't live long enough to finish it (nah!). John Hill bought the 312 Y-block motor and trans out of the '57, and it was John that introduced Lowell to the Club after being invited to eat lunch on Wednesdays at the 3 Brothers Restaurant with a bunch of car guys who happened to be FMRCOA members. He joined the FMRCOA in the fall of 2004.

Lowell grew up in Cincinnati and graduated with Mechanical Engineering Degrees from the University of Cincinnati and Purdue University. He worked at the Jet Engine Division of General Electric in Cincinnati before spending 3 years in the Air Force. After doing graduate work at Purdue, he went to work at Ford Motor and retired in 2001 with 37 years in powertrain research.

At Ford Lowell worked on many types of engines including gas turbines, Stirling engines, Diesels and gasoline engines. He worked with Porsche on the design of the crankshaft for the 3.0L V6-4V which currently is in many Ford cars. His last project before retiring was the design and build of an internal combustion engine running on pure hydrogen.

Lowell is currently the President of the Klassic Haulers Truck Club of Michigan which is a club for people with old Ford trucks. His first car was a 1939 Ford coupe which he drove to high school and the first years of college. He replaced the Ford coupe with a 1953 Studebaker Starliner. "I wish I had both of those cars back," he comments.

Lowell and his wife, Barb, live west of Plymouth. they have 4 daughters and 10 grandchildren. Barb takes care of two of the younger grandsons everyday with help from Lowell when necessary!

### A Note from the Treasurer



February has been another relatively slow month. Dues are coming in but we still have many members who haven't paid. If you are one of these members, please do renew as soon as possible and send your check in!

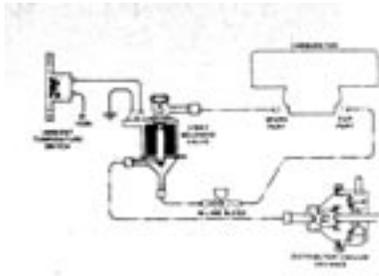
Thanks much!

**Steve Rohde**  
Treasurer

## The Early Days of Ford Electronic Engine Control

by  
**Dan Davis\***

Back in the 1960's, when engine emission control first began, the only control method, or "muscle" for operating emission control devices was the vacuum created by the engine. Through the 60's and early 70's, the emission control components and their resulting systems became increasingly complex. The vehicle engine compartments were a sea of rubber or plastic hoses, full of "widgets", looking like spaghetti draped over the engines, so the metal of the engine could hardly be seen.



**Early 1973 Ford Temperature  
Activated Vacuum System**

The modifications seemed to strangle the engines to where they would hardly run.

Back then, the only electronics in the car might be the solid state radio or maybe a "breakerless" ignition system. Then, as the contradictory requirements of fuel economy, driveability, performance, and reliability, not to

mention the Government mandated emission regulations, evolved; the need for more precise control with greater reliability brought about the need for vehicle grade electronics systems. The Government had pioneered the term "Military Specification" for many of the attributes they felt were needed for their unique applications, but the automotive industry would have to make their systems robust enough for vehicle use, affordable to the customer, and serviceable by a dealer.

In 1978, Ford made their first production electronics system. It was a very basic "closed loop" fuel control system for the California market Pintos with the 2.3L OHC engine. The term "closed loop" means that it had an adjustable fuel/air ratio carburetor and a monitoring system in the exhaust. Called the FBC-TWC system, the carburetor had a "range of authority" of about 2 air/fuel ratios about either side of the ideal "stoichiometric" or chemically balanced A/F ratio of approx. 14:1. The EGO or Exhaust Gas Oxygen sensor in the exhaust would monitor the exhaust gas to see if it was burning rich or lean. Its signal to an electronic control unit would be converted to a vacuum signal to the FBC (Feed Back Controlled Carburetor), which would adjust the fuel flow. This closed loop of constant monitoring and fuel flow was only accomplished in the warm engine, stabilized operation to improve the emission control.

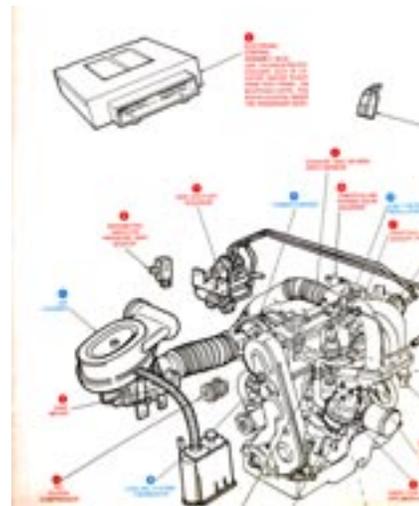
Behind the engine, attached to the underbody, was a catalytic convertor containing a TWC or three-way catalyst. The catalytic convertor had one "NOx brick" of catalytic honeycomb material that worked on the nitrogen oxides, and another "COC brick" that reformulated the hydrocarbons and carbon monoxide. The NOx brick needed the close tolerance control of the FBC to maintain its highest operating efficiency.

While the fuel control was achieved using the electronic control strategy system, the EGR (exhaust gas recirculation) system and Thermactor (external air blown into the exhaust manifold to complete the combustion of hydrocarbons) were still controlled with conventional

vacuum systems. Even the ignition system still had a conventional vacuum and "spring and weight" advance mechanism.

After these trial systems, more complex EEC (Engine Electronic Control) systems began to evolve. The EEC I and EEC II systems were also limited production applications, in part to access the viability of their increased complexity. The EEC III of the early 1980's was used on larger production volumes, but still were only used on certain models of 5.0L and 5.8L V8 engines., primarily on Lincoln, Crown Victoria, and Grand Marquis vehicles. These more complex EEC systems would control either a FBC or a CFI (Central Fuel Injection) system. The electronic engine management system also had begun to evolve, using more advanced fuel control strategy or "algorithms" and a calibration "chip" in the computer. The systems now under electronic control were fuel, spark advance, EGR, and secondary air. Some basic diagnostic functions were also built into the computer to help the technician diagnose concerns with the system.

Starting in the 1983 1/2 models (i.e. 2.3L OHC Turbo Coupe Thunderbird), an enhanced EEC IV system was introduced. This 4<sup>th</sup> generation electronics system featured a more innovative system, with individual 39 psi fuel injectors in each intake port, more calibrate-able ignition timing system, engine idle speed control including engine load "adders" for air conditioning, EGR and secondary air control solenoids, fuel vapor management, and increases in self test diagnostic functions. There were many typical inputs and outputs for the ECA (Electronic Control Assembly or processor). The inputs included throttle position, air flow, ego, RPM, and manifold pressure. The outputs included idle air control, fuel pulse width and pump control, EGR on/off, and boost control. EEC systems continued to evolve from the EEC IV system over the years.



**Componentry on an EEC-IV Equipped 2.3 L EFI  
Turbocharged Engine**

\*Dan worked on various versions of the 2.3L engine for most of his 28 1/2 years at Ford. In 1983, his department was assigned to form a Technical Hotline, where a panel of dealers across the US could get help on diagnosing problems on the new EEC IV system which was being piloted on the 2.3L T-Bird Turbo Coupe. They worked the phones, analyzed service procedures, wrote service bulletins, and did dealer visits when the problem continued on over several phone calls. Currently he is restoring a 1984 Mustang 20th Anniversary GT-350 that was a major service problem for Ford – but that's another story!

## Clara and the Ford Gyron

At the February Club Meeting Clara Mooradian displayed some pictures of herself with the 1961 Ford Gyron concept car taken in the Ford Rotunda. Clara was a secretary at Ford back then having started in 1957 at Factory Delivery on Jefferson, then moving to the Rouge Plant, and then to the Rotunda.



The Gyron was a non-functioning show car exhibited by Ford in 1961. The futuristic concept vehicle was displayed at 1961's New York Auto Show: a rocketship-shaped vehicle balanced on two



**Photos of Clara Mooradian and the Ford Gyron**

inline wheels using a large gyroscope. Apparently Ford made it quite clear at the time that they were not going to put this car into production. It's also interesting to note that the now famous Jaguar E-type debuted at the same auto show!

According to Clara's notes, the Gyron was styled by Ford's Richard Avery who subsequently left Ford to style outstanding boats at Chris-Craft. In addition, the Gyron was one of several concept cars that was intended to be nuclear powered.



**The Ford Nucleon**

The most famous Ford nuclear powered car was the Nucleon. The Ford Nucleon was a nuclear-powered concept car developed by Ford Motor Company in 1958. The car did not have an internal-combustion engine, rather, it was powered by a small nuclear reactor in the trunk of the car. The nuclear reactor used fuel that could be swapped out, and one load of nuclear fuel could purportedly power the car for 5000 miles. The car never went into production, but it remains an icon of the Atomic Age in the 1950s.

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## Dillie's Story: Part III -- Dillie Gets a New Home\*

The year was 1928. Dillsworth Buck's second sister had just passed away. The estate, equipment, and belongings were to be sold at a silent auction. Bids were being taken. The little boy who worked with his dad was now 13. They heard about the estate sale and the boy, Manly,



Dillie in 1928

asked his dad if he could have the car. His dad agreed and put in a bid of \$15.00. A couple of weeks later Manly and his dad were out along the road fixing fence, and this horse and buggy stopped. The man that was in it was a representative of the auction. He told Mr. Hakes that after careful consideration they decided that their top bid of \$15.00

wasn't enough. After all, the car had only less than 900 miles on it. Manly's heart sank.

As the representative was getting back into the buggy, Mr. Hakes shouted to him, "How much would it take?" And he said \$16.00. Mr. Hakes turned to his son and said, "It's up to you. You'd have to pay me back. Manly said "I will" and his dad went into the house and brought out \$16.00. That same day, Manly and a friend took his dad's 1918 Model T over to the Buck barn and towed Dillie the one and one half mile trip home; Manly said they left a trail of white rubber as the tires crumbled. He said he should have put air in them first. When he tried to air them up at home, only two went up and one of those went back down in a few minutes. The one holding air was used for over a year. Oh, by the way, 72 years later, when asked if he paid his dad back the answer was "Oh yes, and that was a lot of work back then". How long did it take him? He said, "I don't remember, two or three years".

That trip out of that barn was so exciting to me after sitting in one spot for fifteen years. I was in seventh heaven! When we got to Manly's farm, people gathered around and looked at me. I was a sight. By then the roads had Model T's like I'd never seen. More cars than horses! They were so sleek and modern looking with all kinds of body styles and colors. I heard talk of a brand new Ford car called the Model A. This blew me away! They say it can go 55mph. And maybe even faster! I felt so ugly and old. I figured I wouldn't last long as my new owner was so young. At least I was out in the open again and seeing everything. Almost immediately, Manly put water in my radiator and gasoline in my tank. They towed me and put me in gear and my engine flew over and started to fire. It felt so good! I was coming to life again. He did some tinkering and then I took him and his sister and dad for a ride in the pasture behind the barn with two flat tires and another going flat.

I didn't care. It was like being born again! Later that afternoon Manly replaced my old smooth white tires with the new style black rubber

\* This is the third part of the story of Steve's 1911 Model T touring that is based on fact and information gathered through his extensive research. It is told in the style of Personification—the car being "1st. person". In subsequent months we will continue the story.

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tread. At least they had tread when they were new. These tires were well worn with patches but the rubber was still flexible. We then went for a spin down the road. Everything was happening so fast! Manly sure knew how to operate me. He had experience driving his dad's 1918. The world went flying by as he opened me up. I had never gone so fast! At one point we must have hit 40mph. Or more! I suddenly started feeling proud of myself again. I heard people say that I was as good as new and could outrun the newer, heavier Model T's, with the low compression heads.

That late afternoon, I got my first wash job, in 15 and one half years. My top was still good but some of my paint didn't shine any more and was rough in some places. My brass looked just about like the paint and had no color. That evening I was driven up the dirt ramp into the top of another barn just like the one I just got out of. Oh well, felt like home. In the upcoming months Manly replaced my missing front seat cushion with one he found out of a 1910 Touring. It fit fairly well.

Also I developed a smoking problem and Manly took me into Arcade to a machine shop where they took my engine out and opened it up. I had stuck rings on number 1 cylinder and the mechanic said he had better replace all four sets of rings with a newer failsafe type. These required an extra groove to be cut into the pistons for an oil ring. This was the first mechanical repair I'd ever had done. I still had my original spark plugs and Kingston five-ball carburetor. A few years later Manly was having trouble with my coils. He had replaced a couple and still was having problems. New Heinz coils were no longer available and the new ford coils didn't fit the coil box. So finally Manly took out my original box and replaced it with a smaller, Ford, box and coils he picked up at the local scrap yard. They were 65 cents. He also got a good used set of Fisk tires. As the years went by at the Hake's farm I came to realize I had another owner who put me in any time it rained or the weather was poor. The newer cars often sat out. Maybe my fate was better than I originally thought!

## Classified

February 2006

### For Sale

- Left rear view mirror and spotlight for 1973 Mustang. Make offer Clara Mooradian 313-383-9380
- 1966 Olds 98 LS black on black, 47,000 miles. 1 ½ condition, mint interior with tissue dispenser and make up mirror in rear seat. 365 HP super rocket, fancier than a Cadillac. PS, PB, AC (reconditioned 1 year ago) radial tires, drives beautifully, rides like a dream, \$10,500 Chuck Niehaus 248-879-9406
- 1966 Mustang 289 hydraulic Hi Po camshaft and lifters, new, \$125; 289 4V cast iron original intake manifold, restored. \$120; 1997 Cobra Mustang coil springs, 10,000 miles. \$50; 1983 Lincoln Mark VI, looks new, signature series, 2 dr gold, moon roof, low miles, 4950 Bob Milligan 734-674-8483
- 1965 289 4V intake \$100 Gene Johnson 734-261-8334
- 46 Ford business coupe or four door good solid steel front doors \$200 apiece or \$300 for the pair; 47 2dr sedan or coupe good solid steel doors same price; 47 super deluxe hood straight steel \$250; 46 front fenders, good condition, \$75 apiece or \$100 for the pair; 46 rear fenders good condition same price; 41 hood ,straight, \$225; 41 stainless moulding, good, \$100; 41 stainless hood moulding good, \$60; AC unit ,complete, mid 60's Ford \$100; 41 super deluxe horn ring very good \$75; 41 steering wheel good

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\$40; 65 T bird good condition, rebuilt engine, \$2500, needs TLC; Mercury sun valley, nice project car, \$8000; 56 Merc Montclair, North Carolina car, 98% solid steel needs interior, all chrome grill, bumpers, etc. freshly plated last year. Very good stainless mouldings, dent free, need to be buffed out. Bill Bella 734-992-2099

- 1937 Buick Special. Complete & straight. Good for a hot-rod. \$1500. Steve Rohde 734-717-5444.

- Acetylene / Oxygen Welding & Cutting Outfit. Three welding tips and cutting attachment. Large Cylinders with cart. \$125.00. 734-432-5065 Norm

- 'Ford-O-Matic' 3 sp. auto trans out of a '63 260 Fairlane five bolt bell \$150.00. Brian at 734-753-3788 or [mbhouse@chartermi.net](mailto:mbhouse@chartermi.net)

## Wanted

- Trans kick down rod for 1964 or 65 Comet or Mustang (C-4 trans) Gene Johnson 734-261-8334

- 1953 Ford 6 cyl 215CID exhaust manifold EAA-9430-A, Ed Danes 248-685-9788

- Ford 1942 business coupe trunk lid Rod Lamb E-mail dellamb@sbcglobal.net

## January 2006

## For Sale

- Ford 460 engine short block. Fresh .30 over bore block decked and line bored. New freeze plugs and all other plugs. Ready to be assembled. Crank .10 rods .10 mains New rods, arp bolts and nuts. New forged pistons and pins. New rings, bearings and gaskets, high volume oil pump and pickup. Timing cover and pointer. Aluminum Offy intake. \$1700 Tim Mason 248-478-2646

- NOS dipstick and tube for 1970 Boss 302 -69 302, 406, 427. Fuel logs, linkages, gaskets and hardware for intakes. All new. Tim Mason 248-478-2646

- 1970 Ford Torino GT convertible. Built 351 HO 5 spd. Buckets, console, v.g. condition. \$18000 Karl Chase 248-879-0854

- 1954 Ford steering gear and steering column. Has shift handle for Fordomatic. Good condition. Also 1951 center grille bar, needs chroming. Hank Dawson. 810-231-3184

- F 100 steering gear and shaft. 351 C 71-73 Mustang H pipe. Good condition. 351 cast iron intake, exhaust manifold heat shield, front sway bar, front bumper reinforcement, front lower valence panel, instrument cluster gauges, CJ Jeep soft top and full soft doors, new in box Ford AM/FM cassette radio. Mallory magnetic breakerless ignition PN 5027502 with gear for 8BA flathead. With promaster coil PN 29440. Bill Gipperich 586-795-3344

- 64/65 T-bird doors and fenders and dash gauges. 8.8 Mustang ring & pinion also R&T top and deck spoilers 64 Fairlane T10 4 spd trans Call for pricing or trade. Dennis 810-765-0686.

## Wanted

- 2 barrel carb 332 Holley? Need for 59 Ford. Art 248-553-8897

- Rear bumper RS quarter panel and any other parts for a 1970 Monterey Scott 734-770-8519

- Ford speedo cable with threaded connections on both ends, square drive core. No specific year, but using '40 drive torque tube and SW speedometer. Bill Gipperich 586-795-3344 .

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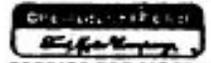
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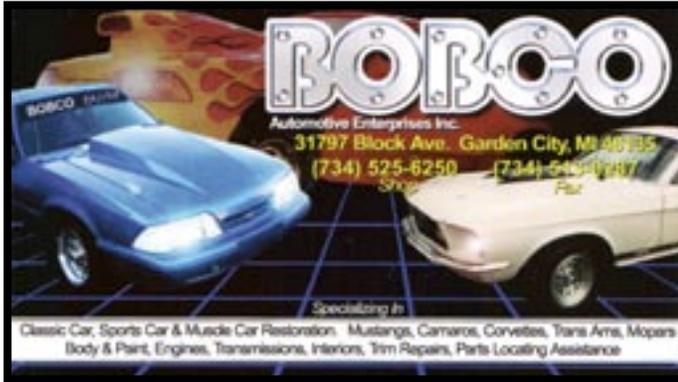
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