

6/26/05

## **Gone To China, The Story of Al Caggiano and the FIVS**



Imagine this - you're a poor Italian kid from a large family in small town Massachusetts. Your father is a barber. It's 1954. When you get out of school you're supposed to go over to the barbershop to wait for your father to finish up. This keeps you off the streets and out of trouble. But you hate it because then he locks you in a closet. He's afraid you're going to have a fit and scare the customers. Every once in a while you do have an epileptic fit because that's how you were wired at birth. Your father knows nothing about epilepsy and believes you are possessed by the devil, so he locks you in the closet for your own good, and who are you to disagree? You're only 10 years old and it will be a few years before you get the drugs to control your condition. While you're sitting in that dark closet one afternoon and there's no conversation on the other side of the door to listen to, you have a strange dream. You're somewhere in China. It's got to be China because all those people you see look like Chinese. They're smiling and waving at you. You're the only American around anywhere. You get scared, you don't know where you are, and then the old man opens the door. The light hurts your eyes. "Let's go home!" he says.

Fast forward to 2005 when you're 61 years old.. It's 51 years later, and you're in Guangdong Province in China for real, not too far from Hong Kong. You're there to meet with a South African man named Neville Solomon who has become one of the most important people in your life. Strange. The path of your life is hard to follow, especially for you. Most everyone you started out with has been lost along the way, but you meet new people, remarkable people, like Neville. You get confused trying to put it all together. You cannot pronounce "Guangdong" or "Fujian", the name of the city you are in. You've never been out of the USA before. You've never even talked to a Chinese person in your life, except in restaurants, but there you are on a street outside your luxury hotel and there's a crowd of Chinese people coming at you. They're all smiling and waving and saying something to you in their weird language. You suddenly remember that afternoon in your father's barbershop 51 years ago. For just a second you're a little kid again, locked in a closet, scared and confused. "Where the hell am I?" you say to yourself.

To understand how Allen Caggiano found himself in China, you have to know the story of his life as an independent American inventor and his single-minded dedication to an invention that more than once nearly cut his life short. It is an interesting and important story that might inspire you to look more closely at some aspects of your life that you take for granted, such as your ritual visits to the gas station where you fuel the vehicle you drive. How much do you really know about that gasoline and your gas guzzling car?

Despite his handicap, Al managed to build a good life. He was driven to be successful and respected and he pushed himself hard. He was never inclined to feel sorry for himself or blame others. Like his father, he had faith in the traditional promise America has always made to its citizens, that if you work hard for your unalienable right to the pursuit of happiness the rules of the game will not be stacked against you. If you fail, you have yourself to blame.

He finished high school, but that was all the formal education he had any patience for. His special gift was what is called mechanical ability. He could think with his hands. He was also a friendly outgoing guy and a good manager, just the sort of guy America needs to keep the infrastructure humming along. He decided to become an HVAC contractor and work with heating and air conditioning systems. He was too independent and ambitious to work for a wage from others or be anything less than his own man. Residential work turned out to be no challenge, nor did he make the kind of money he wanted. By his thirties he had moved into designing and developing commercial refrigeration and air conditioning systems in a multi-million dollar a year business. He supported five children and was making investments in rental property. His wife, Deb, kept the books. He made his father proud and exceeded everyone's expectations, but it wasn't enough.

Heating and cooling technology is basic applied physics. It is not necessary to have an MIT degree to understand the laws of thermodynamics. Nor is an advanced education always an advantage for an inventor. Ironically, too much education often prevents a person from seeing ordinary things in a new way. Al had the gift of an unprejudiced eye and the ability to think for himself. He was successful and comfortable as a self-made man in his chosen career, but he wanted to do something outstanding that no one else had ever done.

Al had a serious case of patent fever, which tends to afflict many Americans great and small, from the farmer who invented the automatic apple peeler by candle light, to Nikola Tesla

and Thomas Edison who electrified the world. This has always been the primary source of America's economic strength.

When the first energy crisis hit the US in 1973 with the Arab Oil Embargo, Al's chronic patent fever became acute and he was inspired to personally provide a solution to the problem. He was running six trucks with twelve employees at the time, and they weren't working. They were sitting in lines at gas stations, hoping to get another five gallons. Debal Heating & Air Conditioning was hurting, like so many other businesses in America. He was patriotically outraged that his own country could be so stupid as to put itself at the mercy of foreigners. The mightiest, most technologically advanced nation in the world was brought low by a race of camel jockeys, he thought. It was embarrassing. It just shouldn't have been happening! The solution was obvious without thinking too hard - America must become energy independent.

Most of the oil the US needed went to power the internal combustion engine, then and now. If cars and every other machine that burned oil were to run more efficiently, the US could get along just fine on the oil it produced domestically. This was true in 1973. Al thought the Arabs could then go shit in their turbans. If a car got less than 15 miles per gallon, as most of the gas guzzlers then did, how hard could it be to double or triple the MPG? The automakers were just lazy and fat, and they had grown stupid, Al thought. He knew that the Model T Ford got 25-30 MPG with a 2.9 liter engine back in 1918! Given the greater efficiency he had achieved in air conditioning systems he had designed, he knew it wouldn't be difficult to make cars more efficient.

When most Americans think of their "infrastructure", they think of roads, bridges, power plants, communications systems, schools, and so on, the big things they see on the passing landscape, but few of them think of the automobile they're riding in as part of the infrastructure, nor do they have any idea of how it works. How many people other than NASCAR fans understand the basic functioning of the internal combustion engine? The scientists, the engineers, the inventors, and hobbyists represent a small number of people out of the total population, and they are primarily the only ones who understand how the technological world works, the computers, refrigerators, power generators, pumps, and on and on, all the mysterious gizmos that make up the techno- environment in which we live and without which few of us would have the means to survive.

We are all slavishly dependent on technical things we know nothing about, blissfully, and even dangerously ignorant. Knowledge is power, as every sleazy garage mechanic understands when he takes advantage of an ignorant consumer. How much greater, then, is the power of an auto manufacturer or an oil company to exploit the ignorance of a mass population of technical imbeciles completely dependent on their cars for their livelihood? The auto manufacturers were actually instrumental in creating this slavish dependency when they helped destroy mass public transport in this country. Back in 1925, Henry Ford himself believed his cars would run better on biofuels, specifically, ethanol made from hemp. But this is another story, a story of roads not taken...

Al Caggiano believed the auto makers were simply resting on their laurels in 1973, he didn't really think they were deliberately selling the American public shoddy, outdated, inefficient, and unsafe technology. Americans trusted their automakers and loved the cars they produced. Ralph Nader was a small voice crying in the wilderness at first, but he had some

success in calling them to account on safety and design issues. He received a public apology from the president of GM in 1966 for the systematic campaign of intimidation and harassment against him after the publication of his book, *Unsafe At Any Speed*, in 1965. He did not succeed in convincing the American public that the corporate interest and the public interest were not the same, and he did not convert the pro-business, politically conservative Allen Caggiano into an anti-corporate liberal. The American public remained love-struck.

Al had worked on cars since he was a boy, and the fuel system for the internal combustion engine was to him simplicity itself. The carburetor turned liquid gas into a fine mist that mixed with air and was drawn into the cylinders and burned explosively. It was little more than a spray bottle. A fuel that burned efficiently would require less to do the same amount of work with less unburned fuel going out the tail pipe in the form of pollution. Pollution is a undesirable product of combustion that is not combusted. The question was how to make that gas burn more efficiently and release more of its potential energy?

He had heard of inventors who designed super carburetors that allowed cars to get phenomenal gas mileage. The public has grown used to hearing such claims over the years, and is highly skeptical. Because there were no such carburetors in general use, Al naively assumed, like most other consumers, that no one had actually been able to make one that worked reliably and consistently. Detroit was building inefficient technology, he believed, because they simply weren't paying attention and investing in research & development. All they really cared about was what a car looked like. He flattered himself with the notion that as a lean and hungry loner, he knew something they didn't. After all, they had no real competition to force them to innovate.

The diversity of American auto makers had been disappearing rapidly as the big fish swallowed the little ones. At the beginning of the 20<sup>th</sup> Century there were literally hundreds of small auto companies. After WW II, any attempts by upstarts to enter the market were crushed by the hand full of old boys who dominated the playing field. ( *Google Preston Tucker and his "Tucker Torpedo", 1948, or look for the 1988 Paramount/Copolla/Lucas film, "Tucker, The Man and His Dream", starring Jeff Bridges. And don't forget about John DeLorean in the 80's* )

By the mid-70's only four auto makers remained, Ford, GM, Chrysler, and AMC, and the competition among them was much restrained so that there was no true competition at all. Eventually AMC succumbed in the 80's, leaving just the three familiar big players, their cozy cartel, their stage-managed competition, and the great mass of adoring consumers drooling over next year's models, willing to spend an ever increasing percentage of their income, and hock the farm to do it if necessary.

Al began to read what he could find on the subject of efficient fuel systems for cars, but information was difficult to come by in the pre-internet days. His inclination was to follow his own nose in any case. He didn't need cautionary tales of those who had gone before, not that he would have been dissuaded in his course. He was young and full of himself. He knew this was the challenge he was looking for, it felt right, and he resolved that he would be the one to succeed. He would make his country energy independent! He would become filthy rich and famous. The world would beat a path to his door!

Without suspecting it, he had taken his first small step in the direction of China, about thirty years away. He didn't know the problem he confronted was not actually technical, but 99% political. It was some years before the patriotic, ambitious over achiever, Al Caggiano, began to

think the unthinkable, that the auto makers were deliberately selling the American public outdated and inefficient technology, because like the sleazy garage mechanic, they could get away with it and make lots of easy money.

This would be no surprise to us today since we have learned about the bad behavior of corporations, thanks in large part to Ralph Nader and other consumer advocates, but back in the 70's few among the public would have disagreed with the idea that "what's good for GM is good for the USA." And because corporate power and influence over legislation has grown dramatically over the years, we are today experiencing a stage managed "energy crisis", as gas prices climb inexorably higher, courtesy of the good old boys in the oil companies. The auto cartel only grudgingly begins to update its antique and inefficient technology, and it is paying the price for a life time of collusion with the oil companies, which are enjoying record profits, while auto sales of inefficient vehicles slump. When it finds sales hurting, the auto cartel instead complains loudly about the burdensome costs of healthcare and pensions. GM is a basket case today, Ford is in the ER for emergency liposuction, but it's the workers' fault. Go figure!

Every inventor has a "Eureka!" moment when the solution to a problem suddenly appears like a revelation. In 1974, Al was working with an evaporation coil he had designed for a cooling system he was developing and he needed to clean out the interior of the coil, but he did not have the special solvent he needed in the shop. He had some gasoline, so he used that as a substitute. He poured in a gallon at one end of the coil to flush it out and he was astonished to find that only about a pint of liquid gas came out the other end. The rest had been turned into a huge quantity of vapor. Eureka! Fuel vaporization. Vaporized fuel would burn more efficiently in the cylinders than a fine mist. All he had to do was design a device to deliver vapor instead of a fine mist and he'd realize tremendous efficiency!

It doesn't matter that the concept was not original and had been around for years, or that at the same time, another inventor in Oklahoma City, a younger man named Tom Ogle, was developing his own version of a fuel vaporization device, what mattered is that Al discovered it for himself and knew immediately what he could do with it.

Independent inventors all over the country were tinkering away in their garages in the wake of the 70's oil shock. At that time perhaps Tom Ogle was getting closest to a reliable vaporization device and realizing the most spectacular gains in efficiency, but it is impossible to know for sure. Super carburetors were developed as early as the 20's. Thousands of independent inventors were working in isolation all over the country, reinventing the wheel in many cases. There were no research programs in universities or industry dedicated to automobile fuel efficiency, and no easily accessible patent data base.

Why would an oil company sponsor the development of technology that would reduce demand for its oil? Why would automakers go to the expense of introducing new technology when they didn't have to? Only genuine competition in a genuinely free market can force a vested interest to move off its dime. Barring that, only a government mandate can move them. There has been no free market in energy or automobiles for many years, and today government acts chiefly for the special interests.

In the 70's, the auto makers were only beginning to introduce fuel injection technology to replace the carburetor which had been around since the internal combustion engine was developed in the 19<sup>th</sup> Century. They had driven Preston Tucker out of business in 1948 when he

installed fuel injection on his Tucker Torpedo, which would have given him an unacceptable competitive edge over the old boys because fuel injection increases both efficiency and power with a corresponding reduction in pollution. Fuel injection systems had been used in diesel engines in the 20's and then in aircraft engines in WW II.. In 1948 it was a familiar and reliable technology. Not until new EPA regulations were introduced in 1968 did the old boys finally get off their duffs and begin to use it. It was the late 80's before they completely switched over to fuel injection and eliminated the inefficient carburetor in passenger vehicles.

Al was going beyond fuel injection, taking the next step the automakers refused to take. They had suppressed the evolution of auto fuel systems because arrested development served their financial interests. In 1977 Al built and installed the first prototype of what he called a “fuel implosion vaporization system”, or FIVS ( rhymes with “gives” ), on a 1973 Dodge Coronet station wagon, a gas guzzler with a 318 cubic inch V-8 engine that got less than fifteen miles per gallon at best. He drove this successfully and was astounded at the efficiency he achieved, slightly over 100 MPG! It was unbelievable. He had seen newspaper reports about Tom Ogle in Oklahoma claiming even higher mileage with his vaporization system, up to 200 MPG, which he had thought was probably a hoax. But now he was a believer!

And then the FIVS failed. It failed spectacularly and blew out the side of his garage. An inventor makes the first prototype and it usually fails. He makes another prototype, and that may fail. If he survives, he eventually gets all the bugs out. He had no time to think about what some one else was doing. This other fellow was working with a different kind of system so far as he could tell from the newspaper report. He believed the FIVS concept was a fundamentally better system and the first failure was in his design, not in the concept itself.

When the FIVS worked on the car, it worked amazingly well, so why not design a device to use with a fuel oil furnace? He had acquired a rental property, a 23 unit apartment building, and it was costing him \$500 a week to heat it. He would save himself a bundle of money right away, and at the same time, he could play around and learn something about its application with other types of fuels. He was thinking about how the FIVS might work on diesel engines. He managed to cut his heating cost for the building to \$100 a week with a device he rigged up, which meant that he'd be saving \$1600 a month, a very happy development. Unfortunately, this device, too, proved unreliable and dangerous and there was an explosion and fire that damaged the apartment he was using as his operation center. Al suffered burns over 70% of his body. Oops!

These accidents underscore an important point about the risks and costs of technical innovation. Al knew that what he was doing in his apartment building was potentially dangerous and in violating of prevailing codes, but he was impulsive, head strong, and impatient with standard procedure. Being good sometimes means being bad.. Getting a device approved by the Underwriter's Laboratory can be a difficult and expensive process. Many code requirements, ANSI standards, and so on, must be met, especially in the use of fuels and gases. It takes money, a lot of money, and years of development to bring new technology to the market for general use. Large corporations can readily afford such costs, but generally avoid them if they can because it is easier and more profitable to stick with what they've got. The catch-22 of the situation for the independent inventor is that you can't use it if it isn't tested and approved, but you can't afford the official process for testing and approval. If you're Al Caggiano, you say the hell with the

risks, put your head down and charge into the territory where angels fear to tread..

In six months, he was out of the hospital burn unit where he had technically died for a few minutes. Some one else might have had second thoughts about where he was going with all this. His wife, Deb, did. But not Al. This was not his first “near death” experience. When he was nine years old and had a seizure while swimming with his friends he was momentarily drowned before he was discovered at the bottom of the pool and resuscitated. The fear of death haunts us all. We tend to be cautious and hedge our bets, but not Al. When he set his mind to something he would seize hold of it like a pit bull, and damn the consequences.

He was the only victim of his attempt to outwit the process and side-step regulations. Even so, he had to appear in court and was prosecuted for starting a fire in his own building. If Ben Franklin were today fooling around with kites and keys during electrical storms the noble Founder might do a little hard time himself! The court was unaware of what Al had actually been up to. He had good friends all his life, in particular one who had gone into law. He was able to finesse the situation and Al was convicted of “burning a dwelling without a permit”, a misdemeanor in the State of Massachusetts that did not cost him his professional licenses as a felony conviction would have.

The cost was heavy enough, however. It was a serious misdemeanor. He spent six months of a one year term in Walpole Prison, and then two years in a work-release program at a facility called a forestry camp where he was required to live with restricted freedom of action. He was allowed to go to work, but was forbidden to operate any business of his own. His wife, Deb, and a friend, took over the operation of Debal Heating and Cooling under the new name of Weatherall Research and Development. Al’s experience behind bars provided ample time for reflection and for his severely burned body to heal. He redesigned the FIVS and called it the FIVS “Gen II”, for “second generation”. When he got out on work-release he was as obsessed as any alcoholic might be with his bottle. His interest in his old business was only grudging.

At Weatherall, he built the Gen II and installed it on the station wagon. Each day he drove the FIVS-modified vehicle to work in the morning and back to the forestry camp in the evening. It performed flawlessly and the formerly treacherous vapor generator was now user friendly. With his genetic disregard for the rules, he then placed newspaper ads announcing his invention and aroused the curiosity of a local newspaper. Newspapers were naturally interested in the subject in the wake of the oil crisis.

There were more independent newspapers in those days that better reflected the public interest than today. The political atmosphere under Jimmy Carter favored alternative fuels and energy independence. Journalists felt empowered in their role as the fourth estate especially through the example of Woodward & Bernstein who had managed to expose a crooked president. Executive editors worshiped fewer taboos in an independent media because media ownership had not yet been completely consolidated in a few hands, as it is today. Today a mere 118 individuals sit on the boards of the ten media giants and these same individuals also sit on the boards of other major corporations, auto companies, oil companies, defense contractors, etc.

The point is that if a corporation, or a corporate cartel, wishes to suppress or limit information in the public domain on subjects that have to do with energy policy, for example, or any other subject, the capability exists to do so, whereas in the late 70's such corporate control had not yet been completely achieved.

Back in the late 70's, a time of relative innocence when Jimmy Carter battled vicious, aquatic rabbits with the paddle of his fishing boat, a reporter followed Al Caggiano diligently for a month because he hadn't been instructed by his editor not to do so. He noticed, *mirabile dictu!*, that this energetic, medium sized, dark haired, Italian man, who had always been a respected local business owner, never stopped for gas. He then showed up at the work release facility, undaunted by his subject's association with malefactors, requesting an interview with Allen Caggiano. The warden was outraged. Al was obviously engaging in a business of his own in violation of the terms of his work-release. The warden was pathologically shy of publicity of any kind as well as deeply skeptical about the FIVS and he informed Al that he would spend the rest of his term behind bars in Walpole unless he told the reporter he had been siphoning gas at night from other cars in the parking lot, which he believed was actually the case. Al lied accordingly. It was the most painful lie he'd ever told, much worse than the ones he told his wife now and then.

The moment he was his own man again in 1981, he began promoting the FIVS with renewed enthusiasm. He did not notice the newspaper reports of the suicide of the Oklahoma inventor, Tom Ogle, at the age of 26. Many of Ogle's friends considered his death suspicious. Al would have done nothing differently even if he had noticed, even if he had known the names of all those like himself from the 1920's onward, who had been disappointed, or worse, in their innocent desire to make fewer trips to the gas pumps. Al had the wind in his sails in 1981. He painted the station wagon bright yellow and wrote in bold black lettering along the sides: THIS CAR GETS OVER 100 MILES PER GALLON AND DOESN'T POLLUTE THE AIR.

He had resolved the technical problems with the FIVS Gen II and it worked safely and reliably. There was a small, relevant issue, however. It was probably illegal. Federal EPA regulations, written by Congress with the kind assistance of auto and oil lobbyists, prohibited any sort of modification of the carburetor or pollution control equipment on newer vehicles. "Tampering with the carburetor is a violation of Federal law," says the 1984 Chrysler Corporation service manual. It is a warning somewhat more serious than the tag on your mattress. Even though the 1973 Dodge was considered an older vehicle, they might still give him some grief. Al had completely removed the carburetor and its associated pollution controls, but he knew that the tail pipe emissions were far lower than the law required. He was breaking the letter of the law, but keeping its spirit, and he was more than willing to argue his case in court. It would be free publicity. He wanted confrontation. He wanted to tell the world his FIVS made pollution control devices obsolete. He wanted the world to know that the US could be energy independent. He was giddy with excitement.

He was sure he would soon be as rich as Ray Croc. At this point, his political education began in earnest. His lawyer and best friend from childhood told him that they'd received an offer to purchase the rights to the FIVS from a California company. It was a multi-million dollar offer that convinced him he was doing something right! Al was aware of stories about fuel saving devices from the past whose inventors had sold their rights. These devices were then never heard of again. Al's lawyer researched the California company and discovered that it was a subsidiary of a subsidiary ultimately owned by an international oil corporation. He refused the offer. A few million dollars was chump change compared to the profit potential of the FIVS.

At this point, he would have been wise to begin the study of Chinese by learning a few simple phrases. "Hello." "Thank you." "How many yuan can I get for one dollar?" "Where's the

toilet paper?” “You are very pretty. Do you like American men?” But there are none among us who can know the future so well as the past.

On the third day of his new campaign, Al got into the station wagon one morning and noticed a car pulling up behind him, tooting its horn. He got out to greet two men in suits flashing FBI credentials. While he spoke to one, the other slipped away, climbed into his station wagon, and drove it off. Astonished, he turned to watch his vehicle going down the street. Then the Fed car pulled out behind him. He stood there watching the two vehicles disappear around the corner, so surprised that he failed to get the plate number. His attorney later called the FBI office. The FBI did not recognize the names of the ostensible agents and denied any knowledge of the incident. They were not, apparently, in a mood for confrontation with Al, whoever “they” were. Was the FBI telling the truth? Were the two suits using false credentials? Wasn’t that a crime the FBI should be interested in? Maybe they just wanted to have a good look at his FIVS and were too shy to ask? He had a sick feeling he’d never see the Coronet wagon again. All he could do was report a stolen car to the local police and get on with his life. Angry and frustrated he mourned the Dodge for a day or two, then quickly found another Dodge station wagon and installed another FIVS. He painted this car yellow, too, with bold black lettering.

In a couple of weeks, two different FBI agents once again showed up. He was being careful not to leave keys in his unattended vehicle at any time. They informed him that he was violating federal laws and should cease and desist. Apparently they had taken a good look at the first vehicle and noticed that it no longer had a carburetor, or even a catalytic convertor. Defiant, and anticipating that he might soon make his case in court, he told Deb not to worry. She was more than wife and mother, she was also a partner who had believed in him and saved his business while he was in prison, but she was beginning to lose her nerve. Shortly after the second FBI visit, unmarked brown paper envelopes began arriving, containing 8 x 10 glossy photographs of the children and Deb. There was a child on the playground at school, and another child getting off the school bus. There was a picture of Deb in the supermarket, and so on. She was terrified. Ultimately she gave Al a choice between her and his FIVS. It was the most painful moment in his life. But he refused to back down. The marriage broke up.

Something in Denmark was truly rotten. He was devastated, but also angrier and more defiant than ever. The FBI was behaving like the Mafia and showing him the ugly face few Americans are privileged to see. Those who have never seen this ugly face do not believe it exists. The public image of the FBI on TV and in films has always been and continues to be strictly white hat public servants, a bunch of really good guys and gals, and an equal opportunity employer. By definition, American institutions are clean and righteous, and if “mistakes” are made, justice always prevails in the end. We are not corrupt in America. A certain portion of the budgetary outlays for government includes public relations costs. Consumers have bought and paid for the image of government they consume in front of their TV’s at meal time. Al no longer believed the propaganda. He wrote on the side of his Dodge: “THE BIG BOYS ARE TRYING TO MAKE ME AND THIS CAR DISAPPEAR! HELP ME!”

If you’re a poor Italian kid from a big family and your father was a barber, you know some of the things your father knew from all the talking heads he clipped, shaved, and oiled, and you know the world isn’t all sweetness and light. If you’re a street wise kid, you instinctively understand what a bully is whether he’s 9 years old in a t-shirt or 35 years old in an impeccable

suit, flashing official credentials. You know the police are working for the people with money and political clout, and not for you, but you hope they leave you some room to wiggle in, as they always have. You also hope your wife loves you like you love her, and if she doesn't, you hope your friends will stand by you. That's why when one of his oldest friends and his attorney, who was like a brother, refused to have anything else to do with him, he began to have the really bad feeling that he was up against something he wasn't at all sure he could cope with. "Wake up!" his attorney said, and then abruptly hung up the phone. Just like that, he was gone. And if Al saw him on the street, he wouldn't look at him or say hello.

He was suddenly isolated and alone as he'd never been, not even in prison, as his political education intensified. Obviously, the Big Boys were angry that he had refused their offer. In his mind it was clear as day that the bad players were the oil companies because it was now obvious that the FIVS could seriously reduce fuel consumption and hurt oil company profits. The auto makers had to be involved, too, because they controlled how much fuel cars used. And the government had an interest because it got its 20% in tax revenue from every gallon of fuel that was sold, which explained why it didn't significantly raise fuel efficiency requirements. It was also clear that they weren't going to use legal means to deal with him, otherwise they would have taken him to court where he could have confronted them.

He drove his Dodge everywhere he went, grateful for the stares he got, and to everyone who would listen, he told his story. He didn't know what else to do. He had no wife and children to go home to now and he lived alone in a condo, in a relentless state of fear, exacerbated by the fact that many people thought he was nuts. Some believed him and shared his outrage. The "people" were the only protection he had.

When John D. Rockefeller Sr began to establish his Standard Oil monopoly in the early 20<sup>th</sup> Century, his competitors had the relative advantage of knowing who was out to get them even if they were helpless to do anything about the clubbed heads, damaged facilities, refusal of bank credit and all the anti-competitive tactics the robber baron could bring to bear in the industrial theatre of war. Today's robber barons are more sophisticated, more subtle, and faceless. They don't bang heads unless absolutely necessary. They engage in guerilla-style psychological warfare, "psyops". And there are no Teddy Roosevelts to break up their trusts because the government is a prominent member of their exclusive club. Ralph Nader, the only politician left standing today with the capacity to deal with these aristocrat barons of bullshit has been shut out of the political system. Their secret meetings take place behind a closed door marked "democracy" and "free market economy". Their spin meisters tell the people happy, patriotic stories and the people believe them.

But not Al, not anymore. It seemed to him most people were blind and sleep walking. And he was the one-eyed man, so wide awake it was painful. His feelings towards his former attorney were especially bitter and contemptuous. How could he know what was going on and cave into it? He was a coward. Somebody had his balls in a vice. How could he live with himself? Al was beginning to have migraine head aches. They were going to get him, he knew that. He had no idea how, when or where. He knew they were watching his moves, laughing at his predicament, setting the trap. He never said anything important on the telephone. He felt like a bug in a jar, but he was a bug with an attitude.

"How can you tell if a guy's a Fed," Al asked..

“I don’t know. The suit? The haircut?”

“It’s the shoes they wear! That there gives them away, right? Every one of them wears the same stinking kind of shoe, right, the cop shoe?”

“You mean the black tie shoe?”

“Uh huh. Yeah, uh, listen to this, one time I was leaving my condo and I seen a telephone truck out there, and I look up the pole, right? And low and behold, there’s the shoe. He had the Verizon uniform, the phone company uniform, but he had the shiny black Fed shoes on! You’d think they’d change their appearance or whatever. I mean, the shoes are a dead give away. You got a guy climbing a telephone pole. He should have boots on, right?”

“So he was up ‘fixing’ your telephone?”

“Yeah. Back in them days it wasn’t so easy like today. So I stops over to the pole and I got out of the car and I says, geez, I says, hey, you know, are the Feds that hard up that they gotta climb a pole to use the phone? Hey, you wanna use my phone?”

Police Chief Richard Sproules of Brockton, MA, had a wife with a cocaine habit, and occasionally he enjoyed a toot himself. A devoted and doting husband, he would bring her gifts from the evidence locker at the BPD whenever it seemed the illicit substance might not be missed. The war on drugs is often most zealously prosecuted at the street level by this type of hypocritical individual who eventually finds himself trapped in the web of his own deceptions. Chief Sproules was seriously compromised and vulnerable to the predation of bigger players higher on the food chain. An informant who worked for the BPD, and the FBI as well, told the Chief that Al Caggiano had friends connected with a certain illegal Italian corporation and might be persuaded to become an informant himself if he were facing drug charges. Certain individuals (with a preference for a certain type of shoe ) would be most grateful for his help in this matter.

Chief Sproules understood the significance of a wink and a nod from this particular informant. He had the soldierly virtue of being completely gullible. It sounded reasonable to him, and what was to fear from a clown who drove around in a bright yellow car with black writing all over it? His friends in the mob couldn’t be too happy about that. So he organized a raid of Al’s condominium over the objections of some officers in the department who knew Al. For anyone who knew him, the whole idea was absurd. Al didn’t even like to drink. The Chief himself took part in the raid, surreptitiously planting a quantity of cocaine on the premises. Al was charged, convicted, and in 1986 found himself in prison again with a felony this time, looking at a 15 year sentence.

For Al, it was a kind of relief, kind of. He was tired of waiting for a piano to fall on his head and glad for the chance to fight. The enemy had made their move and they thought they had him and there was nothing he could do. Wrong! Many people knew that Richard Sproules was a dirty cop and Al was sure it could be proved. But to do that, he needed to contact a friend of his at the BPD, which meant he had to get out of prison. He fashioned a key in the prison workshop, from wood, and simply let himself out. Escaping through the woods he knew well because he had hunted them so often, he eluded the manhunt, the helicopters and the dogs, a real news item of the day, and was able to get in touch with his cop friend. He then turned himself in on the same day of his escape. His friend was able to put together the evidence of Sproules’ corruption, and two days later the Chief himself was arrested for thieving cocaine from the evidence locker.

Richard Sproules went to prison, which led ultimately to the overturning of nearly 400

drug convictions that had occurred during his tenure as chief. The Massachusetts Court of Appeals reversed Al's conviction and he was a free man again. For a moment, he thought he had bested the Big Boys. If some one had said to him: "Al, you need a vacation." and then handed him a free plane ticket to China, he might have said: "Do I look like some sort of fucking commie rice-eater to you?"

But the Big Boys didn't get big by letting the little guys swim out of the net, particularly a smart, cocky little guy with a big mouth. Part of the effectiveness of criminal organizations like the Mafia is their ability to enforce discipline in their ranks with impunity and impress their competitors with their ruthless resolve. A criminal associate who runs afoul of the policies of his criminal organization will not have his day in court, nor does a competitor expect gentlemanly and lawful restraint in the conduct of illicit business. But when an ostensibly legitimate organization, such as an oil company, wishes to engage in illegal practices such as the suppression of new technology, it must be able to disguise its activities behind a facade of legality. It must be able to manipulate the legal system and the laws to achieve its illegal agenda and maintain its righteous public image at the same time. The Big Boys have their back door into the legal system through which they can establish back channel relationships. The Big Boys have deep pockets and well-developed skills in the fine art of political corruption.

That is why when the Mass Court of Appeals exonerated Al of spurious drug charges and set him free, the federal prosecutor stepped in to indict him on new, federal charges. When a modern corporation is as wealthy and powerful as many small nation states, a federal prosecutor can be purchased with petty cash and a promise that his name be entered in the Supreme Court Lotto. The people of Massachusetts had determined that Allen Caggiano had been guilty of a misdemeanor when he set an apartment in his building ablaze, but according to the federal point of view, the fact that he had been sentenced to a year in prison elevated his misdemeanor to felony status. In our federal system, the laws of the people of any given state will most often yield when confronted with the arrogance and contempt of appointed, not elected, federal officials.

According to the federal prosecutor, Al, now a felon, had in his possession two shot guns, which was a violation of the US Code. A felon possessing fire arms can expect a maximum penalty of 15 years in prison. Furthermore at the time Al purchased these shotguns, he committed perjury by checking the incorrect boxes on his purchase forms. He checked the "NO" boxes when asked if he were ever convicted of a felony. He did this twice, one form for each shotgun, with a penalty of 5 years prison time for each form. Because he was a felon in possession of fire arms acquired illegally, he was also considered an "armed courier criminal", an offense meriting a 15 year prison sentence.

Al was summarily convicted on all charges and sentenced to 40 years in prison with no possibility of parole. The Big Boys smiled. This pesky little wop wouldn't be bothering them again any time soon!

Wrong!

The United States has the highest rate of incarceration of its citizens of any nation in the world with over 2.1 million inmates. Al's reputation preceded him in the prison system and he was immediately respected and celebrated for his role in bringing down the dirty cop. Within this huge population are many talented, intelligent individuals, such as former officers from

corporations like Enron and World Com and others. The symbiotic relationship between legitimate and criminal is especially fruitful in our day. Al found his place in the system, acquired loyal friends, and began his post-graduate study of political reality. He made himself useful by correcting prison heating and cooling systems that never functioned properly and was trained in the use of computers for this purpose by the Honeywell Corporation. With the help of his new friends, he applied for and ultimately received US Patent #5,782,225, awarded July 21, 1998, for his FIVS Gen II device. With the help of a Warden of Facilities at one institution, he produced the Gen II's and sold them outside. He was not held in one federal prison exclusively, but spent time in several around the northeast.

Though he was sentenced to 40 years without parole, he did not despair of ever getting out. He began to see himself as a kind of righteous political prisoner, though he did suffer depressions and sometimes thought he might be better off dead. He was certain, however, that whatever didn't kill him could only make him stronger. Though it is a cliché to say so, his body was in prison, but his mind was free and as his case was being appealed he began to put together a plan for a new life and a new strategy when he got out. The Feds could fight the Gen II. He needed a FIVS that did not violate any laws. He had also come to understand that the additives the oil companies put in fuels tended to reduce the volatility of the fuel, making it more difficult to vaporize. He now realized that many super carburetors, which were all fuel vaporization systems, had been rendered unworkable by these fuel additives.

He dreamed up a new FIVS, very literally. He would wake up in his cell in the morning and find drawings on the writing table. At first he believed his cell mate was making these drawings at night while he slept, but then he realized that he was doing it himself, sleep walking, sleep drawing. He studied his own unconscious productions, combined all the elements, a canister of T76 aluminum alloy with a platinum plated interior surface, nickle plated magnets placed in a certain arrangement, and so on, and he developed a design for a FIVS Gen III. He did not know if it would work, and if it did, he could not say why. But he did understand that the Gen III was no longer a fuel vaporization device like the Gen II. It was something altogether different. It did not merely vaporize the fuel, it changed its composition at a molecular level through the combined effects of magnetism, heat, and pressure. He had come up with a design for a mini gasoline refinery. With the support of the Warden of Facilities, who had profited from the sale of the Gen II's, he built his first Gen III prototype in a prison machine shop.

One day, in 1997, ten years into his 40 year sentence, at the age of 53, he was suddenly and unceremoniously released. It was so unexpected that he hardly knew what hit him. He was free. Later on, after he had relearned the art of self-directed living, from curiosity, he happened to ask a cop friend to run a check on him in the national criminal database. His name was not there as a felon. Yes, he was drunk and disorderly on prom night in 1962, and he had been convicted of misdemeanor burning of a dwelling without a permit, but the felony conviction on federal charges and the 40 year sentence was not there, even though the 10 years of incarceration weighed heavily on his soul. Lawyers who have attempted to make a case for his wrongful imprisonment have been frustrated by the fact that no record of his conviction and imprisonment can be found.

The stain of systemic corruption had been discretely removed. Few people are privileged to experience this miracle of the modern legal system. The only other who comes immediately to

mind is George W. Bush, who was similarly liberated from the infamy of drunk driving and cocaine use.

The Big Boys are truly awesome, but Al was incorrigible in his ways and more determined than ever to stick it to them. Armed with his advanced degree in political reality from the University of Hard Knocks, he began to put together his FIVS Gen III International organization, making use of prison contacts that included some people in the Ukraine, the former Soviet Satellite state that had become an independent republic while he was in prison. The world had changed a good bit in ten years and grown a lot smaller. It was now possible to do business on an international scale while sitting at home in front of your computer. Thank you, Honeywell Corporation.

He put up a website, which is still up, [www.get113to138mpg.com](http://www.get113to138mpg.com). The name of the site reflects mileage results he recorded testing the FIVS Gen III device on a variety of vehicles, from old carbureted 70's gas guzzlers to a Mercedes, to post-millennium Ford Explorer gas guzzlers. He arranged to manufacture the FIVS components outside the US, the cannister body in the Ukraine, with an assembly facility in Mexico. The magnets, coincidentally, were imported from China, but he hardly suspected the significance. He was too busy preparing for what he believed would be the last major battle of his life. In 2002 he solicited interested parties from around the world at his website to sign the FIVS Gen III International beta-testing agreement, pay a fee to purchase the prototype Gen III's at cost, and test their performance in different climates, under different conditions with different fuel mixtures, in a variety of different types of passenger vehicles in 40 different countries around the world. He figured this would make it impossible for the Big Boys to stop him. His web site was getting over 70,000 hits per month. And once the test result were in, the hungry Ukrainians could bang out the FIVS from their secret facility in their irrationally exuberant new capitalist republic Free of Bullshit Interference, FBI. Soon enough, millions of FIVS all around the world would reduce fuel consumption so dramatically that the Big Boys would be well and truly.....FUCKED!

Al knew there was something strange in his motivation. The intensity of his drive to produce his FIVS for the world was very impressive to others who followed in the wake of his own conviction without really sharing it. Others wanted good gas mileage and maybe a piece of the FIVS Gen III International action, a cut of the profits, a FIVS distributorship, but for them it was an investment, it was mostly about money, and for some it was also about protecting the environment from pollution. The exhaust from a FIVS modified vehicle actually smelled good. It would be nearly impossible to commit suicide by running your car in a closed garage. He was never given to introspection, but in prison he had come to realize that the FIVS was a mission. It was part vendetta, but only partly.

He hated the oil companies, he hated them in a deeply personal way. Corporations are legally persons after all, so they can be hated or loved personally. It was more than that, though, it was a mission and that meant it went beyond the personal, corporate or not. He'd never thought about it before he went to prison, and he'd never believed he was the kind of guy who would have a mission because there was something religious about that, and he'd never really felt religious until after he'd been locked up for about five years and thought he might kill himself. The migraine headaches were excruciating.

Prison had changed him. He knew now that Jesus was real and God the Father, and the

Virgin Mary, and all that. He'd never thought about religion before. He didn't know if he had a jail house conversion or not, like some of the guys he knew inside. He was no Bible thumper, that was for sure. But it was strange how he'd drawn the FIVS in his sleep, very strange. Where did it come from? He was afraid to even ask such a question. He didn't talk about it. He just went around feeling good, and very confident, like there was a guiding hand on his shoulder. He was completely without fear.

For some one on a mission, money was not the bottom line. Missionaries didn't even care too much about their own safety. The mission was all that mattered. They were fanatics, like the Jap kamikaze pilots in WWII his old man told him about when he was a kid. By his own lights, Al suspected he was a fanatic. He didn't understand it, so he hardly expected anyone else to. But he knew it was a very good thing, the best thing he could ever do in his life. When he thought about it, he saw an image of himself cutting down a tree. He was going to cut down *the tree*. And when he finally managed to cut down *that* fucking tree, he knew he would be ready to die with a smile on his face. There was no way the bastards could stop him now. They'd have to kill him. And he kind of thought they might. They'd try anyway.

In late 2002, the delivery date for the first beta testing group was set. The parts were shipped from the Ukraine to Mexico where they were assembled. It was necessary for Al to travel South of the border to oversee the operation. He made the punishing drive from Massachusetts to Mexico several times in his FIVS equipped 1970's Pontiac Catalina and it functioned flawlessly, sometimes delivering more than 90 MPG from its huge 400 cubic inch engine. His friends warned him not to drive alone, but he made the last trip by himself.

On the return leg of the journey, he noticed an 18 wheel truck following him. The intentions of this truck were soon obvious when it overtook him and forced him off the road. Al anticipated the maneuver, however, and was able keep control of the Pontiac. He breathed a sigh of relief and continued on. Somebody up there was looking out for him. He made it all the way to Massachusetts and was nearly home again before the truck found him again and caught him unawares this time. The Pontiac rolled over several times, but landed upright. The driver's side door was crushed and the roof caved in, but the car still ran and Al was able to drive it home without further incident in spite of his injuries. He had to be cut out of the driver's seat with a torch. He had several broken ribs and a punctured lung and was immediately rushed to the hospital.

The Gen III's for the first group of licensees were shipped from Mexico on time, however, by means of several different shippers. Some devices for US licensees were shipped via United Parcel Service. A total of 137 units were shipped around the world. Only those that went UPS in the continental US and Canada, a total of 44 units, did not arrive at their destinations. Every shipped item has a tracking number, of course, and when Al inquired about the missing 44 units and provided the tracking numbers he'd been given, he was informed the numbers he had did not exist.

The attempt to turn him into road kill was not completely unexpected, but Al was shaken just the same and the effect on those around him was more profound. He maintained his bravado, however, while he watched financial supporters, friends, and sympathizers react more predictably. When the intent of the suppression escalated from malicious to deadly, most began to slip quietly away. Another complicating and aggravating factor was the appearance of a

discussion group at the Yahoo website called “Get 113to138mpgNOT”.

This Yahoo Group was established by an individual calling himself “David Rodale”. He was not a Gen III licensee. He was a disinformation specialist posing as a freelance public servant dedicated to helping those who had been ripped off by the promoter of impossibilities, that unscrupulous scoundrel, Allen Caggiano. He provided advice and counsel to those who had not received their Gen III’s. He orchestrated their disappointment, convincing about 20 of them that they should file suit in Massachusetts and seek redress in the courts. Al spent much time and energy fighting back against this defamation. He was also plagued by relentless attacks on his website, which was frequently knocked out of commission.

Al was fully recovered from his “accident” by this time and had repaired the Pontiac. He was feeling every day of his 59 years, but he soldiered on with a grim determination towards whatever final confrontation awaited him. They had sabotaged the FIVS shipment and now they were destroying his credibility. His finances were in crisis. When he answered his phone one afternoon and a careful, bloodless voice spoke to him and proposed a compromise, he felt ready to bargain. The high volume of traffic at his website was a concern to them. The voice told him that if he would just remove the Gen III from his site he would be left alone.

He knew a bargain with the devil could never work in his favor, but he had to catch his breath, so he played along and removed the Gen III from his site. It was a strategic retreat. If they would just back off, the beta testing of units already out there could go forward. The program was smaller than he had originally intended, but it was a start and if he could just gather his data, then he might ultimately win this game. However, a careful examination of the FIVS in his Pontiac one afternoon made his heart jump into his throat. He found a tiny hairline crack in the T76 aluminum alloy cannister. This Gen III unit had many thousands of miles on it. It presaged a potential disaster for all the others and he immediately notified all the licensees of the problem and recalled those units. He worked feverishly and discovered that he didn’t have to redesign the cannister. A simple alteration appeared to be the solution.

It was 2003 and time for his annual medical check up. He was physically robust, though he’d been taking medication for his epileptic condition most of his life. He’d finally found a solution to his head aches while in prison. The medication prescribed had cured the migraines but damaged his pancreas, which made it necessary for him to take insulin pills. The annual trip to the hospital was chiefly for the purpose of monitoring an aneurism that had been identified years earlier in the area of his stomach. It was considered benign, but the medical opinion was that it should be monitored.

This check up was anything but routine. It was decided that the aneurism required immediate surgical intervention. After the fact, this diagnosis was shown to be incorrect. The aneurism had not posed a danger and the best course would have been to leave well enough alone. Nevertheless, while the surgery was underway, Al suffered a stroke. His heart stopped, but he was revived. It stopped again and he was brought back again. When it stopped for a third time, he was technically dead on the operating table, and further attempts to revive him failed. He was disconnected from the monitors and was about to be carted off to the morgue, when his heartbeat resumed spontaneously and his breath returned.

Though his heart had stopped, he was not actually “gone”. He recalls observing the frantic scene in the OR. He recalls that one of the attending nurses who had climbed over the

operating table in the effort to revive him was wearing blue panties, although his face was very near to her face and her posterior was only visible from the direction of his feet. He was somewhere else, in the typically dispassionate zone of the near death experiencer. He was having a very intense nonverbal conversation with a dark skinned, blue eyed personage who had a large shock of curly, kinky, white-grey hair. He thought to himself that this person was Jesus, which was disturbing to him because he'd never thought of Jesus with dark skin and an Afro. The truth be told, he'd never been fond of that race which sported the Afro, especially since his time in prison, when white prisoners celebrated the assassination day of Martin Luther King as a holiday.

Be that as it may, this person was very impressive and with great authority, informed Al that it was not his time to die. He had to finish the job, he was told, he still had work to do and he should get back and do it. Al knew he had to cut down the tree, and when he made the decision to finish the job, his heartbeat resumed. He was stitched together again, and sent to the IC ward where he lay comatose.

He was in a coma for 30 days. The devotion of one of his daughters, who argued strenuously against pulling his plug, stopped the hospital from giving up on him. It was reasonable to assume that he would never emerge from a vegetative state, given the length of time his heart had stopped. The damage to his brain was certainly irreversible.

Wrong!

When he finally came around in his hospital room, feeling more dead than alive, he was astonished to discover that he could not move his legs. Welcome back! His spinal nerves had apparently been damaged during the catastrophic and unnecessary operation. It may come as a shock to most Americans to know that the leading cause of death in the US is not heart disease, cancer, AIDS, auto accidents, murder, and so on, it is iatrogenic death, or death caused by doctors. More people die as a result of hospitalization than any other single cause. It is possible, and even likely, that Al's experience was not accidental.

Without bad luck, he would have had no luck at all. It was sometimes difficult for him in black moods to see any advantage in being the Allen Caggiano who could take bold and reckless strides in life, but as he lay recuperating day after day, he could see no advantage at all in being an Allen Caggiano in a wheel chair. The loving support of family and friends couldn't relieve the crushing feelings of futility and helplessness. He kept the television playing in an effort to distract him from his own bloody thoughts, and on the local noon news one sunny day in the spring of 2003 he watched a dramatic live report of a SWAT team in action. They were closing in around a familiar looking building. He thought to himself: "Hey! That's looks like my condo! Hey! That is my condo!" He watched the police seizing his yellow Pontiac in the parking lot as the Channel 7 reporter explained that Chelmsford, Massachusetts, resident, Allen Caggiano, had defrauded investors in a fuel saver scam and then fled the country. He didn't see how that could be true since he was in the IC ward of the local hospital, not 20 miles away, but for one fleeting moment, he did believe it. That's the Allen Caggiano he wanted to be, strolling on a beach in the Caribbean. Such is the power of television. Then he shouted in rage, and he remembered why he was back from the dead. He wasn't finished with those bastards yet!

Al returned home to his condo to find his Pontiac with three Gen III's in the trunk gone from its parking space. These were the modified Gen III's, the Gen IIIa's that were to be returned to licensees. It wasn't a bad dream, it was real! His premises had been ransacked, his computer

hard drives removed, even sensitive materials he had hidden in the attic of the condominium building had been taken, like the CD with information about all the members of the beta testing program, for example. With his mind foggy from pain killers, Al tried to concentrate on getting used to life in a wheel chair. Nurses from the Visiting Nurses Association were with him around the clock. Gradually he stopped using the pain killers. He began to notice some sensation returning to his legs.

Even as he felt himself improving, his diabetic condition inexplicably worsened. Twice he was rushed to the hospital in a state of insulin shock. The third time this happened, a nurse checked his pill caddy and discovered insulin pills that should not have been there. He was now taking insulin through injection, but the old insulin pills were still in the medicine cabinet and had been placed in his pill caddy with his other medications, with a predictable result.. The nurse, Michele, who had done this, not once, but three times, did not again appear for her shift. Al tried to reach her to ask for an apology for her mistakes, but she had vanished. The Visiting Nurses Association denied having any record of her employment.

David Rodale, slick disinformation professional, was successful in convincing some disappointed licensees to file suit, and with the newly acquired information about the FIVS Gen III International operations taken, illegally, during the SWAT assault, a postal inspector was persuaded to launch a preliminary inquiry into the feasibility of action at the federal level for mail fraud. If they could get a larceny conviction against Al in state court, they would be more confident about prosecuting him at the federal level. Rodale, scratching his tiny balls in satisfaction, announced to his Yahoo Group stooges that he was confident that the threat to society posed by Allen Caggiano was now neutralized.

Wrong!

That summer of 2004, a judge dismissed the larceny charges against Al in the Massachusetts court. His lawyer petitioned for the return of his property, the Pontiac the local police had seized a year earlier. He was told it had been taken to Washington, DC, and was being examined to determine if it violated any federal regulations. Al continued to hope he'd get it back. He was a little short and couldn't afford to keep buying cars and making Gen III's. A grand jury in DC was convened to investigate the federal charges of mail fraud, but it failed to return an indictment. The licensees who had paid their money had assumed the risks of a testing program though they may not have understood that part of the risk they assumed was the history of the suppression of new technology by the monopoly energy interests. Those who followed the pied piper, David Rodale, should apply to him for a refund.

Failing in their new hard ball efforts to stop the pesky Italian, the frustrated Big Boys again tried the soft approach. Through his attorney, Al received an offer for exclusive rights to the Gen III, an amount of money that beggars belief. Though he was broke, financially and physically, he again refused as he had done in the early 80's when an offer was made for the Gen II device. Al spent his days in a wheel chair and was slowly regaining his mobility in 2004. When he walked, it was "like Frankenstein", he said. He had nearly \$500,000 invested in the Gen III. He had disappointed many of his licensees to the tune of \$795 each. He knew that the Gen III International operation was a bust. But when his persecutors offered him megabucks as a consolation prize, he refused. The kinky haired Jesus was a hard task master. He was on a mission, and that was that.

The Big Boys have never attempted to prosecute him for the violation of federal emission control regulations. He is clearly guilty on this score so far as the Gen II is concerned. To do so would risk the exposure of the fraud they are perpetrating on the public. Their technology is obsolete and they well know it. They will go to any lengths to keep the public ignorant of any technology they do not control. They are not ready for efficient vehicles just yet, they do not want a significant reduction in the demand for oil at this point. You may hear talk of “peak oil”, but don’t let this confuse you. This does not mean there is a fuel shortage at present or will be in the near future. It means prices will go up because of a *perceived possibility* of shortage. They will not permit a significant reduction in the demand for fuel without a corresponding escalation in price.

The Big Boys control the supply of fuel, of course, but just as importantly, from their omnipotent point of view, they also control the demand. *That is what the suppression of new technology is designed to do.* They will supply you with what you need at the same time they determine how much you need, and what you will pay. The operations of a “free market” have very little to do with it. They have taken total control over the energy market and guaranteed for themselves unimaginable profits in perpetuity. A very sweet deal for the aristocratic robber barons of energy, a very bad deal for the peasant consumers and the environment.

“But you are continuing, aren’t you?” I asked when I spoke with Al later on that summer.

“I am continuing!” Al said vehemently.

“But, Al, they kicked your ass! They shut you down!”

“Yeah. They kicked my ass, right? Look at it this way. I let ‘em kick my ass, OK? Pretty soon these bastards are going to get tired of kicking my ass! They’re gonna get blisters, right? I’ve got enough people behind me that know how to do the right thing. I’m tired of all this bullshit! The Feds are going to screw up one time and I’m going to get em!”

“How’s that?”

“I don’t know how..... I just don’t,” Al said with huge weariness. “But I’m tired of their bullshit. They don’t scare me. I go after the big boys and I’m like a little ant and they’re an elephant. I go and give em a little bite on the leg. And one of these days, I bite em enough and I’m gonna at least get the leg infected. I mean, they tried everything on me. They tried killing me, right? I don’t die, I don’t stay dead.. I ain’t giving up. Hey, you know what I seen one time that really impressed me? I was watching Discover on TV. Maybe it was National Geographic. Whatever. OK? I’m looking at this elephant, right, and he’s gliding across the desert, sideways, instead of walking, Know what it was?”

“No. That’s weird. What was it?”

“Ants! Thousands and thousands of ‘em. African ants carrying an elephant across the desert! They carried him to their house there in the desert and they just took him apart piece by piece. The elephant just disappeared!”

“Amazing!”

“And you know what I’d like to say? I’d like to say: ‘Calling all ants! Calling all ants! Come and help me with this fucking elephant!’”

When you’re into a David and Goliath scenario like Al, you’ve got to know when to hold em and when to fold em. He knew it was time to fold, but he also knew the game wasn’t over. There was still another move he could make, his last move, one he didn’t really want to make.

Sure, he was on a mission, but for a guy with patent fever all his life, the last thing he ever wanted to do was give up his chance to own the patent for his baby, the Gen III, not that he could afford the nearly half a million it would have taken to secure the patent in this country and others around the world.. It was the ultimate sacrifice. No one did something like that, except maybe Jesus Christ. No one truly wanted to help pry the hands of the Big Boys from the neck of the American public. Even people who claimed they were on a mission, the good guys, in particular one Steven Greer, the founder of an organization called The Disclosure Project, which was dedicated to forcing the government to reveal to the public the secret technologies hidden away in the military/industrial complex, even these self-proclaimed missionaries wanted exclusive control of his FIVS. They came to help, so they said, but it was bullshit. They wanted exclusive control, they wanted the licensing fees, the royalties, the money!

He was used to standing alone. It was a matter of pride. He'd cut off his own arm before he'd let the Big Boys win this game. It was very personal. It was like Hari Kari, or some fanatical Jap kamikaze pilot. He allowed his patent application to expire, then he published the basic design concept on his website to prevent anyone else from stealing the patent and gaining exclusive control. Soon after, he made CAD drawings available to the public so that anyone with the capability could build the Gen III. The Big Boys had broken his bank and his health, but could they now stop thousands of others around the world? As he had done in the 80's, he placed his hope in the people.

Then he went into the on-line mortgage business, which was something he could do sitting in his wheel chair at his computer, and on the side he fielded queries from people interested in the FIVS. He does well brokering mortgage paper, well enough to enable him to get out of the condo where he felt like a sitting duck and into a more secure living arrangement. His new place has a sophisticated security set up the Feds would find most interesting should they decide to check it out. His heating bills are remarkably low. He spent a lot of time at home now eating more take-out than he ever did, mostly Chinese. Italians tend to be a bit chauvinistic about their own cuisine, but Al found himself eating more Chinese food than he ever did before. He didn't wonder about that, of course.

Keeping his website up was almost a full time job in itself. It was under constant attack. There were numerous queries from individuals in this country and around the world who wanted to build the FIVS and he had to evaluate each caller's potential. They were far more likely to qualify for a refinance. One individual claimed he had produced a FIVS but it didn't work, which was no surprise to Al because he did not strictly follow the directions and bring the fuel to the correct temperature. No telling how else he screwed up.

Al could not be an itinerant shop teacher. He realized there would be very few who could ultimately do it and he could only realistically work with one or two others. He began to wonder if he'd made the wrong move. But then, early in 2005, he got a call from the man he was looking for. After several hours of talk, he knew he wanted to work with Neville Solomon. Neville understood the FIVS, it seemed to Al, even better than he did! He had the right stuff. He was a genius! Al was hot to go to Mississippi right away. Mississippi, for crissake! Cotton Fields. Bull Connors. Gangs of deranged white people screaming at little black girls. Water hoses. Martin Luther King. It was the last place he ever imagined to find his man.

Neville Solomon was born into the wealth of a conservative Jewish family in

Johannesburg, South Africa. It is unlikely that he will ever gain access to any of that family money because he got interested in Christianity as a teen, undertook a study of the Christian religion, and ultimately became a minister. He was disinherited by his father and banished from the family heart and home. For a number of years in the first flush of enthusiasm for his new identity, he was engaged in missionary activities such as Bible smuggling under the auspices of the “Iron Curtain Ministries”, and helping to counter communist influence with his Christian message while alleviating the living conditions of the poorest in the Philippines. He declined an invitation from George Schultz in the Clinton administration to enrich his Bible smuggling activities with a little patriotic espionage and remained blissfully ignorant of the dark political dimensions of his religious evangelism.

He had always been deeply curious in the area of physics and chemistry and had a special interest in the mysteries of electricity. It seemed to be the most abundant energy in the universe.. And what was energy itself? Wasn't energy in the physical world the equivalent of God's grace in the spiritual one? These questions were as intriguing to him as the theological debates about the nature of God and the purpose of life. While ministering to the cast off children in the Philippines who lived like rats in the public dumps, he took an interest in the battery salvaging activity of these dump dwellers. They broke apart old car batteries for the value of the lead they contained. Neville discovered that these batteries were not junk at all and could be raised from the dead through the miracle of chemistry. They could be restored to their original potency and resold. It was possible to extend the useful life of a battery indefinitely.

His commitment to his evangelical activities began to fade after the Philippines as he gave more of his attention to the world's energy problem. The developed countries had an embarrassment of riches made possible through an abundance of cheap energy derived from oil whereas the undeveloped countries wallowed in poverty through a lack of access to affordable energy. Oil was a costly non-renewable resource that was playing havoc with the world's environment, whereas the mysterious substance called electricity was not being developed as he thought it should be. The solution to poverty and suffering, he concluded, was cheap renewable energy for all, as renewable as the grace of God. He transformed his passion for religion into a missionary zeal for the development of alternative energy.

Until he connected with Al Caggiano and the FIVS, he lived in the bright ideological space of conservative Christians and was a loyal Republican. If he had been a citizen of the US, he would have voted for Bush. He had permanent resident status with his American wife and children in Mississippi and a job doing research in biodiesel fuels. On his own time in his garage, he worked with batteries and an over-unity electrical generator, a device that produced more net energy than was required to run it, a so-called free energy generator. He was also working with bioelectrical medical devices based on the pioneering work of the Russian researcher, Georges Lakhovsky ( 1869-1942 ). He was just passing time with Mississippi Biodiesel, Inc., and being well paid for it, but he needed more money for his own work. Electrical energy was the future.

There would be some money in biodiesel, but it was a small market in a world dominated by gasoline engines. Why not research fuel efficiency for automobiles? Obviously, whoever could give fuel efficiency to the American public would be an instant billionaire! He heard the seductive siren song loud and clear, just like Al and so many others. His view of America was essentially that of the starry-eyed immigrant who sees a free country with unlimited opportunity

for the guy with the right stuff.

He began looking around to see what had been done and eventually discovered [www.get113to138mpg.com](http://www.get113to138mpg.com). Neville decided it was not necessary to reinvent the wheel. He had also been looking at the “vapor box” concept of Tom Ogle, but like Al, he realized that the FIVS was a step beyond fuel vaporization. It overcame the negative effect of oil company fuel additives. He was a quick study. He concluded that the FIVS was the way to go and was hot to build it, sell it, and get rich, so he could develop his own electrical generation and storage technologies as well as bioelectrics for medical purpose.

“It ain’t that easy,” Al warned him, but at that point Neville wasn’t certain that Al Caggiano was playing with a full deck. Al’s website did not convince him that a conspiracy to suppress new technology really existed. That sort of thing just didn’t happen in a conservative Christian Republican world, the Horatio Alger fantasy in which he lived. However, he did believe it was possible for a paranoid to invent a remarkable fuel saving device. He ignored Al’s warnings and stories, just as Al had done when others tried to warn him, and focused his attentions on technical matters.

He did not doubt that the FIVS worked because he was familiar with the chemistry of the catalytic cracking of complex hydrocarbon molecules. He was intrigued by the effects of the magnetic field in combination with high temperature, pressure, and the circulation of the liquid as it passed through the FIVS to become “strawberry juice”, as Al called the gasoline after it was transformed in his mini-refinery. The new gas had a pleasant, strawberry-like odor. His experience with electricity and magnets inspired him to make some suggestions about the placement of the magnets and the design of the cannister that led to an intimate collaboration between them. They trusted each other immediately in spite of their mutual reservations. Al worried that Neville was seriously naive. They worked smoothly together, developing a new FIVS design they called the Gen IV

Neville is the type of creative individual who rarely thinks *inside* the envelope. He is the perennial outsider, impatient with things as they are because he so clearly sees a vision of the brilliant future. He has a level-headed American wife and *seven* children to help him pay attention to the ordinary concerns of the present.

When Neville made a presentation for the development of the FIVS to the financial backers of the biodiesel operation, they were impressed and willing to listen. The chief moneybags, who had made his fortune through a string of drug stores in the South, dismissed the suppression theory as the product of an unbalanced mind. Liberals weren’t used to losing elections and it made them paranoid. He was enthusiastic and wanted to see a prototype.

To win over the investors, Neville had to first of all convince them that super high mileage was actually possible. There was, and is, universal public skepticism about fuel efficiency, based on the erroneous belief that if it were possible, the automakers would have done it already. He quickly improvised a device that would generate hydrogen and inject it into the fuel stream of an automobile. The addition of hydrogen created an impressive, but temporary, spike in fuel efficiency that would make a believer of anyone. It would only last for two or three tankfuls of gas, however, before it failed, but that was all he needed to completely sell his investors while he went shopping for the FIVS materials, which included T76 aluminum, a type of aluminum that was alloyed with titanium and used in aircraft and other special applications.

Neville was blissfully unaware that one of the special applications was to make equipment for the gas diffusion process that was part of the enrichment of uranium necessary for the manufacture of nuclear weapons. The famous aluminum tubes possessed by Saddam Hussein's Iraq that were falsely claimed as proof of his intent to enrich uranium were purportedly made of T76 alloy. The Patriot Act in post-911 America defined this T76 aluminum as a sensitive material with consequences for national security, so the FBI became aware that a native South African, non-citizen US resident was making inquiries with the intent to purchase this sensitive material. All his communications were therefore monitored. It was no longer necessary for FBI personnel to climb telephone poles disguised as Verizon employees. They visited his workplace and spoke secretly with his colleagues. They examined his private workshop in his garage without his knowledge.

The end result of the FBI investigation was to clear Neville of any suspicion of terrorist involvement. They knew, however, that he had serious financial backing to build the FIVS and that he was deeply involved in other types of unusual technology. No elaborate conspiracy was required to stop him from doing what he was doing. He was an easy mark, bright-eyed, cooperative, and unsuspecting. The FBI gave him a pat on the back and simply handed his case over to the INS.

In legal terms, the terms that matter, the INS is concerned with "administrative" matters as opposed to "judicial" ones. What this means, in effect, is that the INS is a law unto itself. An individual under INS administration is not subject to normal civil or criminal judicial procedures. Habeas corpus does not apply. The INS decides his or her fate, with no appeal under civil or criminal law, and the non-citizen can languish forever in detention.

Neville was hard at work one afternoon in the spring of 2005, installing one of his hydrogen generators on an automobile. Out of the blue, several officers of the INS, a humorless group of thugs, approached him, inquired if he were Neville Solomon, and promptly handcuffed him and shackled his legs. When he insisted that they tell him what was going on and where they were taking him, they threatened to charge him with resisting arrest and treated him roughly.

They hauled off this father of seven children to a detention facility. He was stripped naked and subjected to the indignity of physical examination in full view of leering female guards. He was doused with disinfectants that irritated his skin and choked his breath. He was a young man not yet 40, in excellent physical condition, but the shock of his arrest and humiliation drove up his blood pressure to dangerous levels and caused an erratic heart beat. He did not lose his innocence easily. The experience nearly killed him. He felt betrayed by all that he had trusted, the glorious promise of the American dream.

The charge against him related to an incident in 1992 when his brother, a South African citizen, who was visiting in Canada, attempted to cross over into the US to spend the Christmas holidays with Neville and his family. His brother, for reasons of his own, lied to the border official when asked if he were an American citizen. He glibly said he was. Neville was astonished that his brother would tell such a whopper and for about 20 minutes he mulled it over until he finally told his scofflaw brother that he had to tell the truth. He then approached the official and corrected the record. The damage was done, however. For about 20 minutes, he had been guilty of assisting an alien in his attempt to make illegal entry into this country.

From this minor incident, provoked by a pothead brother, there developed consequences

of Kafkaesque horror and weirdness, involving a Jewish immigration lawyer who resented Neville for becoming a Christian, bad legal advice, misattribution of statements made by Neville's brother to Neville himself, postponed appeals, obtuse officials, terminal confusion, the election of George W. Bush, the destruction of the World Trade Center, passage of the Patriot Act, the illegal war of occupation against Iraq, and, finally, 13 years later, on a warm spring afternoon in Tupelo, Mississippi, a gang of INS thugs snatching an innocent Christian husband from the bosom of his devoted family. They claimed he was a fugitive and they had been searching for him for five years, which was, of course.....bullshit. They had completely forgotten about him, until a discrete call from the FBI alerted them to the presence of an undesirable non-citizen in our midst.

The INS facility that processed Neville Solomon and stripped him of his illusions about America is operated by a private contractor. Privatization of government operations, favored by conservative Republicans, has turned the INS into a legal body snatching operation. Each non-citizen represents potential profit for facility operators in the post-911 United States, so the INS enthusiastically, and indiscriminately, pursues every lead, snatching any warm non-citizen body that can be found. In detention, Neville met a wealthy Chinese businessman, by the name of Kevin Ng, who had been snatched without cause by avaricious INS agents, and in their adversity, Neville and Kevin became fast friends for a week. "Come to China," Kevin said. "And we will build the FIVS. I have all the money you need." Though Kevin spent just one week in INS hell, and had received an official apology for his mistreatment owing to his wealth and contribution to the US economy, he was nonetheless gravely insulted and had resolved to return to China.

Neville Solomon, however, received no VIP treatment. He was incarcerated for two months and it seemed as though he might die along with his illusions. His heart behaved erratically, he became anemic. Fearing his death in custody, the INS put him in a medical ward and began testing to discover the problem. He was chained to the hospital bed, under guard, because he had dared to protest on the day he was snatched. They wanted to do a blood transfusion, but he refused. Freedom was the only cure for what ailed him. Like Kevin Ng, his revulsion against the US was so strong that he wanted nothing more than to leave the country. He demanded that he be deported. He knew that there would be no justice from the INS and he was certain that if he remained incarcerated, waiting for his case to be decided, he would die.

On the balance sheet, Neville's warm body had become a liability instead of an asset, owing to his failing health and the mounting costs of his treatment. The INS therefore acted with unaccustomed efficiency and put him on a plane to Johannesburg, South Africa. In a maneuver designed to prevent him from ever returning to the US, never mind his American wife and American children, he was given a document on board the South African air liner informing him that he had been convicted of an aggravated felony. If he had deplaned at that moment and stepped back onto the tarmac of US legal jurisdiction, he would have been arrested and imprisoned for 20 years, though he had never been formerly charged or convicted, or at any time had even harbored a felonious thought, prior to being snatched.

Neville finally understood what Al had been trying to tell him, and Al was miserable with feelings of guilt. But as a free man again, Neville quickly recovered his health and his determination to proceed with the FIVS project. He had made a contract with Kevin Ng, and in Johannesburg, he found help from friends and a ticket to Hong Kong.

Al had been talking with Kevin Ng as well, and with his friend and partner, Kenny, he was already in China, awaiting Neville's arrival. On the street in front of his hotel, he was feeling a little woozy with the sense of *deja vu*, staring at the crowd of Chinese people waving at him and yelling something in their strange language. It was a little frightening at first. But soon enough, he understood that they were the welcome wagon, not a mob out to lynch a foreign devil. The word was out on the street that he was an American, and the Chinese people had come to see Americans like Santa Claus because they brought jobs. It was strange to feel like a hero, but it was nice. He shook hands, he smiled, and he thought, if this is a commie country, where's the problem? At the same time, he was sad, and angry at his own country for being so stupid.

As of September, 2005, the FIVS Gen IV is installed and being tested on different types of automobiles. Before the year is out, it will be manufactured in China. When it becomes available in the US, *if* the sale is not prohibited in this country, then like so much else, it will bear the stamp "Made in China".