





March 2006

I know it's almost spring because we're going to the Frederick Flea Market in a couple of weeks. For me, that's the real sign of spring, emerging snowdrops and crocus notwithstanding. Plan on joining everyone by vanpooling up there. There are details on the trip elsewhere in the Valve Clatter. I can't say I ever find more than a few odds and ends there but some members have had good success. I just enjoy poking around the parts both inside and outside, although I've never understood how inside the barns can be so much colder than it is outside. Someone ought to find out and patent it, because it's one of the best forms of air conditioning I've ever seen.

If you missed Train Day at **Clem and Sandy Clement**'s, you missed a good party. With all the toy trains, cars, good food and friends, it was a good time as always. I especially enjoyed seeing Clem's '39 pick-up and hearing it run. I understand it's been a battle sometimes with the pick-up but he seems to be making good progress with it. Won't be long before we see it on a tour?

Attendance was down a little at our last membership meeting. I suspect the winter doldrums had many folks still hibernating or in their migration pattern. Those who attended saw a good program put on by **Dave Gunnarson**, **Hank Dubois** and **Eric Sumner**. I hadn't realized how much there was to know about steering columns (and how much I didn't know). I'm always amazed at the knowledge and expertise our members have regarding these old Fords and it's a pleasure to have them share it with the rest of us. I'll bet there is one or more aspect about our cars in which you have expertise to share. Give some thought to it and give Eric a call or an email and discuss giving a presentation at a meeting this year. **Jack Machey** will be presenting at this next meeting on safety as it relates to our old cars. I'm looking forward to learning more about this topic.

In this issue, we conclude the "serials" by **John Sweet** and **Godfrey Cohen** and start another by **Al Edwards.** We're fortunate in that we've had so much material for the Valve Clatter recently that this is the second month with "bonus pages," 12 pages versus 10.

One other item to note: **Dave Westrate** is already busy on our car show for May. He worked with the Board to redesign the brochures and posters for the show and is including more pictures, capturing a larger variety of cars. They're really attractive and I think they'll be effective.

Finally, we're making progress on the Eastern National Meet. The big effort this month will be creating a budget. **Hank Amster** is the treasurer for the meet so you know he'll ensure that we develop a sound budget.

Get those old Fords ready. It's almost time to begin touring again!

JOHN

PART 6: THE POSTWAR YEARS (Conclusion) John Sweet

Henry II inherited a sick organization. Losing money, and with no real management team in place, the company was teetering on the brink of collapse. Henry II immediately began to rectify the situation by bringing on management experts from the outside, including as hiring talent from General Motors. Change would take time, and success would come, but what was important was to get the lines started up again. This happened on November 1, 1945. The Lincoln, for the first time since February 1942, was producing automobiles again. But the new Lincoln line-up that Edsel Ford and Bob Gregorie had designed during the war years was to be put on hold. These "new" Lincolns rolling off the line in late 1945 and 1946 were, in fact, warmed over '42's. After four years of rationing and used cars, people wanted new cars, and the fact that they were based on '42 models mattered not at all. So, prewar tooling was dusted off, the bodies were given a light facelift and then readied for production. A look at the nameplate however revealed that the Zephyr was gone. Of the many casualties of the war, the Zephyr nameplate was one of them. Lincoln was looking towards the future and the Zephyr name was not part of it. Only the Lincoln and the Continental models remained.

Changes to the 1946 66H model Lincoln were kept to a minimum. The car was still based on the body stampings that had been introduced in the 1940 model, and the engine was still the same old venerable HV-12. By '46, it was the only V-12 in the market. In keeping with the styling initiated by Cadillac in '41, a large, massive die cast eggcrate grill was substituted for the delicate stainless steel '42 version. Body styles available were the 4-door sedan, 5window coupe, convertible coupe and the Continental Coupe and Cabriolet. The hood ornament, in keeping with the newly won peace, was a winged "V" over a gold ball. Hubcaps were simple one-piece stainless steel stampings that said "Lincoln." Bumpers were bigger, but that was about it. Options were the same as earlier years. Overdrive was again an option, but just about all the cars were equipped. Perhaps the biggest change between the prewar and postwar models was the price. In 1942, a Lincoln Model 77 4-door sedan cost \$1,801. In 1946, the same model cost Despite the price increase, more than 16,000 \$2,337. Lincolns were built in '46. The crowning moment for the '46 model year was the selection of the Continental Cabriolet as the official Indianapolis 500 pace car. Driven by Henry II himself, the yellow colored Continental again elicited the same amount of excitement as the prewar models.

Like many other manufacturers, the Lincoln Motor Company would have preferred to introduce its brand new post war models in the fall of 1947, however this was not to be. Lincoln, along with its parent company Ford, was still in transition and being reorganized. Part shortages and labor strikes with suppliers also stifled the production. It was a sellers market and demand had yet to slack off. Additionally, the new designs Gregorie had produced in '41-'43 were being scrutinized by the new management team lead by Ernest Breech. Henry II had brought in Ernie Breech from GM, made him an executive vice president and gave him a seat of the Board of Directors. More work was needed on the next generation of Lincoln, so the decision was made to again update the prewar Lincoln bodies that were still being produced. It was during this time that any idea for a workable Continental was scrapped. The new shapes envisioned just didn't lend themselves to the Continental classic, sensual design. The Continental would continue through the '48 model year and then it would be no more.

The '47 76H Lincolns received minor trim changes to denote the change in model year, but little else. These trim changes included a speared hood ornament similar to the '40-41 styles, new hubcaps, and side trim, a new Lincoln script logo for the hood and revised faces for the gauges. Mechanically, they were the same as the previous year with the HV-12 sized at 292 cid and producing 120 horsepower. The biggest news for Lincoln that year was not so much with the cars, but rather the reorganization. Lincoln was combined with Mercury to form a new division. Three new manufacturing plants supplemented the original Lincoln plant, which dated back to 1917. Additionally, a new dealer network was being put into place. Before the war, Lincolns could be sold and serviced from any Ford garage. Now, Lincolns would be purchased and maintained by Lincoln-Mercury dealers all over the nation. This move would also serve to boost Mercury, as Mercury would now be thought of as a baby Lincoln rather than just a super-deluxe Ford.

In the fall of 1947, the '48 876H Lincoln and Continental models were introduced. It was the last hurrah for the HV-12 engine and prewar bodies. These cars were simply warmed over '47's being produced to fulfill any remaining orders and to keep production going until the new 1949 Lincoln were introduced. By March 1948, the last HV-12 Lincoln moved down the line and production of the HV-12 Lincoln came to an end. Produced during a ten-year model run, these HV-12 powered cars had performed admirably and had done the job when Lincoln needed them most, but it was time for a new Lincoln, a more modern car, to carry Lincoln into the second half of the 20th Century.

The cars that became the Lincoln in 1949 had their start in the 1941 designs envisioned by Edsel Ford and Bob Gregorie. The basic ideas had been okayed by Edsel in 1943 and, by late 1945, were set. There would be two sizes of Lincolns, the smaller EL (light) and the larger EH (heavy) model. They would be available as 2- and 4-door sedans, and a convertible coupe. The smaller EL would be more conventional, while the larger Lincoln would feature a unique fastback styling. When he came on board in early 1946, Ernie Breech immediately reviewed the future Ford and Lincoln line-up. Although the Lincoln was set, Breech decreed that the Ford was much too big and needed to be redesigned. Breech pitted Gregorie and his team against

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an outside company led by George Walker. While the two designs turned out to be remarkably similar, the car Walker's team had designed was selected. Bob Gregorie saw the writing on the wall and, after he and his team had completed touching up the designs for the '49 Lincoln and Mercury, left Ford to pursue his first love, yacht design.

The '49 Lincoln was introduced in April 1948. The smaller 121-inch wheel base 9EL model was a thoroughly modern car, as was the larger 125-inch wheelbase 9EH Cosmopolitan model. The smaller Lincoln line-up included the Model 72 2-door Club Coupe, the Model 74 4-door Sport Sedan, and the Model 76 Convertible Coupe. These models could be easily identified by their split front windshields, a stainless steel side molding that stretched from front to back and on 4-door models, a rear window vent that was integrated into the back door. The larger Cosmopolitan line had a panoramic windshield and unique chrome wings over the front wheel wells. The Cosmo came with the same model designations, but also added the model 73 Town Sedan, with a torpedo back that made the long car look even longer than its 220.5 overall length. For the first time since the Model K Lincoln, both Lincolns featured a 90° V-8. Adapted from a Ford truck engine introduced in January '48, the new engine was rated at 152 H.P. and had a displacement of 337 cubic inches. For the first time, Lincoln owners could have an automatic transmission, the GM Hydromatic. A three-speed column shift with optional overdrive was available as well.



Inside, the new Lincolns were just as well trimmed and appointed as the earlier Zephyrs. The seats were wider and longer and featured rich broadcloths and leathers in simple patterns. On the outside, the rounded designed fitted them well. One of the most unique features of the new car was the "frenched-in" headlights. Originally to be fitted with concealed headlights, the engineers had been unable to come up with a workable mechanism in time, so Gregorie came up with the tube-like headlight trim that hid the hole between the fender and the headlight assembly. The grill was an updated version of the postwar models. Low and wide, it sloped downward to the upper corner of the massive front bumper and continued the egg-crate motif as used in earlier models. It even included round fog lights at each end. Unfortunately, the downward slope of the grill gave the new Lincoln an unhappy, frowning look. Yet, despite the frown, new Lincolns were doing well. Production (even accounting for the extended model run) was an astounding 73,507 units, almost twice that of the combined '46-'48 production.

In 1950, the Lincoln line received a facelift. The frowning grill was replaced more horizontal one that didn't frown at all. Chrome rocker trim was added and round taillights were used. The dash, which had garnered many complaints the year before, became more conventional. The flathead V-8 received some welcome engineering refinements to correct excessive oil consumption and a harmonic imbalance problem. The 0EH Model 73 Town Sedan was dropped from the Cosmopolitan line, as was the 0EL Model 76 Convertible Coupe from the Lincoln line. In an effort to keep up with General Motors's new hardtop models, Lincoln introduced the Lido and Capri models. The Lido was a dressed up Model 72 Lincoln Coupe with a deluxe interior and padded vinyl top. The Capri duplicated the effort for the Cosmopolitan line. Unfortunately, the body design of the cars precluded them from being true hardtops.



The 1951 1EL and 1EH Lincolns were further refinements. On the outside, the grill was modified by stressing simple horizontal lines and merged with the front bumper, a styling cue that would become part of Lincoln for the next few years. Even the headlights were moved more to the outside of the fenders to take advantage of the effect. Taken as a whole, it made the car look even more massive from the front. In back, they restyled and rounded the trunk and rear fenders, generating a flowing look that seemingly separated trunk from fender line. Fender skirts were now an option on 1EL models, and were left off a surprising number of cars. This was to be the last year of a Lincoln flathead, thus the engine received only a few modifications. The Hydromatic was now standard equipment, but the biggest improvements came from the inclusion of a new high-speed rear axle and an improved carburetor. These changes allowed the smaller 1EL Lincoln to take first prize in the Mobil Gas Economy



Run in 1951. Equipped with above improvements, the optional three–speed manual transmission with overdrive, and a well planned and timed route, driver Les Viland won with an average of 25.488 mpg. It was a high note to go out on.



When production of the '51 models ceased, 32,574 cars had been made. Although radically different from the older Lincolns of the 1920's, '30's and early '40's, the '49, '50, and '51 Lincolns shared more with those earlier cars than with any Lincoln that would come afterward. While Lincoln would go on to produce some very fine automobiles in the future, the earlier Lincoln L's, K's, Zephyr's, Customs, Continentals, and Cosmopolitans made the company what is was. Never again would Lincoln have direct connections to the men like Henry Leland, Henry and Edsel Ford or E.T. Gregorie. Never again would Lincoln have the design synergy of Edsel Ford and E.T. Gregorie directing the styling visions of the company. It was truly the end of a golden age and the end of the Lincoln Motor Company's beginning.

Postscript:

When Edsel Ford became president of Lincoln, he once remarked, "Father made the most popular car in the world, I would like to make the best car in the world." Like any automobile, Lincolns have their quirks and foibles, and yet as any Ford V-8'er knows, that is what makes it fun to own and drive one. Another part of the fun is knowing the history of the car. What makes it so interesting for Ford V-8 owners is how much the early history of the V-8 Ford and the HV-12 Lincoln are interconnected. What affected one company had an impact on the other. Like Ford, the story of the Lincoln Motor Company can be seen as a series of steppingstones, or bridges. Each had distinct models that really don't overlap. Ford had the T from 1908 to 1927, followed by the Model A from 1928 until 1931. In 1932, the V-8 was introduced. That was an era that lasted until 1953. Although the Lincoln K model overlapped the Zephyr from 1936 until 1940, each model of Lincoln was distinct unto itself with very little carried over from the previous older one. Today, there are three separate clubs that cater to these automobiles.

The oldest, founded in 1951, is the Lincoln Owners Club (LOC). This organization caters to Lincoln L, KA, KB, and K models produced from 1921 to 1940. More info can be found on their web site <u>www.lincolnownersclub.com</u>.

The Lincoln Zephyr Owners Club (LZOC), founded in 1968 is for owners of HV-12 era Lincoln-Zephyrs, Lincoln Continentals, Lincoln Customs and Lincolns produced from 1936 to 1948. Their web site is <u>www.lzoc.org.</u>

Founded in 1953, the Lincoln and Continental Owners Club (LCOC) recognizes all Lincolns from 1921 through present. Their web address is <u>www.lcoc.org</u>.

Additionally, your very own Early Ford V-8 club also recognizes these cars through 1953!

WE WON'T STEER YOU WRONG

A tag team comprised of Dave Gunnarson, Hank Dubois and Eric Summer covered steering columns and steering boxes at the February Membership Meeting. Dave started off with a discussion and demonstration of the ignition switch, column lock and keys. Hank took over and discussed the older steering boxes and Eric finished up the discussion of the newer steering boxes, covering the different types of gears and adjustments.



As is typical of our group, there were many questions and much discussion during the presentations.

<u>VALVE CLATTER</u>

MY 1951 V8 PANEL TRUCK ODYSSEY Al Edwards

My 1951 Ford F-1 Flathead V-8 panel truck apparently started its life of service in Dinwiddie, VA. It was purchased new by a couple who owned a funeral home. For a number of years, it was used as a utility vehicle to fetch caskets over to the home and to deliver flowers etc. to and from gravesites. I guess the husband died and the funeral home was sold. The widow, whose daughter lived over in Owings, MD, kept the truck and used it for a number of years in Dinwiddie to take trash to the dump on Sundays. So, it was literally owned by a little old lady who only drove it on Sundays.



Eventually, she grew frail and went to MD to live with the daughter and husband. her The husband brought the truck over. parked it and there it sat,

collecting weather and sinking into the mud. The mother ended up in a nursing home in MD and the daughter and husband, who now had title to the truck, decided to sell it.

It was purchased by a mechanic who cleaned it up a bit, put new gas and a set of plugs in it and brought it over to the townhouse development where he lived in Herndon, VA. He lived next door to our daughter and son-in-law at the time and when Mary and I went over to have dinner with them one day in May 1994, our son-in-law Brad said, "You have to see what my neighbor just bought".

Well, Brad took me out to the parking area and there sat the forlorn and rusty old 1951 Ford Panel Truck, apparently on the original set of tires. Well, I guess I got there either at the right or wrong time, depending on how you look at it because Brad told me that the neighbor had decided he didn't really want the truck after all and might be looking to sell it. I met the neighbor and he told me a bit about the truck, and asked me if I wanted to hear it run.

What really did it for me was when he fired it up. He put it in neutral, turned the key and pressed the little chrome starter button. He was standing outside the truck when he did this and didn't even hit the gas pedal. The engine roared to life in less than half a second and settled down right away to a beautiful, quiet idle--you know, that "thrum-thrum-thrumthrum" sound. I used to race flathead V-8's on dirt tracks in my stupider young days and I never forgot that sound. I was a bit mesmerized and the next thing you know I found myself asking the guy how much he wanted for it. And the next thing you know after that is, he agreed to sell it to me for a very decent price and even agreed to let it go WITH the four, brand new 6.00x16 wide-whitewall tires laying in the back of the truck that he had acquired somewhere for it; and, the next thing you know after that, I was bringing him a check for it and agreed to take it off the property.

What I didn't understand was the true condition of the running gear. It had plenty of field time in Dinwiddie and over in Maryland and had sat uncovered so it developed a lot of surface rust, in addition to developing some very bad brakes. What the heck, he had driven it over from Maryland, so, blissfully unaware, I decided to drive it home.

My secretary at the time went over there with me to pick it up. The eight miles to my then home in Great Falls was all white-knuckles. I found that the brakes were virtually not there--they went south about 4 blocks from where we started. I found that if I pumped them very hard and very fast, I could slow it down---well, pretty good. The cruddy wheel bearings, dragging shoes and downshifting had to do the rest of the work because the parking brake cable was broken. I told her to drive very slowly and to not allow much distance between our cars, but to watch out in case there started to be NO distance, if you know what I mean. Well, I managed to get it home and noticed that the left front brake was now sticking badly and was plowing large divots in my gravel driveway with any forward movement. This caused the rear wheels to spin a bit too, so I ended up taking the offending front wheel off and beating on the drum to shake the brake shoes loose.

Having managed to finally get it around to the concrete pad behind my house, I decided I needed to "fix" the brakes first. It seemed pretty easy at the time. I also wanted to learn a bit more about the truck's history so I found the people over in MD who owned it. That's how I learned where it came from and how it was used. When I got it, the ODO showed about 20,000 miles. Inside the glove box was a little round metal lady's button/sewing box in which she had some buttons, all of her pink Dinwiddie inspection receipts since VA started the practice, all showing 20,000 miles, some recipes, and some other receipts from a local garage and a general store. It was very touching to see this memorabilia and I saved all of it. There were also a few horseshoes and a couple of old Ford script wrenches in the back of the truck, which I saved for posterity. As best I can guess, the truck never had more than about 30 or 40,000 miles on it, if that. They had disconnected the ODO at 20,000 and it's doubtful she would have put more that another 10 or 20,000 on it.

One of the problems I faced was that I had no place to keep it inside. The truck was just sitting out back in the weather and I found that in addition to not rolling or stopping too smoothly, it had virtually no seals around the doors, windows, or especially the cowl vent. Things had already gotten quite soaked in the interior. There was the usual mouse nest in the glove compartment, (made with puffs of upholstery filched from the driver's side seat cushion by the little critters). Pulling the remnants of the floor mat back revealed missing sheet metal patched with an antique tin "Marlboro" sign and the remainder of the floorboards looked like alpine lace. Never having really reworked an antique car before, needless to say, I was almost on the verge of slightly becoming a tiny bit discouraged.

Well, I decided I would cover the truck with a tarp but before I did that, I obtained some schedule 40 PVC pipe and built a latticework on top of the truck, which would support the tarp. I used foam blocks off a couple of canoe mounts to keep it up off the body and keep air separation between the tarp and top. I used a very large tarp that hung down over all sides of the truck pretty well, so at least I could bungee the tarp down all around and keep it out of the weather. I learned that it also did a good job of keeping me out, even when I just wanted to open the door and look in, so eventually, I erected a 10' by 20' vinyl covered carport over it to provide easier access. Ah, yes--there's nothing like an open air garage, is there!

Then I proceeded to try to remember all the stuff I did to cars as a kid. Not much was coming back to me--all the "antique" cars I worked on as a kid were really not very old at the time and I could get parts for everything at the store. I started by just taking the wheels off -- the fronts first because I couldn't remember how to get the recalcitrant rears off. I fieldstripped the front brakes down to the spindles and naturally found that the wheel cylinders were totally frozen. There was also an accumulation of mud and dirt and other detritus that defied description inside the brakes and under the body. If dirt could weld, I had discovered the magic formula. Amazingly, I remembered how to use the tools I had to get everything off. Then I realized (after field stripping BOTH front wheels down to the spindles) that I had behaved exactly as I did when I was a kid and hadn't bothered to document a durn thing. Well, I did draw a couple of crude kind of cartoon pictures that I thought would help me but I couldn't read my own hieroglyphics afterwards.

About that time I began to realize that I probably needed some documentation about the old Ford so I managed to find a source for manuals in Hemmings. As it turned out, this contact was great – I got a complete, <u>original</u> 49-50-51 Shop Manual and a 48-52 Truck Chassis Parts manual, which were in VERY good condition for a reasonable price. I proceeded then to become a formal student of '51 panel restoration.

I also started to cast about for sources and learned from trips to Carlisle that there were flea markets and places like Dennis Carpenter for parts and guys selling POR and rust converter and specialty tools. I had long since discovered that my local NAPA guy had little interest in supplying stuff for me. I also learned that there was a local Ford agency that had just recently gotten rid of ALL of it's pre-60's manuals and no longer entertained any maintenance on old Fords. Apparently, they just went into the dumpster! I was discouraged in one sense but really felt great in another because I kept finding new places and sources to get "stuff" for the old Ford. In simpler terms, I was now "hooked". I was a hunter/gatherer!

Back to the back yard--by now the back of the old Ford was filled with brakes drums, shoes, cylinders, springs, clips, hoses

and all manner of other little parts and I took them out one-byone and started cleaning them up. How? Well, a while back at a yard sale, I had purchased one of those '50s "butt-shaker" exercise machines (remember them?) with a big strap and two eccentric cams on either side. I took the cams and the strap off, installed right and left hand mandrels, and made myself a very respectable wire wheel/buffing station. I used this to clean and wire brush all the parts, even the backing plates and they looked pretty good. I even tried to revisit something I had done as a young man and bought a brake cylinder honing tool.

The cylinders were so frozen and so rusted, however, that I could barely get the cups out and the cylinder walls had pits you could break a fingernail on--they were far beyond honing. One of the best things I ever did was to remove the whole mess -- wheel and master cylinders as well and send them up to White Post to be bored out and sleeved with brass. In the interim, I re-learned the fine art of how to cut, flange and bend brake lines and managed to get all new steel lines installed with new rubber lines to connect them. The old lines were invaluable as patterns in making up the replacements but I found I had to wing it quite a bit when bending and fitting the new ones. They turned out to be pretty good, though. By that time, I had all the other stuff cleaned up and back on the truck and I was ready to reinstall and hook up the brake system. If I had to make up sets of brake lines for, say, about 20 old Fords, I decided I would have gotten pretty good at it by the 20th one.

About that time, a dear friend of mine who had MANY hours rebuilding old Buicks came up to see me and we spent a few days together working on the Ford. He knew exactly how to put the wheels, new bearings, shoes (which I did get through NAPA) back in with all the clips, springs, adjusters, etc. I had all the drums turned and they were all ready to go back on as well. (I had finally rented a puller to get the rear drums broken loose.) Now we had a reassembled, all new brake system with all new shoes, clips, springs and hardware. He had to leave so I ended up hooking up the lines and bleeding the system myself – to my amazement, there was only one leak (loose fitting -- you really have to turn those things tightly) and after fixing that, I had a rolling truck and working brakes. (*Continued next month*)

"Most obvious of the 1951 year's modifications was the new full-width grille comprised of a horizontal bar supported by the ends by the parking lights and the headlamp nacelles and mid-span by three "bullet capped" uprights. The updated cab called Five Star, incorporated a 50% larger rear window (not in the sedan delivery) dual windshield wipers, and a modified instrument panel with two circular cluster dials. Also there was a "deluxe package" consisting of several cab refinements and exterior trim features. The automatic transmission was an option for the first time." From *FORD TRUCKS* by J.K. Wagner

BIRD WINGS ARE TRANSVERSE (Continued

from Feb) Godfrey Cohen

Moving the front spring forward in 1935 also enabled the motor to be moved forward 8¹/₂ inches. This move alone, inspired by the 1934 DeSoto Airflow, helped to improve the Ford car's balance and ride comfort because the passenger seats were also brought forward and located well within the wheelbase so that, significantly for passenger comfort, the rear cushion was located well forward of the rear axle. For the next 1936 model year, a new 5 lbs lighter road wheel was introduced, which further contributed towards a reasonable ride by lowering unsprung weight. It was calculated that the resulting riding ease was improved by the same amount that adding 200 lbs to the body would have meant.

Henry Ford's transverse springs were perfect for the ultra lightweight Model T. Advantages were that the spring weight was held by the chassis and as there were no front wheel brakes, the front axle locating radius rods could be light as they didn't have to prevent axle wrap-up during braking. Further, the torque tube drive component was also light and so all of these



structures combined to provide a low unsprung weight, which was good for comfort. However, as the Ford car grew heavier over the years, along with its more robust radius rods and torque tube drive, Henry Ford insisted that his engineers stick with and modify the transverse springing to compensate and keep the unsprung weight as low as they could. That they, arguably, managed to keep up with the competition in this area throughout the 1930's was simply because Henry Ford's V8 remained lighter than other cars in their class, such as Chevrolet and Plymouth. As I see it, the only significant inherent problem with Henry Ford's beloved system was when Fords passed a certain weight threshold, therefore signaling the natural limit of transverse spring suspension. For example, the heavy 1936 Lincoln-Zephyr was probably just over that threshold. Its front spring was given two extra leaves but nevertheless, all of that body weight literally hung and swung on its shackles. The engineers added a strut in order to combat, to a certain extent, the otherwise intense body sway.

The Fords after 1935 developed a small degree of sway because the new front spring location needed a different steering linkage, which, unfortunately, transferred any lateral body sway directly to the steering. This problem intensified with the heavier Lincoln-Zephyr and the strut was added to restrict sideways movement caused by cross winds. This problem, on the much lighter Fords, was only ever considered mildly irritating and the strut wasn't considered necessary.

Apparently, the only other inherent weakness is perhaps just a theoretical one and because the question of ride comfort is subjective, it wouldn't result in a noticeable effect on the road to many, including myself. It concerns the ratio of the respective front/rear spring deflection rates or, in other words, Henry Ford's particular type of solid axle springing system dictates that its front spring should always be harder than the rear one.

> Interestingly, General Motor's brilliant engineer chassis at Cadillac during the 1930's, Maurice Olley, is widely given credit for discovering that in order to achieve an ideal flat ride, the crucial factor wasn't independent suspension but instead, it was in getting the front suspension to be relatively softer than the rear. Ford engineers were well aware of Olley's ideas but could only strive to approach his ideal, hindered as they were by the engineering limitations set by Henry Ford himself. However, whereas Ford engineers had no choice but to retain spring stiffness at the front, Mercedes Benz had not

learned the lesson from Olley and did the same as Ford and others through ignorance and instead put their engineering focus on independent rear suspension.

In order to achieve the best possible ride, the Ford engineers, throughout the decade, strived to close the gap between front and rear spring deflection rates knowing full well that there was a critical threshold above which they couldn't venture. They would never be able to successfully permit their softer rear spring load rate to be either very close to, the same as, or harder than the front spring load rate. The technical description if this happened would be to produce a single frequency deflection in equal pitch and bounce. So there you have it! Apparently, achieving that state would have been disastrous.

In 1934 rear spring stiffness was just 56% of the front because the necessary shorter stiff front spring, at a 400 lbs deflection rate, was on top of the axle and only provided limited wheel movement anyway. In 1935 with the spring moved in front of the axle, the stiffness could be radically reduced to 245 lbs and clearance was opened up above the axle for more free travel. The rear spring rate stiffness was proportionately lowered from 225 lbs to 180 lbs and the

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Ford ride was dramatically improved. By 1937, the front spring was lengthened by 2 $\frac{1}{2}$ inches and the rear by 2 inches. By 1940, the all-important Ford ratio of rear to front spring stiffness had increased to 78%.

The increased body weight over the decade, although not great, was deemed to have an effect on roll, so for the 1940 model year a front anti-roll bar was fitted to the Ford Deluxe 85 hp, Mercury and Lincoln-Zephyr, tying down the front axle at its outer ends but limiting free motion to some extent. However, roll resistance was improved and the front spring deflection rate could be dropped from 245 to 185 lbs. In order to avoid the aforementioned critical balanced pitch frequency, the rear spring rate had to be dropped to 165 lbs, which again improved the ride and the excessive roll had been dealt with too. It looks to me as if the post war V8 Pilot probably adopted this 1940 set-up, too.



Interestingly, by 1940, the Fordor sedan only weighed 176 lbs curb weight more than the 1935 Model 48 Fordor sedan. So throughout the decade the Ford V8 remained relatively light and sporty which gave a viability to the transverse springing development. The final evolution of Henry Ford's suspension design was for the new and significantly heavier 1941 model. The springs were lengthened again and the deflection rate decreased yet again but this time they were mounted on shackles with an outward angle and the spring base was set even further apart to 125 inches.

Clearly, Henry Ford didn't originally intend his transverse spring system to be used beyond his beloved lightweight yet durable Model T, for which it was admirably suited, for it is well known that Edsel Ford had to struggle in order to persuade his father to contemplate a successor. And yet, the fact that his springing system was successfully developed for use in progressively heavier models seems to me to be a testament to Henry Ford's vision, because it was he who determined that each successive V8 model would remain both relatively light in weight and durable; just like his Model T.

TECH TIP -NUTS AND BOLTS

Dave Gunnarson

Ever been frustrated at Home Depot or Lowes when searching for some hardware for your Early Ford V8 and lamenting the demise of the local hardware store? Remember being able to run down to Fairfax Hardware or some other local store for that special nut, washer or bolt? Unfortunately times have changed and we are stuck with the big box stores with their lack of knowledgeable sales staff, disorganization and meager variety of inventory.

While it may be possible to get some items from a good source like Ray Nacewicz (www.fordbolts.com), I have used McMaster-Carr as a less expensive alternative on several occasions. McMaster-Carr is a large hardware and equipment supplier with tens of thousands of currently available parts from hardware to shelving, tools and much more. They have an online catalogue (www.mcmaster.com) that can be searched for that special fine-thread machine screw or special thin washer and can be fun just to search through – you may be amazed at the variety of goods. I had success in locating the tiny (3/64")cotter pins used in the early distributors, 3/8" diameter roundhead steel frame rivets and some other parts I could find nowhere else. Some items come in larger quantities (box of 100) and there is a nominal shipping charge but the prices seem to be reasonable. A box of 100 frame rivets cost a total of less than six dollars including shipping and was on my doorstep in less than 48 hours of my phone order.

TRAIN DAY AT THE CLEMENT'S

John Girman

As you can see from the collage on the front cover of the VC, Sandy and Clem Clement hosted their annual open house this past month. The approximately 250 devotees of trains, cars, good food and good company descended on their home for a full afternoon. Many Early Ford V8ers were present. I saw Bob and Jane Wild, John Sweet (who brought his '48 Lincoln convertible), Chad and Evelyn Coombs, Bob Burke (who brought an old train for an appraisal), Hank and Cindy Dubois, Ken and Helen Burns, Patty and myself. Undoubtedly, others were there that I missed in the crowd. There were plenty of antique and classic cars present as well. In addition to John's Lincoln, there were two Packards, a Mustang, and a slew of Model A's. Of course, Clem's '39 pick-up was there and it really drew a crowd, when he fired it up. Many commented on how quiet it ran and I'd have to agree (just like an early Ford V8 should). There were trains galore, both running on the tracks and on the three and a half walls of shelves covering the large room devoted to this hobby. Clem gave a presentation covering the history of his hobby and trains.



If you haven't been to Train Day, you've missed an unusual event!

VALVE CLATTER

BACK PAGE PICTURE

Here we have a very austere Lincoln/Ford dealership. It must have been in a fairly large town as there are two Lincolns on the floor. The nearest car to the camera is a snazzy Ford Phaeton in a very light color – probably the spring option-Desert Sand. You don't try to sell a car like this in the country dealerships! This car has a banjo steering wheel and a clock (which are standard in deluxe models), and locking glove box. Notice the beefy front seat. This is necessary as it is a structural support for the door pillars – thus it is not adjustable. This was the last year for the Ford Phaeton with only 1,169 built. Sales of 1938 Fords totaled only 410,048 units compared to 1937, which had 848,808. It was the poorest sales since 1933. Source: *The V8 Album* EFV8CA

1932 FORD POSTER



This very colorful 1932 poster was considered useful for our National Meet. Imagine it with meet essentials printed on it in white. However, it was necessary to find the origins first, so I wrote the guru of 1932's--Dave Cole, who writes '32 articles for the *V8 TIMES* and is the editor of the *"Way of the Zephyr"*. He thinks the artwork might be British since the car has fender lamps rather than cowl lights. There is also a British catalogue for the '32 "V8--The Greatest Thrill in Motoring". He has seen British magazine ads with "thrill" in the headlines. However, he feels that it is more like the French would have done it, rather than the conservative British, with the dramatic orange sky, the low angle view of the car and the clouds, etc.

He had a nice comment about the VC: "Thanks for sending me your July Valve Clatter. In it I read that you had taken first place in the V8 newsletter competition again, and I must say you well deserve the honor. I have not seen many chapter newsletters, but I have a few, most of which are barely adequate, let alone outstanding, yet most seem deficient to me despite their being highly regarded by others. Yours, on the other had, really has some content and is well put together. No wonder you got first place!"

SELL/WANT

For Sale 1953 thru 1956 Ford F100 Truck Parts: 1) Enginecomplete/original 6 cylinder, 223 cid /60,000 mi, new valve job and water pump, runs like new, includes bell housing, clutch, pressure plate, ready to go; 2) Set of fenders, front and rear; 3) Pair of front springs; 4) NOS tailgate fits F-250 and F350 trucks (part no. B7D-8340700-A). Leo Cummings: 703-866-9707 or rpmlhc@aol.com

SPECIAL REQUEST: Trailer Needed for Eastern National Meet Advertising Display

As many of you know, our club will use the V8 60 engine restored by Ray Kunsman to advertise our meet. However, we need a trailer to haul it around (Hershey, Batavia, Frederick, etc.) and then on to it's final home in the Foundation Museum. To do this we need the following: 1. An open trailer so the engine can be effectively displayed (i.e., no need to move the engine out of the trailer). 2. 14" diameter wheels or greater and 8' x 5' size for stability and ride. 3. The engine firmly mounted to the trailer and enclosed in a weather-tight, lockable enclosure. 4. Have the trailer in our possession by the end of the next month to finish for showing at Batavia.

A trailer can serve as an advertising device on its own and be capable of storing sales items, posters and other supplies, including t-shirts, raffle prizes and other show-related items. Dave Gunnarson has looked at want ads, eBay, and other places without success as well as checking three local trailer dealers and several on-line sources. The best deal is a Leonards trailer dealer in Manassas. The dealer mentioned that the market for used trailers is really strong in this area and he never has any used inventory. Most of the good condition 1 to 3 year old used trailers sell for their original sales price because the new trailers continue to rise in price. According to the dealer, the more heavy duty the trailer is, the better they sell used.

So, what is the problem? We have a limited budget for the show and the trailer will produce no income for us. Once the engine has been delivered to its final home, we'll clean up the trailer and sell it used for, hopefully, the original price or close to it. We are looking for three volunteers willing to finance the purchase of the trailer at \$300 each and be reimbursed with the sale proceeds. There are opportunities to advertise your business with a sign on the trailer. We can't promise that you would get it all back in 2007, but it seems likely that a good portion of the money should come back to you. We might also work out a deal to donate the trailer to the V8 Foundation for a tax write-off. If someone is interested in that option, please let us know. Contact Dave Gunnarson (703-425-7708) if you are interested in being a partial or whole sponsor for this activity.









The functions for the year will be determined at the Board of Directors meeting on January 31th . Here are few of the highlights:

- <u>March Membership Meeting</u> March 14th Old Cars & Their Occupants: How Safe Are They?: Jack Machey Refreshments: Eric Sumner
- <u>March Tour</u> March 25th Frederick Flea Market- Sugar Loaf Mt. AACA Parts Meet
- <u>April Membership Meeting</u> April 11th Refreshments: ?
- ♦ <u>April Tour</u> April 22nd Annual Poker Run
- ♦ May 6th -Willowcroft Wine Tasting w/ Classic Cars_- (May 7th Rain Date) Contact: Don Lombard 703-690-7971
- ♦ <u>May Membership Meeting</u> May 9th Refreshments: ?
- ♦ <u>May 20th Annual Car Show at Fairfax City Hall Contact</u>: Dave Westrate 703-620-9597
- <u>June 10th</u> Fredericksburg AACA Meet -new show date. Special class for EFV8s. Contact Jason Javaras- 540-786-5819.



Jack Machey, former Crash Test Engineer at Chrysler and DoT Crash Testing expert, shares his expertise and addresses

"Old Cars and Their Occupants: How Safe Are They?"

At the March 14 Membership Meeting Come and learn more about this topic important to us all.



<u>VALVE CLATTER</u>

Northern Virginia Regional Group

BOARD OF DIRECTORS NORTHERN VIRGINIA REGIONAL GROUP Virginia Regional Group Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi- Cordi					
President:	John Girman	703-242-1459	Past Presiden	t: Steve Pieper	540-465-9512
Vice President	: Dave Gunnarson	703-425-7708	Programs:	Eric Sumner	703-709-4164
Secretary:	Jim La Baugh	703-573-9285	Property:	Frankie Marti	n 703-928-7136
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Membership:	Jim McDaniel	703-569-6699	Historian :	Don Lombard	703-690-7971
Tours:	Hank Dubois	703-476-6919	Newsletter:	Cliff Green	703-426-2662
Tours:	Leo Cummings	703-866-9707	Web master: helenandken@earthlink.net		

Monthly general membership meetings are usually held at 7:30, the *second Tuesday* of each month, in the historic Hunter House, located adjacent to the tennis courts, Nottoway Park, Court House Road, Vienna, VA. Check the newsletter for occasional alternate sites.





Regional Group 96 Early Ford V8 Club Post Office Box 1195 Vienna, Virginia, 22183

FIRST CLASS MAIL