The Early Days

The First Feelings

Maybe not every boy has the same dreams and thoughts and it probably changes with the times but, for me in the late forties, thoughts of the war faded and thoughts of motive transportation thrived. These thoughts were fueled by the approach of the magic age of sixteen which only meant one thing.....being old enough to obtain the cherished document, the driver's license. I was one of those boys whose head was filled with visions of various types of mobile transport devices. My dad, Ralph, was a registered pharmacist who had owned a drug store over on 50th and Vliet for all the years that I could remember. A few years before, when I was 11, My dad and mom had decided that life in the drug store with Ralph working 12 to 14 hours a day, seven days a week needed to be changed. They sold the drug store and bought a house out in the suburbs near 73rd and Center street and Dad got a new job at a pharmaceutical manufacturing company where he could work eight hours a day and spend the evening at home with his family. Weekends were spent mowing grass and shooting the breeze with Oscar Lewis and Elmer Sieber, the neighbors on each side. This was early suburban living with two children, a mortgage and neighbors and friends with time to spend with all of them. The children were also typical with the boy, me, completing grade school and going off to junior high school and the girl, Sarah, who was seven years younger than me starting in grade school and enjoying a big bedroom with twin beds all decorated in very girly things. My room was in the southwest corner of the house and had model airplanes hanging from the ceiling. I had brought this hobby of building model airplanes from kits along with me from the sunroom of our flat above the drug store to the basement of our new home on 73rd street. These planes were typically built from 1/16th inch square balsa sticks laid out on a plan and glued together. When the structure was complete it was covered in thin tissue paper held on with glue and shrunk to fit with a light spray of water. The finish began by painting the plane with clear airplane dope and finally the color coat. These planes were intended to fly powered by a large rubber band down the center connecting the propeller in the front to a bulkhead near the rear. In an early test of this propulsion system I wound up the rubber band so tight that the compressive load collapsed the fuselage and resulted in a flurry of recently learned profanity. This combined with a desire for excruciating detail resulted in the airplanes being built for show rather than flying which could result in further destruction from uncontrolled crashing. Hence the ceiling of the bedroom becoming an aircraft show place. When I got to be 12 years old, the age required to be a paper boy, I was able to purchase a paper route from another neighborhood kid and start on a road to financial independence. My dad, Ralph, started telling people that his kid was in business and ran a chain of newspaper stops. I thought the route was cool since it was about 35 papers to be delivered around the house but was considered rural because of the relative distance out in the suburbs. This meant that the papers were delivered to the

front porch and could be brought into the kitchen, rolled up and delivered before breakfast. The kids delivering the afternoon paper had to go to a central station to pick up their papers, sub them, the name given to the installation of the advertising supplements, and deliver them to the customers. These papers were much thicker than the morning paper and therefore had to be stuck between the front door and the screen/storm door which took much longer than riding by and flinging a rolled up paper onto the porch of each customer. Since the principal mode of transportation for both business (delivering newspapers) and recreation was a bicycle, a certain amount of maintenance had to be performed which started a new activity......that of taking apart and reassembling motive machinery. This was made doubly necessary by the extraordinary loading put on by paper delivery. The bicycle was equipped with a large basket on the front in which the papers were carried in a large canvas bag. To get closer range on the customer's front porch the bicycle was ridden on the sidewalk rather than in the street. At the end of the block it was necessary to cross the street which involved riding the bike off the curb into the street and on the other side riding up the curb back onto the sidewalk. Hitting the curb with a heavy basket of newspapers could easily result in a seriously bent front wheel so the technique of yanking up the front wheel into a wheelie at precisely the right moment to jump the curb needed to be developed. We begin to see a pattern in the activities of the typical boy past the age of 12 years somewhere around 1945. He is making his own money, traveling about in his own transportation that he needs to maintain himself with a bunch of other boys doing the same thing.

It did not go un-noticed to me that another even more desirable piece of machinery lived in the garage next to where the bicycle was parked known as the family car. This was pretty much Dad's thing although Mom knew how to drive and occasionally took it out on errands. As the human growth cycle progressed I noticed that I could sit in the driver's seat of the 39 Mercury, reach all the controls and still see out, cool! This promoted little comments like, "Hey Dad, when are you going to teach me how to drive the car?" Dads being like they are probably thought that it was really cool to teach their son how to drive but they couldn't show it or give in too easily but sooner or later, "Son, get behind the wheel and let's see how you do." The mind says "Oh cool, this is so fuckin' neat I can't believe it but I must stay cool" "Ok Dad, let's do it" Now it must be remembered that 39 Mercury's have manual clutches and no power anything. After several tries we finally jerkily proceed down the street toward Hadley which is the first street south of the house and at this stage of the neighborhood development is not equipped with curbs. "Turn right at the corner" so when I get there I turn the steering wheel and would have run the rear wheels over the curb if there would have been one and then I proceeded to run right up into the Regan's side yard. "Stop" cried Dad with a touch of panic in his voice. "Oh shit, I've had it, my driving career is over!!!" "Look, son, I guess I should have told you that the first part of turning is entering the corner, which you knew, and the second part is steering back straight again which you didn't know." "Also you have to remember that the car has got rear wheels as well as front wheels and you have to leave enough room for them to go around the corner too" "Now back up a little and we'll try it

again" "Whew, I guess I made it through that, don't screw up again" We set off again with a few more false starts with the clutch and I managed to catch on to the cornering without cutting too close and turning the car back straight. In a few blocks the initial driving lesson was over. Dad said, "You did pretty good but I think the next time we'll go out to the cemetery where there are no other cars and you can try there"

A few sessions at the cemetery and I began to get the basic hang of it but since I was only about 14 I had a ways to go before I could even get a temporary learning permit which in those days was the precursor to the big day when a guy got to drive with the highway patrolman and get the cherished document. For now it was back to the bicycle for everyday transportation coupled with a little begging for return trips to the cemetery for advance training like parallel parking which was one of the requirements of the actual driving test that was most scary. Since my dad was basically non-mechanically inclined the only maintenance performed in the alley behind 73rd street was washing the car. It didn't take me very long before I realized that if I washed the car I could not only drive it around from the front of the house to the alley that paralleled 73rd street, but I could also drive it up the alley to Locust street, right turn over to the corner at 73rd and back down to the front of the house. Needless to say my father enjoyed having the cleanest car in town.

One Saturday after washing the car, I hopped in to drive it back to the front of the house. Driving by myself prompted a bit more throttle than when Dad was aboard but not too much so that a neighbor might notice. Going right out of the alley was a little awkward because it angled down into the street but the right onto 73rd street was just a normal right angle turn which I wheeled into with a bit more velocity than usual. Cranking it into the corner, stepping on the gas and straightening it out into 73rd gave me a feeling like I had never experienced before. "That was so cool, I got to do that again". Needless to say, even an adolescent boy is not dumb enough that he will attempt such a thing twice in a row. Next time. It was this little bit of motoring that really was the beginning of my lifetime of motor-sport and racing. Cornering a 39 Mecury just a little bit faster than normal resulted in the essentially same feeling as one feels blasting a 600 horsepower Can-Am car flat out through a turn at Road America. Viva, the "Feeling".

The First Car

In January of 1947, just after my 15th birthday I entered the 10th grade at Washington High School. This meant that I started to get to know a few of the older guys Who had already been blessed with their long awaited 16th birthday, which in those days usually meant obtaining the cherished driver's license. In those days driver's education in high school hadn't even been thought of so most boys went and obtained a learner's permit from the DMV and cajoled their father into using the family car to teach them how to drive good enough to pass the exam as close to their 16th birthday as possible. Since WW-II ended in the summer of 1945, the automakers immediately started to produce new cars again

in 1946 with the general populace along with the returning veterans snapping them up as fast as they were built since there had been no new cars built during the war. This left a goodly supply of junky, wired together, worn out, old used cars on the market, a virtual mother lode for a 16 year old boy that had accumulated a little nest egg from his paper route. Most boys were able to get some kind of work for after school from the time they were 12 years old which was the age when they could get a work permit. This work included delivering newspapers or hawking them on street corners, setting pins in the local bowling alley, working as stock boys in a variety of stores, mowing lawns, shoveling snow or working as caddies at the local golf courses. The booming post-war economy spawned such things as super markets which employed mostly young lads as stock boys, baggers, and take-out helpers. As boys grew a bit older they also were able to get jobs in gas stations as car washers, grease monkeys and gaspumpers. Although most of this employment paid less than one dollar per hour, it gave the boys sufficient money to buy a junky car and afford the gas to drive it around. Junk yards abounded with cars that had been nursed through the war to the point where they were essentially un-drivable. These junk yards were the parts stores for the boys with drivable old cars.

One of my friends bought a 1937 Packard phaeton to drive around. A phaeton is a four-door convertible and a Packard was considered "the" luxury car of them all. This particular one was old and basically worn out so he got it for a pretty good price. This piece can best be characterized as a gangster car, it was about 25 feet long with a big huge squared off grille in front of a long hood covering a big straight eight engine. A spare tire was mounted in a shallow well on the back side of each of the big swooping front fenders behind which were long wide running boards stretching out to the big swooping rear fenders. A convertible top covered the all leather interior while a big square trunk on a rack out back and two huge headlamps finished the front. The notorious Chicago gangster Al Capone actually had a Packard that pretty much looked exactly like this one. Well, we would get a bunch of kids in this magnificent machine and cruise around to the various drive-ins and it was indeed cool. One night, however, strange knocking and banging noises began to issue forth from the engine signaling the demise of the fine old machine. In a few days and after some consultation with local experts the Packard found it's way to a vacant lot next to Ken Kircher's house. The consensus was that a rod bearing had burned out causing the knocking in the engine. After much discussion and wheeling and dealing, I became the new owner of the Packard for the startling sum of \$15. This was my first car and the plan was to remove the oil pan and repair the burned out bearing and restore the Packard to it's former glory.

I had a large amount of youthful confidence but was extremely short on good tools and knowledge of the detail workings of the bottom end of an automobile engine. With some help from buddies with a floor jack and a mix of concrete and wooden blocks the monster vehicle was elevated to a height sufficient to just barely be able to crawl under. Hell, good enough. I crawled under the car and began to remove the oil pan using a bizarre mix of crescent wrenches and cheap-ass socket wrenches with a six-sided drive. Several days

and a lot of cussin' bared the bottom end of eight connecting rods in a line. One of them was clearly loose on the crank and was probably the source of the knock. I thought "Wonder how the hell a guy fixes that". I removed the cap from that rod and found the remains of a bearing shell and decided that an auto parts store might be the next best start. "Got one of these for a 37 Packard?" "What size do you need?" This guy was thinking in terms of standard, .010 under, .020 under, etc. all of which I knew nothing about. "Well, it was knocking, so probably I need the thickest one you got." "You might need some shims as well." "Yeah, gimmee a bunch of them 'cause the rest of them might need tightening up, and oh yeah, gimmee a pan gasket set along with it." I left the parts store with this small armload of car parts and headed back to the empty lot while the parts guy thought, "Boy, it'll be a miracle if that kid ever gets that thing to run again." I got back to the Packard and crawled underneath with the new parts. "I guess I'll start with the one that is the loosest." I put the new bearing shells on the rod and cap and bolted it back together. "Shit, it is still loose as hell." "I wonder what these shims do. maybe you put them behind the bearing halves to push then inwards on the crank journal." So I removed the shells, stuck shims behind them, bolted it back together and felt it again. Still too loose so I repeated this process until the thing felt pretty good. "Well shit, I still got a bunch of these shims left so maybe it would be a cool idea to tighten up the rest of the bearings too." So I repeated the above process seven more times. "Well that pretty much should take care of it, next I'll put the pan back on." After considerable time working away with the piece-o-shit tools, the pan is back in place. "Tomorrow I'll get some oil to fill it up and see if it'll start." The next day it is back to the empty lot with an armload of oil. After pouring in the oil and connecting the battery, I got in the car, stuck in the key and steped on the starter. A historical note: in those days it seems that only Ford had heard of a starter solenoid to pull the gear into the flywheel and simultaneously engage a high current switch, the rest of them had a movable mushroom on the floor that the driver stepped on to cause the above action to take place to start the engine. Anyhow, I stepped on the starter andnothing. "Shit, what the fuck is wrong with this piece of shit?" "Probably the battery is dead and I need to get the car back down on it's wheels so we can tow it to start it." This need required finding some of the guys and a car with which to tow the dead Packard. Larry Albert lived right down the alley and could get his mother's green Terraplane that we could use for a tow car. We used the same bumper jacks to get the car back down on it's wheel and a bunch of manpower to get it backed out of the field into the alley. We couldn't find any rope to use for towing but by tying some old tires to the front bumper of the Terraplane, we figured we could push the Packard to bring it back to life. I got into the Packard with Larry in the Terraplane and the rest of the guys split up between the two and off we go. Out in the street, I select a gear and holler to Larry to begin pushing. We get up a little speed and I let out the clutch and eeeeeeeeeeeeeee, the rear wheels don't turn but the tires just skid along. "What the fuck?" I yell. "Maybe you got it in too low a gear", Larry suggests. "Hey maybe you're right, lets try it again in second" We repeat the process and when I let out the clutch everything is smooth except the engine does not start. "What's

going on?" "Tell you what" I said "one of you other guys drive the Packard and we'll pull up the one side of the hood and I'll ride on the fender and look at the engine while we do this again." We get all ready again and set off with me hanging between the spare tire and the exposed engine to see what is happening. They get up to speed again, select second gear and let out the clutch. I shouted loudly, "Stop, the engine is not turning, just the clutch is slipping." Sitting around on the fenders the guys discuss what could possibly be wrong. After some discussion I woefully exclaimed "I think I must have those bearing shimmed up too tight and the god-damn engine won't turn." "I guess you got to take it back apart and loosen it up, huh?" "Bullshit, I'm fuckin' tired of working on this piece-o-shit, if I can find some guy to give me the money I got in this, he can have it."

Some time goes by but eventually a guy from outside the neighborhood hears about the Packard and comes by and says "How much?" "I got \$27.50 in this whole deal, gimmee that and it's yours." The deal is consummated and my first car is out of my life without ever being driven under power. The story ends happily a few months later when we spot the Packard somewhere in our travels, rip-shittn' down the street. I heard later that it had changed ownership a couple more times before it finally got into the hands of someone smart or lucky enough to be able to get it running. Another historical fact: a car like that Packard today sells for something north of a half-million bucks, ain't it a bitch?

The Motor Scooter Days

Back in the forties in Wisconsin, it seems that the motor vehicle licensing laws were quite a bit different than nowadays. It seems that one could drive a motor scooter without a driver's license or at least drive one at some age less than sixteen years old because I had one before I was sixteen and my Dad did not allow any such illegal improprieties. I used something like \$250 of my hardearned newspaper fortune to buy this brand spanky new shiny pea-green Cushman from the Cushman dealer down on Bluemound Road. What a prize, a single cylinder kick start engine that could propel the scooter at a blinding 45 mph flat-out. The only electrical system was a belt driven generator on an overcenter mechanism that when engaged would energize the head and tail lights for night driving. It had a key whose purpose was to lock the steering to prevent unauthorized operation. To start the engine a foot pedal was pulled up on a ratchet, a bit of throttle was applied by the hand control and the start pedal kicked down, A hand choke was used when necessary. To stop the engine, the seat was raised, exposing the top of the engine and a metal spring pushed over to short out the spark plug. A centrifugal clutch drove a chain drive mechanism that powered the scooter from a standstill to maximum speed with no gearbox. A larger and more expensive and faster model had bigger tires and a two speed gearbox but no one got that kind. The tires were about the size of a wheel-barrow tire and the body of the scooter faired in the engine, drive and rear wheel with a small trunk-like storage compartment behind the seat for the driver whose feet rested on a platform with the foot operated brake on the right. The throttle was on

the right handle-bar and turned opposite of a motorcycle or clockwise (rightytighty) to go faster.

The big deal with scooters was that it was a motorized contrivance that greatly increased the range of mobility before the magic age of sixteen and if enough guys had them it was a way of hanging out with one another cruising the highways and byways. The scooter craze was sufficiently popular that Harley Davidson whose home was in Milwaukee started to produce a baby motorcycle to fit in with the scooters even though it looked more like a motorcycle than a scooter. It was called the Harley 125 because it had a 125 cc two cycle engine whose performance was about like a scooter. It had a clutch and gearshift but still only had a top speed in the 45mph neighborhood, nothing like the full size Harleys which were faster than anything on the road at the time. More about that later in these writings.

The newness of the scooter caused some changes. I started delivering my newspapers on the scooter which was more cool than practical but it made me the only scooter mounted paperboy in captivity. This was more than likely because I was the oldest paperboy in captivity. I had decided that the paper delivery business was for me because it had grown so much from the early days that I could make more money easier doing that than in the more "grown-up" jobs that other ex-newsboys had gotten.

I was right at the transition age from being a little kid and a grown kid so I was still obliged to dress up and go with my little sister to Sunday school. To ease the pain of this I convinced my parents that Sarah, my little sister, and I could ride the motor scooter to Sunday school. Sarah didn't think much of this idea but I thought it was cool and after all it gave me another opportunity to ride the treasured scooter.

One of the first painful lessons of my early life with mechanical stuff came with the scooter. After acquiring it and driving it everywhere I started to have engine trouble with it which caused me to take it back to the dealer. As it turned out I either did not know or forgot to check the oil level in the engine and had burned out the bearings. This meant a considerable expense for which it was necessary to borrow funds from Dad to get repaired and then work essentially for free for some time in order to pay off the debt. From those early days of repeatedly kicking my own ass, I have never again neglected the oil in the engine of anything.

The Driver's License

eased out the clutch to get going smoothly you did have to remember to roll down the window and stick your arm straight out to signal that you were about to leave the curb and enter the driving lane. 1939 Mercury's were not equipped with turn indicators but ignoring hand signals in your driving test was well known to result in instant failure along with banishment from the society of cool guys in school because you flunked your driving test on the first try. "Ok, here we go, stick out your arm, look over your shoulder to make sure no one is coming and ease out the clutch smoothly and give it a little gas." "Good, smooth take-off, up through the three gears, don't go too fast and listen for the next direction" "Ok make a right at the next corner." "Approach the corner, stick your arm out again bent upwards to signal a right turn, brake, shift to second, turn the corner and accelerate enough to shift back into third gear." "At the next corner make a left." The procedure was the same except this time I let the car drift into the right lane after the turn. "You need to stay in the left lane when exiting a left turn." "Oh shit, I have fucked up big time." "Yes sir, I will be sure to remember that." A historical note: I remembered that moment forever and upon moving to California in 1986 became instantly pissed off because other drivers exited turns in either direction into what ever the hell lane they felt like and when I studied the Driver's Manual for California I found out that that was OK......fap! "OK down in the next block are two saw horses at the curb, these simulate parked cars and I want you to parallel park between them." "Shit, here it comes, relax you know how to do this, just don't screw up. Arm out the window hanging down to signal slowing to a stop, up next to what would be the front car, into reverse and back up while turning sharply right, in the middle back to the left and then straighten it out......just right, COOL!" After that it was pretty much a piece of cake back to the start, "You did pretty good, remember the lane thing and go inside to finish your paperwork." "Whew, am I glad that's over." "Yes sir, thank you sir." A short time later with the piece of paper in my hand, "Can I drive home, Dad?" The beginning of a new era!

The era began and continued with driving the car at every possible opportunity. I was sometimes able to take the car out by myself but this was limited by necessary things like Mom and Dad having priority along with school and sports activities. Besides I still had a Cushman for everyday transportation so I really did not need a car. Shortly after getting a driver's license, my mom went on the train to Chicago to visit her sister, my Aunt Virginia. On the weekend my dad, my sister and I were going to drive to Chicago to complete the family visit and bring mom home. A little begging put me behind the wheel for the trip down. Somewhere between Milwaukee and Racine on old Highway 41, a four lane highway with no divider, there was a gentle S-bend through a railroad underpass. I drove down into the underpass at something between 50 and 55 mph and before I reached the bottom the back end came out for no particular reason. I steered into the skid like I was taught and promptly lost control of the venerable old Mercury by over-correcting. "Oh shit." But old dad sitting over there in the passenger seat spotted what was happening and with no particular panic reached over, grabbed the wheel and deftly steered us out of trouble and I brought the car to a stop with trembling knees. I think dad let me continue driving, kinda like "getting back on the horse" but with considerably more caution and probably slower. This experience was pivotal in my early driving career because it scared the shit out of me and caused me to learn the art of driving and feeling a car through curves at highway speeds (about 50 mph in those days) very carefully instead by luck and good fortune like the other guys. It provided me a much sounder basis for high speed car control over a period of about a year than I would have had without a seemingly life-threatening experience.

The results of this was illustrated a few years later while driving my dad's new 1949 Ford with the entire family on a family vacation to Arizona, again to visit my Aunt Virginia who had moved there from Chicago. The reason for the change to the new 1949 Ford will be come obvious in later pages. My dad and I took turns driving on this long trip before the advent of Interstate highways or even a lot of four lane divided highways. Most were just two lane roads perhaps 16 to 18 feet wide. In any case we were on one of these two-lanes in the high country of New Mexico driving along about 60 mph in something like 4 inches of wet slush. When a person is used to driving in Wisconsin winters in the 1940's when only major streets received complete down-to-the-pavement snow removal, driving 60 mph through slush that allowed full contact with road underneath was no particular big deal. About this time, a big tractor trailer coming toward us got into some kind of situation that caused the trailer to start to come around past the tractor out into our lane. My dad and I saw this at about the same time, "Oh shit look at that. Be cool and brake real easy and stay on the road to the last possible moment and then ease it off the right side and just miss that swinging trailer." My dad just sat there gripping the passenger seat with white knuckles as I pulled off this maneuver as smoothly as I could. Back on the road again picking up speed back to highway cruise like nothing unusual happened. "That was the best piece of driving I ever saw" my father said. Later I thought "Yeah, a hell of a lot better than that dry curve under the railroad tracks going to Chicago." My dad related this story to a lot of his friends and lodge buddies over the years and even repeated when I was an accomplished racing driver. Viva the learning curve.

Once in awhile I talked Dad into using the Merc in the evening to go hang out with the guys. We'd go out to Elmer's Custard Court on Highway 41 and Capitol Drive and just sit around and shoot the breeze, mostly about cars. Since, in those days, Fords were the preferred vehicle, probably because they were the only car with a V-8 and guys that had their own cars usually had "duals", which meant that they had a modified exhaust system with each side of the V-8 exhausting through a separate pipe usually equipped with "Schmitty's" which caused a louder and more throaty sound than the standard exhaust system, (more about exhaust systems later). Since my Dad's car was a Mercury which was in the Ford family it was definitely cooler than some of the other kid's Dad's cars but maybe it could be cooler. We got out some tools and took the nuts off the right hand exhaust pipe right where the pipe flange fastened to the manifold. This side was done because it was easier to get to than the left side. The pipe did not come off because the left and right side pipes were welded into one unit under the car and both side had to be unbolted to get it off. If however, a guy could get a screwdriver between the flange and the manifold the two could be

pried apart and a rod stuck in place to allow a gap to be there. Then when the engine was fired up......roooaaar, the sound of unmuffled exhaust issued forth. It wasn't exactly the smooth rumble of Scmitty's but it was pretty cool to us. After an evening of cruising about with the cool sounding Merc, we would head back to Elmer's and pry open the gap, remove the rod and bolt the thing back together again. After awhile of doing this we noticed that when the gap was pried open and the rod removed, the thing would sort of spring back together and the bolts were unnecessary for it to be back to quiet original, so this is the way we left it. I guess Dad never noticed that there was probably a little leakage around that joint but if he did he never said anything so we had instant hot rod when I managed to get Dad's car.

With our increasing mobility came a wider range of things to do. My friends and I found out about hot rod races at the State Fair Park in West Allis which was not too far from my neighborhood. In fact when I was a little kid I remember lying in bed on summer night with the windows open to keep cool and listening to the distant buzzing of what I now know were Offy midgets running on the ¼ mile dirt oval at State Fair Park. We went to State Fair Park to watch the hot rods and thought it was nearly the coolest thing around. The hot rods competing were part of the legendary Andy Granatelli's Hurricane Hot Rod Association based in Chicago and featuring famous drivers Pat Flaherty along with Jim and Dick Rathman in their early days prior to Indy 500 and champ car racing. The cars were mostly 27 Tee roadsters with flathead Ford V-8 engines and sort of resembled a two-seat sprint car or maybe a California street roadster on a dirt track. These were not jalopies but rather neatly put together race cars with shiny paint jobs, striping and chrome roll bars and nerf bars. They ran on the 1/4 mile dirt oval which was built in front of the grandstand using part of the straightaway of the big one mile oval that was the main track. These cars went like hell and sounded great with their race car headers and open dual exhausts. They went around the flat dirt corners sideways like a typical dirt-track sprint car. The racing was great if perhaps a bit contrived, a practice made famous by "Fat Andy", although he was not nearly as portly in those days as he became in his later and more famous days. Needless to say this sort of activity with these machines was really inspiring to teen age boys who could dream of driving around corners sideways in a car like that. How cool!

I never got too wild with my driving because of the highway incident with my dad going to Chicago but I liked to drive with a bit of vigor to get that racy feeling. In the winter time it was especially cool because when things were covered with snow a car could spin donuts and easily get sideways. Even a totally underpowered Dodge six cylinder could get sideways in a snow covered parking lot. Winter was wonderful with the cars those days because the snow made every one of them feel like a race car. Now 73rd street where we lived had one of the early curved streets like thrived in later subdivisions. Lefeber street was sandwiched in between 72nd and 73rd and as it came north from Center street, right after Hadley street it curved gently into 73rd street and the two merged into one. When one drove around the 180° bend from coming north on Lefeber to going south on 73rd it was remarkably like the end of an oval race

track, or at least it seemed to me that it was. The corner radius was such that fear easily kept a teenager from driving around the concrete surface of this carousel fast enough to loosen up the traction but on snow it was an entirely different animal. Moderate speed with a little throttle on would result in a nicely controlled power slide. The old Fords and Mercury's of that era had really elementary suspension consisting of a straight axle on each end suspended by a transverse leaf spring. High roll centers on each end with decent weight distribution caused these cars, when pushed a little, to oversteer or be loose which means they sort of naturally liked to have the tail out with counter-steering holding them that way just like the track roadsters at State Fair which were suspended the same way. It did not take me too long to figure this out so on every snowy occasion I became Pat Flaherty in a 39 Mercury. One snowy evening I either got into the north turn too fast or applied too much throttle and the Merc got away from me and slid wide sideways into a tree right in front of the Bruggink's home and came to rest. "Oh double shit!!!", I said exiting the machine and walking around to the passenger side to examine the extent of the damage to my race car. More than double shit when I observed that the car contacted the tree right at the intersection of the rear door and the right rear fender with enough force to result in a perfect U-shaped dent all the way up into the roof with about the same radius as the tree, about six to eight inches. The Bruggink's home was only about four doors up from our house there on 73rd street so all I had to do was walk slowly home thinking rapidly about what in the world I was going to tell my father. Needless to say there was a period of time during which I was restricted to riding the scooter and not taking the car. The Mercury was declared sufficiently damaged along with it's age that a brand new 49 Ford soon graced the Durant household.

After I got to drive the 49 Ford out and about alone in the evening I inadvertently experienced the huge difference in automotive design and handling characteristics between the old Fords and the newer ones. One evening I was driving the 49 with a girl-friend and she said something that pissed me off large and I made an abrupt right angle turn on a street corner at perhaps 30 or so mph. The car started around the corner and then completely lost adhesion on the front tires and skidded front end first all the way to the opposite side of the street. Fortunately there were no other cars around and the speed was low enough that there was no impact with opposite curb so all that was necessary was to sheepishly back up and continue. What I had unexpectedly encountered was terminal understeer or "plowing" caused by the new-to-Ford suspension and chassis layout. The new Ford had independent front suspension with probably a low front roll center and a parallel leaf straight axle in the rear, with a high roll center. Add to this an engine placement further forward enabled by the absence of a front axle and you have a perfect combination for understeer. This was a complete surprise to me because, in my limited driving experience, I had only driven the old Fords which had the opposite tendency toward oversteer. How much these experiences influenced my later abilities in racing car design and driving is questionable but the fact that they were clearly remembered as very different could indicate some connection.

The Motorcycle Days

As time passed the motor scooter got to seem a little slow and less manly for a guy approaching seventeen. Several of the guys that had either scooters or no wheels at all started to buy regular motorcycles, usually Harley's which were pretty much the only kind available. There was a number of different size engines that they came with, 45, 61, 74 and 80 cubic inches each affecting the performance, but not as much as might be expected for the rather large variation. This was probably because a motorcycle was so much faster and accelerated much quicker than any car available. Their characteristics might even been called violent. Learning how to ride a motorcycle was somewhere between frightening and terrifying for the learner and leg-slappingly funny for the observers. To set the scene, the technical capabilities of a forties vintage motorcycle needs description. First it is big and heavy about 750 pounds, has no self-starter, a foot clutch, a gated hand shifter, hand throttle and a manual spark advance. So to start the engine one must kick out the kick stand on the left side so the machine will remain more-or-less upright on it's own, retard the spark by rotating the left hand grip all the way counter-clockwise, give it a little gas by rotating the right hand grip a little counter-clockwise and rotate the bicycle pedal on the end of the kick-starter lever out perpendicular to the lever. The kick-starter lever, located on the right side of the motorcycle, is on a ratchet device that allows it to turn the engine but does not allow the engine to turn the lever. To operate this device requires the rider to press the lever down gently with his right foot until he feels it engage and then rise rapidly up as high as possible and apply downward inertia to the pedal to kick over the engine. Done properly, the engine rotates through some number of degrees, fires up and the lever goes to a lower ratchet position from which it can be gently raised to the upper rest position. If this is not done with considerable vigor the lever does not make it into the lower ratchet position and remains engaged to the engine which, if it fires or coughs, will pitch the operator over the handle-bars, which of course mortifies the operator and sends the gallery into waves of laughter. Assuming that the starting procedure is finally mastered, the next step is to get ready to embark. This involves returning the bicycle pedal to it retracted position, leaning the bike over to the right, retracting the kick-stand with left foot, disengaging the clutch and selecting first gear. Sounds simple enough except the clutch is an invention of the devil. It is a two pedal lever with a bunch of counter-balancing springs that is kicked down in the back with the left heel to disengage and then pressed with the left toe to rotate it down in front to engage. The gear shift is a simple gated arrangement mounted on the left side of the fuel tank. Now we are ready to set off, which is the usual drill of having just the right amount of throttle on as the clutch engages to ease off and then, since it is a two-wheeled vehicle, applying enough throttle to get to a speed where the machine is balanced and will not fall over. The first couple attempts at this usually result in too much clutch too fast and not enough gas with a cough and a stall. This, of course, means that the

engine must be re-started which, of course, means that all of the above starting procedure above must be repeated. This plus the derisive laughter from the gallery coupled with shouts of "more gas" tends to frustrate the newbie to the point that he decides that the next try he will damn sure give it enough gas. He does just this with some vigor and all the systems engage and the motorcycle takes off like a missile interceptor. The unexpected acceleration throws the rider backwards and makes him grab onto the handle-bars to avoid being thrown off. In grabbing onto the right handle-bar grip while being thrown back causes him to rotate the grip in the counter-clockwise direction which opens the throttle more and provides even more acceleration rendering the rider/machine combination uncontrollable. This first ride is often an uncontrolled plunge through the grass and flower beds into a big bush which tips over the motorcycle and revs up the engine until the switch is finally turned off. This experience usually sorts out the men from the boys, the meek from the macho or maybe the smart from the dumb. In either case it results in one of two things, "back on the horse" or "fuck it, see you later".

In a few tries the terrible monster is basically tamed and the newbie can start training himself on cool smoothness so as to not to look like a newbie. To a teen age boy, not looking cool is nearly the worst possible fate. To do anything to invoke the title of "simp" either directly or indirectly is to be avoided at all costs. Each endeavor, however, has it's own set of cool stuff that is either done or worn. With motorcycles it is the ease with which one starts and takes off on the bike and what sort of stuff is worn while both riding and hanging out. Examples of this are available at the local Harley Davidson dealer where the "real" bikers hang out. They also have all the services, equipment and clothing available for use or purchase. The "real" bikers look a lot like the Hell's Angel types with the key pieces of apparel being a black leather jacket with a myriad of zippers and a built-in belt to cinch the waist, black leather boots with a buckled strap across the instep and a cap that nearly defies description and is certainly unique to the motorcycle crowd. Basically the cap is a cross between a garrison cap like worn by an army or police officer and a beret. Where the garrison cap usually has a wired shape, the motorcycle cap cloth top is free-formed like a beret or the "fifty mission" crush of a WWII military pilot. Also compared to the garrison cap, the bill is guite a bit smaller and angled down much more so that the cap can be worn, more or less, on the back of the head without the bill sticking up where it can cause the cap to be blown off. The bill is usually white with the cloth cap black with a white cord across the top of the bill. This is the as-purchased look which is then modified by the individual biker to include an AMA (American Motorcycle Association) roughly triangular patch sewn on the top (back) of the cap with the white cord moved to the top over the patch and a chrome metal watch expansion band across the front above the bill where the white cord originally was. Now all this stuff was available at the motorcycle shop but it tended to be beyond the budget of a newsboy or a grocery stock-boy but the biggest, by far, deterrent to getting all this stuff was your parents with whom you lived and gained significant support from. "You might have a motorcycle big shot but you are NOT going around looking like a goddamn hoodlum". Also in those days high schools had a

dress code and this sort of get-up was way out of line with that. Boys were prohibited from wearing tee shirts and denim jeans to school in favor of slacks and sports shirts. To be able to wear denim jeans to school you had to bring a note from your parents that you were too poor to afford proper clothes and no cool kid would ever even think of letting that happen unless he was really poor, in which case it was impossible for him to be cool. The way around this dilemma was to go to an army surplus store, which were plentiful given the recent ending of WWII, and get some combat boots, an army air force bomber jacket and a navy officer garrison cap (navy blue is close enough to black). This stuff was marginally acceptable to parents and really affordable since it was all used to some degree. It also satisfied the coolness requirements since all the local kid bikers were pretty much in the same boat. The cap could be artfully modified by removing the wire supports, painting the bill white, installing a cheap watch expansion band and wearing it on your head sufficiently straight-up to avoid it blowing off.

I started to get the itch for a motorcycle as I rode around on my scooter with the other guys, some of which were already on bikes. My opportunity came one day when an older guy offered me his 1935 Harley 74 for a price that I could afford. It was a slick looking machine, red and white with a lot of chrome and a big buddy seat with a lot of leather fringe. Parental approval was reluctantly given and a deal was struck. This was a huge machine, somehow bigger and especially taller than the later model Harley's with the Hydra Glide forks. It apparently was either built that way or had larger wheels fitted at some time in it's life. Me, being a short guy could ride this machine in spite of not being able to put both feet on the ground at once. The only time that this really was a problem was on hump backed streets near the curb where there was a noticeable gutter. Things were OK when stopping the bike at a stop sign because I would put out my left foot to hold up the motorcycle when it came to a stop. However the situation quickly became unmanageable when the bike was leaned over to the right so the clutch could be disengaged to select first gear. In order to touch the street on the curb side of the motorcycle, the bike needed to be tipped over so much that I could not hold it up and it fell onto the right side crash bar, resulting in more than a little embarrassment. I had to turn off the engine, stand in the right side of the bike and hump it upright again and then finally wheel it over toward the curb enough so that I could use the curb to keep from tipping the thing over so far to operate the clutch. Oh well, just one more thing to keep in mind while riding this over-grown heavy beast, when coming up to a corner to stop either stay out in the more level middle or get all the way over next to the curb before stopping. I actually became proficient enough in handling this big motorcycle as to be able to turn donuts with it on a gravel parking lot. This actually required some coordinated driving skills to pull off. The engine was started, the bike leaned over right, first gear engaged and the clutch engaged to spin the rear wheel in the gravel with the bike tipped over and the handlebars counter-steered left so that the bike spun around in circles to the right. Giving it just the right amount of lean coupled with counter-steer and throttle the bike pivoted right around the right foot and sprayed gravel in a 360 degree circle. Very cool and I

was the only one in the bunch that could do it. I could even do it with other guy's bikes.....ultra cool.

Actually having a bike and the ability to handle it proficiently gave rise to going down to the Harley shop and hanging out to soak up more bike and biker lore as well as checking out the goodies for sale. One of the goodies at the shop was Gunk, a degreasing solvent with a unique smell sold in an orange and blue can. In those days, engines in both cars and motorcycles leaked or at least seeped oil which when combined with road dirt caused nasty greasy stuff all over the engine. In a car this was sort of hidden under the hood and largely ignored but on a motorcycle it was right out there for everyone to see and for the owner to contaminate all his clothing on. Therefore, to be properly cool a guy had to buy a can of this stuff and take it home to "gunk down his engine". This involved using a paint brush to apply the brown liquid to the greasy parts of the engine and brushing to loosen the stuff and hosing it off, resulting in a nice clean bike with the very cool residual smell of Gunk. Another thing a guy could do down at the Harley shop was to borrow a big tool that could bend the handlebars and adjust the angle of the handle bars so that it was possible to assume the most cool position while riding the bike down the street. That was sitting all the way forward on the buddy seat almost touching the back end of the tank with the arms held straight down to grasp the ends of the handlebars. We all were getting cooler and cooler.

Another accessory that was discussed a lot was the windshield and whether it was cooler to have one or not. The consensus pretty much that it was cooler without even though the windshield provided considerable protection from flying stuff, rain and the beating wind itself. One summer night when I was out riding through the countryside with my girlfriend on the back of the buddy seat, I spotted a big old June bug coming at me about 60 mph and ducked down, Splat, straight into the young lady's bosom went the giant insect. "You son-of-a-bitch, you did that on purpose", she screamed and I laughed which did not make it better. When we returned to the Custard Court where the rest of the bunch hung out she said "Do you know what this sob did?" and related the story which resulted in great peals of laughter. The bike was fun!

That same summer we heard about a big motorcycle rally in Rhinelander which was about 240 miles north of Milwaukee. We decided to go to that and packed up our sleeping bags and took off. At Rhinelander we did the same stuff as everyone else, parked diagonally along the curb with several hundred other bikes and sort of hung out. There were events at the fairground to watch. It was also the place to bunk out at night. Sleeping out under the stars for a bunch of ex-boy-scouts was no particularly big deal until we realized that it was necessary to get in the sleeping bag to avoid being eaten alive by the mosquitoes but in so doing you became so damn hot that it was like going to hell. The night was not fun. The next day the feature event was a flat track motorcycle race on the fairgrounds dirt oval. This kind of racing is called "iron shoe" racing because the rider slides through the turns sideways with the tail out and the front wheel counter-steering and the left foot out sliding along to hold the whole deal up. To keep the sole of the boot intact, a steel plate in incorporated for the left foot,

hence the name "iron shoe". The racing was good so I decided to stay to the end in spite of the rest of the guys deciding to take off for home about the middle of the afternoon. I hung in there until all the races were over and then took off south all alone. While going along I got the bright idea to stop off in Wausau to visit my maternal grandma and probably scrounge a hot meal. Needless to say she was delighted to see me and the meal became a reality. I visited with her for a while and then set back off for home which was still some 200 miles off. The big bike was pretty comfortable and rode good on the highway, the evening weather was pleasant and cool without being cold so in what seemed to be no time I was going through West Bend which was about 35 miles from home. The ride was getting long and the steady 60 mph wind was starting to beat me up and I was definitely ready to be home. Along the way here in the dark something happened that I never in my life thought was possible: I started dozing off while riding, sleeping on a motorcycle as it was going down the road. I was so astonished that this was even possible that it sort of woke me up and the thought of what possible disasters could result from such behavior gave me the incentive to bolster my attention to the task of making it to my bed without crashing. Fortunately this happened and I slept peacefully with yet another motoring experience under my pillow.

One fine evening sometime later saw our bunch out cruising on the bikes around the area of suburban Milwaukee. There was probably four or five us leisurely motoring along on highway 100, which was a pre-interstate highway bypass around Milwaukee. We were cruising south near North Avenue when the traffic light changed from green to red. I was leading the pack and made it through but the rest had to stop. To avoid getting separated, I pulled over to the shoulder of the road and proceeded slowly while looking over my shoulder behind me to view the progress of my buddies from the light. With my attention diverted to this task I did not see that some repaving efforts on the road had raised the level of the highway about four to six inches above where it had been when I pulled onto the shoulder. As the guys caught up to me I started to ease the bike back onto the pavement easing over caused both the front and rear wheels to come into this cliff-like rise at the same time and tipped the bike instantly on it's side at about 15 or 20 mph. Mind you, this was before helmets were even thought of as appropriate headwear on a motorcycle. Fortunately those big ole Harleys of the day had big crash bars sticking out from the sides which pretty amply protect the working parts of the motorcycle during such a mishap but the rider contacts the pavement, not crushingly but contact nonetheless. "Oh shit, this is not cool". The presence of my buddies around me kept me from being run over by an errant car but there I lay on the pavement. I got up and hoisted my bike back to the riding position and wheeled it out of the driving lane back onto the low shoulder to clear the road and then began an examination of the damage. As I rolled the bike out of the street I noticed something shiny lying in the road and picked it up. Examination showed it to be the remains of my wristwatch. It was a normal round watch mounted on a clip-on stainless steel band which was very cool in those days. The watch face was ground completely off and the downside end of the band was completely

straightened out where the contact with the asphalt had ripped it off my arm leaving tell-tale bloody marks in my wrist. Aside from a few noticeable bloody scrapes and small rocks imbedded in my body the rest of me looked pretty good except for my Levi's which were pretty much trashed. We reformed our group and finished our cruise at the Custard Court where we finished off the evening showing and describing this adventure to the other guys there. A few days passed and the inevitable occurred, what were minor abrasions to the skin became giant thick reddish brown scabs. These advertised to the world the extent of the damage one can do to the body when sliding along on pavement at relatively low speed. These scabs populated my body from on my left cheek, shoulder, elbow, down to my hip and knee on my left leg. The combat boot saved my ankle. Fortunately all of this was minor and went away in a week or so but it was another accumulated experience for a budding moving machinery nut.

By this time in his life I had finally divested myself of the venerable paper route and moved on to more-or-less conventional part-time employment as an all-around hey-boy in a supermarket. As a point of interest, in those days supermarkets were pretty much absent among all the mom-and-pop grocery, meat and drug stores. In 1946, Max Kohl opened his first supermarket on Burleigh St on the northwest side of Milwaukee. This was revolutionary for the time, meat, produce, canned and box goods all under the same roof with carts and self-service, checkout stands and a big adjacent parking lot. For such an enterprise to flourish a large transient low paid eager work force was required, perfect for the teen age kids of the day. A number of my buddies and I toiled away for old Max who sat in his office in the basement and counted the money. Hours could be arranged conveniently around school and extracurricular activities and the pay was pretty good especially if you were good at schmoozing the ladies for whom you carried out groceries and loaded them into her car. One night after closing at Kohl's Fine Foods, a bunch of us set off west on Burleigh Street with our motorcycles. I guess we were probably stretching the speed limit a bit and a few blocks up the street, the bubble gum machine on a police car came on. One guy dutifully stopped and the rest of us must have figured that one cop can't chase more than one guy so we bailed out in a number of scattered directions. After achieving success at evading the law, I headed over to my girl friend's house, hid the motorcycle in the alley and shot the breeze with her until I was pretty sure I wouldn't get caught going home and that my parents would already be in bed. I managed to quietly ride the bike home and stick it in the garage next to my dad's car and sneak into the house to bed without any communication with my parents. I lay in bed thinking all kinds of thoughts, none of them pleasurable. "Have we really gotten away with this?", "What if the guy squeals on us, can they find us?", "What if they threaten him enough to make him rat us out?". The hour was late enough that the thoughts faded away into fitful sleep. The next sound occurred about 12:30: "Ding-dong" the front doorbell. "Oh fuck, fuck, fuck.....I'm dead!!". I kept telling my self it was a bad dream and would go away if I just squeezed my eyes shut and lay there as I heard my dad get up and go downstairs to answer the door. A big booming police type voice on the front porch asked "does Dick Durant live here?". Eyes squeezed shut even more

will make it go away as dad comes up the stairs and opens my bedroom door. "Dick, there is a policeman at the door to see you." Oh shit, I am for sure dead, I'm off to jail and prison for the rest of my life." I drag my sorry ass out of bed and go down to face the music. A few questions from the big policemen and I am singing my head off about how I didn't think it was me he was after, just my buddy and a ton of flimsy excuse bullshit stories that he had probably heard a hundred times before. After a short time and the exchange of some paper work the cop was gone and I was not going to jail and I was in a large shithouse full of trouble with my parents. Since I was not yet eighteen years old there was no court appearance or fine but instead a visit with my dad to the Milwaukee juvenile facility better known as "The Detention Home" for a talk with the traffic advisor who, it turned out was famous among the young group of drivers that I hung around with that had also gotten themselves into trouble with the long arm of the law. This guy was a crabby looking hawk faced son of a bitch that clearly was as mean as a snake whose most distinguishing feature was a deformed hand which was tightly wrapped in a leather contraption and sort of looked like a cross between a hook and a black-jack. He forced you to talk and relate weak ass bullshit stories about your innocence and that you never did this kind of thing before and in between remarks he would snarl at you and move that goddamned leather hand threateningly to absolutely scare the livin' shit out of you. After about 15 minutes of this torture he would pronounce sentence upon you, "Suspended driver's license for 90 days" and don't let me see you here again." "Yes sir, thank you sir, no sir you won't see me again." "Let's get the fuck out of here pop before this scary fucker changes his mind." We walked out, got in the car and went home and life was pretty much over except that I would be without wheels for the next three months. A note on Old Leather Hand: I found out way later after I had reached full adulthood that that son of a bitch was a lodge acquaintance of my father and that neither of them ever let on. That whole deal was dreamed up and executed by that old fart to create exactly what it did, scare the shit out of the offender and make him think that another trip into the juvenile facility was certain death. Maybe we should still do things that way!

After a few days of riding around with my buddies on the back of their motorcycles and in their dad's cars I decided I needed independent wheels to get around. Now with the mechanical education I had assimilated from my experiences with the Packard, the Cushman and the Harley, I got out my good old bicycle and decided to give it a complete restoration. All the scary stuff from a few years ago like the intricacies of the coaster brake and the adjustment of wheel bearings was now sort of old hat stuff and the parts were sure a lot less costly than motorcycle parts. "Shit man, this is fun." When the bike was completely stripped down and cleaned up, I went and bought a couple of cans of shiny enamel and gave the parts a spiffy two-tone paint job, after this dried I carefully reassembled the whole thing and then finished it off with some reflectors and trick handlebar grips with streamers like a motorcycle and stood back and viewed my new ride, "Pretty fuckin' slick for something without an engine and legal for me to get around on for the next three months", I proudly rode the bike around to go to my girlfriend's house and even on dates when we would take the

bus but I had the trusty bike to get home later. Having the bike all tricked out kept me from feeling like some nerd and filled the bill for independent transportation for the next quarter year. During this period I was able sell the motorcycle which made Mom and Dad Durant happy as I got ready for the next stage of my motoring life.

The First Drivable Car

The almost inevitable next step was the actual ownership of a car of my own, that was the dream of nearly every teen age boy of that day, at least yours truly. I really didn't care what it was as long as it was a Ford and didn't cost too much. My buddies and I would ride around and look in the various used car lots for candidates. The reason for the desire to only buy a Ford had nothing to do with brand loyalty, your father's preference or even the relative merits of different brands from a technical standpoint. No, none of the above, it had everything to do with lore and coolness. All the coolest people like the mythical hotrodders in California used Fords. Ford had a V-8 engine and nothing else remotely available had that. The general inalienable position of everyone that counted said that if you didn't have a Ford you had less than nothing. One of the searches uncovered a 1937 Ford tudor sedan in the rear of the Ford dealer where my father did business. It was basically what an adult might refer to as an old worn out rust bucket but to me and the guys it looked like the perfect car, especially since it carried a price tag of \$40. This had to be perfect. The law in those days said that kids under eighteen could not buy a car without a parent in tow to approve the purchase even if the kid was going to pay for it. The other rule was, at least with my dad, that he needed car insurance to own a car. That cost more than the car but that was all part of the save-up procedure that preceded the big day. My dad took me down to the used car lot and we talked to the salesman and I showed him the 37 Ford that I had my eye on. "Ain't it cool, Dad?". My dad just said "If that's what you want it is OK with me" and the deal was done and I proudly drove home with my new treasure.

It is probably time in this writing to take an interlude to describe just what is mechanically involved in the cars of the 30's, the kind that were affordable to teenage boys, in general and Fords in particular. Cars of those days were literally glorified wagons with a closed body on a simple ladder frame suspended on two straight axles with parallel leaf springs. The driveline was typically a six or straight eight cylinder inline engine making 50 to 80 hp driving the rear wheels through a three speed manual transmission. Braking systems were just transitioning from mechanical to hydraulic with the chief reason given being to improve the equality of the braking on each wheel. With four-wheel mechanical brakes there was almost always one or more wheels adjusted tighter than the others so it would take hold first and cause the car to pull or one wheel to lock and skid. Compliance and non-severe braking made this tolerable for the average driver but the hydraulic brakes did not do this and were a distinct improvement. Henry Ford was an acknowledged automotive genius that not only came up with the assembly line technique of mass producing automobiles but

also came up with some designs and parts for Fords that were outside the mainstream. Fords from the beginning did not have parallel leaf springs but instead had transverse leaf springs, one on each end, popularly called "buggy springs". Fords also had torque tube rear axles which had the effect of making the rear axle a stout triangular affair pivoted at a single u-joint at the rear of the transmission and sprung by the transverse spring at the rear, different than all others. Fords had a relatively unsophisticated V-8 engine that made something between 65 and 85 hp. That V-8 engine did capture the fancy of the pioneering hotrodders on the west coast in the days after WWII and specialized speed equipment was manufactured and sold that markedly increased the performance of the engine and a legend was born. The serious hotrodding was pretty much confined to the west coast but the legend spread throughout America and most certainly to Elmer's Custard Court drive-in on Highway 41 near Capitol Drive in Milwaukee Wisconsin.

My buddies and I were regulars at Elmer's, it was the place where we met to go cruising, the place we adjourned to after cruising and the place we hung out to conduct serious discussions on cars which was basically all we were interested in. The brand new magazine called Hot Rod was read by all and reinforced the language of car talk markedly. Terms like high compression heads, full race cams, boring and stroking and headers came into the vocabulary and were used at every opportunity to baffle the unwashed and to enhance a person's coolness. The activity was not all talk, often a group would pile into one or two cars and head off to cruise around. The location of the Custard Court was ideal in as much as it was located between the city and the country. Heading east or south led into metropolitan Milwaukee and heading west or north led into narrow gravel roads more or less out in the country. Often these forays would result in performance demonstrations. Some guy in the car would say, "Hey, how fast will this thing go in first?", "Hell, I don't know, let's try it out and see.". We would then scout out a deserted stretch of road and hammer down the gas until the speed maxed out which in an old flat-head Ford would happen without engine destruction because of the inherently poor breathing of the L-head engine and the robust strength of the old Ford engines. "40 in first is all she'll do, maybe if I put on dual carbs it would go better." knowing full well that the money for that would be a long time coming. Occasionally a challenger might come along in the form of another old car full of boys. If this happened on an arterial thoroughfare with two lanes in each direction, a stop-light race was inevitable. These were most often a short-lived first and maybe second gear affair because of the typical city congestion and usually won by the guy that got the quickest jump off when the light changed. Also if the car was something other than a Ford it usually got whipped because Fords were indeed a little guicker than most of the rest of the era, Plymouths, Dodges, Hudsons, Chevy 6's, Buicks and that sort of machine. One night we were close to downtown in an area known to be mostly populated by black people and we pulled up at a red light next to a big Buick loaded full of black boys. A challenge was issued and when the light changed we took off and easily outdistanced the overloaded Buick. About a half block further down the street the Buick comes roaring by doing fifty or so mph and black guys waving

out the windows. When we pull up at the next red light they exclaimed happily, "You get us on the drag, man, but we pass you on the top speed!!" That story laughingly made the rounds at Elmer's later on and was one to make the lore hall of fame.

These illicit competitions began to illustrate that driving techniques had a real bearing on the outcome and so this became a topic of discussion in bull sessions at Elmer's and also led to experimentation on the road. The terms heard in more recent years such as "launch" and "power shift" had not been invented yet and really had to do with cars that were hugely more powerful than these grossly under-powered mid-thirties machines. In spite of this "peeling rubber" or just "peeling" was invented as a technique to get away quickly as well as draw attention to dramatic driving. This, of course, merely involved raising the engine rpm to a high level and engaging the clutch rapidly which, in these machines, resulted in a momentary screech of the almost bald 600 x 16 tires as the vehicle lurched forward and started down the road. This action often left a rubber mark on the street about a foot long which was dubbed "laying rubber", and thus the hot rod vocabulary began to be established. Another phenomenon that was duly noted by us young drivers was that rapid shifting noticeably improved the performance in rapid acceleration. I was one of the first ones to suggest "speed shifting" which was noticeably different from the established technique that our father's taught us. Instead of letting off the gas, pushing in the clutch, changing gears, letting out the clutch and getting back on the gas, it was suggested that while the gas was pressed hard on the floor the gear lever was moved as rapidly as the arm could move it while the clutch pedal was jacked in and out as rapidly as the left leg could move. I tried this in my old 37 Ford and it worked. I could successfully change gears in a blink of the eye. Part of what made this possible was that the 37 Ford had a three-speed transmission with a long spindly gear lever protruding through the floor that moved about a foot between the gears. The details of this shifting technique were that the car took off in first gear to something between 35 and 40 mph and then without lifting the clutch/gear lever motion resulted in the gear lever shaft crashing into the bottom curve of the dash which ultimately left a tell-tale "speed-shifting" dent, which of course was considered the ultimate in cool. The down side of this action occurred one evening when cruising about with three people in the front seat, a buddy over by the window and my girlfriend in the middle, I encountered an apparent challenge which resulted in an impromptu acceleration contest. "Watch me blow this guy off" as the old Ford launched off. Moments later, in the heat of battle came the moment of the speed shift that would likely put a big winning gap between the two cars when a screeching "Owwwww!!!" pieced the air. My girlfriend was hanging on to the dashboard with both hands to counteract the acceleration with her thumb directly over the speed shift dent so that when I made the magic move from first to second gear her thumb was smashed against the dash by the gear lever. Miraculously it was not broken and the race had been won by her sacrifice as she was so consoled by the lads.

The Custard Court was ideally located for this sort of behavior since it was just a bit off the intersection of US Highway 41 and Capitol Drive in an area that

could be referred to as more rural than in the city and was not subjected to huge amounts of traffic nor was it routinely patrolled by the police. Highway 41, in front, was a relic of the forties called, colloquially, a "suicide highway", a three lane highway which used the two outer lanes for traffic flow and the center lane as a passing lane in either direction. It was a huge improvement to the traffic flow of a typical two lane highway until the passing lane was occupied by two cars, one from each direction, then a game of chicken ensued. In any case, this configuration in front of the Custard Court allowed for "line 'em up and let 'em go" without much concern for oncoming traffic, sort of a built-in drag strip. There were no side roads or businesses in the mile or so down to Burleigh Street so there was plenty of room for acceleration and slow-down. The parking lot of the Custard Court was relatively expansive and paved with gravel thus making it suitable for showing off the driving skills necessary to enter the parking lot at high speed and throw the car into a controlled slide across the gravel while gently spinning into a desired parking space, considered very cool indeed. All of this rather rowdy behavior was apparently condoned by Elmer, the owner and operator of the Custard Court since all he did was stand behind the counter and smile while he served up the burgers and colas to the perpetrators. Needless to say Elmer's was the headquarters for the loosely organized group the might have been referred to as the "west side hot-rodders".

I had a good friend during this time named Larry Albert. Larry went to the same school, and had, at various times, a Harley 61 cubic inch motorcycle, a white 1940 Ford coupe and often drove a pea green Terraplane owned by his mother. Larry was an only child raised by his single mother who worked during the day and often allowed Larry the use of her Terraplane in the evening. One such evening, several of us were cruising about in the Terraplane when a policeman in a 49 Ford squad car decided we were doing something unlawful and turned on his red "bubble-gum machine". Larry apparently thought "To hell with this, he can't catch me" and took off with the cop in hot pursuit. We were in an area typical of Milwaukee in those days, a residential area divided up into rectangular blocks long in one direction an short in the other. Surprisingly the Ford was not much faster than the Terraplane down the long blocks and with Larry's natural skill and considerable bravado in nearly continuous cornering, after a while he actually began to gain an advantage over the lawman, ultimately making around two corners before the cop could see and ended up evading arrest. The next step was to beat it back to Larry's house to put the green Terraplane in the garage and take off in another car to describe this episode to the gang at Elmer's. We figured that we were pretty much off scott-free since we were never actually caught but we never thought of the fact that Larry's mother would take off to work the next morning and come back home in the afternoon in that same green Terraplane. Henry Ford was attributed once to the statement "they can have any color they want as long as it is black or blue" and that pretty much said it for most of the cars on the road in those days. A pea green Terraplane really stood out and that cop had gotten a pretty good look at it in spite of it being dark. The next day he apparently spotted Larry's mother in the car and, figuring that she was not the person he wanted to talk to followed her

home. That evening we were out and about in another car and when we took Larry home into the alley behind his house there was the 49 Ford police car parked there awaiting us, "Oh shit". The alley was dead-ended at the other end so we did not have much choice but to stop and face the music. In those days fair was fair even with the long arm of the law and he knew as well as we knew that it was a matter of his word against ours since he had not actually nabbed us in the act. The conversation went along the lines, "you guys been riding around in the green Terraplane parked in this garage?", "No, not us, for a long time, maybe his mom had it out". "His mom wouldn't have been running away from the law, would she?". "No and neither would we". Well somebody was and let me tell all you guys something, I know it was one of you and I'll be watching all of you so you better not screw up or I'll have you and you won't like it". With that he eased off up the alley and after he had rounded the corner we all breathed a sigh of relief and started laughing but also knew that we'd been had and better be on our best behavior around the neighborhood or we were in big trouble.

Somewhere along the line Larry sold his Harley 61 and bought a light gray 40 Ford coupe. Besides peeling rubber and drag racing in front of Elmer's, if we took off to the north and west from there the roads were largely gravel "farm-tomarket" roads populated during the day with farm stuff like tractors and stake trucks but at night were essentially deserted. We thought it was great fun to go out on these roads and race around taking the curves and turns as fast as possible. Being gravel the traction was greater than snow but still dicey enough to make our basically under-powered machines feel like race cars. Somewhere in the literature of the teen age boy, Mechanics Illustrated, Hot Rod Magazine and others of this ilk we had come across articles on the "bootleggers and the revenoors". These were the guys that were lugging moonshine around the mountainous roads of the deep south, the forerunners of NASCAR, guys like Junior Johnson. It was said that they piloted highly modified Ford coupes much like the one that Larry had. The magazines luridly described a maneuver that these guys could perform called a "bootlegger's turn" to escape from the pursuing "revenoors". This was done right after cresting a hill and becoming temporarily out of the sight of the pursuer. The driver turned sharply left while yanking up on the handbrake followed by immediate liberal application of the power while counter-steering to the right, all of which resulted in the car doing a quick 180 degree turn and proceeding off in the opposite direction at great speed. This was exactly the sort of thing that led to a huge amount of speculative conversation around Elmer's. It seemed obvious that one had to be carrying enough speed when starting this adventure to keep the car from stalling out about half way through and it also seemed obvious that quite a bit of daring was required to even attempt such a thing. Well it turns out that the guy that had the biggest ones was Larry Albert but nobody really knew about it because he apparently went out on the back gravel roads all alone and tried it and was able to pull it off. He also must have practiced some to become proficient but never let on, that was the kind of guy he was. One night we all decided to go out and play some chase on the back gravel roads. Larry was leading in his coupe and some of the rest of us were piled in one of the other machines following him. This was

great fun, roaring flat out down the gravel roads chasing Larry in the huge cloud of dust his car threw up from the dry gravel road. His acknowledged skill allowed him to gain perhaps a quarter mile lead on us when suddenly as we were headed up a slight rise that he had just disappeared over a set of headlights trailed by a gray flash roared by going the other way shortly followed by a complete disappearance of the dust. "What the fuck? Where the hell is Larry?". It slowly dawned on us all that we had been "bootlegged". "Holy shit, how the hell did he pull that off?" Nobody had seen it because he had utilized the short lead he had on us just as he had gotten over the rise and was headed back the other way just as we got there. We sheepishly turned around and headed back to Elmer's and there he was lounging on the front fender of his 40 coupe with a smug look on his face. "Got you guys, didn't I?" Even though he described, in detail, the exact procedure and timing of the maneuver no one had the balls to try it and it was written off as one of the legends of Larry Albert.

While discussing the legend of Larry Albert, he of great skill and daring, a digression from the teenage adventures is necessary to describe the last known event of the Larry Albert legend. Many years later after many of us had gone off to the service and the gang had basically broken up as usually happens with teen age adventures, my mom sent me a newspaper clipping that talked about a fatal airplane crash at the local small airfield out a ways from the site of Elmer's Custard Court. The reason for interest on the part of my mom was that the crash involved Larry Albert and she knew that he was one of my friends back in the old days. Apparently Larry became interested in light aircraft and had taken flying lessons. While flying near the airport another light aircraft was blinded temporarily by the sun resulting in an air-to-air crash with Larry's plane, doing considerable damage to both aircraft. Larry being Larry, he attempted to maneuver his disabled plane in such a way as to land it back on the field but to no avail since the prop was bent making considerable vibration when attempting to apply power and the operation of the rudder pedals severely limited by the crushed in fuselage. Larry immediately unbuckled his harness, got down on the floor of the cockpit to get better leverage and proceeded to kick the bent aluminum out of the way to free up the controls. He then got back into the seat and calmly steered the plane down to a dead-stick landing on the grass crossways to the runway and brought the aircraft to a safe stop. The other aircraft, piloted by a man with considerably more flight time than Larry but unfortunately less ingenious crashed to his death. It was described as a "miracle" that the relatively new pilot, Larry Albert was able to survive this crash. I thought otherwise, no miracle, it was just part of the legend.

One night at Elmer's I backed the 37 Ford out of one of the front spots into the middle of Highway 41 and revved it up and popped the clutch. Instead of the customary screech and lurch with a foot or so of rubber deposited on the road there was a loud metallic pop followed by a bunch of ominous clanking. Limping back into the Custard Court parking lot, the guys and I did some investigation and experimentation with the net result being a consensus that the first gear in the transmission had failed. Using the remaining two gears and some luck I was able to get the old Ford back home where I was able to sweet talk my father into

an extended stay in the family garage to repair or replace the transmission. Here is where the aforementioned oddities in old Fords really began to raise their ugly head. Because of the torque-tube style rear end, to remove the transmission requires that the entire rear end of the car be disconnected and rolled back. This involves removal of a two-piece ball cover in which the front and only u-joint is housed, disconnecting both rear shock absorbers and disconnecting and removing the two large center mounted u-bolts holding the transverse rear spring in place. Then the chassis had to be raised up in back to a height that would allow the entire rear end assembly to be rolled back under the gas tank. This allowed room for the transmission, after being unbolted from the engine to be slid back and lowered out from the car to the ground. The same rudimentary tools that were utilized in the ill-fated Packard engine project were still the only ones available. This made the relatively simple removal of the u-joint bell into a frustrating several hour task leading to artfully strung together profanities that became louder as the frustration grew and the hour became late to the point where my father came out to the garage angrily announcing to me that if he could hear this stuff up in his bed so could the neighbors and would I please cease and desist. The tool situation led to other frustrations such as removal of the leverarm shock links. They were simple links except that they fastened to their mating parts with a tapered joint like a small tie rod end, which were impossible to get apart without a small version of a pickle fork which we had never even heard of. If the tools weren't bad enough, the lack of proper lifting and handling equipment presented yet another challenge. To clear the extended transverse rear spring out under the gas tank to roll back the rear end required that the back end of the car be raised about three feet into the air and the only way we knew how to do that is with two bumper jacks. This goes pretty smoothly until the spring comes out of the frame channel into which it is inserted and the entire rear end of the car is swaying back and forth on two spindly bumper jacks which are nearly completely extended. This was handled by two guys holding the car steady so it wouldn't fall off the bumper jacks while another guy goes under the car and struggles mightily to roll the rear end back until the spring is under the gas tank. The jacks are then let down enough to achieve some stability with the car resting on the somewhat compressed spring. These are the beginnings of ingenuity and fearlessness that ultimately turn into broken bodies to the unlucky and the "right stuff" to the rest.

A "new" transmission was obtained from one of the local junkyards and the reassembly commenced. Needless to say all of the above and that yet to go took several extraordinarily dirty, greasy and profanity filled days for me and sometimes some of my buddies. The buddies were usually available when necessary for balancing and lifting but most of the dirtiest shitty jobs are a lonely proposition. The Ford did not have a conventional bell housing with a removable pan to aid in viewing the assembly of the transmission spline into the clutch. Instead the engine had half the bell-housing incorporated into the block casting with the other half forming sort of a bell on the front of the transmission casting, in the top of which was a little removable cover that allowed a limited view of the transmission spline entrance into the clutch. It also allowed a view of the open

There was some romance in driving old Fords mostly connected with the V-8 engine and the hot rod image. There were also certain idiosyncrasies that had to be largely ignored when driving an old Ford. The behavior of the clutch was one of the chief oddities connected with the old Ford. For some reason most old Fords suffered from an abnormal amount of clutch chatter. When attempting to ease off from a stop the car would start bucking violently as the clutch was eased out. Sometimes it would cause ones legs and feet to vibrate enough to feed back into the throttle and clutch operation and worsen the situation. The cause of this anomaly was, as far as I know, never uncovered but I have a suspicion that it probably starts with oil or contaminants on the clutch face and is amplified by the odd configuration of the Ford engine/transmission mounting along with the single u-joint torque-tube rear end arrangement with the transverse buggy spring and associated wear in all of these components. Technique seemed to be the most common cure since nobody really knew what caused it. When the car was bucking violently it was also rolling slowly so if the clutch was pushed back to the floor and disengaged the bucking would stop and then when it was let out to re-engage it would not chatter anymore when the throttle was applied. Also, if a peel-out was done the clutch usually did not chatter either so often as not this was considered to be the way to properly drive your old Ford. As time passed, the inevitable oil on the clutch facing would get sufficient to start to cause clutch slippage when the power was applied in high gear. This thankfully seemed to be sort of a cure for the clutch chatter because it seemed to make it much easier to smoothly engage the clutch and motor away without the uncontrolled bucking and jerking. Clearly, however, this situation did bad things to the performance of the car since when the power was applied the engine would rev up and the car would go no faster because the clutch was slipping. The idea of changing the clutch was looked upon with a dim view because it required all the agony of rolling back the rear end and pulling the transmission to remove the clutch as well as the expense of the new parts. Then someone heard from one of the old Ford legends that abounded in those days that the way to cure a slipping clutch was to nose the car against a stout tree, put the car in gear, let out the clutch and burn off the oil by allowing it to slip until smoke came out. Then back the car away from the tree and let things cool off

and voila, no slippage. It really worked good and was a hell of a lot easier than taking all that stuff apart and putting it back together. The disadvantage to this procedure is that along with making the clutch not slip it also caused the clutch chatter to return. Oh well we knew how to drive around that problem.

There was another problem that was unique to the 37 Ford. As I described earlier, cars in this era used mechanically actuated brakes where the foot mechanism was connected to each wheel brake with a system of bell-cranks and long rods. Getting this arrangement adjusted so that the individual wheel brakes were all applied simultaneously was somewhere between difficult and impossible. The solution adopted by most of the car manufacturers was to go to hydraulically actuated brakes which sort of inherently applied evenly as well as being adaptable to a much greater multiplication of the foot pedal pressure applied to stop the car. Ford, however, had a better (?) idea for 1937. He replaced the actuating rods in the mechanical brake system with cables that would stretch a little when the brakes were applied and even out the application when compared to the un-compliant rods. This scheme evidently worked better on the drawing board than it did in practice since to keep the pedal from going to the floor when the brakes were applied vigorously, the brakes had to be adjusted up so tight that the car was barely able to roll with the brakes released. Clearly this was an entirely intolerable situation for someone trying to extract the maximum acceleration performance from the vehicle. Therefore it was necessary to adjust the brakes so that the car could roll easily and letting stopping be however good it was with that adjustment. As it turned out the car would stop adequately well during normal driving but when the car was driven at high speed short braking distances were not possible since when the brake was vigorously applied to whoa down the car it went straight to the floor and whatever tension was in the cables was all that was available to apply the brakes. This deficiency honed some new skills into high speed driving techniques. If the traffic flow could be seen to be slowing, the brakes could be applied earlier in hopes the car could slow down enough to get even with the rest of the traffic. On the other hand, if the car was cruising down the road at near max velocity and came over a rise with all the traffic stopped on the other side a mixture of max brake application, quick shifting and rapid assessment of situational awareness was simultaneously applied to keep from crashing violently into the stopped traffic. Shifting to second was all that was available since first was non-synchronized and was effectively rendered unavailable. This left figuring out what off-road pass was necessary to avoid a catastrophe, very often this involved driving off the pavement to the left down the median strip of a divided road or off to the right on sidewalks and lawns. I became quite proficient at this catastrophic avoidance technique because in all the time I drove the venerable 37 Ford I never did touch another car in anger.

One day while cruising the gravel roads out to the north and west of Elmer's, I lost control of the 37 Ford and plunged into a water filled ditch that was deep enough to partially submerge the bottom part of the engine. With the rear wheels hanging in the air I had to find the other guys and engage in an effort to free the 37 from this dilemma. Some chains and rope along with another car and

some manpower got the Ford back up on the road and somewhat surprisingly relatively unscathed. Sometime after this event the old flathead in the Ford started to refuse to start under battery power. Some analysis and battery switching yielded no positive results and after further thought the difficulty was traced to a faulty starter, more than likely caused to be inoperative from the inadvertent bath it got as a result of the off-road excursion into the water filled ditch. Getting a little push, jumping in and engaging second and popping the clutch and it was running again. No problem. At home parking on the street was not allowed so the 37 lived crossways to the back of the garage on the little down-hill apron next to the alley. Since it was summer-time no special choking or the like was necessary to get the engine running and it was quite easy to let the Ford roll down the little incline and bump start it into life. Since starters cost money even at the junkyard and required effort to remove and replace this whole deal turned into something of an art-form. I found that it took very little velocity to bump start the car and that I could push the car myself from behind the door on a level surface fast enough to jump in, engage a gear and bump start it all alone. "Sheeit, who needs a new starter?" At the Jackson Park pool where I worked as a lifeguard I could park the car on a slight slope so that after work I could simply roll down the hill, start and go. I had perfected the starting technique such that I could even get it started rolling in reverse with deft operation of the gears, gas and clutch. This lent itself to the only slight problem of going on dates downtown to the movies where one had to find a parking place on the end of the block so the car was free one way or the other and preferably on an hill facing the right direction. I could park on either end of the block because I could start the car going forward or backward. There is nothing like a little ingenuity to save a few bucks.

A Real Hot Rod

As the senior year of high school approached, the desire to have a real hot rod increased fueled by other guys in school having cool machines. Dave Droegkamp had a really cool metallic blue 40 Merc tudor sedan that was dechromed, lowered and had fender skirts and dual exhausts with the muffled V-8 rumble. He brought it to school every day and parked it at the end of the block across from school where the kids parked. He was considered very cool, indeed. Another guy that I did not know but I think he was a recent graduate occasionally came around at noon-time with a customized 34 Olds with a straight six that had a split manifold and duals. He would cruise slowly around the block in first gear letting the duals rumble......the coolest. As a note, most guys had Fords and although the V-8 rumble was considered to be the ultimate sound, a few guys had other make cars like the Olds and some Chevies with a straight six and a split manifold and dual "Scmitties" which definitely had a sound all of their own that even the Ford guys considered very cool. During this period, there were two categories of cool cars, "customs", which were similar to the Mercs and the Olds described above and "hot rods", which were usually fenderless coupes and roadsters that sported souped up engines using a lot of polished aluminum and

chrome exposed in engine compartments with no hood. As long as a "custom" was cool it was OK to not be souped up and be slow but a "hot rod" needed to be fast. "Customs" were often referred to as "lead sleds" since the body work to customize them included the removal of hood latches, ornaments, headlight frames, door and trunk handles and often included fairings between the fenders and the body. The common body shop material to fill, fair and smooth all of this stuff was lead melted into the spot and filed smooth with lead files. "Customs" were more or less works of art whose major function was to cruise majestically and park in conspicuous spots at school and in drive-ins. A cool exhaust sound was mandatory but "fast" was not. A hot rod was meant to shit-n-git and the more it resembled the mythical California street rod the better. I was inclined in this direction so my searches of the used car lots were confined to finding a suitable car to pursue this dream. Sooner or later I found a 34 Ford 5 window coupe that fit the bill. The 5 window designation refers to the fact that Ford and some other manufacturers through most of the 1930's made some coupe models with a small window behind the main side window in the door and some without hence the designation five-window and three window. Somehow the windshield didn't count as a window. The 34 Ford was basically a typically shaped 1930's car except for the grille which was sort of a long heart shaped chrome frame with vertical bars instead of the more usual rectangular shape. The car also had "suicide doors" which had the handles in front and the hinges in back so they opened opposite the normal car door...out from the front toward the rear. This car was considered quite cool just as it came from the used-car dealer but I had ultimate plans for much more.

By this time it was clear to me that more and decent tools were high on the priority list but tools were expensive. An idea occurred to me that I decided to implement. I went to my father and said, "Hey Dad, as you might know, almost all the guys in high school get a new suit for graduation. Well you know I still have the suit I used to wear to Sunday school and I haven't changed much in size so I could wear it to graduate and then you could spend the money that a suit would cost to buy me some decent tools for working on cars". Dad had to think about this for a while but fortunately for me, he had the common sense to realize that I really didn't give a shit about dressing up in a suit but was obsessed with my ongoing car hobby and hence would get a lot more use out of a set of tools than a new suit. He and I went off to a hardware store and I was able to get a complete socket set with both 3/8" and 1/2" drive along with a supply of open end and box end wrenches and a set of good screw drivers all in a nice green tool box. What a treasure for a seventeen year old budding hot rod builder.

Also during this period, hot rodding had spread from California back into the hinterlands of Milwaukee in the form of Hot Rod Magazine and a genuine speed shop that sold or could order most all the goodies necessary to convert a 34 five-window coupe into a genuine hot rod. Poring over those early Hot Rod Magazines until I just about read the printing off the pages I began to formulate a plan. Because of money limitations and the requirements of school and a job to furnish the financing, the plan was necessarily a long range plan. The idea was to begin by modifying the chassis to make it feel and look more like a hot rod

than an ordinary Ford coupe and then drive it while planning out and incrementally buying the equipment required to ultimately produce a souped up hot rod engine to install in place of the existing stock engine. The first step was to convince my father to give up the garage as a place to store the family car for at least the amount of time it would take me to do the initial modifications and put it back on the road, which, of course, I thought would be a about a week and actually would most likely turn into a much longer project. I must say that my parents were certainly supportive of their son's somewhat unconventional obsession, what with giving up the garage, washing the greasiest dirty shitty clothes on the planet and listening to all the bullshit about how this speed equipment will increase the gas mileage of the coupe.

The project began with the removal of all four fenders and the relocation of the headlights and tail-lights. To give the rod a better stance by lowering the front end, I bought a dropped front axle from the speed shop and installed it. The front axle of these old Fords was basically of I-beam type construction with a wishbone fastened to it about eight inches in from each end that formed a triangle that fastened to the center of the frame near the back of the transmission. A dropped front axle is made by stretching out that outer eight inches and bending it up in an S bend and reshaping the king pin mounts to the proper angle so that the center part of the axle that contains the spring perches is about four inches lower than it was before. Obviously this operation must be carried out in some kind of heavy duty shop that has heating ovens and assembly jigs and stuff like that, kind of like a blacksmith shop on steroids. The next thing was to install hydraulic brakes to avoid all the problems of the old 37 Ford and all the rest of the mechanical brake difficulties. I went to the junkyard and procured the entire brake setup from a 40 Ford, including all four brake backing plate assemblies complete with shoes and wheel cylinders and the pedal assembly containing the brake master cylinder. A pair of specially machined adapter rings were obtained from the speed shop to make up for the fact that the rear backing plate centering hole on the 40 backing plate was a little bigger than on the 34. Fortunately Henry's model updates usually did not include major mounting changes thereby making such swap activities relatively straightforward. The 34 mechanical brake system was completely removed including the actuating rods and mounts and the 40 Ford stuff bolted in place. Tubing was fabricated to join the assembly together hydraulically and the system filled and bled. The bleeding was the most difficult part because I had no idea how to systematically approach this task. I also found out that I needed a special 11/16" open end wrench to perform the adjustment on the rear shoe of each rear wheel. The idea of grinding on one of his brand new wrenches sickened me so I went down to Western Auto and bought a cheap one to grind to a shape and thickness that would fit around the interfering part and allow the adjustment. After a couple of days of profanities and consulting with more knowledgeable folks I finally was rewarded with a hard pedal thus rendering the new hot rod drivable. The old 37 Ford was abandoned to the same field next to Ken Kircher's house that the old Packard resided for it's brief history and the new 34 coupe became the regular ride of this proud new hot rodder. Looking like a hot rod made it way cooler than

the 37 and being lighter because of the removal of considerable amount of it's bodywork, it was also faster than the 37 as well as stopping infinitely better. What a cool machine! Wait 'til I build up the new engine!

When the new hot rod was drivable it was the fall of the year and school had started. Naturally I had to drive the rod to school and park it near Dave Droegkamp's blue lead sled in "Cool Car Row" on the street separating the north side of Washington High from the adjacent football/track practice field, In Milwaukee the fall is short and the winter long so it wasn't too very long after school started in the fall and the weather was getting downright cold at night, thereby making anti-freeze an issue. In those days there were three kinds of antifreeze, ethylene glycol which was outrageously expensive (\$3.50 an gallon in the late 1940's), alcohol which was cheaper but tended to boil away and need constant replacement and, last, the cheapest, no anti-freeze at all. Fortunately the Fords and most other cars of the day had a water system in which the petcock in the bottom of the radiator was the lowest point in the system and when opened would allow all the water in the system to be drained out leaving none to freeze up and crack anything. This allowed the no-anti-freeze system to be workable. In the evening before going to bed, I would take the car up to an empty lot about a block away for the night, since in Milwaukee street parking at night was not allowed. The last act was to grab the pet-cock and turn it ninety degrees to let all the water drain out. In the morning I would go get the car, start it up and head for John's Mobil station on 72nd and Center. When I got there I would give the pet-cock a stout turn to break the ice loose, turn it closed and fill the cooling system with water from the can on the island. John was always there, amused at my daily routine but he also made me go and refill the island water can before I set off to school. In the depths of the cold Wisconsin winter this exercise had to be repeated at school because it would stay cold enough during the day to freeze up the engine and radiator which would constitute at least a major pain in the ass if not a huge catastrophe like busted parts.

Another thing about the frozen tundra of Milwaukee in the winter was that when the thrill of driving the new hot rod around wore off, it was downright cold in those old cars because most of them including my 34 coupe had no heaters. Cars that did have hot water heaters were only marginally better because the heater cores were woefully undersized and unless you had ethylene glycol antifreeze you could not install a 180°F thermostat so therefore the water was not hot enough to make good heat. To make up for these difficulties there was an aftermarket device called a South Wind heater made by Stewart Warner that actually burned raw gasoline to create hot air which a small fan would circulate into the cabin. The way it worked was that there was a plate that bolted under the carburetor that sucked enough air through an open tube in the heater for combustion and also supplied vacuum to suck fuel from a little 1/16" tube stuck in a little hole in the top of the carburetor float bowl. The products off combustion were thus sucked into the intake and not discharged to the cabin where there was some possibility of carbon monoxide poisoning even in those drafty old cars. The fuel-air mixture was ignited by a glow plug and a thermostat caused the fan to start when the heat came up. Apparently these things must have worked pretty well because Stewart Warner sold a shit-load of them. When you are a teenage boy however you tend to buy such an item from the junk yard and also lack knowledge and experience on exactly how they are supposed to work and whether or not the junkyard version is still functional. I installed the one I bought in a junk yard into the 34 coupe and after a lot of messing around coupled with a appropriate amount of profanity got it to work. The only trouble seemed to be that working on a car in the middle of a Milwaukee winter is something that is reserved for relatively warm days and that is when the heater would work reasonably well. When it was colder than an arctic night and the heater would be nice the damn thing would never seem to work until you nearly reached your destination if at all. Fuckin' piece-o-shit.

A tradition in the Durant family household was to go to Aunt Ethel and Uncle Fred's house for Thanksgiving. Uncle Fred was an optometrist and did pretty well and they also had no children so they were pretty well off and always had a nice home. Sometime during my youth they bought a big spread out on Bluemound Road west of Highway 100. This was far enough out to be closer to an estate than a suburban home. On the Thanksgiving after I bought the 34 coupe my job or some other activity kept me from going out to Aunt Ethel's with the rest of the family but I would drive out later in my hot rod and join them. For some reason, maybe the driveway capacity with the other relative's cars, I was relegated to an empty lot next to the house that had enough trees in it to almost be considered a forest as the place to put my car. A happy Thanksgiving was had by all and after Aunt Ethel's turkey, dressing and all the goodies were devoured, someone looked out the window and observed a blizzard in progress. By the time everyone was going to leave there was nearly a foot or more of snow on the ground and we had to shovel out the driveway to get everyone out and on their way home. Needless to say the poor old hot rod buried out in the forest had zero priority and it was therefore necessary for it to be abandoned until some later date to be freed of the snowy captivity. I had to round up some of my buddies on one of the weekend days after Thanksgiving and drive out to Aunt Ethel's with a bunch of shovels a dig out the poor old hot rod. Just one of the stories to illustrate what driving a hot rod is like in Wisconsin winter.

The next logical step in the process of converting the 34 coupe into a real hot rod was the build-up and installation of a modified engine. This required the study of the details of the Ford V-8 engines from 1932 when they were introduced through 1948 since those were the engines that would fit into the 34 with almost no changes necessary. Besides it was cool to be really well versed in the engine of choice for most rods. The engine in the 34 was a 21 stud, 221 cubic inch with the water pumps in the heads, one in each and rated at 85 hp. In 1937 Ford changed to the 24 stud head arrangement and also changed the water pumps to a block location one on each side of the front with the water outlets relocated to the center of the top of the cylinder heads but maintained the hp at 85. The engines pretty much stayed this way until after the war except for the Mercury which came out in 1939 and used a larger bore. After the war until 1948 Ford introduced the 59A engine using the larger bore of the pre-war Mercury which then were rated at 100 hp. These engines had the 24 stud heads

with the center water outlets and were considered to be the engine of choice for modification. Part of the reason was that they would fit well in the early Ford chassis which were the most popular for use in hot rods. Also a lot of speed equipment started appearing for this engine as well as the ability to bore out the cylinders as much as 3/16" to increase both the displacement and the compression ratio by having a larger cylinder volume with the same head volume. The crankshafts were also "stroked" by welding material on the outsides of the crank journals and re-machining the journal back to round with the center further away from the main bearing center-line. In 1949 this process was even further enhanced when Mercury came out with a crankshaft with a 4" stroke (1/4" more than the Ford) which would fit in the 59A block. Stroking one of these cranks with the welding process is what lead to the now famous term "3/8 by 3/8 bored and stroked flathead". What this meant was that the block was bored over 3/16" to create a 3-3/8" bore coupled with a stroked Mercury crank that was 3/8" bigger than the stock stroke of 3.75". This was about as big as an old Ford flathead could be enlarged, 295 cubic inches versus 239 cubic inches stock, almost a 25% increase. All this engine and crankshaft modification was not for the new and unwashed hotrodder like me who could talk all the talk but, in reality, barely knew shit about the technicalities of engines in general and Ford V-8's in particular.

I went to the junkyard and hunted around through piles of discarded engines to find the correct casting numbers to identify my ultimate purchase as the desired 59A block. This engine was to be the raw material for the new engine for the 34 coupe and by disassembling it down to its smallest component pieces I could learn all the details concerning this engine. The chief difference in the Ford when compared to other engines including modern engines of today is in the valve system. The flathead Ford is so named because it is an L-head engine with the valves in the block next to the cylinders as opposed to an overhead valve engine where the valves are located in the head above the cylinders. Most of the engines of those early days were L-heads and also inline sixes or eight cylinder instead of V-8 like Ford. The valve train of these engines were basically all the same and other than the mounting place with a pushrod and rocker arm, not too different from the arrangement used in modern overhead valve engines. The camshaft drove a valve lifter, better known as a tappet in those days which had an adjustment screw in the end which contacted the end of the valve stem which was a constant diameter all the way to the head with some little grooves near the bottom to hold a keeper in place. With the cylinder head removed the valve stem slid down through a bronze valve guide which was usually pressed into the block. In the valve chamber a spring went over the valve, was compressed and held in place by a retainer with a lock or keeper to hold it the assembly together. The valve chamber had a removable cover so that all this assembly and adjustment could be made and then sealed up with the gasketed cover. The Ford V-8 valve chamber was under the intake manifold and was basically inaccessible after the engine was initially assembled so the valves were adjusted during assembly by grinding the end of the valve to provide the proper clearance and no serviceable adjustment was provided for later. The valve did not have a straight stem but,

instead had a mushroom shaped lower end that precluded any sort of slidetogether assembly like the other cars, so it did not have fitted valve guides in the block but rather it had split cast iron valve guides that held the valve stem and also retained the upper end of the spring. Thus the valve assembly consisting of the valve, the guide, the spring and a slotted retainer were assembled out on the workbench. The bores in the block though which the valve assemblies fitted were larger in diameter than the springs. This allowed the assembly to slide down the bore into the engine. The bottom of the guide had some slots into which a forked bar was fitted to compress the spring and expose a groove in the valve guide where a horseshoe shaped lock went in to hold the assembly in place. This arrangement worked pretty well when all the parts were new and nicely lubricated but after several years of service with heat, varnish and other deposits from the unfiltered non-detergent oil, the assembly was virtually welded together. Usually this required a host of cussing and special gizmo-like tools and resulted in total destruction of nearly all the components before the block was cleared of all the old and ready for the new. Ford clearly did not have a better idea when it came to the flathead valve system.

During the slow disassembly of the 59A block along with cleaning up the parts, I was systematically saving my money and going down to the speed shop to buy the new hot rod parts. First came the finned aluminum 8.5:1 high compression cylinder heads along with 48 slip-on acorn nut covers that fitted onto the head hold-down nuts after they were installed and torqued. Next there was the Edmunds polished aluminum high rise dual carburetor manifold that held two Stromberg 97 two barrel carburetors with little chrome air filters on top. Finally the Harmon and Collins three quarter race camshaft with a completer set of adjustable tappets. In those early days of hot rodding camshafts were not identified by technical terms like lift and overlap but rather by terms describing how much they varied from stock, terms like semi, 3/4 race and full race pretty much was the choice regardless of the manufacturer. Full race was generally too radical for street use and was specifically recommended for competition while the more common street cam was the 3/4 race which offered a noticeable increase in performance along with a somewhat lopey idle which was considered cool. Some wannabe hot rodders even would mis-adjust their carburetor to achieve a lumpy idle in an attempt to be cool. I brought all this stuff home and proudly showed it to his parents while downplaying the performance increases and stressing the increase in efficiency and fuel mileage that it could provide. I never did know if they believed all this bullshit I laid on them. I would take these treasured items up and stash them in my bedroom so I could gaze at them with gleeful anticipation.

Finally the day came when I had saved up enough money to be able to take all this engine stuff down to the speed shop and let them build up the engine for the 34 coupe. After the experience with the Packard a few years before along with a lot of reading about hot rod engines and machining and critical clearances I decided that the best course of action was to get the engine professionally built. This was probably a wise decision. In the meantime it was time to remove the venerable old 21 stud engine from the 34 and prepare to install the new engine. The site of this transplant was the little one car garage at the rear of the Durant

family home on 73rd street. Needless to say this edifice was built using common construction techniques for a small building in which a car is parked, not for use in major auto overhaul work. Undaunted I borrowed a chain hoist from Dad's work place along with some more chain to fasten it in place. The garage utilized a gable roof which more-or-less supports itself with the help of one or more transverse 2x4 braces to hold the walls together when the snow piled up on the roof. Unfortunately an eight foot 2x4 does not have near the beam strength to hold up a big old chain hoist with a completely assembled flathead Ford engine hanging from it. This was determined in the first attempt to lift the 21 stud engine out of the 34 coupe. As the chain hoist was tightened up it became obvious to all of us that there was no way this was going to work. "What the hell are we going to do here? Let's go get a couple more 2x4's to use as braces" realizing that the 2x4 beam would sag way less if the span was shortened. This seemed to work pretty well until the engine started to come loose from the chassis at which time the planar two dimensional truss became unstable in the remaining dimension and threatened to collapse. Realizing that this situation was similar to the twobumper-jack method of rolling the rear end back, a couple of guys were assigned stability duty, manually keeping the structure with the suspended engine from collapsing long enough to roll the engine-less chassis out into the alley and lower the engine to a safe resting place on the floor. So we have another teen-age success story, solving problems with manpower, cleverness, bravado and dumb luck.

When the new engine was ready, essentially the same technique was used to install it but with a lot more cussing because the transmission spline had to aligned to and stuck into the clutch as part of the installation. In the old Ford with the bell-housing that was half cast into the block and half cast into the transmission case it was necessary to peek through a small square hole in the top of the transmission half of the bell-housing to see and judge the concentricity necessary for the mate. In addition another person or two viewed the up and down and transverse alignment and all these folks had to communicate to finally get the job done after a lot of tries complete with somewhat violent wiggling and pushing. The feeling when it finally slides together is indescribable! After the engine mount donuts are inserted and the assembly bolted down the starter, generator and associated wiring is installed. The radiator, carburetors, air cleaners and radiator hoses are put in place and bolted down. Geez, it is beginning to look like a car again......a VERY COOL hot rod car.

The last thing left was the exhaust system, left for last because it was the most difficult and time consuming task before the car was ready to try out. Since I did not have enough money to afford prefabricated store-bought headers and also was missing the skills and welding equipment to make them, the stock exhaust manifolds had to do but dual exhaust pipes with Schmitty mufflers was considered a necessity. This brings us to the time for an interlude to go into some detail on the different types of exhaust system used in the early 50's and the personality of each along with the coolness and legality involved. As discussed earlier with the reversible modification of my father's Mercury exhaust fastening, the roar of an open exhaust straight out of the manifold was considered better

than the stock quietness but was illegal and not that cool as regards sound. This was something that only newbies did to try to emulate the more senior cool guys. Now when I was a newby, there was an older kid called Allen Korbel that lived on the other side of 73rd street south of Hadley which was the cross street just south of my house, actually just about six or so houses from me. I found out that he was building a much more ambitious and expensive hot rod in the two-car garage behind his parent's house. I discovered this fact and immediately set out to befriend him so I could hang around his garage and absorb stuff. Because I was a few years younger than him and a newby I was viewed with both scorn and as someone to impress with hot rod lore. Besides the car he was building, he had another old Ford which was his daily driver back and forth to school. The reason I didn't know him from school is because of the fact that Hadley street was the dividing line between Milwaukee and Wauwatosa, a Milwaukee suburb, and he went to 'Tosa High and I was in the Milwaukee school system and would attend Washington High. One time I wandered over to his garage and he had his daily driver jacked up in the air and was busily working underneath it. "What are you doin', man?" He replied "Installing dual straight pipes". I got down on the floor to look at what he was doing and saw two long pieces of flexible steel tubing threaded through the frame members and up over the rear axle and protruding out the rear, one on each side. They were slipped over two flanged pipe stubs bolted to the exhaust manifolds and held on with muffler clamps. The rest of the support along the length on each side was a combination of muffler clamps. hangers and baling wire. I helped him finish up the fastening and then we jacked down the car and prepared for a try-out. He was rubbing his hands together in obvious anticipation of the results and said "This is going to be most excellent". We jumped into the car and he fired it up and we backed out of the garage and took off. The sound of the exhaust was loud but probably not as loud as straight out of the manifolds and with a much cooler sound, sort of like Schmitties but harsher and louder. We drove around a little and ended up about a block up from my house when he decided to give it the real test. He stopped and put the car in first gear and took off revving it as far as it would go to about 40 or 45 mph in first gear and then let off and let it coast back down in speed while still in gear. The rev up sound was sort of a loud barking whistle but the over-run was a loud gargling, sucking sound that was completely strange to me but extraordinarily cool. Allen went berserk with excitement exclaiming "MOST EXCELLENT" in a loud delighted scream. "Listen to that rap" he exclaimed. I was rapidly and graphically learning new facts and terminology regarding automotive lore. "Rapping" was the sound made by various engines and various exhaust systems when the engine was backed off in gear from a high rpm and put into maximum over-run. On the next try he said "Let's open the doors and hang out so we can hear it better" so we did. He again took it to max speed in first and backed off as we hung out the doors precariously listening to the rap of the dual straight pipes. It was indeed, MOST EXCELLENT!

This arrangement was not a typical one inasmuch as it had several flaws, not the least of which is that it is way loud and way illegal with a distinguishing sound familiar to most lawmen plus the fact that when the law looked under the

car there was no mufflers at all, therefore no excuses no matter how flimsy. Even if one could somehow get around the long arm of the law, the system still rattled and banged around under the car until the flex tubing began the stiffen up from rust and shortly after that began to fall apart as the flex tubing rusted through. A much more suitable system was dual Schmitties connected together with real exhaust pipe that one could find in the junk yard using a lot of patience and multiple trips. Now I have used the term Schmitties several times and it is now time to put a definition on these most common of exhaust system components. Schmitty is German Milwaukeeze for Smitty which is what they were called in the rest of the country which is easier said than their real name which is Smithy's Muffler. This company manufactured the world's first high performance muffler, a 3-1/2" diameter heavy duty tube that came in various lengths welded around an inner tube that was sized to fit conventional exhaust pipe sizes. The inner pipe contained a large number of holes that communicated with the annulus which was filled with steel b-b's. Apparently this arrangement was to provide a straight pipe with a resonator having the capability of absorbing a certain amount of the sound and leaving a low-pitched rumble. A modern equivalent of a Smithy is the glass pack muffler which is a hydroformed version of the same thing with fluffy fiberglass substituted for the heavy steel spheres. Schmitties were not guaranteed legal but usually would pass muster with the law until they began to get some carbon and baked-in oil deposited in the b-b's and became louder and louder. Beside the muffler type, the thing that really contributes to the cool sound of duals on a V-8 is the order that the cylinders fire on one bank. The fact that most all V-8's including the old flathead have a cruciform crank (one that looks like a cross with the rod throws 90° apart when viewed from the end) means that even though the cylinders fire evenly they do not alternate evenly between the banks. Therefore the typical sound from a single bank is space-bang-bangspace-bang-space-space-bang with the other side sort of synchronized oppositely. This is what gives "that V-8 sound" which goes un-noticed unless the exhaust from each bank can be heard separately. A V-8 with a planar or 180° crank has evenly spaced firing pulses in each bank and sounds completely different, kind of like a siren. The Ford powered Indy cars of the sixties with the "worm exhaust" on top of the engine sounded like a siren because two of the pipes on one side of the exhaust came from one side of the engine and the other two from the other side. Properly selected gave an even firing exhaust system and hence the different sound from the standard Chevrolet V-8.

There were no real technical laws written for the amount of noise that a motorized conveyance with a muffler could make since from most lawmakers point of view the decibel was not yet invented. This made run-ins with the police on noise largely a personality thing. If he was pissed at you then your car might be too loud and you got a fix-it ticket. This meant that you had to show up at some police station with your car and demonstrate that it was quiet enough. To a large degree this depended on the policeman that came out of the station to check it as well as what you had done to correct the situation. Most of the time the fix was to get steel wool pads and stuff them up the tailpipes with a long semi-flexible rod thereby markedly quieting the exhaust note for a few weeks

until the steel wool burnt out or just blew out from the back pressure. With the steel wool jammed up the tailpipes, the car was driven gently to the police station and revved moderately for the inspector. If you didn't hit it pretty good but just gave it a little vroom-vroom, the cop would say "Come on get on it" and you'd hold your breath that you didn't blow the steel wool pads out while revving it harder and hopefully it would get signed off. One dumb guy one time bought soap pads instead of plain steel wool pads and when the exhaust system got hot it smelled like the laundry had just been done. I'm not sure if the cop didn't notice it or if he did and thought it was so goddamn funny that he let the kid go just to get inside and guffaw over it with the other cops. Probably the ultimate stunt ever pulled with the noise Gestapo was with Wayne and Bob who had almost identical metallic blue 40 Mercury convertibles except Wayne's car was quite a bit louder than Bob's. Wayne got picked up for being too loud and had to appear for the noise inspection to get the ticket signed off. During the discussions out at Elmer's, we hatched the idea of exchanging cars so that Wayne would take Bob's car and let them listen to it instead of his louder one. They decided that was a workable scheme and that they would try it in spite of the trouble they would both get in if discovered. Wayne took Bob's Merc down to the police station and the guy came out, listened to it, signed off the ticket and it was a done deal. That was definitely the talk of Elmer's for a while.

I struggled along with several trips to the junk yard but finally got my new Schmitties mounted with some pretty good semblance of a dual exhaust system and the new machine was ready for the road.

Adventures With the New Rod

Needless to say, the first place that I took the newly built up 34 coupe was to Elmer's Custard Court where I found, to my surprise, nobody. I went inside and found out that they had all adjourned to another custard stand about a mile east down Capitol Drive to slather over a kid that had a new Olds 88. Now I have explained that the pre-war cars were pretty rudimentary and ploddingly slow, and the immediate post-war cars were pretty much the same thing just sorta warmed over but in 1949 the car manufacturers started introducing some really radically different stuff. Ford came out with a smooth sided car that pretty much eliminated the concept of fenders and running boards. GM introduced a new overhead valve V-8 engine for Oldsmobile called the Rocket V-8 and installed it most of their line. The Olds 88 was the smallest and lightest of their line and with the 135 hp Rocket V-8 engine it easily became the quickest car in America. GM also introduced a new suspension geometry and springing arrangement as well so that when one really got on the 88 it sort of raised up a scooted away. For the day it was awesome. Well, I got down to the other custard stand and as I drove in I was surrounded by all my buddies exclaiming "Hey man, you got to blow off this Olds 88" to which I replied, "Yeah, that would be nice but I got a brand new engine in here and I'm not about to really get after it". "Well that's OK, but this guy is hot to trot and if you don't beat him you might as well not come back". Off we go to the east-bound lanes of Capitol Drive and line 'em up. Somebody

waves a handkerchief and I punch the rod while the guy in the 88 stands on the gas. A little punch and a little steady throttle and I blew away from that guy like he was parked. About at 60th street, he ashamedly kept going and I turned around and went back to the custard stand to accept my just award, adulation.....the hot rod was almost an instant success! I blew off the fastest street car in America almost without trying. "Shit oh dear, this car is FAST!".

One night we were out cruising and Herb Cup was with us on his motorcycle. Herb was a leftover from our motorcycling days but he never left those days. He really liked riding motorcycles to the point that he had full rain gear in his saddlebags for going to work on rainy days as well as a down suit for riding the bike in the bitter Milwaukee winter. His bike was a big old Harley Davidson with a flathead 80 cubic inch engine which made it pretty damn fast. He had equipped his bike with what were called "over and under" straight pipes. These were two heavily chromed pipes, one from each cylinder of the big 80 extending down the right side near the ground with one pipe on top of the other. At the ends the top pipe flared up and the bottom flared down. Aside from looking very cool they sounded great especially the rap they produced on the over-run. It was a real deep sucking gurgling sound that only a big-engined two cylinder motorcycle can produce. To this day I appreciate this sound when I hear it, which is relatively rare. We were cruising east down Capitol Drive toward Lake Drive that went downtown along the shore of Lake Michigan. About half way to the lake there was a railroad underpass of the kind in which the railroad crossed on the level and the street dropped down under the tracks like a big concrete tunnel, the kind that inspires folks to blow their horn to hear the echoing response. Since this was a big rail crossing and a four lane road this particular one was like a big cavern and really echoed. Herb and I had never squared off to see if my rod was as guick as his big Harley 80 so we decided that this was a good time to find out. We vaulted away from the stoplight, entered and went though the underpass side by side flat out up through the gears with both the Schmitties and the Over-andunders bellowing mightily. It was probably the coolest sound ever produced by man and his machines and I will never forget it. Beat the hell out of any puny old car horn! The closest thing to it was when Judy and I got passed by three rice rockets flat out in the tunnel on the Angeles Crest Highway north of LA many years later. Incidentally, the drag turned out essentially even so it looks as if a moderately modified 239 flathead in a stripped down 34 coupe is just about as fast as a mostly stock Harley 80.

The summer after I graduated from high school a friend of mine named Ken and I decided to take a trip to Arizona with the 34 coupe. We rigged the inside up so that with the seat bottom removed and the seat back raised up we could lie out full length with our feet in the trunk and sleep in the car, thus avoiding the need for costly accommodations. My parents were somewhat dubious about the wisdom of this adventure but finally agreed to it after my father insisted that I buy a brand new set of tires for the 34, which was probably a good idea. We set off from Milwaukee heading almost due west through Madison and Dubuque into Iowa, through Cedar Rapids into Des Moines. From there we headed west on two lane highway through Nebraska and Wyoming towards Salt

Lake City on a route roughly paralleling what would now be Interstate 80. Somewhere near Grand Island, Nebraska we encountered a train that was traveling along tracks that closely paralleled the highway. This train was apparently carrying migrant workers somewhere as they were sort of hanging out of open windows in what one might consider passenger cars but much cruder than any I had ever seen before. They were waving wildly to us as we slowly passed the train doing about 70 mph. Shortly after the train encounter we spotted a guy in a Cadillac approaching from the rear and decided that he might need a lesson on how fast a souped up Ford was so we got after it. We got somewhere north of 100 mph and left him fading into the distance. Some time later we arrived in North Platte, Nebraska and were cruising through town when this same car catches up with us with the guy waving at us to stop. For a moment we thought "Oh shit, is this some kind of lawman or what?" We dutifully stopped and got out when the guy exclaims "What the hell have you got there? I had that Caddy going as fast as it would go and you guys just left me in the dust." We were relieved to find out that the guy was an admirer and not the long arm of the law. We had to hang around and show him the engine and shoot the breeze about fast cars for awhile before we set off toward Wyoming. I don't remember much about our sleeping arrangements except that it seems that we just pulled off the highway and drove out into the prairie a ways and parked. We would then unload all our stuff including the seat and stick it under the car and get out our sleeping bags and sack out for the night inside the car. Similarly the memories of Salt Lake City are vague but I do remember The Great Salt Lake because we made a point of stopping there because we had heard that it was the saltiest body of water in captivity and we had to go swimming in it to check it out. It was a genuinely cool experience for a couple of traveling rookies. You could indeed float in the lake about half sticking out and tasting the brackish water was an exciting new experience. After we had gotten our fill of swimming we relaxed in the sun and watched as our tan skin became white with caked salt. "Wow, this is cool!"

From The Great Salt Lake we headed south to Bryce Canyon and Zion National Parks. To say that these were awesome to a couple of flatlander kids was an understatement. When we went into Zion National Park the ranger at the entrance gave us the big scare treatment when he saw what kind of car we were driving. He showed us pictures of squashed cars that had been dragged up out of canyons purported to be thousands of feet deep to deter any ideas we might have had about hot rodding through the curvy road of this magnificent park. Needless to say we cruised coolly through the tunnels and archways that make up Zion.

From Zion we got back on the road south toward Las Vegas which we had begun to call LV as opposed to LA for Los Angeles where we really wanted to go but had long ago decided not to because of the excessive extra miles it would add to our trip. It started to get dark as we cruised through the desert toward LV and we just kept going. In those days Las Vegas was a lot smaller than it is now and the surroundings were nothing but incredibly dark deserts. We began to see the light on the dark horizon like the sun was going to rise at around 8 or 9 at

night. As we came over a little rise in the road our jaws dropped for there was LV in all its early glory, we had never seen so goddamn many lights in our lives. We drove on into town where we saw a huge animated lighted cowboy beckoning us into the main street of LV. We went in there and parked and got out of the car to try out some penny slot machines and promptly found out that people under eighteen years old were not welcome in such an establishment. Fah, we say and got into the car and headed off to what might now be "The Strip" which was lined with drive-ins and such. We drove into a big drive-in to get a burger since it was well past dinnertime. We might as well have been driving into Elmer's Custard Court for the welcome we received. A whole shithouse full of hot rodders descended on us and told us to park over in their group so we could all hang out. This was more like it, maybe LV was as good as LA after all. We sat around on tires and shot the shit and compared notes on hot rodding until far into the night. About 2AM Ken and I decide that we had better be finding a place to park the 34 to sack out for the night so we ask around if anyone knows of such a place and could direct us there. One guy volunteers and says "Follow me". We take off through the dark streets of suburban Las Vegas and after a while he pulls up in front of a residence and gets out and beckons us to follow him. We go into the house and follow him to a bedroom with one double bed in it and he tells us "You guys can stay here, I have to get up for work in the morning but you can sleep as long as you like." "Wow, a real bed, how cool is this?" We crap out on the bed and when we wake up it is indeed light out about mid morning. We get up and are wandering around looking for a bathroom when an older guy encounters us asking "Who the hell are you guys?" "Hey some guy about our age brought us here and said we could sleep here." His reply was "OK, just wondering, make yourself at home, I have to go to work. See ya around." We got washed up and left in the 34 wondering how the hell anyone could possibly be that friendly and trusting, wouldn't have ever happened in Milwaukee.

From LV we set off across the desert for Phoenix, Arizona where my Aunt Virginia lived. (yeah, her again, the same one that lived in Chicago) We thought we were going across the Sahara Desert it was so deserted and bleak in the considerable distance between LV and Phoenix and in those days there was absolutely nothing there except for a couple of wide places in the road and, thankfully, a few gas stations. When we arrived in Phoenix and went to Aunt Virginia's house you'd thought royalty had arrived. She treated us to dinner in a nice restaurant and insisted on buying us a genuine motel room with a swimming pool and the whole nine yards. Man, we were living in style. We stayed there for about a day and then set off on the long return trip to Milwaukee which did not produce any more notable events aside from getting nearly hopelessly lost in Cedar Rapids Iowa. We arrived home in Milwaukee considerably enriched from our adventure.

One night at Elmer's one of the guys came in and announced, "Hey. I heard that there is going to be a real sanctioned drag race down at some airport in Illinois, how about we go down and see what it is all about." Some of us went down to the speed shop and found a posted brochure for the first legal drag races in the Midwest at an old abandoned WWII airfield in Half Day, Illinois which

was just down Highway 41 about half way to Chicago so we decided to go down and check it out. On the Sunday of the event we all piled into our hot rods and headed off. When we got there we discovered that there was no missing it since about a jillion people were present. It turned out that the event was thought up and promoted by the second coming of P.T.Barnum, Andy Granatelli, the same guy out of Chicago that ran the Hurricane Hot Rod Association that raced at the State Fair Park in Milwaukee. It was at this event that I had my first experience with Technical Inspection. I tried to enter my hot rod in the racing event so that I could see how fast it was in the official quarter mile but when they looked it over for mechanical compliance with their rules, I was rejected because I didn't have any front shock absorbers. "Shit, what the hell difference does that make?" The inspector said, "I don't know but the rules say you got to have them and you don't so get the fuck outta here." So with a shrug of my shoulders I was relegated to a mere spectator with thoughts that flitted back to the installation of the dropped front axle along with the impossibility of those goddamn tapered shock links that I fucked up getting off and never put them on. We walked around and checked out all the cool cars that were there and decided that the coolest of all was a powder blue 32 Ford coupe that belonged to Andy Granatelli's brother Vince. Aside from the beautiful flathead all decked out in polished Grancor speed equipment with chrome headers and the whole deal, the car was chopped and sectioned. Chopping is accomplished by taking a section of material out of the top and welding it back together to lower the roof line. This was fairly common and relatively easy to do given some proper body shop equipment but sectioning was something else altogether. Channeling was the lowering of the body by cutting out the floor and remounting the body lower, but sectioning is removing about a six inch high slice out of the middle of the body itself and fitting the whole deal back together like it was made that way. This takes unbelievable body shop skills. This car was about the coolest hot rod we had ever seen up close and personal. It was certainly on a par with the cars featured in Hot Rod magazine. During the course of the afternoon of competition it appeared as if Vince's beautiful 32 coupe was also the fastest car there. That is until he came up against this ratty piece-o-shit Chevy coupe from the south side of Milwaukee. We, being from the north side, didn't know this guy but we were told by acquaintances that he really knew how to make fast cars. Checking under the hood of this 37 Chevy coupe revealed a great big six cylinder engine that we were told was a 302 cubic inch GMC truck engine that this Polack had breathed on. On a special manifold were mounted five carburetors that were all stained green where the 100 octane aviation fuel seeped out of the joints. He lined up against the beautiful blue 32 Ford coupe and when the green flag dropped a lusty roar came out of the Jimmy and the Polack blew away the coupe like it was parked. We all cheered like hell partly because he was from Milwaukee and partly because he was the clear under-dog. We all gathered around him in awe when he returned back to the pits. About this time up walks Andy Granatelli himself with a whole bunch of Italian guys in suits and tells the Polack his car is illegal and he is disqualified. The Polack was a belligerent son of a bitch and told Andy that the only trouble was that his little coupe was just an underpowered

piece of shit and couldn't hold a candle to his car. The discussion didn't go a lot further since Andy implied that if the Polack knew what was good for him he would pack up his shit and get the hell out of there before these guys in the suits made him sorry that he didn't. After this lightly veiled threat, Vince got the big trophy for the fastest car and the big day was over.

After driving the souped up 34 Ford coupe for awhile, I decided that what would really be cool was a channeled roadster,. I found out that Ray Milbrath had a cutting torch in his garage so I asked him if I could bring my car to his house and do some surgery to it. Since he was in the hot rod crowd, he thought it would be cool so he agreed to that. We removed the seats and all the upholstery from the car and got after it with the torch. First we cut off the top to make it into a roadster. Then we installed big angle brackets on the inside of the body about six inches above the floor at key points like the door posts, the cowl and the rear corners. After that we cut the floor off the body all the way around and slid the body down over the frame until the big angle bracket sat on the floor. The steering column had to be rotated down and the shift lever cut off and a new knob installed. The seat bottom and seat mounts were discarded in favor of about a three inch thick pad on the floor, while the seat back could be retained since it now came all the way down to the floor. A little heating and reshaping on the pedals made them workable from the lower seating position. We had to reposition the radiator and grille shell lower to match the cowl height and use the same support rods. I found a chrome Model A roadster windshield and frame in the junkyard that amazingly enough fitted over the hacked up cowl pretty well and almost looked like it belonged there. Since there were no fenders or a hood to mess with, a little hacking around on the firewall and floorboards pretty much completed the job and a street roadster was born. The engine looked more pronounced because even though it was in the same place in the frame, it sort of stuck up relative to the body with the high rise intake manifold putting the carbs and air cleaners up through the radiator support rods, very cool.

After driving the channeled roadster without a top at all, it came to me that it might be nice to have a removable top like a real roadster. There was no way that any convertible top that I found in the junkyard was going to fit on a hacked up 34 Ford coupe so I decided to make my own. I sweet talked my mother into helping me with the pattern making and the sewing. I made some top bows out of electrical conduit and fitted them in place after which my mom and I laid out some paper patterns kinda like dress patterns that were sold in fabric stores. We transferred them to the black convertible top material I had bought and she took care of the additional necessary for the seam allowance and all that sewing technology. We cut the pieces out and she sewed them together with a special big needle and waterproof thread designed for convertible tops. When the sewing was finished we put the top on the car and although it looked kind of funny, it fit good and I was able to drive the car without the top blowing off.

A short time after the top fab effort, we heard about sports car races that were going to run at Janesville, Wisconsin so our group of rods took off on the Sunday morning of the races and went to Janesville for the day. On the way back

it was kind of chilly outside so I got my roadster top out and put it on and rode home in relative comfort.

The Menge Experience

Sometime during the high school days I found Louie Menge, the proprietor of Menge's Service, a filling station on 72nd and Center across the street from John's Mobil where I filled my radiator on cold frosty mornings. My dad used to get gas and other service there largely because he liked Louie better than John so when I decided that I wanted a job working on cars he introduced me to Louie. I had already decided that I did not want to work at John's Mobil because he didn't do any car work, just lube, wash, tires and that sort of thing while Menge's Service did tune-up, brakes, mufflers as well as lube, oil change and general light maintenance, the sort of stuff I wanted to get into. Hiring on at Menge's Service was a pivotal move for me from the point of view of, not only the enormous amount of automobile knowledge that I gained from Louie, but the work ethic, responsibility and attention to detail that he instilled in me. Louie had an only son named Alvin that worked with him in the station sort of as manager, parts chaser, bookkeeper and customer relations representative. Al did as little as possible around cars because he really didn't like working on cars nor did he like getting dirty. He was a college graduate and bon-vivant and loved to show that off so as Louie got to know me better and mentor me in automotive skills I became almost like Al's little brother, the one who loved working on cars and getting dirty. It wasn't as if Louie disliked Al because Al took care of all the stuff that Louie hated doing and after all he was his real live son and was definitely a value added to the business of Menge's Service. When I first started there Louie said "I know you think the front of your pants is where you wipe your greasy hands but here we do stuff different. These orange things here are shop towels and this green thing is a shop coat that we wear. You keep a dirty shop towel in the left pocket of the coat to wipe off your greasy hands and a clean shop towel in the right pocket to wipe off the windshield of cars you service on the drive. I don't want to see any grease at all on the front of your shop coat." I was surprised at how easy that was after a few slip-ups in the early days but pretty soon I looked about as sanitary as Louie and Al. After I got the hang of that he showed me the tan fender covers. "The customer does not want you laying over his shiny car working under the hood so we use these every time we reach under the hood to work on something. Also, when you go out on the drive to pump gas you do not put your foot up on the shiny bumper of the customer's car even if it all rusty. It offends them. The next lesson was "Let me show you the proper way to lube a car up on the rack. First of all you put the grease gun in your LEFT hand so that your good hand can better maneuver the rag which is used with a dirty shop towel to clean off the Zerk fitting BEFORE you put the gun on it and pull the trigger. The right hand then uses the same shop towel to catch any grease that comes out of the joint you are lubing so that there is none left to drip on the customer's driveway when he gets home. Also remember that the shop towel that you start with comes out of this barrel where we throw the towel out of our

left pocket when it gets pretty well soiled and the rag full of grease and dirt from the zerks go into this barrel which is the place where the guy from the towel supply goes to get the towels he needs to take away to be laundered. So, you got it? Clean rags go into the RIGHT pocket, when they get a little soiled the move to the LEFT pocket. When they get way more soiled they go into the clean barrel in the grease rack and the only rags that go to get laundered are the ones that are full of grease and dirt." This is the way Louie was, he had a system for everything and everyone that worked there had better damn well conform to his system. The short handled broom was another of these systems. This was a regular broom with the handle sawed off to about 18 inches in length. We did a lot of brake jobs at Menge's Service which involved removing all four brake drums from the car followed by the shoes, springs and links and small parts. The black brake dust that needed removal from the backing plates was NOT to be blown off with air as it contaminated the entire station with floating black shit. Rather the short handled broom was utilized to gently brush the brake dust onto the floor where it was swept up after the brake job was finished. The short handled broom was also the source of one of Louie's many customer jokes, he would see a customer eyeballing the short broom, "See that broom? Dick sticks that up his ass so he can sweep the floor while he works." In time I worked my way up to doing tune-ups. Usually this consisted of a new set of spark plugs along with new points and condenser. I learned how to bump the starter to get the cam on the high point to set the point gap which Louie said was .016 to .018 for 6 cylinder and .014 to .016 for 8 cylinder so you remembered that and didn't waste time looking each car up in the book. A new rotor finished the parts and with timing the job was done. One time I had to replace the spark plug wires on a Buick straight eight. Unknowingly I just pulled all eight wires off the plugs and out of the distributor cap. When I got the box of new wires open I went to Louie, "How do I know how which plug goes to which hole in the distributor cap?" Instead of getting mightily pissed off like he had every right to do he said "Normally you take one wire off match the length with a new one from the box and install it, then you do the next one, etc." He then made me figure out by the timing mark, the rotor position and the firing order, how to get the wires straightened out and installed correctly. Result; I never made that mistake again and I had figured out for myself something that was infinitely valuable and forever imprinted in my brain. Stuff like this was typical of my experience of working for Louie Menge, my mentor.

It was a tribute to hard work and a very active metabolism that I did not grow extremely round working at Louie's. The station was open from 7AM to 9PM six days a week and shorter hours on Sunday. In spite of being about 32 years old, Al lived with Louie and his mother in their home on about 84th and Center so it was not overly distant from the station. They had some sort of dinner ritual in which one would go home to eat with Mrs. Menge and then bring back a plate of dinner for the other one. Mrs. Menge had met me a few times and being an old-world Germanic woman, thought that I looked undernourished compared to her two somewhat portly men so she took to sending a plate of dinner back for me as well. The only problem was that during the school year when I just worked

in the evening, I had just come from home where my mother had just served dinner for our family and in less than an hour later I was eating another dinner. I was too embarrassed to tell either woman to stop feeding me so I just kept eating two dinners a night. Remarkable!

There was certainly other strangeness to get used to around that station. They had a considerable number of customers in those pre-credit-card days that preferred to pay their bill once a month and with Al's bookkeeping ability and Louie's keen sense of customer satisfaction it worked out quite well. As a new guy this caught me off guard a couple of times when I would go out and fill a guy's tank and he would just drive off without paying. I would go in and report this to Al and he would have to question me about what kind and color the car was and how much gas he put in and usually could figure out who it was. Then there was the ethnicities to deal with, one big old fat guy who had an "eight und eighty" would come in and request "fill up mit eddle" which, of course was pigeon German for premium, often referred to as Ethyl in those days. Then there was the German Jewish guy with the Kaiser whose name was Weiner. When he came in and one of us young guys that worked there would go out and say "Good evening Mr. Weener" just so we could listen to him say "Vyner not Veener!" We did it every time and he never caught on. Al never did it but used to laugh his ass off every time we did it.

Summer was a time when I experienced a couple of weeks that were not only different from my regular routine but also 180° different from one another. These were the weeks when Louie and AI went on their respective vacations. Partly because they felt that one of them should be at the station to take care of business and partly because they had totally different vacation interests and plans they always took their vacation separately and arranged that I work more hours to make up for the absence of one guy from the work force. When Louie was gone it was orderly time since AI still did as little as possible of the work on cars so he would take in work that he knew I could get done without too much trouble and he NEVER took in any work past about six or seven in the evening so we usually spent that last two hours of the day sitting in the office bullshitting. He would get the bookkeeping done, the money counted and all the paperwork handled and we would lock up exactly on time and be off for the evening. Now when Alvin went on vacation it was totally different. Louie was free of Al nagging at him about clogging the place up with cars and took in every job that came along and talked everyone into whatever he thought they might need to be done on their cars, during which time we worked our asses off. We even expanded into the empty lot next to the station. I'd have one brake job all apart in one stall and another one the in the same shape outside. Then when someone went to get brake parts I'd pull off two tune-ups outside just in time to get the parts to get the brake jobs done. By that time it was time to knock out the four or five lube and oil changes that had come in which I could do in about an hour. I was pretty much a one-man-band because Louie kept getting interrupted by gas customers on the drive as well as taking in whatever work came along. Man this was fun, maxing out on wrench twisting for an entire week. Louie would take shit in at eight at

night so I would be working right up to quitting time and had to get my ass in gear just to get done on time.

Another thing about working at Menge's was that I got to drive all kinds of different cars both from the standpoint of diagnosis of a trouble and also to test out the adequacy of the performance after a tune-up as well as just for the hell of it. Sometimes it was just around the block sometimes around the neighborhood and sometimes out to the fence. Now the fence was built along the boundary of a cemetery that stretched along the right side of Highway 41 from the traffic light at Burleigh street for about a quarter of a mile out toward Elmer's Custard Court. How fast a car could get to the end of the fence had become a standard and calibrated measure of a car's performance with all the guys that hung out at Elmer's. "How fast will she go to the end of the fence?" This standard did not require the use of any timepieces and was easy to do by one guy alone for all he had to do was pull up at the light at Burleigh and stand on it and watch the speedometer while letting his peripheral vision note when he went by the end and remember the speed at that point. I seem to vaguely remember that 60 mph at the end of the fence was acceptable and anything much slower than that was doglike. If you could get up to 70 or 80 at the end of the fence it was remarkably quick. Obviously there was a way to uncover bullshit artists who claimed outrageous speeds to the end of the fence, line 'em up in front of Elmer's against a known performer and see. At Menge's we had an old woman customer whom in about 1951 traded off her Dodge for a 1949 Olds 88. As I explained earlier, the 88 was just about the quickest stock production car in America at the time while the postwar Dodge was just about the doggiest. The Dodge was a big old heavy son of a bitch with a weak-ass six cylinder engine and a two-speed semi automatic transmission. This transmission was one of the bright ideas that came along during the transition years when the automakers were going from three speed manual transmissions with non-synchronized first gear to full automatics like the Oldsmobile had. The Dodge had a clutch and conventional gear lever which would pretty much function like a regular three speed but it also was equipped with a fluid coupling that made it unnecessary to depress the clutch at stops. Driven in this mode was called "Fluid Drive" and involved pushing down the gas pedal to take off and after achieving a speed of 15 or 20 mph let off the pedal and wait for the clunk of an automatic shift into the cruising gear. It was a little like taking off in first and skipping to high, which it probably was. The maximum performance take-off in the Dodge entailed mashing the gas to the floor and holding it there until it would rev no further, letting off for several seconds waiting for the clunk of the up-shift and then mashing it down again, such dog-shit. This old woman described the difference between her old Dodge and her new Oldsmobile in terms that were absolutely hilarious but of course one of us doubling over in laughter was politically in bad taste. "My old car was so gentle, when I would take off I would just push it to the floor and away I would go but when I do that with my new one.....OH MY, it's hard to keep it straight!" "No shit, lady!" I believe this is the same old lady that came in complaining when she first got the Dodge that it would hardly get down the road. We drove the car and it seemed normal so Louie asked her to describe exactly how she drove her car, to

which she replied. "Well I get in and pull out the handle to hang my purse on, start the car and then drive off and it will hardly go." Louie had her show him the new Dodge accessory, the purse hanger. It turned out to be the manual choke that she was pulling out to hang her purse on and Louie had to explain to her that that procedure was unacceptable. Eventually she got used to the idea that she didn't have to take off flat out in the 88 and it was a lot more manageable and she could cruise along in her usual putt-putt mode, About once a month she would come in wanting a tune-up because the car was bucking and running rough. It turns out that in those days spark plug technology and the available fuel did not put up well with putt-putt driving and the car needed to be taken out to have "the cobs blown out of it." This involved putting the Olds in LO range in the automatic transmission and standing on the gas. The engine would buck and miss and generally carry on but gradually all this would start to go away. Continuing this for awhile usually would get the car back to normal. The reason we did this for the old woman instead of soaking her for a tune-up was partly because we knew it would work and the rest because of Louie's kind heart, he hated taking advantage of people. After getting the 88 back to normal it was usually necessary, at least in my devious mind, to take her over to Burleigh street and see how she did to the end of the fence, just in case the old woman found someone who wanted to square off. It was always fun blasting to the end of the fence in a fast car.

Louie and Al played another important role in my automotive life. They got me to switch my automotive allegiance from Ford to General Motors. This did not happen during these early hot rod days even though they started working on it then. It actually happened much later after I had divested myself of all the hot rod stuff, gone off to the army, got married, had a child and re-started college. Before he got into the service station business, Louie was a service manager at a Ford dealer, knew Fords inside and out and even knew things that went on at the Ford factory. He used to relate tales such as "At the Ford assembly plant in Detroit, Henry forbade smoking so the guys used to chew tobacco and spit in the corners, so Henry had the corners painted white so that anyone who spit in the corner could be noticed and fired on the spot." I have no idea if this was fact or fiction but it certainly was a cool story. Louie was a good story teller. Although he never offered an exact chronology, somehow during the ownership and operation of Menge's Service he lost or gave up his loyalty to Ford and when I started there he had a Chevrolet truck for the service station and he and Al both had Cadillac's as personal transportation and usually renewed them on a fairly regular basis. I got to drive one of them occasionally and began to realize that they were pretty cool cars, smooth, quiet and pretty damn fast although completely out of my class, being a hot rod teenager. Louie used to say "When you own a Ford you go out for a drive but when you own a Caddie you go out for a ride." I think this was also the first time I ever heard the sayings that Ford stood for "Found On the Road Dead" or "Fix Or Repair Daily". Needless to say these things were only uttered to me in private and NEVER in the presence of our Ford owning customers. In any case, this putdown of Fords must have slowly soaked into my brain over the years along with the experience of working on a variety of different

cars because when I came home from the army married and with a new child, they got me into a shiny maroon 49 Buick fast back two-door sedan and I never looked back. For some forty years I was a cured ex-Ford junkie and went through a countless number of cars, none of them Fords.

Louie had some other unique tricks for different situations that came up around the station. Every time we would rebuild a master cylinder, we would take the old one out in front of the station and spread the old brake fluid around the base of the bushes lining the front sidewalk. Louie said that the brake fluid would not hurt the bushes but would keep dogs from peeing on them. I never confirmed this but then I never saw any dogs peeing on Louie's bushes either. Occasionally little kids from the neighborhood would appear at the station and play around on the drive by the gas pumps. Needless to say this was a dangerous situation since a driver entering the station from the street certainly would not expect to see little kids on a service station driveway. Louie would tell them nicely to go back home and stay there and they usually would but in stubborn cases where they would continue to return, Louie would invite them into the station and ask them "Would you like a handful of grease to take home and play with?" This was usually followed by an eager affirmative nod of their little heads after which Louie would take them over to the grease rack, get out the gun and fill each little paw with grease and send them trotting off proudly toward home with their little hands stuck out in front of them full of grease. Amazingly, we would never see them again.

Louie was a self-taught business man. He made enough money over the years in a small two-bay neighborhood gas station to own a home, drive a Cadillac and put a kid through college. He did it by cultivating an amazing customer base throughout the neighborhood and keeping it by giving good service, making the customers feel good about their cars and the work we did on them. The gas station business in those days was on a lease basis, Cities Service Oil Co. owned the property upon which the station stood and leased it to the proprietor. The amount the dealer paid the oil company along with the amount the dealer got per gallon of gas sold along with the mark-up on the other products sold was all negotiable. Louie did all right on most of the product we sold but he could never get them to give him what he wanted for tires. To make matters worse, Louie had a buddy that owned a Firestone tire distributorship so he could buy Firestones at a really good price. Therefore we would have the Cities Service brand tires, all wrapped in their paper wrappings up on the rack in the back of the bays and a whole bunch of Firestone's of the popular sizes hidden in a big lock box out behind the station. I think we sold more Firestone's than a Firestone store and nary a single Cities Service tire. It was more than a little amusing to hear Louie cry the blues when the oil company representative would come in asking why we didn't sell any tires. "Just look at these ads at all these tire dealers. How do you expect me to sell tires when you charge me more than the tire dealers charge the customers? I have to pay my men to install them and balance them and then can't charge enough to cover that and make a profit, how does that work? How do you expect me to stay in business, just selling gas?" This haggling would go on for nearly all the time the guy was there and

Louie would never give in. If the guy would appear unexpectedly when we were installing a set of Firestones Louie would tell him that the customer was fussy and would only use Firestone and so we sold him a set to keep a happy and satisfied customer. What the hell could he say? The ultimate in Louie's bargaining came guite a bit later after I had returned to the university and only worked there when I would come back to Milwaukee. Cities Service decided to phase out the old location on 72nd and Center and offered Louie a brand new modern station over on 76th and Lisbon Avenue. The oil company of course wanted a whole bunch more rent for these lavish new digs but Louie was having none of it. Besides arguing that he might keep some of his old customers but would likely have to build a whole new customer base from this neighborhood, he also took the oil company suits out into the front of the station and told them "Look around, what do you see?" They looked puzzled until Louie pointed out that there was a huge cemetery diagonally across the intersection from the station and said, "All the people in there are dead and do not drive cars, therefore, by relocating here I have only three quarters of the possible customers than I had at the other place so the rent ought to be only three quarters as much." The suits were flabbergasted at the simple business logic of what they had just observed and heard. Obviously I was never privy to the final deal but Louie did move Menge's Service from the venerable old 72nd street location to the new one and I'm willing to bet had a better deal than any other service station operator in the surrounding area.

The Post High School Days

After graduating from Washington High School in the middle of the winter in 1951 I started what turned into my first try at college. I enrolled at the Milwaukee extension of the University of Wisconsin and began my studies. Going to college was enough different from high school that it knocked a big hole in my hot rod activities what with nightly studying and daily classes. In the fall I decided that it would be cool to go off to the big U in Madison and I guess my folks were OK with paying for it so off I went to stay in a dorm, go to football games, engage in ridiculous beer-drinking parties and even attend classes. After one semester of these fun and games with drastically slipping grades, in a state of embarrassment over spending my father's money so stupidly I decided to abandon college, come back home and enroll in an aircraft engine mechanic course at the Milwaukee Vocational School.

One notable thing in my automotive life took place during the course of my short ill-fated college career at Madison. I drove in my first ever automobile race. Before I had left for Madison some of my buddies asked me if they could take my old 37 Ford that was parked in the field and turn it into a race car. I agreed to that since it wasn't much good for anything else. On a weekend when I came home to visit my family and old Milwaukee friends, I was out at Elmer's and during the evening bullshit session the guys with my old '37 asked me if I wanted to drive it at Hales Corner Speedway on Sunday. "Well shit yes!" Sunday around noon we headed out to the speedway with the old 37 in tow with it's crude numbering

making it somewhat resemble a race car. When we got there I had to scrounge around the pits to borrow a helmet which was about all the safety equipment one needed in those days. I went out for time trials and found that racing flat out around a quarter mile dirt oval was pretty much the most incredible thing that I had ever done. It was one big blur with everything happening so fast that all a guy could do was hang on and steer. Breathless! Apparently the time I set was not any great shakes because I ended up in something like the "dog heat" or consolation race or something like that. A dozen or so of these old pieces of shit lined up for the race and I was somewhere in the middle of the pack. After a couple of pace laps with these guys banging and pushing around the green flag came out and we were off. More chaos, dust, noise and even more banging. I made a lap or two and passed a guy on the outside going into the turn and then when we started out of the turn I must have cut in on him. Big mistake because as I came by his front end he turned out and gave me what the LAPD calls the pit maneuver, a little knock in the left rear fender when you are all leaned over to just nudge you into a spin. The only problem was I didn't spin, I went ass over teakettle and rolled that bugger all the way over back onto the wheels again. It didn't hurt me anywhere but I must have knocked my thumb into something and split the end of it open and was bleeding all over my white sweatshirt. My racing day was over. They patched up my thumb and I returned the blood spattered helmet to the rightful owner and we set off back for the north side. I had told my mother where we were going that afternoon and what was going on but had left out a few details. When I appeared home with dirt and blood all over my sweatshirt she exclaimed, "You were driving that thing." I could not tell a lie and admitted that I had done that. It probably was not my best moment with the lady who later would become one of my biggest fans.

The aircraft engine course that I started in the middle of the winter when I came back home from Madison was much more what I wanted to do at the time than go to college and was actually a lot of fun as well as teaching me a lot of stuff about the insides of an engine. The class wasn't actually in the big vocational school building but rather in a temporary building on the corner right across the street from the similar temporary buildings that constituted part of the University of Wisconsin Milwaukee extension that I had attended the previous year. We were the only class in this big open building so it was kind of nice and spacious and also had a big roll-up door where we would take the most recently built-up engines to crank them up and run them with open exhausts bellowing into nearby downtown Milwaukee. It was definitely cool. The instructor was a diminutive balding Swede with the typical shop teacher uniform, a shop apron with a micrometer protruding from the upper front pocket. His name was Mr. Hedberg and he spoke with a heavy Swedish accent that entertained the students no end and resulted in considerable imitation. "Ven ve assemble the parts ve must laubricate torrowly." Translated this meant to apply ample oil to stuff before sticking it together, a practice that became so ingrained in me that I do it to this day when assembling an engine. Mr. Hedberg cleverly configured the course and the difficulty of the student projects to suit the widely varying abilities of the students in class. There was none of this equality shit like now where

everyone must be dumbed down to the lowest common denominator. As it turned out my depth of experience in mechanical things, being a high school graduate versed in math and physics and what I now see as a natural aptitude for engineering type stuff stood me in good stead and I rapidly advanced to the head of the class. Starting with a little 35 hp opposed four cylinder engine that powered things like Piper Cub's and Aeronca Champ's, I followed that with some much more cool stuff like a tank engine adapted from an air-cooled 250 hp Lycoming opposed six cylinder aircraft engine. I thought the tank engine was especially cool because it had a big cast aluminum fan and housing to adapt it to transmission and was more like a big old hot rod engine than an aircraft engine. It also had exhaust header type manifolds to which we hooked up big dual straights made from about three inch flex pipe for run-up out the big overhead door and it just sounded so cool. Then I got to take apart a Pratt and Whitney R-1340 air-cooled radial engine. This was some kind of engine, 1340 cubic inches, 450 hp, 9-cylinder radial about four plus feet in diameter with a 5 3/4" bore and stroke. The big finned aluminum cylinder barrels were arranged like spokes on a wheel bolted to a basically round center casting. To disassemble, four nuts were removed from the base flange and the cylinder pulled off over the piston and rod assembly. To put them back on required a ring compressor that could come apart after the cylinder was pushed down over the piston rings, all very new and strange to a 19 year old hot rodder. In the rear of the center casting was a bowl shaped casting that mounted the two magnetos for the dual spark plugs, contained all the accessory drive stuff for various lube oil pumps and, of all things, a centrifugal supercharger buried down in the middle. Apparently superchargers were common on aircraft engines and were not so much for increasing the power like on a hot rod engine but for maintaining the power as the aircraft went to altitude and the atmospheric pressure went down. The connecting rods and crankshaft in these engines was different than any I have ever seen before. There was one master rod with a huge big end with eight small holes surrounding the big hole that the crankpin went through. The crankpin was offset half the stroke on a splined come-apart single throw crank supported between the front and rear crankcases on some kind of roller or ball bearings. Each of the other eight connecting rods were just a straight h-beam with what looked like a wrist pin hole in each end, the top connected to the piston and the bottom pinned to one of the eight holes in the master rod. The flange on the master rod was thick and had like a circumferential slot into which each of the other rods fitted. Very unusual and quite cool. One of the most interesting things I learned in that school was how the valve gear worked in a radial engine. Mr. Hedberg had a way of pointing things out to get your interest piqued but then letting you figure your way through it rather than just telling you. He would say "See these two wheels here in the engine with the four bumps on them? They are the cam wheels and operate the valves, one wheel is for the intake and the other for the exhaust. Now how do you suppose four bumps can operate the valves in time on a nine cylinder engine?" You think "Yeah, how the fuck can that work?" The engine rotates counter-clockwise viewed from the front or propeller end and the cylinders are numbered 1 through 9 in the same direction. The firing

order is 1-3-5-7-9-2-4-6-8, thereby firing the cylinders evenly round and round making for very smooth power. After looking at the parts carefully, counting gear teeth and drawing some sketches, I came up with the fact that the cam wheel turns the opposite direction from the crankshaft at 1/8 the speed. Drawing up a diagram of the engine turning with the bump on the cam wheel turning 1/8th as fast in the reverse direction and after a lot of time you exclaim "Well I'll be a son of a bitch, the goddamn thing works, it is fuckin' amazing!" This cam wheel exercise took the better part of an entire day to figure out but looking back on it it seemed to be what that whole school experience was to me, a learning process on mechanical stuff that interested me but was way different from the normal hot rod stuff. I would not be surprised if it was nor instrumental in my later extreme interest in mechanical engineering. It certainly influenced a similar analysis that took place some forty or fifty years later when I sat in my garage figuring out exactly how the hell the timing chain and double speed counterweight drive assembly worked in a Mitsubishi double overhead cam four cylinder engine so that I knew how to get it timed right during reassembly.

There were also some fun times at this school. One time we were having what I guess one might call magneto and carburetor week where all the students were working at the same big table taking apart carburetors and magnetos and sort of group learning how they worked and how they were serviced. As I mentioned before, being a public vocational school led to considerable variance in the brightness of the students, but in this group exercise we were all together. A couple of us more mischievous guys decided to have some fun with some of the dumber guys and we sort of strung wrenches and parts and other metallic stuff together in a connected circuit between one of us working on a magneto and some of the dumb guys working on a carburetor. We'd wait until one of them would touch some particular part of the carb and we would whiz over the magneto to create a several thousand volt pulse in this metallic train in which this guy was the ground terminal. "What the fuck?" he would exclaim as he jerked away after being shocked. "What do you mean, what the fuck? dummy" one of the other guys would say. "This sumbitch just shocked me!" he would reply. "Yeah, bullshit, how the hell could a carburetor shock you?" one of the other guys would say while we were ignoring the whole thing and faking working away diligently on the other end of the table. "That fuckin' part right there shocked the shit out of me when I went to pick it up." he would repeat. One of the other guys would grab the part and, of course it would not shock him, "What're you talking about, look?" Then we would let him touch it a few more times before we would spin the mag again and get him. "Goddamn, it did it again, that sumbitch" It was all we could do to control our laughter as this situation went on and they never caught on. Finally the commotion was too much for Mr. Hedberg and he came over to the table asking what the trouble was and these guys started to tell him about the mystical electrical phenomena going on. Well, Mr. Hedberg was no moron and had been teaching teen age boys of varying brightness for some time. He kind of looked the table over a little and immediately recognized a makeshift electrical circuit reaching some six or seven feet across the table from the magnetos to the carburetors. To keep the peace he pointed out to the lads the

existence of this circuit which, of course, set us guys into waves of laughter and those guys into waves of profanity and derogatory remarks about our mother's sexual habits and such. The next day when we switched around and they worked on magnetos and we worked on carburetors they naturally tried the same stuff but we were wise to it and kept subtlety thwarting their efforts which naturally pissed them off, set them to arguing among themselves and gave us some more laughs.

Then there was Mr. Hedberg's pride and joy, the Le Rhone engine. This was a French radial aircraft engine from WW-1 that had a fixed crankshaft and rotating cylinders. The thing looked pretty much like a conventional radial engine except the crankshaft was mounted to the engine stand as it would have attached to the aircraft and had a carburetor hanging off the back end while the entire crankcase, cylinders and heads rotated with the propeller (ours did not have one) attached to the front of the crankcase. This was apparently the hot ticket for fighter planes during the first world war because it had a really good power to weight ratio over the more conventional inline aircraft engines of the era but it was certainly weird to us young lads who were not even born at the time of the first war. Every once in a while Mr. Hedberg would drag this thing out and we would open up the big overhead door and attempt to start the thing up. It seemed that nobody, not even Hedberg new how to make the carburetor work so we would prime the thing with gasoline by squirting it straight into the cylinders. This was possible because the centrifugal force of the rotating engine pretty much kept the valve train tight against the cam wheel so the valve springs were real weak springs just enough to keep the valves that ended up on top when the engine stopped from falling into the cylinders. The intake valves were inaccessible because they were inside the copper intake pipes but the exhaust valves were just hanging out there in the air. There was no exhaust manifold. What we would do, with Mr. Hedberg's gleeful but careful coaching, is push open the exhaust valve with our finger and squirt about two squirts of gas into each cylinder. Then we would un-ground the magneto, grab a hold of the bare ass valve train components and give the cylinders a lusty yank to crank over the engine. After a time or two the engine would snort and bark and sometimes begin to run for a few seconds until the fuel ran out. After a few times at this it would get warmed up and actually start pretty good with the only difficulty being that if you didn't give it a stout enough yank it might hiccup and start running backwards. The damn thing ran damn near as good backwards as it did forwards. Apparently, according to Mr. Hedberg, this was an actual problem during the war where the engine would have to be stopped and restarted to keep the airplane from backing up. This activity was one of Mr; Hedberg; s favorites so we got to do this about once a month. We all thought it was great fun.

One of the side benefits of going to the vocational school instead of college was that there was no homework, thus once again leaving the evenings open to hot rod activities. We were also now eighteen years old and in those days in Wisconsin beer drinking was legal. The law at that time was that between the age of eighteen and twenty one you could not go into a tavern that sold hard liquor but you could go into one that served beer only. Needless to say there

were a lot of enterprising tavern owners that took advantage of this law and opened up what amounted to "youth clubs". We still went to Elmer's Custard Court that also had a beer license but we also hung out at a place further out on Hwy 41 called the "Old Dutch Mill" or as we knew it "The Mill". There were several others but those two were our favorites and we could usually be found at one or the other in the evening. I also worked part time at Louie Menge's to make enough cash to engage in all these activities.

Larry Albert and his mother's famous green Terraplane were still in the picture. Sometimes Larry and I would find a couple of chicks and talk them into a joy ride in the Terraplane. We had a routine that would totally freak them out. Although it wasn't rehearsed we pretty much knew what the other guy was going to do so the routine went off with not much talking, sort of like we sort of casually did this as an ordinary pastime. As we were cruising along one guy would casually open the door and get out on the running board and shut the door and sort of disappear. He did this by scooting along the running board and perhaps appearing in the back window standing on the bumper or on the roof presenting his head upside down in the middle of the windshield making some kind of goofy face. He would then disappear again only to reappear outside the driver's door at which time the driver would abandon his station and the other guy would open the driver's door, get in and begin driving the car while the other guy who was driving would get out the other door to perform some more weird outside the car shenanigans. This would set off the chicks into screaming "What are you doing?" and "Where did he go?" and "You guys are nuts!" while us two guys would be laughing our asses off. This tom-foolery would go on until we got tired of it and quit. We never were able to make out with any of the chicks because they were uncertain of our sanity and such activity certainly did nothing for our sexual image. We usually had to find new chicks to do this with because once through was all one set could handle and they would not go riding with us again. Besides it wouldn't be as much fun if they expected it.

One time Larry's mother had some kind of mission that caused us to put a top carrier on the roof of the Terraplane to transport some sort of outsized cargo. In those days a top carrier consisted basically of two boards with suction cups on each end stuck to the roof one near the front and the other toward the rear. A few straps fastened to the rain gutters and strapped up tight completed the installation. After completing the haul for Larry's mother we were contemplating the two boards on top of the Terraplane and hatched a plan. We found a length of stout rope and tied it to the ends of the front board making a loop that a guy standing on the back board could hang on to while leaning back. We took turns testing it out and decided that we had converted the Terraplane into the world's tallest and fasted surfboard. What the hell did we know? The nearest water was Lake Michigan and we had never even seen a surfboard. It was time to go out to Elmer's for a demonstration run so we took off at a time when we knew all the other guys would be there hanging out in the parking lot telling lies. Larry was driving and I was on the roof hanging on the rope with one hand and waving at the troops with the other with Larry blowing the horn for attention as we cruised

by at about 60. The guys were suitably impressed and bought us beers for providing the evening entertainment.

We had a tradition, well what the hell, one year makes it a tradition, of going swimming for the first time of the season on Memorial Day so we would get a bunch of guys and cars together and trek out to this place called Mauthe Lake where we went with the Boy Scouts back in the olden days. This was a cool little lake out in the kettle moraine country near Milwaukee where we could camp out, go swimming, hang out and drink beer. One day we were cruising around on the back roads near there with our cars and some of the guys were riding in a 36 Ford coupe with a rumble seat. Thinking of the surfing demo in front of Elmer's one of the guys in the rumble seat got out on the back bumper and while hanging securely onto the rumble seat back, let himself down until he was sliding on the pavement with his shoe soles, surfing. He would sort of hold on to the rumble seat to lift himself up slightly so his entire weight was not on the pavement. The only hitch to this was getting back up on the bumper. To do that he had to sort of jump up which put much more weight on the pavement with notably more friction causing his legs to fly out backwards. He looked like a flag sticking straight out from the rumble seat where he hung on for dear life. Then with considerable arm strength, some acrobatics and help from other guys drew his feet in to stand on the bumper again. Needless to say, this was one of the dumber stunts we ever did but all of us had to give it a try and no one ate it big. Shit, that was more fun than swimming in the freezing cold water of Mauthe Lake on Memorial Day.

Ray Milbrath, the guy in whose garage I did the surgery to my 34 to turn it from a five-window coupe into a channeled roadster, belonged to the hot rod group but did not own a car. He had an arrangement with his Dad. If he took him to work and picked him up in the evening he could have the family car all day and most evenings. The family car was a black 49 Chevy four door sedan, definitely not too cool but after all wheels were wheels and if you had no car this was way better than sitting at home. His dad worked in the office at the Miller Brewery. Miller, like the other beer companies in Milwaukee, had a tap room where the factory workers could come in their leather aprons from their work stations in the hot brewery and fill up their beer steins to keep them cool while working. Sounds like a strange arrangement but that was the way it was done in those days. Ray knew the guys that ran the tap room so he could go in there and have some free beers while waiting for his dad to get done with work. Well it didn't take long for the word to get around that if another guy went with Ray he could partake of the free beer as well. It was like a lottery to see who would go down there with Ray about an hour before Ray's dad got off and it was all we could do to save a seat in the car for dear old dad. The big old Chevy was also kind of a cool car to take when we got a couple of handy sixes and sort of just cruised around. The problem was what to do when you had to pee. We found out by experimenting that the four door sedan design was made as a solution for this very problem. The technique was to open the rear door a little bit, roll onto your side and hang your weenie out the door and have at it while still cruising down the road. With a little practice a guy could relieve himself without peeing on the door, the side of the car or himself. Very ingenious!

The spreading fame of Elmer's as a place where car guys hung out and the expanded cruising presented the opportunity to meet a bunch of new guys to hang out with, notably a bunch of guys from the nearby Milwaukee suburb of Wauwatosa. There was Roger who had a 46 Ford coupe and Billy "Beeb" Ballard who had a really cool metallic green 32 three window and a couple of his buddies, Wayne who worked at a Ford dealer and had a very cool metallic blue 40 Mercury convertible and Hansie, an older guy who had already served his time in the Army and had a 47 Oldsmobile tudor sedan. Hansie was an ingenious dude and aside from having sort of cool sounding Scmitties on his Olds had fashioned an arrangement that made fire come out his exhaust on command. Now nearly everyone knew the trick where you shut off the key while cruising down the street and pumped the hell out of the accelerator pedal and turned the key back on to produce a giant explosion out of the tailpipe and sometime some fire. Also never forget the unlucky few doing that with their dad's car and blew the muffler to kingdom come and had to figure out what to tell father about his destroyed muffler. Well Hansie went this transient scheme one better and had a controllable fire maker, like a rocket he could make happen even when the car was sitting still. He had a little pee-pee tube like the one for a South Wind heater plumbed into his tailpipe somewhere a few feet up from the end. Downstream from the injector was a spark plug fired by a model T coil box that Hansie could turn on from the cockpit. What he did was to turn on the fuel and then the spark and a fire would appear out the tailpipe. It was kind of lazy at idle but if he speeded up thee engine and increased the fuel flow to the burner he could produce an impressive blue flame out the back of the innocent looking Oldsmobile. As I understand it, there is a revival of this device in the custom equivalents of modern day "rat rods", notably at the annual "Hunnert Car Pile Up" gathering in upstate Illinois.

One of the reasons that brought these new guys up to region of the Custard Court was the fact that one of their buddies lived almost across the street, not guite but just off of one of the gravel roads north of Capitol Drive. His house had a giant front yard kind of like a farm house might have and his folks didn't object to us all parking out rods there and hanging out on weekend afternoons. There were also no objections to us drinking beer as the afternoons wore on. This often led to some bizarre behavior such as the afternoon we were all pondering the notion of using a beach umbrella as a parachute and just how much it would slow one down in free-fall. Now a few rudimentary aerodynamic calculations would have shown the hopeless inadequacy of this small canopy in supporting a full grown teenager but at this stage of our lives there was no engineers present in the group much less ones qualified in aerodynamics so it was necessary to revert to experimental data. I volunteered to be the first to try jumping off the garage roof using the beach umbrella parachute. As we all knew from being little kids, garage roofs are not all that high and jumping off them without being maimed was just a matter of folding up when striking the ground to absorb all the shock of the fall. After rounding up a ladder to get up on the roof, off we go, me with the beach umbrella and a couple of other guys to act as comparisons for the rest of the observers to judge the difference in descent

velocity. Well, with a bit of a run down the slope of the roof and a lusty "Geronimo" off into space we go. The other guys just jumping landed just like when we were little and folded up but me, depending on the retardation provided by my parachute landed stiff legged and damn near drove my legs up to my shoulders. "Oh fuck, that hurt like a son-of-a-bitch but if I fake it I can get other guys to try it." I just bit my lip concealing my pain and after some discussion involving the amount of slowing achieved, the experiment was repeated with another sucker using the umbrella. I volunteered for a ground judge since my body was not yet ready for another leap even done right. The result was exactly the same, a few guys with no parachute folding up and the guy with the umbrella hitting stiff-legged. "Jesus H. Christ, I just broke both my fucking legs. You sonof-a-bitch, Durant, you didn't say anything because you wanted to see me kill myself" I was rolling on the ground in laughter barely able to control myself. "You bet your ass and it was worth it." After all the laughing, we discussed how damned idiotic it was to depend on a dumb beach umbrella for a parachute and not fold up with the impact just like real parachutists did with a hell of a lot bigger canopy.

I previously mentioned the guy named Wayne who worked at a Ford dealership, it turned out that this Ford dealer had some car lease deals with various companies to provide cars for their salesmen no matter the location. Since they knew that Wayne had a bunch of young guy buddies with nothing in particular to do, the lease organization would tell him about cars that needed to be delivered out-of-town in hopes that one of these guys would deliver the new one and bring back the old one for expense money only. Scheming car dealers never change. One time some lease guy from the Ford dealer took Wayne and four more of us guys down to Chicago to pick up five of these lease cars from some company that had gone broke or something like that. That was one fun trip. The lease guy was on an expense account so a lot of us ate lobster for the first time in our lives and generally lived high on the hog at someone else's expense. To make matters even better, all the way back the five if us were racing one another, driving as fast as we could absolutely nose to tail and all sorts of stuff we couldn't or wouldn't do in our own cars. On some of the multi-lane highways around Chicago we would pick out some hapless soul driving along sedately in a center lane and come ripping up behind him at breakneck speed and at the last minute peel off into two columns and pass him on either side with about six inches to spare. Most likely only his laundry man knew how scared he was.

The opportunity for another adventure came out of this relationship with the Ford leasing people. They were looking for two guys to drive a new Ford to Saratoga Springs, NY and then go to Cohoes, NY to pick up another leased Ford and bring it back to Milwaukee. It was something about a newly hired salesman and one that had suddenly quit the company or something. We didn't know at the time but I guess what they were thinking is two guys dividing up the driving was cheaper than having to buy one guy hotel rooms. At any rate Ray Milbrath and I accepted this challenge and set off for New York with a small pocket full of expense money in this dealer plate equipped new Ford with an envelope of paperwork for the salesman to whom we were delivering it to. We must have

looked at a map and decided that the shortest way to Saratoga Springs was to go around the end of Lake Michigan, across Michigan into Canada to Buffalo, NY and finally across the middle of New York state. Remember that this was way before Interstate highways and that dodging big cities avoided the unbearable traffic on what we now refer to as "surface streets". We had no difficulty in traversing a considerable distance in Canada but somewhere in the middle of the night in the middle of New York the state highway patrol decided to find out what two young guys in a new Ford with Wisconsin dealer plates were up to. I think that the only thing that saved us was luck and honesty. We told him what we were doing and showed him the papers in the glove compartment and put on our best innocent clean cut boy faces and he let us go. That could have been ugly. We successfully delivered the new Ford to the new salesman and talked him into taking us to Cohoes to pick up the other one and set off for an extended return trip. The plan we had cooked up was to go to two major east coast sightseeing destinations that neither of us had ever seen before. New York City and Washington, DC. Being virtually penniless and totally unsophisticated in the ways of proper travel we arrived in New York City and just drove around hanging out the windows looking at the tall buildings. We never even got out of the car except at a delicatessen to buy bread and lunchmeat for our continued sustenance. Somewhere along the way I remember going though a tunnel under some river that reminded me of the world's biggest bathroom, all in white tile. Also we observed something in downtown Manhattan that intrigued us to no end. The traffic lights had no yellow, just red and green. The way it was supposed to work was that the green would change abruptly to red stopping the flow of traffic and after a short period with both directions stopped with red the other direction would abruptly change to green to start the flow of traffic in that direction. The way it actually worked was the guy stopped would watch the other guy's green and when it changed to red he would take off blowing his horn at the cross traffic that was not yet stopped. I think that the only thing that averted total chaos and destruction was that all the cars in Manhattan were yellow cabs and there was some kind of understanding among the cab drivers. Since we were not a cab we just were careful as hell so that we got through unscathed. After our time in New York we headed for Washington, DC. As I remember we got there sort of early in the morning so we must have stopped off and slept somewhere for the night. Since I don't remember anything about any accommodations at any point in our trip we must have slept in the car and washed up in gas station bathrooms. At any rate we were driving up a big wide Washington DC avenue in the morning rush hour when there was one of those sudden "all-stop's" that occurred right at the instant we were in a giant wet spot in the boulevard caused by a sprinkler that had gone awry. Ray jammed on the brakes, locking the wheels in the water and BAM, we whacked into the car in front of us. Ray got out of the car and encountered this big ole black guy that was driving the car in front of us while I stuffed shit back up under the front seat. We had the windows open so that I could hear what they were saying to one another. As the conversation went on it seemed like the black guy didn't have insurance and naturally we were trying to get out of this any way we could. I hear Ray tell the guy that his buddy, me,

owned a body shop and knew all the costs of stuff in his head so I got ready to make my grand entrance. Both of us knew enough about the law to know that this was our fault and that the only way we were going to get out of this was to give the guy enough money to send him on his way. So I get out of the car and studiously examine the damage on his car and then thoughtfully stroking my chin I say to him "Looks like to me I could put this all right for about twenty dollars". He replies "Ain't no way you gonna get this fixed roun' here for no twenny". It was two against one with the bullshit and finally when cash money appeared he grabbed the twenty and took off, much to our relief. We limped the busted Ford off onto a side street and started to assess the damage to it. Aside from the grille and sheet metal damage the biggest mechanical problem we had was the radiator wrapped around the fan with the water leaking out. With a lot of muscle, a few borrowed tools and ingenuity we were able to get the radiator pulled off the fan and straightened out pretty flat again with some of the really damaged tubes pinched off so it would hold water pretty well. I remembered some old wife's tale about repairing radiator water leaks with bread so I got out our faithful loaf from the New York delicatessen, peeled the crust off a slice and wadded the soft part into the residual leaks. Filling it with water we decided that the best thing to do was abandon the Washington sightseeing tour and head off to our next destination which was the Miami of Ohio University in Oxford, Ohio where Ray had attended college for a while at least. The bread fix did a fair job of keeping the water in the radiator so that with several stops to reapply the patchwork and refill the water we made it to Oxford and into the arms of a big bunch of Ray's college buddies. They even were able to provide us with beds so along with the partying and beer drinking, the car was totally forgotten. A day or so later we decided to continue our trip back to Milwaukee. In carefully examining the radiator bread repair I noticed that what was keeping the repair from really being effective was the fact that the caraway seeds in the deli rye were breaking up the repair and it was falling out. Oops, we used the wrong kind of bread but what the hell it was all we had. I asked the guys in the frat house if they had any plain old white bread and they supplied me with a couple of slices, I picked all the rye bread repairs out of the radiator and replaced them with white bread which immediately got all gooey and pasty when it got wet and this looked like it would work pretty good. After several good-byes and thank-you's we headed down the road towards Indianapolis where we stopped for gas. I got out and raised the hood to look at the radiator and to my surprise the radiator was completely dry and full of water and the white bread repair patches had dried hard as a rock and were sealing perfectly. This scheme of stop-leak really works when you got the right bread! While we were driving the rest of the way back to Milwaukee we were engrossed in coming up with what Ray was going to tell the Ford lease agency about what happened to the car whose front end was all bashed in. To make us totally innocent we decided the best tale might be that we went to a movie and when we came out this is what we found and the fact that we were so ingenious to get it patched up and home with no cost to the lease company was a testament to our integrity. This was such a stack of bullshit that it was difficult for Ray to keep a straight face while relating the sad tale but they accepted it and

we were scot-free. They probably had the car written off anyway and just put it in the body shop to straighten it out enough to peddle on the used car lot.

Later in this year of 1952 Uncle Sam came beckoning for young men to serve the armed forces in the Korean conflict. Ray Milbrath and a couple of other guys decided that they would avoid the draft and the Army and enlisted in the brand new, at the time, United States Air Force for a four year hitch. I was tempted to do the same with the possibility of becoming a pilot but rumor had it that most guys were rejected from pilot training for minor chicken-shit reasons and had to serve out their four years as grunts instead of fliers. I didn't want to take the chance so I decided to just wait out the draft and go into the Army for just two years. In November, Ray left for the Air Force and shortly after that I got my orders to report for duty in the Army. On "Black Friday" December 12th, 1952 I appeared in downtown Milwaukee to start my military adventure. All this military activity plus just outgrowing teen age pretty much dissolved the old hot rod gang and guys started going their own way. The "Early Days" had run it's course.