

Chapter 2

A Little History

As it appears to me, at the turn of the century with the introduction of the petroleum burning internal combustion engine, a few speculators with insight acquired a position that with time would give them nearly the power of God. If they could have foreseen that within twenty years, nearly the entire country would become almost entirely dependent on their product: gasoline. They would have been insane to pass up the opportunity to gain a position of control.

In the United States Constitution, it is stated that monopolies shall not exist in this country. As long as the oil-producing companies were competing for sales of their fuel, prices could remain reasonable and the service of the selling agency would be an important factor in whether their product was sold.

It is not difficult to see that this has changed. Up to the early seventies, you could drive into a gas station, have your windshield cleaned, oil checked, and fill up for around four to six dollars. You would probably receive a free gift, green stamps, a decal, or some sort of advertisement for the station. Do you remember the independent gas station? “Joe’s Service Station and Restaurant.” Chances are, you could get the best buy in town there. Especially if “Earl’s” across the street was trying to undersell Joe.

If I was one of the largest gasoline producers, I could see that as long as all of these independents existed, there would be no possibility of organizing the gasoline producers and getting a unanimous effort to boost the price of fuel. As long as these little “jerks” existed, gas prices would remain competitive. Not just the independent stations, but also their suppliers!

Now there is one simple bit of logic that has existed since the beginning of man. This is, whoever has the most power gets what he wants. In this country, money is power.

People can be bought. You see this on a local scale quite often. Quite often a community depends on a large factory for it's existence. You can be sure any decisions made by the mayor or city council will not be adverse to the factories' will. Right here in my home town, the sheriff was arrested for being an underworld leader. He was responsible for protecting prostitution and gambling, and was even charged with murder. We recently saw Watergate and the arrest of certain congressmen for accepting bribes from FBI men disguised as Arab sheiks. It is only logical to assume that the oil companies have more than a natural amount of clout in Washington, D.C.

It appears to me that in order for the major oil companies to be able to stage what we feel was a false energy shortage, there had to be inside help.

This supposed oil shortage caused most independent oil suppliers and gas stations to disappear. It was the government, from what I understand, that decided to allot oil to the largest consumers, or largest suppliers of gasoline, and the smaller guys were just out of luck. It all sounded logical and most of them gave up without a struggle. The end result: after the smoke cleared, the small guys were gone and the price of gasoline was nearly double, all in one swift move.

Where were the powers sitting after this? Several independent gasoline producers joined and merged into one, Exxon. That frightened many people. The appearance of a single, all powerful monopoly in the United States had been formed. Where did all of the small guys go? Only the few strongest and largest remained. Now there was this small group that controlled everything. If they were to have organized and unanimously come to decisions on issues such as how much to raise the price of oil and what tactics to use, no one would be capable of interfering.

Have you noticed that the production of any possible alternate fuel has staggered or has been acquired by the oil companies? Finally, where has the concept of gasoline vaporization fit into the story?

The earliest patent that I have seen for a gasoline vaporizer was dated as early as 1889.

The concept and the knowledge of it's benefits are not new. Again, in the beginning of our dependence on fossil

fuels at the turn of the century, especially when the oil business was so competitive, it would have been disastrous for a device to be introduced that would create such a sizable increase in gas mileage. Gas was sold for so little that to increase gas mileage by eight to ten times would have broken the industry.

There was very little public understanding of the internal combustion engine at that time so it seemed to be quite a majestic creation. People could seldom understand it's theory, much less doubt it or improve it. The innovations that could have brought us this increase in mileage were generally confined to the auto manufacturers. At the time, I would assume that their attitude was to let well enough alone. Why introduce this when the oil companies were charging so little for fuel in the first place. They could see that a sizeable increase in mileage would wipe this industry out. What they probably did not realize was that they were protecting a harmless pup that would soon grow into a strong and merciless wolf who would soon have them at their command. Not a large majority of the public is aware that the controlling interests in both the oil and automotive industries in this country are now held in New York by the same financial organizations, or holding companies. Now they are one and the same and there is no chance of one hurting the other. Talk about a monopoly!

In earlier days, once in a great while, someone out of the population would produce a gasoline vaporizer. Most, according to reports, were bought for as little as \$12,000. There are also the reports of inventors suddenly disappearing without a trace of their invention to be found. One of these inventors that surfaced in the late 1920's and early 1930's was an individual that many of you have heard of before. Charles Nelson Pogue, who emerged from Canada, got up to 200 miles to the gallon from a V-8 engine. The world was delighted. I still don't know how he got that far without meeting with some type of oppression. Once he surfaced and became an international hero, they could not do very much to stop him. His disappearance would cause rage. It was already suspected by the public that this device would not be very welcome by the oil industries. Pogue was, according to history, quite successful in his testing. What happened to Pogue in the following years is quite cloudy.

No one seems to positively know what did happen during this period of his life.

Based on reports that we have gathered from people who claim to have been witnesses to different happenings, we pieced together the following story.

At the beginning of the Second World War, it was rumored that the United States Army acquired Pougé for a period of six months. During the war, in the North African desert, our American tanks had to travel great distances while burning tremendous amounts of fuel. This, as I understand, caused severe problems. Fuel was already very scarce. What I heard happened next came from the mouth of a tank mechanic. I was told that as soon as the tanks were delivered to their assigned post or command, they were secretly taken aside and altered. The carburetors were encased in a box. After the installation of this "box", the tanks reportedly attained a tremendously higher range on the same amount of fuel.

Well, this was one unproven report. It interested me, but there would be no way to support this claim unless one of the unis was obtained and it could be proven that it was used on these tanks. Nearly a year later, I was speaking to a group at a lecture and mentioned this story. One of the members of the group raised his hand to interrupt me. He said, "Excuse me, . . . but I was a tank driver in the North African desert at that time, and I can confirm that." He told me a story similar to the first one related by the mechanic. When stories from around the country come up consistent, then either the same story teller started all the stories or they may indeed be true. To top off my surprise, my partner, who is a bit more of a historian than I, told me that in Rommel's papers at the end of the war, he made the statement, "We would not have lost the North African campaign if it had not been for the introduction of the *American Long Range Tank!*" American Long Range Tank? How were our tanks getting farther on the fuel they used that the Germans' tanks?

All of these reports point to one conclusion. It must have been that Pougé gave his knowledge of high mileage carburetion to the United States Army and they used it in times of need during the war.

At one of my latest lectures, another man near Portland told me that he was a military driver in Europe during the war. He claimed that the cars were getting fifty miles to the gallon. If you inquire around or consult your library, you will be amazed at the information that you could gather to support these reports. I have seen advanced Pougé carburetors. If you go through the Patent Office, you will attain the old dinosaur patents. Pougé's first patents were functional to a degree. They were large, expensive to manufacture, and were very difficult to regulate. Pougé developed many more advanced units that are hard to find. Why? As a matter of fact, none of the patents or information available to the general public seem to be extremely credible. There could be a good reason for this. If all of the information was taken from the public on Pougé's and other inventors' works, the public would be outraged and become uncontrollable.

If only the poor or difficult patents are made available, and the public tries to use them, they would soon become discouraged and feel that there is no credibility to the concept of gasoline vaporization after all.

Pougé apparently kept working but dropped out of public view. Many people throughout the United States and Canada still possess Pougé carburetors. Mr. Pougé is still living, somewhere in a Canadian rest home from what I understand. The last word that I heard of him was when a reporter recently went to interview him. One of his statements, as I understand it, was "they could never get as much gasoline mileage now as I got in my day; they have lowered the quality of gasoline so much now, that when you vaporize it, it turns to gum."

With Pougé's carburetors, that statement could be quite true. However, we have developed vaporizers that are not affected by this lower quality of gasoline.

I feel that out of respect and appreciation, someone should write a book or movie of Pougé's life and struggles. Then there was the Flex movement. I have talked with dozens of people who were directly involved in the Flex movement. From what I understand, this carburetor was invented around 1960. I have heard reports of 96 miles to the gallon on some tests. It would seem that the state and federal agencies would have given a great deal of support

for such a needed product. Did they? Not from what I understand. As a matter of fact, the California state government did everything within their power to discredit the movement. The meetings held by those concerned with the Flex carburetor would be raided with court orders restricting them from talking. Finally, the effort was defeated.

The inventor, from our reports, went into hiding for ten years. These are only a few of the reports that we have heard. The Flex effort could well be a book in itself. If there is any credibility at all to these reports, then we know for a fact that we cannot call on our fine government for support.

Have you heard of Tom Ogle? At 19 years of age, this young inventor began tinkering with lawn mowers and gas vapor. By the time that he reached 24 years of age, while employed at an auto parts store, he managed to attain over 140 miles to the gallon on a 1966 Thunderbird. By then, he had attracted the attention of some of the local news media. Upon hearing of Ogle, the University of Texas challenged Ogle to a test. As national publications state, the car was thoroughly checked for hidden fuel tanks and exactly two gallons of gasoline were metered into the gas tank. With a convoy of news media and automotive engineers trailing, they set off for New Mexico. Ogle completed a 200-mile round trip, stopping only to let the observer's cars refuel. After a long and tiring battle to market the device that had been authenticated by the University of Texas, Ogle wound up dead at the age of 26. Will Ogle's death have been in vain? His death was said to have been suicide by drug overdose. It does not appear that anyone can prove otherwise. What a dishonorable way to die. If people believe that his death was of his own doing, he is even stripped of his gallant heroism. There are quite a few reporters that swore that if Ogle wound up dead, like so many reports of other vaporizer inventors, they would avenge his death by exposing the guilty party. Unfortunately, in my opinion, the guilty party considered this possible retaliation well. If Ogle had died from a heart attack at 26, been accidentally killed in an auto accident or shooting, there would have been a rage that swept the country. But with a suicidal overdose, which would disgust most people, there was not any hostility or greatly suspicious reactions.

If I die of an accidental drug overdose, you will have cause for suspicion. I don't even take aspirin when I need them. I don't like mind- or body-altering drugs, and I can feel the sluggish affects of aspirin. I am a careful driver and have never even broken a limb, so, an accidental death or suicide is greatly unlikely. I have always enjoyed life, even at it's worse.

Does death sound outrageously far out to you? Many people are of the attitude that the whole concept of Detroit or Washington, D.C., being against fuel-saving devices is totally outlandish. In the time that we have been involved in this pursuit, we have heard reports from dozens of people right here in the state of Washington of acts of violence or even death. Bombings of experimental vehicles and shops are quite common. In some cases, these individuals claim that their children have been threatened.

Let us back off and analyze this situation in simple terms. According to information available to the public, there are and have been devices that can sizeably increase gasoline mileage. If it does exist, why hasn't this been made available to us?

Who is responsible? The most popular villain accused is the oil company, automotive industry, the international bankers that control them, or the federal governments that are heavily in need of oil.

Why? It is suspected that the financial organizations that control both do not desire to lose control of the exculsive power they possess over the volume and price of oil to be sold.

If this is so, then why doesn't the government do something to stop it? It appears that they do not have the power. It seems they are afraid to change things that dramatically. This is not to mention the possibility that some or all of the government officials that influence the freedom of fuel-saving technology may be paid off.

What would explain the fierce and destructive attitude with which the government seems to greet these new ideas with the same attitude as a mother lion protecting her cubs.

The overall answer to this problem is not so much for us to conserve gasoline as Uncle Sam has advised. We should find an alternate fuel. How free is this avenue?

Chapter 3 Alternate Fuel?

What you read in the papers about the efforts made by the government and the oil companies to conserve fuel, I consider to be no less than propaganda.

The Russians are quite loyal to their country. They will even die for it in time of war. Why? According to what we learn in school, it is a horrible place! I agree that it is, but the point that I am making is that they don't think so. The reason for this is the propaganda that their people are fed daily. They feel that the United States would be a horrible place to live and is a threat to their comfort. Just about every country in the world is able to keep their population loyal through propaganda.

Why is it that our population doesn't feel that they are subject to the same?

Do not get me wrong. I am quite proud of my country and feel that it is superior to any throughout the rest of the world. As a matter of fact, I am willing to die for it. At least, for the people in it and the constitution that it was founded upon. I just hope that it isn't the corrupt part of this modern government that does me in. I would like to see the purity of this country stand as it did, with no changes with the exception of a strong defense against any type of monopoly, especially monopolies on necessities. If the food supply was all under the control of one large and powerful organization, the same thing could happen all over again.

Well, I am making some awfully noble and profound statements. All we have to do is find an alternate fuel. Is it all that simple? You would be surprised. Although daily we see that the government has sponsored some solar or other project on alternate fuels, hundreds of true solutions are passed over. I can name a few.

Nuclear power, geo-thermal energy, hydrogen, and super efficient solar energy. Explaining one of these at a time, did

I say, nuclear? Why everyone knows that nuclear power is already being used. Unfortunately. I bet you have heard just how dangerous nuclear power is to our families and environment. We'll all be mutes!

Propaganda! Open-mindedly compare the safety of nuclear power to fossil fuel. If you can get all of the facts, you will realize that hydro-carbon fuel, when combusted, generates gross amounts of carbon dioxide. It is a fact, according to an NCDA professor. The amount of carbon dioxide currently being introduced into our atmosphere is dangerously high. It is creating a hazard by breaking down our protective insulation of the atmosphere. A higher amount of carbon dioxide in the atmosphere would radiate valuable heat into outer space, causing us to eventually go into another ice age. Does this sound far-fetched? It is there in black and white, and quite true. If this threat isn't enough, think of the amount of carbon monoxide and other toxic gases that are being pumped into our atmosphere by hydro-carbon-burning electrical generating plants. Now, how does nuclear energy look. The radicals point out the potential danger of nuclear power. Look at the actual damage created daily to the alternative. People are easily excited to support an issue. The propaganda experts seem to have reduced the threat of phasing out fossil fuel electrical generation and going to an alternate, clean source of energy. This was accomplished by using the people of the country themselves.

I am not claiming that nuclear power is completely safe. I do consider it to be far less of a threat than the daily use of such fantastic amounts of hydro-carbon fuel.

The main point that my argument boils down to is this: A nuclear power plant can produce electricity almost indefinitely. Once the expense of the initial construction is paid, the only real expense of operation would be the employee's salary and, once in a great while, the replacement of the core material.

In an oil-powered generation plant, once the initial construction has been paid for, gross amounts of oil are required, forever. The expense is never-ending, along with oil company profits.

It is my opinion that the nuclear power plants are, and always have been, a threat to the oil industry. There is no

way that they can monopolize the nuclear industry to recapture their lost revenue. It is also my opinion that these oil companies have been responsible for all of the negative propaganda that has come out against nuclear power plants. Professional propaganda psychologists would know just how to incite riots and how to excite the people against the entire industry. If the defenders of the power plants had ethics that low, I am sure that they could incite demonstrations against the oil-fueled plants. The damage is being done here and now to our atmosphere and environment by fossil fuels. Anything would be a more practical alternative. The nuclear power plants do present a potential danger, but very seldom actually do any damage. Compare the decay of the atmosphere to the nuclear damage.

If water is heated by the sun, it will absorb that heat and then can be used to heat a home or the home's water supply. This is fine, but it could be used more practically to produce the home's electrical supply. The process is not that complicated and could probably be constructed by the average home handyman.

If freon or ammonia (both refrigerants) are heated, they will expand to a pressurized gas. If freon is exposed to about 200 degrees of heat, available from a solar collector, it will expand to a pressure of an amazing 1,500 to 2,000 pounds per square inch. Imagine the power that could be yielded for use in a piston, steam-type engine, or a turbine for electrical generation!

Remember, this is not just abstract theory, it has been done and is currently being used. For a relatively small cost, you can disconnect your electrical cables and become self-sufficient. The solar energy would not be practical year-round, but, for the winter months, the ground heat would fill the void.

You have the power to do something about this. The American people have shown a great amount of ingenuity in times of need. Things have been awfully easy lately and the increase in food and fuel prices has been slow enough not to create panic.

In a recent news release concerned with the OPEC countries' decision to raise the price of oil once again, Saudi Arabia made the statement, "We cannot raise the price of

oil. If we do, they will come up with alternate means!" They know that we can.

Finally, I mentioned the use of hydrogen as a fuel. This is the avenue I hope to pursue. Hydrogen, as you know, is made from water. I made it in my science class in high school. Simply pass an electrical current through water that is slightly saturated with a conductor, sulphuric acid is popularly used. At one electrode, the one part oxygen is produced and on the other electrode, two parts hydrogen.

Hydrogen is a very explosive gas. One of the nice things about using hydrogen as a fuel is that once it is burned, rather than emit an exhaust of carbon monoxide or hydrocarbons, it yields pure water and nothing else. The water can be processed back into hydrogen once more. Or, if you are thirsty, you can stop and drink some of your exhaust gases.

Everyone could have a hydrogen generator in their garage someday which they can carry home, plug into the wall and hook up to the garden hose. In the morning you could throw the hydrogen bottles into the trunk and use them as you need them. Hydrogen is explosive, but there are ways in existence that provide absolutely safe storage and containment of the gas. Metal Hydrides are one example being utilized by the Billings Energy Corporation in Salt Lake City, Utah.

Geo-thermal energy is an alternative that we should have been taking advantage of a long time ago. This medium of energy use is enough to make the most fanatical defender of the oil companies doubt them.

When you think of geo-thermal energy you probably envision a site above some volcanic activity in the desert. Most people, according to what they have been told, believe that at least 300 degrees of heat is required to power a geo-thermal power plant. Would you believe that there is enough heat in your backyard to produce all your electrical needs? It is true. As a matter of fact, this is not just abstract theory. It has and is being used now.

A professor in thermal dynamics, who has been a consultant to us and the National Car Drivers' Association, has developed a home heating system that for twenty years has been heating homes for a cost of about \$140 a year. Professor Schlicktig has also designed a geo-thermal power

plant. Also, other scientists associated with geo-thermal energy have built generating plants that can power homes and businesses simply by using a combination of ground heat, and sometimes super-efficient solar energy. The Stewart story is an example of this. Stewart had a geo-thermal plant which powered his fairly large research facility in Spokane, Washington. When he tried to market his invention, the federal government began to attack him, apparently trying to stop him in his efforts.

Projections made on this topic indicate that a geo-thermal power plant would cost tremendously less to construct than a nuclear plant and would be far safer.

Imagine. For a small proportionate expense, you can install a power plant in your backyard that will power your house year round for nothing. Again, this technology is not new and has existed for nearly a generation. In Stewart's case, it was Uncle Sam that stood in his way. How many other cases have occurred with similar response I do not know.

I also mentioned *super-efficient solar energy*. Solar energy has been used for quite some time, but in very impractical ways. It has either been used to heat water or converted into electricity by solar cells. The efficient utilization of geo-thermal energy or solar heat is defined scientifically as *low grade energy*. The energy obtained may not be as intense, but is by no means an impractical source of energy.

If you have any doubts or questions about any of the mediums of energy programs I have discussed, you can contact the National Car Drivers' Association, a non-profit organization, with which we have worked closely as of late and for which we have a tremendous amount of respect. This organization has reputable authorities who can provide documentation to support the theory and history of such companies. They are actively working to unite the energy rebels around the country and to put an end to energy problems. The director of the NCDA has been constantly pursuing more efficient or alternate energy saving devices for over twenty years. The files of the NCDA contain documentation that supports many of my beliefs expressed in this book with fact.

I feel that the NCDA is a medium for the concerned people

of the country to unite and gain strength in the struggle to get out from under the power of the complete monopoly that seems to exist.

There are many other organizations pushing for the same goal as we are at Carburetion Technology Enterprises. The NCDA can give you information on who and where they are.

The overall picture reflects that all types of energy saving technology in the country and world have been stifled by governmental agencies and oil powers of the world.

We have had people and organizations by the dozens offer to finance our product. Many had quite a fortune they were willing to invest, but we also talked with many who have lost their fortunes to a gasoline vaporizer or similar device. We are patiently waiting for the right one.

Chapter 4 More About C.T.E.

To continue with our history of Carburetion Technology Enterprises from the point where we had to consider just what we were up against in our struggle to market our device, you can see that the information indicated on the previous pages was quite discouraging.

At this point, we had a proven product. But, if we jumped into manufacturing, we would surely face the same fate as the others.

I was not a politician or promoter; but with the drive and creativity of myself and my partner, Billy, I was determined to find a way to market the device.

It was apparent that direct manufacturing and marketing was not the answer. If we tried, we would either come under fire from the government or be subject to direct violence. We decided that if we could somehow obtain the public's support, as Flex did, we would stand a chance. How were we going to prove to the public that this thing really worked? One obvious answer was to appeal to the news media.

This was not quite enough. The people could see the newscast, but they only had our word that the thing worked, and of course, there are plenty of skeptics. The solution on which we decided was to distribute a set of plans with an explanation of how and why the unit worked. With this, people could build the unit themselves and prove to themselves that it works. Seeing is believing. We began distributing the plans through public sale. The problem that we ran across was that people would gladly obtain a set of plans but that is as far as they would go. Very few people would complete a system because they found it to be too much work.

We stopped the sale of the plans for six months. In this period of time, among other things, we worked on making

the system simpler to build. We came up with what we called the simple system. The results were not quiet as impressive as 80 MPG, but, in many cases, it would double the mileage on cars.

We found that the way many inventors were stopped from marketing their device was by making claims of the mileage that could be obtained with their unit.

When an inventor would obtain a 200 percent increase, he would modestly claim for safety's sake that the unit would obtain a 50 to 100 percent increase. From the stories I have heard, the California state agencies would produce a car that was an exception and say, here, double the mileage on this or you are in violation of state advertising laws. Invariably, the inventor would lose his case and be out of business.

In order to protect ourselves from being attacked by an agency that we feel might be out to put us out of business, we do not make claims. We did in the beginning, but fortunately we realized in time. Now we do not claim as a fact that we can attain a one-mile to the gallon increase. We can say that we have tested our unit on several vehicles and according to *our* test results, attained a 100 percent increase. Many people who have built our system have called or written us with similar testimonies. By my standards, the people who drive to and from work every day in actual driving conditions are a much more reliable source of proof than the "State Approved Testing Facilities."

The simple system was a smash. At the same time I introduced it, another inventor introduced one that was similar. Between the both of us, we saturated the Tacoma-Seattle area with these systems. Everywhere people were talking about their gas savers. Auto parts stores began to carry the kits. All around town these auto parts stores were giving reports of people getting 50 percent, and in some cases, an 800 percent increase in mileage. At the weekend flea markets, parts for the systems were being sold. It was great! The Tacoma residents were believers.

There were still many people that had attained the plans *that were still having difficulty increasing their mileage.* Most had overlooked something in constructing the unit. It appeared that the type of vehicle on which the unit was installed made a difference in the increases obtained.

I decided that I could explain the system to the people better if I could speak to them personally. The solution was to conduct lectures or seminars. I contacted the director of the NCDA and asked him to honor the seminar with an appearance. He gladly accepted and offered to give a small speech on the oppression and who was responsible. I also invited this other inventor who had been in the limelight. He had recently been in many newspaper stories and had stirred quite a bit of enthusiasm. We charged a \$35 admission fee, which we all agreed was reasonable, offered the other inventor's and my plans on the two different systems. The director of the NCDA offered to include a book on energy conservation and oppression, published by the NCDA, entitled *Energy Crisis Answers*.

The public response was overwhelming. Almost all the television, radio, and newspaper media covered the story. It was very encouraging to have the public express their appreciation and admiration directly for what we were doing. We knew that we were on the right road. After a few joint seminars, our trio separated. We at CTE continued on, still distributing information provided by the NCDA. We traveled for months from town to town, always getting a great response from the news media. Meanwhile back in Tacoma, the work continued on refining the unit to perfection and reducing it in size. The complex system at that time remained the equivalent of one of Pougé's first designs. It required much work to construct and was difficult to adjust. It was also vulnerable to weather changes as far as the performance was concerned.

The simple system became quite popular. We received good reports from the students of our lectures on their results. A great advantage to the seminars was that the students could exchange names and share their skills and tools in constructing their units.

In the months that we were on the road, we met many other inventors who showed us their systems; some were quite unique. Others were copies of the Pougé or Flex, or some other popular invention. Many attained amazing increases in their mileage using these homemade devices.

We also met quite a few investors who, after seeing the devices tested and proven, had invested their fortunes to market the devices. Always the story ending was a sad one.

Most of the investors reported that the government had placed too harsh demands on the testing requirements. The tests would have cost hundreds of thousands of dollars. If they got past that, there was always another obstacle.

We could have taken this as discouragement, but instead we built on it. We observed the methods by which the others had been defeated and this enlightenment allowed us not to make the same mistakes.

We felt that our time on the road had been fruitful. We managed to enlighten the people of every city in the state. They now knew who we were and what we were doing. We acquired much support. If anything negative were to confront us now, we would have a large group of people who had proven the existence of a high mileage carburetor. Before there may have been rumors of their existence, but now there was proof.

Now that this work was done, we needed to decide what to do to continue this effort. It is obvious that manufacturing would be the route to go. There would be a fortune to be made. With these funds, we could pursue our concept of a hydrogen or freon engine.

Most of the knowledgeable investment groups who have had experience with the bureaucracy in this pursuit, feel that an attempt to market in the United States would be futile. I am sorry to agree. I, being a proud American, would like nothing better than to see the unit produced here. It does seem that we would have a much greater success in a foreign country. We have been discussing Italy or South America.

We now have a product that exceeds the complex system. I would describe it as a portable, under-the-hood cat cracker. It alters the gasoline to a vapor or gas state.

I have an optimistic philosophy. There could be a good and fair reason for the government's stand, if they are indeed oppressing fuel saving technology as it appears. It could be to simply offset the severe economic change that would occur should this device be introduced overnight. Imagine people pouring into vaporizer service centers to install these units. Not everyone could afford one to start. The oil companies would need to multiply the price of gas many times to offset the loss of profit. What about those who either could not afford a unit or were not able to get one?

They would have to pay up to ten dollars a gallon for gas.

It does seem as the years go by that the mileage on cars is slowly climbing as the prices of gas increase. If the only way that we are offered to increase our mileage is to buy a small car, then slowly people will buy small cars. If a full-sized car was introduced that increased mileage, people would want to know how it does, and once they discovered the reason, overnight, everyone would have the device responsible.

This would create an economic shock. The cars may be getting smaller, year by year, but the mileage of these cars is climbing. A Chevette, the same approximate weight of a Volkswagon bug, can attain 50 or more m.p.g.

I feel that they could possibly have an ongoing plan that will ease gas prices up to ten dollars to the gallon about the same time that we are getting 100 miles to the gallon. This could possibly happen in 10 to 50 years.

Still, we are bound to the oil companies. This may be the most merciful view that the oil companies will get for their activities.

I would still like to change over to a fuel that anyone can produce. Hopefully, whatever fuel that may be, we will not become monopolized and the freedom of competition can again exist.

For the time being, the cars that we depend on are what we now work with. Changing the engine to burn another fuel or replacing the engine with another is not economically feasible. What we must do is develop a device that can be cheaply installed to save gas. These are in existence. If we use them though, the oil companies will compensate their losses almost immediately by raising fuel prices again. We can buy time and weaken the oil companies by using these vaporizers. The oil companies can raise prices to compensate, but they will have to come forth and expose their greedy intentions to the public to do so.

Did you notice that the price of everything skyrocketed when the oil companies went crazy? If we can remove their power, maybe we can get some stability back into our economy.

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Chapter 5

An Explanation Of Gas Vaporization

As I stated earlier, gasoline vaporization is not a new concept. I think we all, to some extent, suspect that gasoline vaporization is much more practical than conventional means of carburetion.

If you have ever heard a story of a mechanic attempting to weld a damaged gas tank without clearing it of vapors, chances are the guilty mechanic was not the person telling you the story.

Any fuel needs a supply of oxygen to support burning. If you tried to ignite a pool of gasoline in a complete vacuum, you would not have very much luck. It would not be possible to ignite it. If you submerged a spark plug in a pool of gasoline and applied enough current to it to generate a spark, there would be no combustion as a result. Unless the gasoline is exposed to air or oxygen, it will not ignite.

Consider these four ways of supporting the combustion of gasoline. Only the manner in which it is exposed to the air supply varies.

First, envision a cup of gasoline being set on the ground. You can throw a match into it without much success. You must take the time to hold the match close to the surface of the gasoline to ignite it. Now, you have an orange, flickering flame. You can sit back and relax. It will continue to burn in this manner for about an hour.

Second, pour the content of the cup of gasoline onto the ground and toss a match into the pool. You better give it some room. The flames will be somewhat fierce. The burning will not last as long as when in a cup, but it will be considerably more violent. Why? Quite simply, it is due to the fact that more of the gasoline is exposed to the supply of air.

Third, place the cup of gasoline in a paint sprayer and spray it into the air. Ignite the mist and the cupful will burn

with much greater intensity than the cup spilled on the ground. It will take even less time to burn, but again, the intensity of combustion was far greater. Why? The rate of burn has changed. The amount of BTU's of heat given off in each case were identical. Only the burning is speeded up, the intensity of the burn increased because more of the fuel was exposed to air.

So apparently, the quicker the fuel is burned, the more energy it seems to possess. The rate of burn can be easily altered by changing the amount of air that the fuel is exposed to. This is why an internal combustion engine is as efficient as it is. The fuel mixture is compressed to about seven atmospheres of pressure, therefore, multiplying the density of the oxygen that the fuel is exposed to by seven times. This means that the fuel will burn seven times more violently than it would have at atmospheric pressure. Again the more quickly the fuel is burned, the more explosive force it has.

The fourth method of burning the gasoline would be by turning the gasoline into a pure vapor. The fuel in the other examples became more explosive as more of the fuel is exposed to the oxygen, and therefore, burned much more violently. When gasoline is turned into a vapor or gas, the molecules of the fuel mix evenly between the air molecules. When ignited, the combustion is almost spontaneous. The molecules of fuel could not be more explosive unless the oxygen density is increased. When the vapor enters the cylinder of an automobile, it is compressed in the same manner as the gasoline spray produced by conventional carburetors. This does boost the oxygen density.

Let us visualize the flow of gasoline into an engine using conventional carburetion. The fuel, which is at ambient temperatures, is pumped to the fuel bowl of the carburetor. Here it either passes through the fuel jets or is directly injected into the intake manifold by the accelerator pump. The air passing the jets will be considerably cooler than the ambient temperature, cooling the gasoline, and therefore, making it more dense and strengthening the bond of the molecules of the gasoline to each other. The air in the venturi is moving at a much greater speed than the air outside the carburetor. It will also be at about twenty inches of vacuum. These factors are responsible for the cooling. If

you are a private pilot, you know that even on the warmest summer day, when you go in for a descent, you must not forget to pull the carburetor heat on. If you forget, you could ice up your carburetor, even on a warm day.

The colder the fuel, the denser the fuel. It is not as thin and will vaporize very little.

Now picture the coarse droplets of gasoline entering the intake manifold. They do not pass directly into the cylinder, but slow down in the intake manifold, and wait until one of the cylinder's valves open. The intake manifold has a certain amount of heat that it radiates while the engine is warm. This, of course, helps some of the fuel to vaporize, but only very little. When the engine is cold, you usually have some difficulty starting and warming the car. This is because the engine is not heating the cold gasoline. If an engine needs vapor to run, then how does you car start on a cold morning? When the cylinders compress the air in starting the engine, the heat of compression help to loosen the gasoline to a degree.

After the fuel is drawn into a cylinder, it is compressed along with the air that accompanies it. The air will gain heat in the neighborhood of 450° Fahrenheit. This will help the fuel to become more workable, but not nearly enough. The popular opinion existing on the efficiency of the external combustion engine is that it is from 15 to 25 percent efficient. This is a pretty close approximation as to how much of the fuel is in the vapor state at the time of combustion.

As ignition takes place in the cylinder, most of the fuel remaining is a very coarse spray. Large particles of gasoline are suspended in air. The center of these particles are not exposed to the supply of oxygen, only the outer surface (as in the cup of gasoline). When ignition takes place, the vapor, or suspended molecules of gasoline, along with the smaller particles of fuel are the first to begin the combustion. As the piston is driven down by the combustion, the heavier particles begin to vaporize from the heat. It is a little late for that. We needed the fuel to do it's burning at the beginning of the stroke; and now that the stroke is completed, it has only begun to turn into an explosive medium. Now the piston begins on it's upward stroke and the exhaust valve opens. Now that the fuel

mixture is an explosive state, it is still violently in the process of combustion. The result of venting this exploding fuel is quite noticeable, especially if your muffler is in need of repair. At this point, the combustion is beginning to die down, not because the fuel has been exhausted, but because the oxygen that entered the cylinder with the fuel has been exhausted. Now there is nothing but a rich supply of hydrocarbons in the exhaust gas. Another term for hydrocarbons in this application would be gasoline vapors.

If you are not convinced of this try to remember back in the fifties, in California, what teenagers did for kicks. They would put a spark plug in their exhaust pipe at the very end. They would then throw a switch, rev their engine, and produce a twenty-foot flame from their exhaust pipe! The California police finally put an end to it. Too many cars were losing their paint jobs.

I would say that this is a very obvious example of just how much un-burned fuel is blown out your exhaust pipe. What is worse, it is bad enough that you are not using that wasted fuel to power your car, but you end up breathing it.

It seems that Detroit has made two backwards attempts to cut down on the emissions of unburned fuel. Rather than improve our carburetion to use the fuel, they tried two methods of dumping it. First, there was the EGR. They realized that the exhaust was so rich with fuel that they tried to send the exhaust back into the intake manifold. This would be a great idea if the unburned fuel was not carried in the exhaust gasses. The exhaust gases are rich with carbon dioxide. Sending this back through your engine would give you a similar result if you shot CO² from a fire extinguisher into your carburetor. Needless to say, this was a flop. Most mechanics just disconnect the vacuum line that actuated the EGR when a customer comes in with a rough running engine or one that consumes way too much fuel. I feel that somehow this might have indeed been an honest, but ill-fated, attempt to save some of the unburned fuel. It is possible that the engineers who knew better decided to let this one by to prove how ridiculous the concept of saving fuel was.

The other attempt slightly angers me. They basically admitted that there is far too much fuel being exhausted from the car and it is creating a hazard. Rather than