The Racing Beginnings

My First Indy 500

The end of the early days of teen-age hotrod activity in 1952 started a seven year period of activity that took me through a hitch in the Army, a brief try at marriage, the birth of a son, four years of college resulting in a degree in mechanical engineering and a position as a rocket propulsion engineer at McDonnell Aircraft Corporation in St. Louis. During this period hot rods and racing took a back seat to other more pertinent and necessary activities and only surfaced for brief episodes. In the army after basic training, I was stationed at Camp Atterbury, Indiana which was about 30 miles south of Indianapolis. As Memorial Day approached the idea of attending the 1953 Indianapolis 500 looked pretty good to me so bright and early Memorial Day morning I arose, put on my dress khaki's and began thumbing my way north. I wore my uniform because experience had taught me the value of the uniform in getting rides while hitch-hiking and it worked as I was almost immediately picked up by some guys headed to the 500. This and the fifty cent infield admission got me inside the giant speedway about 7 o'clock in the morning. As I was standing there wondering what to do next an older guy comes up to me and asks if I have a seat for the race. He explains that he had two seats inside the north-east turn, one for him and the other for his son who was, unfortunately for him, restricted in his basic training unit at Camp Atterbury, so he sought out a young soldier to take his place and I was that lucky guy. I was immediately transformed from a lonesome young guy at his first 500 into this guy's surrogate son which meant that, not only did I have a seat for the 500, but this guy bought me breakfast, lunch, snacks, drinks and the whole deal. After the race he even drove me back to Camp Atterbury and dropped me off right in front of my barracks. It was definitely worth sweating my ass off in my dress uniform while watching one of the hottest 500's in history. The race was won by Bill Vukovich in one of the early roadsters, but my interest was in watching some of the old dirt-type cars with the cut down sides where you could see the driver's at work. My impression was that they were going so damn fast that they were on the bitter edge of disaster at all times, which I suppose could have been true in those days. My most vivid memory was watching a guy named Manuel Ayulo whose tee shirt had worked its way out of his pants and up his torso so that the wind was flapping it up in his face. Lap after lap he was being smacked in the face with the end of his shirt but had the concentration to ignore it and rip around that north-east turn at incredible speed. That impressed me!

During this period of my life I was so busy with my main activities that being a sports fan of anything including racing was not part of the game. Earlier in my life as a hot rodder I attended some historic racing events that I never knew were historic until years later. In 1952 I attended some sports car races, one at an airport in Janesville, Wisconsin, another on the country roads around and through Elkhart Lake, Wisconsin and in 1955 another at what is now Road

America near Elkhart Lake, Wisconsin. Being primarily a hot rod enthusiast, what really got my attention was a Cad-Allard at Janesville and the Cunningham-Chryslers at Elkhart Lake. These were essentially high dollar fendered hot rods raced by rich guys that could blow off the exotic foreign machinery like Jaguar's and Ferarri's. Very cool! All of these experiences undoubtedly began forming the mental structure in my brain that eventually led me to a serious part-time racing career.

The Indy 500 Revisited

After graduation from the University of Wisconsin in June of 1958, I moved to St. Louis with basically all my belongings in the back of a 1953 Buick, rented a room in a private residence near the McDonnell Aircraft Corporation where I worked and started a new life with new friends, work and activities. I started hanging around with a few guys that I worked with and some of their friends as well as enrolling in night school taking masters degree courses in mechanical engineering at the Washington University in St. Louis. Our activities were those typical of young twenty-something's in the late fifties and early sixties, hanging out in joints, drinking beer and shooting the shit. In the spring of 1959 I suggested we plan a trip to the Indianapolis 500 since Indianapolis was only about a 300 mile drive east of St. Louis. In those days the 500 was not generally held on a weekend but on Memorial Day itself which meant that it could be a single holiday in the middle of the week but in 1959 Memorial Day fell on a Saturday so on Friday night after work we loaded up on beer and set off for Indianapolis. We drove directly to the speedway on 16th street and Georgetown Road in Speedway, Indiana. The drill for the hard core fans in those days was to arrive several days early in a futile attempt to be "first in line" and park three abreast along the closed west-bound lanes of 16th street for several blocks east from the Speedway. This practice turned 16th street into a six block long roving party site abounding with drunks and roving policemen who were experts at recognizing trouble-makers and eliminating them by the simple expedient of driving them off to about a mile away and turning them back loose. That way they were able to defuse a situation before it got out of hand, ingenious indeed. Now if a six block long party were not enough, on the south side of 16th street was a 1/4 mile dirt speedway called, cleverly enough, "16th Street Speedway", which basically offered midget racing all night. I think this was the beginning of the traditional "night before the 500" midget race that still exists at a different venue with a different program. At any rate we figured that we ought to go and watch the midgets from about midnight to three in the morning, after which we returned to our car to sleep. We had found out that the speedway gates opened up at five in the morning so at about four-thirty we were up brushing our teeth with beer, getting our cooler packed and moving back over to 16th street near the big underpass into the grounds. It was a sight watching all the dust covered cars and their occupants who had been parked there for about a week getting underway for the big inrush at 5AM. On the dot of five AM, in the darkness, a huge loud aerial bomb goes off to signal the beginning of race day and the opening of the

gates. Engines roaring and beer cans flying, the mad rush for the premier parking spaces inside the speedway begins. Walking in is also a racing competition inasmuch as there is a limited number of spaces right next to the fence along the back straightaway where a group can set their cooler and gather to watch the 500 which is flagged off about six hours later. In our newness we actually found out that having a sturdy cooler was all that was necessary and that a pretty good view of the track could be had with out getting right up to the fence and one did not have to battle it out with a bunch of drunk and belligerent hill-billy's for a choice spot. After the five AM rush things get pretty laid back and it was time to watch a number of entertaining activities. As it is getting light, the scaffold builders go to work. The deal was to bring in all of the painter's portable scaffold section that would fit into a number of pickup trucks and then assemble them into the tallest tower possible, guy wire it to keep it from falling over and climb to the top to view the race. The funniest part of this activity was that many of the assemblers were suffering from a week of beer nourishment in the parked pickups which tended to diminish their ability to safely assemble an unsafely tall tower. Another sight to behold was that some of these guys would collapse in a drunken stupor at about ten in the morning and spend the entire race doing their impression of a giant pink beach-ball while lying on their shirt-less back snoring in the bright Indiana sun. This practice was stopped a few years later when one of the scaffolds collapsed killing a few people and injuring a whole bunch but it was certainly entertaining while it lasted. This first 500 with my buddies from St. Louis was special because it actually was the official start of my racing career as you will learn in succeeding pages but it was also so much fun that it became pretty much a annual ritual of spring for about the next five or six years. Things changed, the "16th Street Speedway" was replaced by a shopping center and a big non-reserved grandstand appeared along the back straightaway along with a new annual competition for the upper south end seats. We became more sophisticated in our ways as time passed and we ended up regulars. Another interesting thing to do in the morning before the race was going to the garage area to hang on the fence and watch the mechanics start up the cars and warm up the engines. From the backstretch grandstand this activity, at around 9AM, was signaled by what sounded like dogs barking in the distance, rowf, rowf rowf. That was the sound of the four cylinder Offy engine used in nearly all the cars of that era. When we heard the dogs barking, we would divide into two groups, one to go to the garage area and the other to watch over our seats. There was always time to alternate and thus give everyone a chance to go to the garage area. To me hanging on the fence was almost a religious experience. The guys would open up the garage doors of the little green and white garages and roll out a shiny roadster. The chief mechanic, dressed in his team uniform shirt with immaculate white duck pants on would assume the position over the engine and squirt a few squirts of fuel into the injectors after which another guy would stick the long shaft of the portable starter up into a hole in the nose of the car and turn over the engine. It would usually start instantly with a roar followed by dat-dat-dat-dat idling to bring up the oil pressure and get some temperature into the engine. Then rowf, rowf rowf, as the master manually twitched the throttle under

the hood and listened to the exhaust note with a smug smile. Sheeit, that stuff was sooo cool!

After the engine warm-up, there was still about two hours before the race began during which time all the standard Indy traditions took place, none of which were visible from the backstretch grandstand with the possible exception of the balloon release so we would just listen to it over the loudspeakers and imagine what it looked like. All of this gets you steeped in Indy lore. When the race actually gets under way there are more things that are almost as captivating as the ongoing race. The sounds are incredible! The typical roadster of the day had the front mounted four cylinder Offy offset to the left with the driver on the right. A huge chrome plated exhaust pipe ran down the upper left side of the car to the rear and emitted a delicious roar going by flat out at about 200 mph. There was one other engine in limited use at Indy, a supercharged V-8 called a Novi. Now this baby would put an Offy to shame when it came to cool sound. It kind of screamed and roared both and all way louder than anything else, whooo,hah!

Let's Go Racing

Well, after our first Indy race in 1959, we all took naps on the grass as the crowds filed out of the Speedway and later sauntered out to my Buick to head for St. Louis. Since the race was on Saturday, there was no particular hurry to get home so we started stopping at convenient bars and roadhouses along the highway on the way home to make sure we did not die of thirst. About three o'clock in the morning we all had enough of everything, beer, racing, no sleep, saloons and driving. About twenty miles east of East St. Louis I pulled the Buick behind a guard rail and after a nightcap beer we all went peacefully to sleep. Sometime later when it was just getting light I awoke to the tapping of a large flashlight on the side window of the Buick and as my eyes came open they observed an Illinois highway patrolman standing outside the car. "What are you guys doing?" says he. "We were just coming back from the Indy 500 and got so sleepy that we pulled off safely to park and sleep". Now this would have sounded a lot more plausible if the entire dashboard of the Buick was not completely lined up with empty beer cans. "Well we got a report from the neighbors that a big beer party was going on here and I was sent to investigate". "We had a beer when we stopped and before we went to sleep but I don't think I'd call that a party, certainly not a noisy one". By this time we could tell that all the cop wanted was for us to get the hell out of there so the nosy farmers would quit bitchin' so I said "We'll get ourselves up and get on down the road" to which he replied, "Well make sure you are rested enough", and that was that. After we swept the beer cans onto the floor, I cranked her up and we headed into East St. Louis and stopped at the first all-night bar we came to for an eye-opener. It was about 7:30AM when we came up with the idea of going on into St. Louis and waking our late-sleeping buddy Don who chose not to participate in our Indy trip. He lived in a rooming house like Dave Osborn and I did but the people that owned it were quite well-to-do and sort of treated him like their long lost son. They liked having his friends over to the extent that we sometimes enjoyed pool parties in

their back-yard swimming pool. We knew that the lady of the house would get a big kick out of us rousting Don's lazy ass out of bed before nine in the morning so after one more beer for the road we set off for his rooming house. After waking him up and sitting around the pool for awhile, we decided to head for another public pool in south St. Louis County for the afternoon. While we were there drinking beer and regaling everyone with stories of the Indy 500, we noticed a junky old stock car on a trailer go by. We asked the locals where he was going and found out that there were races every Sunday night at Lake Hill Speedway in Valley Park. "Hell, since we are now race veterans, let's head over there for the races", and off we went. During the course of the evening's events on the 1/4 mile dirt track, the announcer came out with "The next race is for the "Hobby Cars". These are cars that anyone can buy and enter in these races. Do you want to be a stock car driver? Just get you one of these and come out and give it a try". I looked at the other guys and said, "How about it, we ought to do that", and a racing career was born.

The Racing Gypsies

Three of us, Dave Osborn, Barry Wiedenkeller and I formed an informal partnership named The Racing Gypsies, in which we agreed to share the expenses and take turns driving. The next night we headed down to the cheapy used car lots on south Kings Highway in St. Louis and came home with a running 46 Ford 4-door sedan for around fifty bucks. Wiedenkeller knew the proprietor of a Phillips 66 gas station near his house in Florissant so we went and talked him into letting us park it and work on it next to his station. It seemed that the makeup of this motley crew was that Wiedenkeller considered himself an artist and would handle the paint and finish, I was the engineer and mechanic who would coordinate the preparation while Dave, who was a talented engineer professionally but really didn't know shit about cars, would sort of be our grunt helper. Somehow I made the wise decision that we should, more or less, make this into a real race car with roll bars, stripped out inside and a real seat and racing harness. I could see that one of the first things we needed besides my good old tool box was a torch and someone that knew how to use it. I ran into a guy that had what was called an aviator torch, which I found out, later, was exactly the kind suitable for race car work. He was willing to sell the whole outfit and I bought it and went immediately to the local welding supply place and bought portable acetylene and oxygen tanks. I had taken a course early in my mechanical engineering curriculum that touched on welding so, at least I knew how to light up the torch and basically fuse metal together. The landlord of the rooming house I stayed in had replaced a bunch of plumbing recently so there was a bunch of old scaled up 1/2" pipe in the back yard he said I could have, so I set out building a cart to hold the bottles and wrap up the torch hoses with places to store welding rod and all. I really didn't design it, I just let it grow into shape there in the driveway of my rooming house. During the couple of days it took to put this together I became at least somewhat proficient in heating and bending as well as making welds that didn't fall apart. There was a place near my rooming

house called Hood's. It was down St Charles Rock Road a few blocks, surrounded by chain link fence and located off an alley that, if you were not shown where it was by another denizen, you could never find it. It was a fairly large place, sort of hung together out of corrugated steel with a dirt floor, no windows, a few bare incandescent bulbs for illumination and presided over by a tall gangly old man in bib overalls that sat on a high stool at the entrance. The inside of this place was entirely crammed with the goddamdest collection of stuff anyone ever laid eyes on. I was introduced to Hood's by another engineer that worked in my department that was an earlier graduate from Wisconsin who took me over there on about my third day of employment on my new job, he knew I'd like it. It turns out that the official name of this establishment was Hood Tool Company and was owned and operated by the old gentleman at the door, Mr. Hood, who had a whole batch of young offspring doing all the grunt work. He stocked the place with used tools and equipment as well as surplus and seconds of all sorts. He even had US government stuff in there including at least one old WWII bomb sight. At least that was what we thought it was. All this stuff was sort of stacked to the ceiling in rows with aisles in between so that you could sort of navigate through the store to check it out. It was both entertaining and useful to periodically check out Hood's during working hours to see what new weirdnesses he had gotten hold of and to sort of keep track of the inventory. An interesting story about Hood's is that, once, he had newspaper articles posted near the door in which Sears was threatening law-suits and great bodily harm to anyone that bought Craftsman adjustable wrenches from Hood's. It seems that Sears had surplused a whole bunch of slightly defective tools without grinding off the name and old man Hood got a hold of them and stared to advertise life-time warranteed tools. If they break just take 'em down to Sears for a replacement. Sears saw this and went ballistic. Anyhow, I went down there to secure a couple of essentials for our new race car, WWII Army Air Corps goggles, a used aircraft seat belt and a brand new military aircraft shoulder harness. You just went in and hunted around until you found the stuff you wanted, picked it up and took it to the front where old man Hood would tell you how much you owed him. There was no paperwork, catalogs, cash registers, just the old man with everything in his head. The was a big old scale up front because a lot of the stuff like hand wrenches and sockets were sold by the pound, usually fifty cents a pound.

In the evenings after work, Dave, Barry and I gathered next to the gas station to work on our race car. At first it was a lot of fun, we got to tear out all the upholstery, door panels and floor mats and throw it all away. We basically stripped the old Ford down to a bare shell. On the weekend we made our way down into the city to an industrial suburb call Wellston which contained a host of junkyards of all flavors, automotive, industrial and scrap metal. At the scrap metal yard we bought rusty old 2-inch pipe for the roll bar and angle iron for the tow bar we knew we needed to transport the car to the track. Dragging all this stuff back to the gas station we set forth fabricating our roll bar. It did not take very long to figure out that our lack of machine tools of any kind forced us into what many might consider a bizarre method of fabrication. All cutting, trimming and hole drilling was done with the cutting tip of the torch with the resulting slag boogers

knocked off using a hammer and cold chisel. This somewhat crude method of fitment made it necessary for me to learn how to weld up joints with considerable air between the metal pieces in places. I got quite good at this and we produced a workman looking job of the roll bar, the tow bar and the trailer hitch we made for my Buick which somehow became our designated transporter. After the guy closed his gas station, we would adjourn to the bar across the street to do the strategic planning for the next evening's activities. As the beer began flowing we started talking about the car's livery. Somehow in some twisted artist type conversation Wiedenkeller decided we ought to paint it up to simulate some warped view he had of human anatomy…pink on the outside and red on the inside. Oddly enough Dave and I agreed to this because, I suppose, we had no better suggestion and besides that, humoring Weidenkeller was easier than arguing with him, Also, the inside of the bar with it's array of decorative signs for alcoholic beverages gave us the inspiration for the car number and name. We would paint an enlarged image of the Seagram's 7 logo of the on the side of the car and call the car the Seven Crown Special. For all the bullshit Wiedenkeller put out about being an artist, I guess the idea of scaling up the label from a bottle of Seagram's Seven was beyond his abilities because he showed up with an associate of his named Curt Poulton who quickly befriended Dave and I. It seemed he was a professional writer for McDonnell but was also a big racing fan that enjoyed Indianapolis and Grand Prix racing. He also loved to draw both sketches and detailed drawing board drawing of these types of race cars. He was an obviously talented person. After we got one can each of red and white gloss enamel and three brushes from the paint store across the street from the gas station we painted the entire inside of the car bright red. Then we added some of the red to the white paint to make pink and painted the outside. After the paint dried, Curt drew a large circular grid lightly on the right side door. This grid was the same as one he drew on the small bottle of whiskey we bought for a pattern. With fine brushes and some kind of paint he brought from home he scaled up and duplicated the label onto the side of the race car…it looked magnificent. He was a craftsman and although he wasn't one of the drivers, nor did he want to be, he was definitely a member of the team and, coincidently, became a lifelong friend of mine. Since that beautiful number was difficult and time consuming he put large black seven's on the tail and the other side topped with a sort of schematic crown to follow the theme.

Racing Pink Lady I

During the week or so that we were getting our new race car ready to race we found out that we could go racing at more convenient times and places than Lake Hill Speedway on Sunday nights. On Friday nights there was racing at the St. Charles Speedway just across the Missouri River south of St. Charles and on Saturday nights at Alton Speedway near Godfrey Illinois, just across both rivers the other way. These tracks conducted racing for three classes of cars: Modified's which were like cut down pre-war coupes with Chevy and Buick V-8's, "Amateur" cars which were less powerful, less modified than the Modified's and

Hobby Stock which was the class we fitted into, basically stock jalopies. When we showed up with our pink racer at St. Charles Speedway the first night we were an instant hit since most of the cars in our class were just straight out of the junkyard with spray painted runny-ass looking numbers painted on the sides and ours bore some relationship to a real race car. Also, since we had stripped significant weight out of the car and tuned the engine, we were significantly faster than most. A guy from Springfield, Illinois named Joe Shaheen promoted the races at both tracks we went to and he was the real deal promoter. Joe was a hands-on promoter and could always be found running frantically around in the pits in the center of the track, sweating profusely, wiping his head with a large white handkerchief which he would wave round and round in an effort to organize the next race on the schedule. “Alright get ‘em lined up, let’s go, let’s go it’s gonna rain.” was his every night routine whether the weather was threatening or not. You see, the drill was that if over half the program was completed before a show-stopping rain he didn’t have to give out rain-checks or return any of the admissions. It also, presumably, meant that we would get paid since the purse was always some mysterious percentage of the gate receipts. We found that we always won more money than any of the rest of the hobby stock guys regardless of our placing and we concluded that was because we put on a better show than the rest. After awhile we even had uniforms of white pants with pink tee-shirts with black seven’s embroidered on them. The announcers began calling our car the “Crown Seven” which wasn’t exactly what we had in mind but what the hell, we were getting announced, drawing attention and getting paid more so we were enjoying it. One night after the races in Godfrey, Illinois we went into the saloon next to the race track and Joe Shaheen was in there and when he saw us, he kept us in beer until the wee hours of the morning. We began to think we were really something. This racing shit is all right. One of the more amusing things that occurred on most nights after the races when we were towing home was the dead driver thing. We decided that since we were flat-towing the car with a tow bar that the safest thing to do was to let one guy ride in the race car so he could steer it and stop it in case it broke loose. Dave Osborn was usually the rider volunteer but he insisted on putting on the helmet and completely strapping himself into the seat in the name of safety. Then we would set off for home and he would fall sound asleep back there and lurch around in the belts so it looked as if we were dragging a crashed race car home with the dead driver still in it. We got a lot of looks from passing drivers and passengers. One weekend we heard about a one-time race to be held on a Sunday afternoon at some obscure speedway in Jacksonville, Illinois and decided to haul up there and race. Well, this track was a 1/4 mile oval carved out of a corn field with a grandstand set up next to it. No guard rails at all, just slightly banked turns joined by short straight-away’s. It was my turn to drive so I was out there ripping around this little track in the bright sunshine when I get bumped going into one of the corners and off I go over the banking into the corn field. It was late in the summer and that good old Illinois corn was higher than the race car and I couldn’t see a damn thing so I just brought it under control and steered it gently around to the left and came out of the corn and back onto the racetrack in the middle of the back straight. I thought

it was hilariously funny doing it but after the race I found out that the entire audience shared in this hilarity. Apparently they could not see the race car, just the trail of wiggling corn tassels as I made my way though the tall corn. They just don't make racetracks like they used to!

This type of racing tends to be pretty blue-collar and down-home which means that the majority of the fans are good-ole-boy shit-kicker types which in southern Illinois and Missouri tend to have a distinctly unique version of the English language. This was always a source of entertainment to us college-educated shit-kickers, especially our literary consultant, Curt. He loved to repeat and categorize the stuff we would hear at the race track. One of his favorites was the alarmed announcement when an on-track altercation would occur that resulted in some fuel spillage out onto the racing surface, "Keep away from them cigarettes, that's alcohol fuel out there!". The typical car description would be, "That 444 car out there is Shivalay-powered with three carburetors mounted." Curt did something else that was actually quite practical but turned into a prime curiosity around the pit area. He stripped the label off a soup can. cut both ends out of it and fastened it to a small chain which he wore around his neck. The actual purpose of this can was to communicate with the driver in the race car in the midst of all the engine noise in the pits. He could hold it up near the driver's ear and speak and then hold it to his ear to hear the reply, pretty cool. One night he noticed one of another team's crew-men following him around, looking at him funny. The guy finally mustered up the nerve to ask Curt, "Hey mister," he said pointing to the shiny can hanging around Curt's neck, "what the hell is that thang hangin' on your neck?" to which Curt replied, "A driver communication device.". The guy had no idea what Curt had just said and sort of just nodded and walked off in a fog. We laughed our asses off when we heard the report from Curt. Being so noticed by all in attendance actually was to some advantage to us technically. We were running pretty good, but one night I was talking to one of the Modified guys and he told me, "You know that car of yours would get around the corners a lot faster if you put some wedge in it.", to which I replied, "What the hell is wedge?". He explained that if I loosened up the two u-bolts that hold the front spring in place and drove a piece of steel up between the spring and the frame on the right side and then re-tightened the u-bolts the car would handle better. Before the next night of competition I tried it and it made a remarkable difference. Technically "adding wedge", so named because that is precisely what you are doing, is increasing the cross-weight of the car, making the RF and the LR heavier and the LF and RR lighter. This promotes understeer in left hand turns, "tightens up" the car or gets it to "push" or not be so "loose". This allows you to fling it into the left turns and really stand on the gas without spinning out.

As the season wore down it seemed to be getting to be a pain-in-the-ass doing the driver swap and considerable bickering resulted over just which guy wasn't pulling his weight when it came to working on the car. We had expanded our team by buying another '47 Ford tudor sedan with the intention of, at least, going to a two-car effort. We also rented two adjoining garages down on McPherson in the city of St. Louis to house our cars. We never got around to making a race car out of the tudor, the season ended and we just sort of folded

the whole thing up and put it away. The first season was over and I, for one, was hooked, this racing is fun!

The Long Winter

I re-enrolled for my third semester in evening graduate school at Washington University and continued my studies toward a Master's degree in mechanical engineering along with the trips down into the city to hang out with the guys at the beatnik joints. Life returned to normal after our summer of racing. The leaves turned, winter arrived and the Christmas holidays came and went but the racing fires kept burning inside me. Finally I decided that I wanted to do this thing by myself so I bought out the other guys and took over the operation myself. As I recall not a lot of money changed hands as they were sort of relieved to be out from under the responsibility of the garage rent and the racing cars. I knew I was not ready for the Modified's yet but the Hobby cars were not enough challenge. The "Amateur" cars, however, were intriguing. I had really no idea how much modification I could get by with but, in my mind, I began formulating a plan for the Ford tudor sedan that reposed in one of the garages down on McPherson. Since Washington University was not far from the McPherson garage site and my classes were right after work, I started going over to the garage after class and began stripping down the tudor with the idea of making it into a race car. As I worked alone in the tiny one car garage stripping the interior, seats, fenders, trunk lid and hood off the car and stashing them next door with the Pink Lady I, I was thinking about what would make the most effective race car out of a stripped down tudor sedan when all the other guys were running coupe type body styles in the "Amateur" class. Running a sedan body gave me the option of sitting in the back seat which then would allow a radical set-back of the engine. Making some measurements resulted in a plan to move the engine back 24 inches making the front of the engine even with the firewall of the body. As time passed, it became obvious that I needed more equipment to make my life easier as a lone race car builder. To supplement my hand tools and my torch I was able to find and buy a used floor jack and a chain hoist to be able to move the heavier parts of the car by myself. I also decided that since the torch, cold chisel and hammer method of hole drilling worked fine before, it would be OK for this car as well and as such there was no need for buying a drill and complete set of drill bits. As the strip-down continued, I decided that to achieve the minimum weight I ought to carve out everything that was of no use to a race car. I cut out all the internal sheet metal in the doors and the body and tack welded the door shells to the body shell making an integrated body shell. I also eliminated the entire floor panel, partly because it was all rusted and partly to gain easy access to the frame, for which I had plans. I studied the X-member in the frame and decided that I could make a new one of truss design that was a whole lot lighter than the original while still retaining the function of stiffening the frame side rails and holding up the back of the transmission at a position 24 inches aft of the original. I cut out the old X-member and replaced it with the one I designed and fabricated from 1/2" electrical conduit tubing. It was an X of triangles supporting a triangular pyramid

in the center that contained the transmission mounts. I built new front engine mounts and welded them in place. Then with my new chain hoist I lifted the engine and transmission into place there in the middle of the car. Cool looking arrangement, this was really beginning to take shape. The next challenge was shortening up the drive line to match the new engine position.

As I described in the first portion of this book, the old Fords had a completely different rear axle/drive shaft arrangement than most cars. It featured a torque tube that formed a tee with the rear axle housing with a pair of braces extending from the ends of the axle housings to near the front of the torque tube. Inside the rear axle housing was a typical ring and pinion gear and axles out to the wheels. A solid drive shaft was inside the torque tube joined to the pinion shaft by a spline and containing a single u-joint at the front. The u-joint was inside of a ball joint arrangement allowing the rear end to move up and down while pivoting around this ball joint right at the aft end of the transmission. I had met an older fellow named Boots Strutman at McDonnell that ran the Propulsion Laboratory to which I had become assigned in the course of my work. He was a very clever guy that knew a lot about everything mechanical in spite of the fact that he did not have an engineering degree. He had taken a shine to me because I was a degreed engineer that liked to work with my hands, I started asking him questions about how I was going to shorten up my torque tube and drive shaft to accommodate the new engine placement in my race car and he offered, “Bring all that stuff over to my house and I will help you figure it out.”. I jumped at this offer because I had no clue how in the hell to do it. I took the torque tube loose from the rear end and the unpinned the driveshaft from the pinion and hauled it over to Boots’ basement. The driveshaft was simply a straight solid steel shaft about 1-1/4-inch in diameter with a spline on each end. He decided that we would cut 24 inches out of the middle, machine a special sleeve for the joint and silver solder it back together. When I looked at him kind of funny about the silver solder, he told me that a silver soldered steel joint with the proper clearance could be as strong as a welded joint. I had to believe him because I didn’t know any better. He had the sleeve machined in the Propulsion Lab machine shop to his specifications. It was about six inches long, just barely slid over the shaft end and had a long spiral cut into the inside. He calculated how long a piece of silver solder would be needed to just fill the volume in between the shaft halves and the sleeve and we cut two pieces that total length and coiled them up into flat spirals the same diameter as the shaft. After meticulously cleaning the two shaft halves and the inside of the sleeve we coated the mating surfaces with white flux, assembled the sleeve onto one shaft half, dropped the two flat spirals of silver solder down in the sleeve and sandwiched it in with the other shaft half. He then put one shaft end into his lathe headstock and supported the other end with the tailstock center. With the lathe in back-gear to rotate slowly, he turned it on and began to heat the two axle halves and the sleeve uniformly with a torch with a big heating tip. Silver solder melts and flows at a temperature corresponding to a dull red. When the center of the shaft and the sleeve got there, Boots turned the tailstock in to squeeze the silver solder through the spiral groove in the sleeve until it appeared at the ends of the sleeve, indicating full penetration. He then quit

heating a just let the assembly cool down while turning to keep it all straight. I thought to myself, *"this guy is a magician, this is so cool!"*. The torque tube was about 3 inches in diameter for most of the length and then tapered somewhat in the front to the ball joint area. We cut the 24 inches out of the straight part, ground the ends to 45°for welding, inserted a sleeve that was machined to be a press fit on the inside of the tube and carefully welded it back together. This entire procedure was a no-bullshit deal because I never had any problem with any of this in the life of the race car.

Back in the little garage in the alley behind McPherson I was busy working out the seating and controls for me seated in the middle of what used to be the back seat. I had noticed that all the modified cars used a truck steering gear which had a horizontal pinion shaft hanging over the side frame rail allowing a pitman arm that hung down and connected to a steering link running forward to the left front wheel. The steering ratio could be easily changed to any quickness desired by fabricating a multi-hole pitman arm. I found one of these truck steering gears in a junkyard and bought it. After fiddling around trying to mount the steering gear it became apparent that the easiest way would be to put it on the left frame rail and angle it through the cockpit to the driving position in the center of the car where the seat would be mounted at an angle also with the driver lined up with the steering instead of the car axis. This would give the added advantage of having the cornering side force partially taken up through the driver's back because of the angle. Hanging around at a gas station gave me the bright idea that a 30 gallon oil/grease drum properly trimmed would make an excellent form-fitted driver's seat so I begged one off the proprietor and took it back to the garage. Using the torch to cut it approximately diagonally from top to bottom, with a little trimming it fit my torso just fine. I propped it up in an angled back position, made some struts and welded it in. I removed the pedal assembly from the old cross-member and welded it into the same position relative to the clutch throw-out but at an angle like the steering and the seat. This made the control axis square to me and angled about 15° to the longitudinal axis of the car which actually turned out to be an advantageous thing from a lot of standpoints for a racing car that only turns left on a short track.

Since the completion of the cockpit established how high everything was including my head, the next step was the design and fabrication of the roll structure. I decided that a cage was much better than a simple roll bar like we put in the Pink Lady I but that it be unique in design rather than like all the rest. The hoop behind my head was pretty conventional consisting of a rectangle with one transverse triangular brace and two longitudinal rear facing braces. For the sake of lighter weight with a properly strong triangular bracing I designed the front part of the cages out of two triangles, a top one from the corners of the rear rectangle to a point in the center even with the back of the engine and a front triangle from the frame rails to that same point. The looked very unconventional and odd but upon rationalizing it I could find no reason why it was not perfectly strong, stiff and completely functional in a roll-over situation. Since I had found, during the fabrication of my new X-member, that EMT electrical conduit is an entirely suitable light-weight construction material I decided to make my roll cage out of it

also but in a larger 2” size. This stuff was light, cheap, welded easily, if you could tolerate all the smoke from the burning galvanize, and was not all rusty and shiity like pipe from the metal junkyard.

The completed roll cage suddenly spawned an idea that solved the body mounting that had been a potential problem rolling around in the back of my mind; I’ll just set the body on top of the roll cage and hold it in place with muffler clamps around the roll bar tubing. With a few braces to keep the bottom from flapping like a skirt, we’d be done. With me sitting just in front of the rear axle and the axle retained by the transverse spring that bolted into the rear cross-member, there was no particular need for much frame behind the rear cross-member except for that to hold up the fuel tank and some kind of tubular rear bumper. That said, the trunk part of the body hanging out the back had no useful purpose. Using the cutting torch and some carefully placed heating I cut wedges out of the rear part of the body shell and curved it down to make a sort of rounded tail. The part hanging down when I finished contained the rear window so I just cut that off even with the rest of the bottom and cut a new rear window about the same shape that lined up with the rest of the windows. The end result was a little short rounded tail sedan that looked kinda cool, at least I thought so.

During this long winter I actually did other stuff besides working on my new race car. I continued my quest for a master’s degree in mechanical engineering until I came to a critical turning point. I finished the class work that was required and was faced with thinking up a project and getting started on the thesis work. I thought about it for awhile and finally came to realize that I was just one hell of a lot more interested in stock car racing than I was in doing what was necessary to get a master’s degree so at the end of the semester, I quit graduate school to concentrate on my car interests and never looked back. I actually, to this day, never regretted that decision, the racing through the years taught me more and provided me with more unforgettable experiences that I would have ever gotten from having an advanced degree,

My friendship with Curt Poulton continued and expanded to friends of his and Diane, his wife. They belonged to the MSCC, the McDonnell Sports Car Club, and invited me to go to meetings with them where I met more car-oriented people. I joined the MSCC and began to familiarize myself with sports car activities such as rallies, gymkhanas and auto-crossing in spite of not having a sports car. I continued to drive big old American iron such as Buicks, Oldsmobiles and Pontiacs which I would occasionally thrash around a Gymkhana course complete with a little back and fill to compensate for the size difference between an Oldsmobile and an MG. Curt and I spent many hours talking about the design intricacies of Indy and Formula 1 cars such as tube frames, overhead cam engines, independent suspension, engine offset and torsion bar suspension. I also continued to hang out with my pseudo-beatnik buddies at the joints in downtown St. Louis and in a very hip new area called Gaslight Square. We even wore special sports jackets that came from the Goodwill store, we called them our “drinking jackets”. I remember the day I bought mine, a stylish olive green corduroy number, which the first time I walked into a joint with it on I was instantly doused with copious quantities of beer to initiate my new drinking jacket. Life was

not all work and serious talk in those days. I even found and bought a 1942 Ford "Woody" station wagon which was immediately dubbed our "drinking car" which we piled into with our "drinking jackets" on and wheeled downtown to places like the Dublin Village. This was a very interesting place, a wide store-front entry with an even longer dark wooden bar inside complete with a brass rail. The Dublin Village was once a very stylish place which had regressed into sort of a slum-like place complete with a very old black man wailing away on an ancient tenor saxophone and "B-girls" which were about as ancient as the horn player and his horn but a lot uglier. In those days "B-girls" inhabited many downtown bars, their job being to keep the men in the bar buying drinks by sidling up to them with prospects of various sexually oriented favors in exchange for drinks. Depending on the quality of the place, they were often quite good-looking, sexy babes that skillfully plied their trade, quite unlike those at the Dublin Village. We realized that the scheme used by the ladies at the Dublin Village was to lay some kind of sob-story on you to get you to buy them drinks, being too old and ugly to do it the normal way. Therefore we would spend the time driving downtown in the Woody dreaming up stories that would out-sob theirs and go in there and tell them. The result were sometimes amazing, we were mothered and all kinds of funny stuff. If they ever figured out what we were doing they would have killed us. Sometimes the shittiest bars are the most fun.

Driving these old shitty cars made maintenance a necessity along with a friendly local parts store to buy repair parts in. There was just such a place called Ackrit Automotive just a few blocks away from the McDonnell Aircraft office where I worked and I got to know the guys in there pretty well. One night returning from the St. Charles Speedway with the old Pink Lady in tow my old 53 Buick started knocking going up the long rise in old St. Charles Rock road making it necessary for my Saturday to be used removing the oil pan to discover that something was wrong in the lower end of the engine. This is when I found out that Ackrit Automotive had an engine machine shop in the back of the parts store and they helped me get the Buick back running again. Naturally, when it was time to build up the Ford flathead engine for my race car, they were my first choice for a place to do the work. This time, as opposed to my hot rod street engine in high school, this was a real dyed-in-the-wool racing engine and I had a real job to pay for it so it got all the good stuff. We used a 59AB block and bored it out to the max with a stroked Mercury crank and a full race cam Somewhere I found a used set of finned high compression aluminum cylinder heads and a three carburetor manifold. Between Ackrit and me, we put together a pretty stout flathead Ford for my little egg shaped race car. They also built an over-sized radiator to keep this little jewel cool. This latter investment was protected pretty well from the beating and banging of short dirt track racing inasmuch as, with my radical engine set-back, I could pretty much mount the radiator in the old engine compartment well out of the way of collision damage complete with a big ole hardware cloth screen to strain the big dirt clods into harmless small ones. This scheme of protecting the radiator seemed reasonable for protecting the driver as well so I made the windshield and the floor pan out of 1/4" hardware cloth assuming that this size dirt clod could only be bothersome, not damaging.

Another thing I did in the winter was to realize that I had to save my money for a decent helmet. I was going to be driving a substantially faster car and the old Floyd Clymer imitation that I had with a metal pot surrounded by imitation leather flaps was not going to get it. I had Ackrit Automotive order me a genuine Bell helmet with a snap-on visor and also a full-face snap-on plastic face shield. To complete the ensemble, I went to Hood's and got a pair of genuine war surplus WWII goggles. This gave me the option of the visor and goggles or the bubble shield. I was so proud of my new safety equipment that I even took it back home to Milwaukee to show my parents who were still somewhat dubious of my budding new hobby career, car racing.

Finally…Spring!

As I found throughout my racing career, getting help in the middle of the winter to do the day-after-day grunt work was pretty much out of the question unless you had a dedicated partner but as racing season approached with the actual "going to the races" becoming imminent, helpers began to come out of the woodwork. It was beginning to get to that time. Curt Poulton had been around all winter for design discussions and advice but as spring sprung I found out that he not only had drill motors and drills in his garage, but he also had an arc welder that would come in handy for the heavier work like building a tow bar and a trailer hitch for my car. After building that stuff I began towing the car out from the city to his house on weekends where he and I and several other guys would work on it doing the final preparation for the opening night at the St. Charles Speedway. We painted the chassis and the roll cage and other accessories black and the little cut-down body pink after which Curt duplicated the Seven Crown number that we had on the Pink Lady I. From the experience gained in the previous season I knew that we would not only need wedge but it would be cool if it were adjustable. I bought a length of 1" threaded rod and some nuts to match and with some fabricated bits and pieces created a bolt that threaded through a nut welded to the frame above the right front of the transverse leaf spring to bear on a fitting welded to the spring. Cranking this bolt in would increase the amount of wedge we could put in the car. With the engine installed and most of the weight in the car, I took apart the leaf springs on each end and began to remove leaves from the spring to achieve a much softer spring rate on both ends to compensate for all the weight I removed from the car. I was also able to provide a much softer rate in the back than in the front which I thought would enhance the handling. All this adjustment was done before the installation of shock absorbers so the car bounced freely on the springs and one could get a good feel for the rates and differences between the front and rear. We also found out that jacking the rear axle off the ground with wedge in the car the right side would come off the ground before the left, the amount being dependent on how much wedge you had cranked in. Obviously when the front was jacked up the same thing happened except the left front would come off first. We figured that this would be cool after we got to racing we would experimentally find the correct wedge for a

given track and when we got home to Curt's level driveway we could measure the difference in the height of the rear wheels and that would be the setting for that track. We had also learned that one of the weak points in the front end of these Fords, and probably the rest of the brands as well, was the tie rod, the link that connects the two front wheels together by which the toe is set. The tie rod was about 3/4" in diameter and when there was wheel banging out on the track that rod would get a sharp enough end load slapped into it that it would buckle and hopelessly fuck up the alignment by toeing the wheels out ridiculously. As it turned out, the rod was just the right diameter to slide a piece of 3/4" pipe over the rod to effectively increase the diameter to around an inch and a half which eliminated the buckling problem and kept the toe-in correct. It didn't even have to be welded in place, just cut to the length such that it just fitted between the tie rod end clamps and let 'er float in there. We got the thing pretty much ready to go to the track and one evening got the bright idea to try it out so we tow it out to the Missouri bottoms on a deserted road in the dark and unhook it. I got in and strapped up and the other guys in the tow car gave me a push start. Well let me tell you, when the engine fired that son-of-a-bitch took off like a scalded cat. I had, in no way, ever driven a car that went that fast. Before I knew it I had sailed off the road into a wet field with water and mud flying all over, turned it slightly left a shot back on the road again where I was finally able to bring it under control and stop, absolutely shaking in my boots. "Holy shit, does that fucker ever GO!!!!!" I said, "It is actually scary." After connecting it back up and towing it back to Curt's house the beer got to flowing in celebration and the confidence that we had a real race car started to surface.

Finally Friday came around and with it the opening of the St. Charles Speedway. We were there with bells on with our new machine. I attracted a huge amount of attention for several reasons. For starters it was turned out a lot better than most of the other "Amateur" cars which, in most cases, were just one step above the hobby cars in appearance with the engines and running gear getting all the attention and the body left pretty shabby. The fact that it was a stubbed off sedan instead of a coupe created a interest and, of course, the radical engine set-back and the driver in the rear seat spawned comment from the announcing stand like "Mother-in-Law-Car". They also referred to it as an "Easter Egg" and naturally the "Crown Seven" like last year. It was a big hit but the overtones from the rest of the "Amateur" car class guys was that there was no way it could be fast because it was a flathead Ford against all their Chrysler based coupes with their big sixes an nobody in captivity could make a Ford run fast enough to blow off those big Plymouths. We found out the reason for this attitude several weeks later when another Ford showed up at the track. These dumb-ass hill-billies's had no idea of the cylinder numbering or the firing order of the flathead and so they spent the entire night swapping plug wires around and pushing the car with pop-bang-pop-pop-sneeze but no run. It was absolutely fuckin' hilarious. It inspired Curt to make little pieces of paper to carry in your wallet with the inscription "Ford Shop Manual" with a little drawing displaying the cylinder numbering and below the firing order. We never actually delivered any copies this valuable document to any of those dumb bastards for fear they might understand it. Anyhow, the initial

outing at the St. Charles Speedway did not go too well. At first I found that there was way too much play in the steering, making the car wander all over the place. I tightened it up and took it out for the next heat. I went down the front straight sideways and put her into the south turn, got back on the gas and just when I got to the pit gate and started to straighten it out, the steering locked and I went straight into the pit gate post with a huge bang and an instant stop. Bent the shit out of the front axle and we were done for the night…shit.

Out in front of Poulton's house the next day there we were with the big chain and the eight ton bottle jack straightening the front axle like we had done a number of times in the previous season. I fiddled around with the steering gear and found out two things that were the cause of the demise of the car in the previous evening. First the steering gear was not centered which was bad because the closest point in the adjustment is in the center and it falls off either side of center so that if you adjust it too tight off the center, it can lock up going through center, exactly what it did last night to send the car into the pit gate. The other thing was that it did not have enough lube so it was kind of sluggish. Correcting these two item made the steering smooth and easy. With these corrections and adjustments made, in the late afternoon we were hooked up and off to Alton Speedway near Godfrey, Illinois. In qualifications, my car was by far quicker than all the rest of the "Amateur" cars which meant that I got to start in the back for my heat race because that's the way it was done in this association. It only took me a couple of laps to figure out that all those evil handling coupes were bashing it out near the top of the track with the hardiest getting to the front and that there was no way my fragile little machine was any match for that kind of stuff. The alternative was to go down on the almost uninhabited bottom of the track and pass them there. This worked pretty well but it came to me that a bit more wedge would make it a lot better. For the feature race we had cranked more wedge into it and so I immediately came from the back of the pack into the turns right at the bottom and passed those suckers where they couldn't get to me. After a couple of laps I was out front and could get up next to the fence where the little bugger would really fly. I came off the turns wide open and sideways and stayed that way down past the starter's stand. It would straighten out when I let off for the turn and then get up sideways again through the turn. I won the race going away and carrying the checkered flag around the track to the immense cheering of the crowd. It was a huge high point in my fledgling racing career. I felt GOOD!

The Rest of the Season

It was strange how little intelligent technology there was in racing in those days. Racing was considered by the general public as a blue collar activity that ranked right in there with motorcycles, conducted by greasy uncouth not-very-smart ruffians with a death wish. With my degree in mechanical engineering and my day job in an office of the largest aircraft company in the Midwest as a professional, I did not fit well into this mold. In spite of my analytical and mechanical ability there were still members of the fraternity that would relay the real racing secrets to me at the Friendly Club, a bar on St. Charles Rock Road

that I sort of used as the extended living room of the rooming house I stayed in. I'd be in there drinking beer and watching TV when one of these experts would sidle up and start telling me all the stuff you needed to do to be a real winner at the dirt track. They'd ask me questions like, "How many leafs do have in yer front sprang?" and "Where is your front spark plug?" to which I would reply, "What the hell are you talking about?". "Well, Ah'm gonna tell you somp'n." he would reply, "If you ain't got 13 leafs in yore front sprang and yer front plug ain't lined up with yer tie-rod end, she ain't a gonna handle, no way,". If I was in the proper mood I would start explaining unsprung weight and center of gravity and other things that I knew that he would find impossible to comprehend while he sat there shaking his head knowingly, sure of himself and his secret info that I seemed to be totally disinterested in. "Well, you kin tell me all that sheeit but Ah know what Ah'm talkin' about 'cause Ah heered it from my brother-in-law who studied metal allergy when he was in the Navy.". Just like Roger Penske talking to Jim Hall. I had to remember all this kind of shit to tell Curt and we'd just sit around and laff our asses off.

Sometime during the late winter and early spring I met a guy at the Friendly Club named Al Welch that worked at McDonnell and also lived in a rooming house in my neighborhood. We got to hanging out together and one night he came into the Friendly Club and told me that he had a work acquaintance that had been transferred to Oxnard California thereby leaving his living quarters vacant and for rent. He had asked Al if he was interested in renting the place so Al asked me if I wanted to get out of my rooming house and share this place with him. He said it was way out in the country, behind a farm house, and had a garage attached to it where we could build race cars. We both decided without much further thought, "Hell yes, this is definitely very cool." and I said "Tell the guy Yes, and find out when we can move in." This place was just a short distance from the corner of Shackleford and New Hall Ferry in north St. Louis County and was, indeed, out in the country in 1960. The farmhouse in the front of this place was occupied by the guy's retired parents who, as the story goes, had converted a chicken coop into living quarters for their son and his new bride when they got married and now that they were off to Oxnard would rent the place to two nice young fellers like us. We scrounged up a bunch of used furniture and moved in.

Now that I had a place to keep it, I decided that it would be cool if I had a trailer to haul the race car on. I had the torch to cut the metal to fit and Curt had a arc welder to glue it all together and also a design for a simple but tried and true race car trailer that could be scaled to carry the cut-down Ford. Another trip down to the scrap yards in Wellston along with a place that dealt in scrapping car haulers where we could buy already fabricated ramps yielded all the materials we needed for the job. Bright and early on a Saturday morning we laid out the basic framework on Curt's driveway with chalk and began cutting and welding. By evening we had this baby all welded together and happily hooked it up and headed off to our new abode which already was dubbed "The Ranch".

I began to learn the subtleties of race car set-up and driving during this summer. I found that when I had enough wedge in the car to make it handle

down low that sometimes when I came down the straight and turned into the corner, the car would barely react to the steering and if I then gave it some throttle it would head straight for that big old unforgiving railroad tie wall. Then one night it came into my mind, *"What would happen if I turned the steering wheel toward the wall instead of the way that would normally make it go left?",* so I tried it. Pleasantly amazed was my reaction, turning the wheel back to the right caused the front tires to pick up a bite and turn in while the tail just kept going toward the fence. More throttle would get the tail coming around nicely and since the wheel was already counter-steering the whole deal came together and the car would just rocket off the corner. There had to be enough steering input at corner initiation to put a little moment into the car before the understeer took over and then it was a matter of balancing the front with the rear using throttle and counter-steer to get around the corner. It was so bitchen and still understandable! I also learned about the legendary cushion that is so well known to dirt-track aficionados. The cushion is the pile of loose dirt that accumulates above the racing line up next to the fence, the edge of which gravitates up toward the fence as the night progresses. Getting the outside rear wheel into the cushion gives it a lot more bite and allows you to really stand on it going through the corner right up against the fence. The trouble with riding the cushion comes at the corner entry with the transition I discussed just above. If you don't get that transition just right and get your right front into the cushion, you are history; it sucks the front end straight into the wall and mashes the crap out of the axle. If you pull the front down too soon the back won't make it to the cushion and you will get very loose trying to stand on it coming off. Riding the cushion is very cool but it has to be done with a considerable amount of finesse. Also, in my case, I had to get clear of all the apes in the Plymouth's before I could even think of getting off the bottom. It was like a bunch of vultures waiting for me to come up and mix it up with those tanks that would destroy me in a minute.

A little later in the season, as I was basically cleaning up on the Plymouth apes and winning all the races, a new guy shows up one Friday night with a white 32 Ford coupe with one of the new Chevrolet V-8 engines installed. I thought to myself, *"This guy could be some serious competition, that car ain't no beater."* The first few nights that he showed up I was able to beat him fairly handily since my car was getting pretty well developed and he was suffering from a little bit of the new car blues. Later on, however, we had some really fierce races together but I was still able to prevail since, I think, my highly modified flathead made more horsepower than his basically stock Chevy as well as my aft weight distribution contributing to better handling. Our two teams became really pretty good friend since these guys seemed a step up in the brains department from a lot of the Plymouth apes. The one strange thing I found out was that the owner/driver of this machine was a ladies hairdresser. Now even in those days way before political correctness it was always expected that any male human being that had a day job as a hairdresser was at least a little light in his loafers, but this guy never seemed to be that way. I never asked and he never told, so what could have been an interesting tale become a mystery forever. We never actually knew that he was not, in fact, a hairdresser nor that, if he was, was he

inclined toward boys. The one thing we did know was that he was a hell of a race driver.

Somewhere towards the end of the summer, Joe Shaheen came up with some outrageous idea of conducting a “World Championship” 150 lap race for the modifieds, ostensibly paying more than the usual purse for the competitors. As the anticipation of this event grew, we started thinking about turning our Easter egg into a modified with a body change and taking part in the “World Championship 150”. Since we had been winning in the “Amateur” class and since our car was so light we thought of it as a challenge to go and compete with the big guys in the fire-breathing, alcohol fueled Chevy and Buick V-8’s, and think of the prestige of running in a World Championship. Now the current breed of modified’s running at the track were kind of a cross between a modified racing pre-war coupe and a sprint car but were actually neither. They were generally composed of a tube frame containing a quick-change rear end, an in-out box, and a set back overhead valve V-8. The bodywork consisted if flat sheets of aluminum fastened to the various tubes of the frame in a way to sort of imitate a pre-war coupe. All we did was remove the hung-on shortened Ford sedan body and install aluminum sheets against the triangular roll cage tubes and install a giant aluminum fuel tank that I found at Hood’s. This thing was rectangular in shape but was too long to install horizontally and too tall to install vertically so we installed it diagonally in the rear up against the roll cage rear down-tubes, looked a little goofy but it did the job of giving us sufficient fuel for the 150 laps of competition. Naturally, in keeping with the Pink Lady theme, the new sheet metal was painted pink and, for the third time, Curt was assigned the job of recreating the Seagram Seven logo onto the crowd side of the car as the car number. The car actually looked quite business like in the new modified form. The week before the 150 lap race, we took the car out to the track to see how it would fare amongst the Modified’s. Surprisingly, it did quite well, naturally it would not keep up with the really big guys but it was definitely a mid-pack racer. Racing against the lightweight Modifieds was a different deal than the big heavy Plymouths, these guys actually raced instead of lumbering about trying to bash their competition off the track. Somehow, in the thick of things I got tangled up in the south turn and went on my head, not just a little ole rollover but three times end-over-end followed by twice side-over-side. I vividly remember hangin’ on to the steering wheel for dear life while seeing light brown lighted track surface alternating with black sky as the car rotated and bounced wildly. Sometime during the side-over-side part of the adventure I remember thinking *“When the hell is this thing ever going to stop?”* shortly after which time it came to rest on all four’s in the middle of the track and I was able to just unbuckle, climb out and walk away. Walking away back toward my pit area in the infield I remember the announcer excitedly exclaiming “…and he went over and over and over” as the crowd sat in awe. Despite the violence of the crash, the Pink Lady took it well and survived with little or no damage, including my triangulated roll cage made out of electrical conduit thin-wall tubing. My very own body also seemed to endure the pounding especially after several after-race cool ones. Getting up the next morning, however, my body felt like I had gone over the proverbial Niagara

Falls in a barrel, I hurt all over, especially my neck. What made it worse was that I had to go into work in spite of it being a Saturday so the day was pretty much agony. When I arrived home after work I went into the garage to look at the race car and observed the white stripes made by my helmet rubbing on the under side of the flat roof panel over my head and I thought, *"I don't recall my head being all that close to the roof."* I put on my helmet and climbed into the driver's seat and sure enough, the top of my helmet was nearly two inches from the roof so that to make the stripes on the roof my shoulder harness and neck had to stretch out about six inches or more…no wonder my neck hurt. I also developed scabs on my shoulders from the pressure of the shoulder straps on my body. This was no chicken-shit little crash!

The next Friday we headed out to the St. Charles Speedway for the World Championship 150 with our trusty little racer. After a bunch of preliminaries, they actually flagged the field off for a 150 lap race when all I had ever run was about 20 or 25 lap features after shorter heat races. This race seemed to take forever, part way through I noticed my radiator emitting steam from my boiling flathead and decided that it was probably OK that it was boiling and as long as steam was coming out the engine could get no hotter. Somehow this lasted through the entire event and my trusty little race car actually finished the race, although there was no telling where the hell I was. I think the scorer's had never worked a race so long so old Wib Spaulding was declared World Champion and the rest of us finishers probably all got the same payoff. The funniest part of the race was a personal event that happened to me. I had decided to abandon the aviator type goggles in favor of the clear face bubble shield to avoid all the dirt hitting me directly in the face. Now this shield snapped to the top of the face opening and was bulged outward into a bubble around my face and terminated below my chin, all transparent plastic and did a fine job of keeping the flying dirt and mud away from my face. What I didn't predict, however, was the dry mouth one gets after exerting oneself for a long time like that and during one yellow flag period part-way through the race I hacked up the dryness and phlegm from my throat, looked carefully behind me to avoid spitting in another driver's face, leaned over the side as far as my straps would allow and flooey… spit straight into the face shield about an inch from my face. "OH SHIT" say me as I spent the rest of the yellow flag period with one finger up under my face-shield functioning like a small windshield wiper to get the mess off the inside of the shield. What a dumb son-of-a-bitch!!!

Sophisticated Design

I named this section with this tongue-in-cheek title largely because this effort was instrumental in shaping the rest of my race car building for my entire career. As I said above, Curt Poulton and I had many long into-the-night conversations on the intricacies of racing car design, he knew a lot and I knew basically nothing except I was an engineer and he was not. Curt was well read on the subject and skillful on the drawing board to the extent that he actually did design work on the side for a sports car racing fellow in the St. Louis area named

Jim Broadwell. Now Jim was a well-to-do sports car racer that not only built the cars he raced but actually built sports racing cars for customers and conducted a business out of his basement. This was not his day job but a week-end and spare time effort, but more on Broadwell later in this book. With Curt's race car knowledge and design ability, I became reasonably enthused about the idea of building up a modified race car for the local short dirt ovals that was so advanced in concept that it would blow everyone into the woods. A sort of natural extension of my little round backed Amateur car which was way different than the rest but a huge success. What apparently escaped me was that I was still in the stage where my fabrication abilities involved very cave-man-like techniques, pretty much torch and hammer, not machine tools and precision. I also had no clue just how long it would take and how many man-hours could be consumed by increasing the sophistication of the race car design. Being young, dumb, enthusiastic and forever optimistic I set off on this project with Curt using his heated garage for the primary fabrication facility.

The basic design of this new car was based on the current Indy roadster being campaigned on the nation's paved oval tracks including the Indianapolis 500. The car was to have a tubular space-frame with torsion bar suspended straight axle's front and rear with an offset big V-8 engine. The nose and tail were to be molded fiberglass with the rest of the bodywork of flat sheet aluminum. To minimize unsprung weight, the plan was to utilize a DeDion rear axle which was a design used in Europe for both sports and formula cars. This design involved the use of a suspended light weight U-shaped "straight" axle that went around the rear end housing which was bolted solidly into the chassis driving the wheels through double u-jointed half-shafts. This way the weight of the rear axle gear assembly and the brakes were all part of thee sprung chassis and only the light-weight axle and wheels was sprung. What I didn't know was that this was a good idea for a sophisticated racing sports car but not very practical for a car intended to bound around a high banked 1/5th mile dirt oval but it was innovative and cool so we pressed forward.

The DeDion rear axle arrangement presented major fabrication difficulties since it required a drastically narrowed rear end gear assembly, a pair of half-shafts with a universal joint on each end and some sort of sliding arrangement to allow for length change and an outer hub assembly for each side to which the wheels were fastened. Obviously to machine all this stuff up from some design was out of the question since we had no machine tools at all, not even a drill press, and I had no where near the funds to get it done in a professional machine shop. There also were no standard automobiles around with such advanced drive-lines so what seemed to be left was an extensive junkyard search for any car parts of any brand that might fortuitously fit together in some modifiable form to achieve the desired result. My experience as a mechanic at Menge's Service during my high school days left me with memories of various components that might work, such as the old three-ball u-joints on Chrysler products that had the length change built into them. On several Saturdays I would drive my old 54 Pontiac down into the city to my favorite junkyard in Wellston and tell the guy that ran it what I was doing and get his permission to root around in his yard looking

for stuff to piece together and mock up on the ground to satisfy the ideas I had. I was usually there all day doing this “design work” and just before it would get dark I would assemble all these parts in a big pile, get the guy and agree on “how much?” Generally I would get all of this stuff for next to nothing because it was usually stuff that ended up leaving the place by the pound anyway. Then on Sunday I would lay all this stuff out on the dirt floor of my garage at the ranch and make lists as to what needed to be done to make this shit work. Several iterations of this process netted the DeDion rear end. As with most hot-rodding in those days, strength was never considered an issue because passenger automobile engineering was not very sophisticated so parts were usually way the hell more strong than they needed to be and would generally work for anything you wanted to do with them.

The torsion bars were another sticky point in the design since all of them used in race cars were round with specially machined splined ends which, again, was beyond our crude abilities to make or my limited financial assets to buy. Curt was not only into race car technology of the day but was versed in foreign cars and even owned and drove a 57 VW Beetle about which he knew all the technical details. Those early Beetles had torsion bar suspension on all four corners, the rear ones being round and the front being a strange square arrangement of multiple stacked leaves. This kind of torsion bar looked like something we could adapt to the race car because the ends were square and a square hole could be made in an end fitting with a torch and a file. Using my engineering skills I was able to modify torsion equations for stacked rectangular strips of spring steel which I found I could buy and came up with four torsion bar assemblies for the race car that looked as if they would work and that I could fabricate with the rudimentary tools in Curt’s garage. I remember standing at the vise in his garage, night after night, filing away at the half inch thick torch-cut steel end plates for those torsion bars making square holes that would just fit four quarter inch thick spring steel straps into. It seemed endless but I finally got them done.

The tubular space frame was actually one of the parts of the car that was a joy to build. Since Broadwell’s sports cars had tubular space frames, Curt had the experience of drawing them up plus he had illustrations of the frames used on the real-life Indy roadsters. With my knowledge from engineering school on proper truss structures, the design of the frame was something we were definitely prepared to handle. Since we used thin-wall tubing that I was able to buy from Broadwell, we were also able to use a Broadwell developed technique to shape the fish-mouths on the tubing ends so they would fit together for welding using aircraft tin snips. Steady work all day on a Saturday finished the basic frame so then we could then marvel at this extremely strong and rigid car frame that weighed in at less than 50 pounds. It makes you feel like you really know what you are doing.

Again, since Curt had spent time at Broadwell’s shop helping with the fabrication of the fiberglass sports car bodies that were built for his cars, he took the responsibility for the building of the nose and tail for the pseudo Indy roadster. We bought good knot-free wood about one inch thick out of which he

cut shapes from his drawings for sections of the thickness, which when glued together made a wooden buck roughly the shape of the desired part. A lot of shaping, sanding, priming and finishing created a wooden part that looked just like the finished nose or tail, gorgeous. A generous coating of wax with a water soluble parting agent sprayed over it made the parts ready to paint on gel-coat and lay up multiple layers of fiberglass to form up a female mold, smooth on the inside and rough on the outside from which the actual parts would be molded. After these parts had cured up, Curt built a stand for them to fit into that stood them on the floor with the open end up. Again wax and water-soluble parting agent made them ready for the real parts to be molded. After curing it became obvious why the mold stands had the opening facing up, to get the parts out it was only necessary to pry them apart enough to slowly pour water in between the pieces and float the part out of the mold…slick as hell.

The engine I chose for this car was a late model Pontiac V-8 largely because it came with almost twice as many cubic inches as the Chevy and Ford late model OHV V-8's, or even the old flat-heads like I used before. All of those engines had less than 250 cubic inches and the Pontiac had 389 cubic inches so I figured that I had almost a two-to-one horsepower advantage over those engines based on the cubic inches alone, even if I did nothing to it to increase the horsepower. Practicality made the selection of the running gear simple, I just used GM stuff all the way back, the Pontiac engine, bell housing, transmission, shortened driveshaft and rear end, all of this stuff conveniently fitted together with basically zero modification. The only thing I needed to do was to narrow the rear axle and weld mounting points to bolt it into the chassis. Again, I used my friend Boots Strutman who helped me with the shortened driveshaft the year before to assist me in shortening the axles and side tubes on the rear end. Basically we cut the extra out of the middle of the axle shafts and sharpened the end like a pencil after drilling a small 1/4" hole in the center of each half. This allowed the two axle halves to be put back together centered with a 1/4" pin creating a big vee to arc weld shut with a sort of end-ways stitch type weld. The welding was done carefully side-to-side symmetrically to try and keep the axle fairly straight and after it was done we checked the straightness in Boots' lathe and straightened as necessary. He showed me a technique using a torch and a wet rag that involve heating a spot on the long side of the axle until a small spot was hot enough to be permanently squished by the thermal stress in the heated axle and then quenched with the water which ended up making the axle shorter on that side and straighter than it was before. Continuing this procedure and we were able to get each axle acceptably straight. Cutting a piece out of each side of the axle housing tubes and grinding them at 45° created a vee to weld the tubes together. Assembling the shortened axle shafts into the outer ends of the housing and then sticking them into the splines on the inner end aligned these parts, allowing them to be tack welded together. Completing the welds symmetrically kept the assembly straight enough for the axles to turn freely and the job was done.

After all the major pieces were fabricated, the final assembly began. It always seems like the job is damn near done when the completed frame is set up

on saw-bucks and the main running gear installed because it begins to look like a race car. That is about the time when frustration begins to rear it's ugly head as week after week goes by and the details seem to multiply with the passage of time, wiring, mount the battery, fuel tank and plumbing brakes, brake tubing routing, bleeding, ignition wiring, carburetor, fab an intake manifold and on-and-on. "Fuck, there is a lot of parts in a complete running car!" It took me about half-way through the season before this creation was ready to roll out in all it's pink painted glory complete with another of Curt's hand painted Seagram's Seven Crown logo on the side. We finally took this creation to the St. Charles Speedway one Friday night where it was set upon by a horde of curious admirer's; it was definitely a major attraction that most had never seen before. The engine fired immediately and sounded big, throaty and powerful. I put on my helmet and climbed in and set off on some slow laps just to make sure it went in a generally forward direction before I got on the loud-pedal to bring it up to speed. I noticed that there was some bottoming of the chassis of the extremely low slung roadster on the rough and rutty dirt track but I didn't think much of it. Pulling it into the pits for an inspection revealed that the light-weight tubing that formed the bottom of the frame had contacted the ground hard enough to get rather seriously bent so we decided to load up and retreat to give it a closer and more thorough inspection in the light of day. The light of day quickly turned into a dark gloom as I realized that by taking out the truss braces in the bottom of the car reduced the side beam loading strength to near zero thereby allowing the cornering side forces to effectively bend the whole frame into a shallow U. "Oh fuck," says I, "the frame is truly fucked up!" It took awhile for the enormity of the catastrophe to sink in, all that work up in smoke…"Oh fuck, fuck, fuck!!!!"

After several days, I realized what I had done, I built a road race chassis to go dirt track racing and I had also bit off way more than I could chew with my limited fabrication equipment. As we will learn in the rest of the book, building one road race chassis along with my increasing knowledge and experience with sports cars led me to give up on the dirt track racing and think about building a real road racer and going sports car racing. The concepts for the new road racer however took a not-too-unexpected one-hundred-eighty degree switch from the sophisticated design back to an easy-to-build hell-for-stout hot rod based sports car. In short, I had built a road race car for the dirt track and now I was going to build a dirt track car for sports car racing, weird, but not entirely unexpected when one endures a major failure and is determined not to repeat it.

Another Lesson Learned

In the first year of racing with the Racing Gypsies team I noticed that the form we signed at the pay shack was some sort of government tax form but that year we all signed for the relatively miniscule amount of gross receipts. In the second year of racing the Pink Lady II little round Easter egg quite successfully, I guess I was not overly surprised when I received a IRS Form 1099 in the following January telling me how much taxable income I had made on the race

tracks. I immediately thought to myself, *"Well shit, if I got to pay income tax on this money, I bet I can deduct expenses and turn this into a regular business."* A trip to the post office netted a Form C small business form which allowed me to do just that and when all was said and done I actually had a small deduction for my regular 1040 and actually paid less tax than if I had not been in racing. *"Shit man, this is cool, I do stuff I like to do and it is tax deductible"* The next year with the ill-fated project with Pink Lady III, I entered one race event and went home prematurely so, needless to say, I did not receive a 1099 because I made zero prize money. Undaunted, came tax time I dutifully filled out another Form C but this time I had much more loss and no gain but I thought, *"What the hell, I worked my ass off on this race car which didn't work out but the intent was to go racing so shit happens in a business."* And I deducted even more off my regular day-job income and sent it on in to the IRS. A few months later I received in the mail a letter from the IRS asking me to come down to the Federal Building and talk to them about my disallowed deductions. I got together a bunch of paperwork and headed on down for my scheduled appointment figuring that after I showed them all my business-like stuff I would be OK. Well sheeeit, no such luck, they ran me through the mill wanting more paperwork than I could ever expect to gather, the bottom line was "If you take in some money on a 1099 it might be a business but if you don't it is a hobby" I indignantly shouted "No way, if I try to improve my lot by innovation and it fails to make me any money it all-of-a-sudden becomes a hobby? What kind of unfair way to do things is that?" This outburst netted me a blank stare followed by some kind of bullshit for more paperwork that I didn't have and I left with my tail between my legs thinking *"Man, you really can't fight city hall."* And went home and mailed them a check. The shit you learn from just being an old shit-kicking hotrodder is astonishing.