



Tribune photo by Scott Strazzante

DaimlerChrysler's ESX3 was once hailed as a giant leap forward in car technology but lost its luster when the Supercar program was scrapped. Now inoperable, it is being pushed into a Chrysler museum near Detroit.

Supercar: The tanking of an American dream

Dependence on foreign oil helped launch a historic national effort to build an 80-mile-per-gallon automobile. But politics and self-interest killed it.

By Sam Roe
Tribune staff reporter

On a crisp fall morning in 1993, President Bill Clinton and Vice President Al Gore walked side by side out of the West Wing of the White House, past the Rose Garden, and onto a small stage on the South Lawn. There, they greeted three of the most powerful business leaders in the world: the chief executive officers of Ford, General Motors and Chrysler.

Before dozens of dignitaries, the president announced that America was embarking on a technological venture as ambitious as any the nation had ever attempted.

Over the next 10 years, the U.S. government and the American auto industry would combine the full weight of their resources—billions of dollars, the best scientific minds and previously secret Cold War technologies—to build an invention simple in concept yet critical in

importance: a family car that achieved 80 miles per gallon.

This "Supercar" not only would be a tremendous boon to the environment, reducing pollution and slowing global warming, but it also would cut the nation's reliance on oil imports from the volatile Middle East and inject new life into a stagnating domestic auto industry.

In short, Supercar would make America a cleaner, safer and more prosperous place in

which to live.

"We do not have the choice to do nothing," Clinton told the crowd.

But nine years after it was born in pomp and splendor, Supercar is dead.

The victim of bureaucratic turf wars, a hostile auto industry and self-serving politicians, the car that was supposed to change everything now stands as a sobering reminder of the forces arrayed against greater fuel efficiency and a cleaner environment.

Lost were years of effort, \$1.5 billion in taxpayer money and perhaps the best opportunity the nation has had to address some of its most pressing issues.

In fact, the very problems Supercar was supposed to help solve have only worsened.

America now imports 56 percent of its oil—the highest

The series

► SUNDAY
PART 1:
STARTING UP
The concept for an 80-mile-per-gallon car is born.

MONDAY
PART 2:
SHIFTING INTO GEAR
After a slow start, engineers make impressive headway.

TUESDAY
PART 3:
HITTING THE BRAKES
70 miles per gallon—and then a dead stop.

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SPECIAL REPORT: THE TANKING OF AN AMERICAN DREAM

SUPERCAR: \$1.5 billion in taxpayer money spent

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ever and twice the amount of 20 years ago. And at a time when the nation is poised to go to war with Iraq, oil imports from the Midwest continue to rise.

Scientists increasingly agree that global warming is real and worsening, and that pollution from millions of cars in the United States is a factor.

The Japanese, who wanted to be part of the Supercar project but were rejected, have raced ahead of the Americans in auto technology, putting on the market in five years what Detroit couldn't in 10: an ultra-efficient car.

And the average fuel economy for new U.S. passenger vehicles is the worst in 20 years, largely because of consumers' desire for gas-guzzling sport-utility vehicles and pickup trucks.

It didn't have to be this way.

A review of thousands of government and industry documents, including dozens of confidential White House records, and interviews with key Supercar participants show that the Big Three automakers and U.S. government officials repeatedly put their own short-term interests and political agendas ahead of what was good for the project and what was good for the country.

The Supercar project had been cited as a cornerstone of America's energy and environmental policies for nearly a decade. When top government officials and automotive executives were pressed about what they were doing to protect the environment or to conserve energy, they frequently pointed to Supercar.

But year after year, officials neglected the project, telling the public it was making slow progress when they knew that it was not. When Supercar finally did get on track, government and industry officials quietly shut the program down.

Detroit was more interested in catering to America's thirst for SUVs and pickup trucks, while Washington officials perpetuated their reputation as bureaucratic handbrakes by fighting among themselves and leaving Supercar vulnerable to political attack.

But this is not a story simply about government, big business and corporate maneuvering.

It is also about how an unlikely cast of characters, from CIA agents to a summer engineering intern to some of the biggest names in government and industry, came together—often grudgingly so—to attempt a project so technologically daunting that the White House had compared it to putting a man on the moon.

The engineers determined to build Supercar included Charles Gray, the brilliant and quirky federal scientist who had dreamed of designing a Supercar ever since he was a teenager tinkering with engines in the back hills of Arkansas.

Also contributing was Francis Castaing, the renowned car designer who helped usher in the era of the SUV but who was now being asked to help undo the damage.

Championing the effort from the White House was Vice President Gore, who personally negotiated the Supercar agreement and then promoted the project for years—at times only when it was politically expedient.

Gore, White House documents show, struck a secret deal with the Big Three in 1993 that was highly favorable to the industry. If the automakers tried to build Supercar, Gore promised that the Clinton administration would back off its 1992 campaign promise of trying to force them to raise the average fuel economy of their cars from 27.5 to 40 miles per gallon by 2000. The automakers, who make more money on large vehicles than small ones, had opposed the 40-mile-per-gallon plan, saying it would greatly reduce their profits.

Over the next three decades,



Irbane photo by Scott Szusterman

The average fuel economy for new U.S. passenger vehicles is the worst in 20 years, largely because of consumers' desire for gas-guzzling SUVs and pickup trucks.

The threat of higher fuel efficiency requirements was perhaps the most powerful weapon in the government's arsenal. Yet for almost a decade the government failed to use it, even as the industry stalled, fell behind and finally moved to kill Supercar.

Tinkering with engines

In many ways, the story of Supercar begins in rural Arkansas, in the tiny town of Fountain Hill, population 19. Back in the 1960s, the town was much like it is today: a loose collection of small farms, wooden shacks and mobile homes in the gently rolling hills just west of the Mississippi River and north of the Louisiana border. Many of the roads were unpaved, there were no traffic lights, and horses outnumbered people.

For teenagers growing up in Fountain Hill, there were few diversions. Boys spent much of their time hunting for squirrels and tinkering with engines. When they were old enough to drive, many souped up their cars and raced them on the back roads.

One of these boys was Charles Gray, a skinny teen with squinty eyes. The son of the local school superintendent, he was a strait-laced student with an unusual grasp of science and math. "You know how you can look at kids and see that they're something special?" asks Mary Joyce Clifford, 70, a longtime school secretary. "You could tell he was a genius."

Like the other boys, Charles spent hours fiddling with engines. But instead of trying to make them more powerful, he tried to make them run farther on a gallon of gasoline.

His friends found his hobby strange, but Charles was intrigued by what he had read in a 4H pamphlet: When gasoline was burned in an automobile engine it created a tremendous amount of energy but only a small amount of that energy was used to turn the wheels and make the car go. Most of the energy was lost throughout the automobile—during engine idling or because of friction in the transmission, for example.

"I thought, 'What a waste. Someone should do something about that,'" he recalls. At age 16, he set up a makeshift laboratory in an old water pump house in his back yard. Using a wheelbarrow, he hauled in a Chevy Impala engine and bolted it to a concrete post in the middle of the room.

He adjusted the carburetors, fixed the timing and played with the idle. The results were generally not successful. At times, his mother grew alarmed when she looked out the kitchen window and saw smoke drifting from the pump house.

But Charles Gray had found his lifelong passion. After graduating No. 1 in his high school class, Gray moved four hours northeast to the campus of the University of Mississippi, where he finished at the top of his class in the college of engineering. He married his high school sweetheart, and in 1970 joined the newly created Environmental Protection Agency.

Over the next three decades,

Gray developed a reputation as an energetic and quirky EPA scientist and administrator. He often talked in fits and starts, changing course in mid-sentence or baffling listeners by discussing two ideas at once or simply rambling on at length.

But he also was known as an intense and deceptively folksy regulator. Generally disliked by the auto industry for his unyielding stands on pollution, he played a leading role in the establishment of the first fuel economy standards in 1975 and the tightening of clean air rules in 1990.

Above all, he knew cars like few others.

That is why the White House called him in 1993.

An idea is born

Fresh off their election victory, Bill Clinton and Al Gore, two Baby Boomers who had vowed to "re-invent" government, started trumpeting technology as a way to combat some of America's toughest problems.

One of their ideas was for the government to conduct a massive research project with the Big Three to improve fuel efficiency. U.S. passenger vehicles were not getting any more mileage than they had eight years earlier, and the new administration was concerned that Midwest oil imports had doubled over that time and that global warming was becoming a household phrase.

The administration knew that if the U.S. fleet could improve just two hours per gallon, about 700,000 barrels of oil could be saved each day. But the White House was struggling to come up with a specific plan that would capture the public's imagination.

Henry Kelly of the White House's Office of Science and Technology Policy decided to telephone Gray, whom he had known since the 1970s when they collaborated on a book about the environment.

Gray told his old partner that the problem of fuel efficiency was relatively simple—and not much different than what he had learned from the 4H literature as a teenager.

He now knew the numbers broke down this way:

Sixty-two percent of the energy that begins as gasoline in a car's fuel tank was lost as heat in the engine combustion process; 17 percent was lost to engine idling; 6 percent to the transmission; and 2 percent to accessories such as air-conditioning and power steering.

In the end, just 13 percent of the energy in the gas tank made the car go—and half of that was subsequently lost to wind and tire resistance.

Inventors had long demonstrated that these figures could be improved and that vehicles could achieve spectacular mileage. But these inventions were invariably little more than auto-show curiosities or one-seat contraptions.

One that captured media attention was the University of Saskatchewan's "Cruisecap Gopher." Weighing less than 100 pounds, it had a steel-tube frame, bicycle wheels and a lawn-mower engine. It got 2,199 miles per gallon.

Gray wondered: What about the best-selling cars on the road? Just how far could they go on a gallon?

Working out of his EPA laboratory in Ann Arbor, Mich., Gray began to pull together scientific data on some of the Big Three's top models: Ford Taurus, Chevy Lumina and Chrysler Conquest. Over the next few days, he and his staff pored over the information to learn more about the cars' aerodynamics, their weights, their engine efficiencies and their tire resistances.

They calculated how much energy could be saved in each of these areas and how much energy could be added to the mix if they could somehow capture the braking energy of each car. When brakes slow a vehicle, all of the energy of the car's motion is lost. Gray figured that most of that energy—80 percent—could be captured, stored and reused.

When he added it all up, he concluded that if the nation put its mind to it, it could build a mid-size, safe and affordable car that got 80 miles per gallon. The White House loved the idea, particularly Gore, whom Clinton had tapped to take the White House lead on the effort.

Gore asked that a government

team go to Detroit to see what the automakers thought of the idea.

Detroit, D.C. at odds

For decades, Detroit had been the country's industrial powerhouse, transforming the car into a national icon and reflecting, for better or for worse, America's signature values: self-reliance, competition, freedom.

The automakers defended their interests relentlessly, particularly when Washington demanded new rules on safety, pollution and fuel economy. Detroit complained that Washington was often seeking new regulations without considering whether the industry had the money or the technology to meet those standards.

But Washington thought Detroit was not trying hard enough—that it frequently claimed it could not meet new standards, then proved that it could.

The fiercest battles—and some of the most heated ever in Congress—were over fuel economy rules, established in the 1970s in the wake of the Arab oil embargo and the national energy crisis.

Almost overnight, the crisis reshaped America's way of life: Thermostats were dialed down to 68, the speed limit was dropped to 55 and skylines were dimmed. People who rarely thought about energy suddenly formed pre-dawn gas lines, added driving costs to their budgets and carpooled to work.

In Detroit, the automakers were caught flat-footed. Most of their cars were big and heavy, averaging 15 miles per gallon—far below the smaller Japanese imports.

"Before the oil shock, you couldn't give the Japanese cars away," recalls former GM executive Craig Marks. "The day after you couldn't give away the big cars."

Detroit closed factories and laid off tens of thousands of workers. To save fuel, Congress passed the corporate average fuel economy laws, or CAFE, requiring manufacturers to nearly double the average mileage of their passenger cars to 27.5 miles per gallon by 1985.

The industry objected, saying

it would force motorists into tiny, unsafe vehicles. But Detroit eventually found a way to cut car weight and meet the new standard without sacrificing safety. In the process, the industry became more competitive.

For the next eight years, from 1985 to 1992, when gas prices were relatively low, Congress did not require additional fuel economy for automobiles, and mileage figures remained flat.

Clinton raised the ire of the auto industry when he ran for president and advocated raising the standard to 40 miles per gallon by 2000—a dramatic increase that the carmakers said would cost thousands of jobs. Later in the campaign, Clinton softened his position, calling his idea merely a "goal" and not necessarily a proposed law.

Automakers were even more suspicious of Gore. In his 1992 book "Earth in the Balance," Gore called for eliminating the internal combustion engine in 25 years, saying the damage it caused the environment posed "a mortal threat to the security of every nation."

Now, President Clinton and Vice President Gore wanted a joint research project on fuel economy. Washington and Detroit had collaborated before—to develop high-tech car batteries, for example—but never on such a contentious issue.

And so far, the White House had not spelled out precisely what it wanted from the industry on this big research project.

Making the pitch

On May 19, 1993, a team of three government officials, including the EPA's Gray, left for what would be the first of several trips to Detroit to sell the Supercar idea.

Their first stop was Ford, where, before a packed conference room of engineers and executives, they made their pitch for an 80-mile-per-gallon car in 10 years.

The Ford officials were aghast. "They almost ran us out of the room," Gray recalls.

They said 80 miles per gallon was impossible to do in a family-size car and not at an affordable price. And even if they could do it, they worried that Congress might force them to mass produce the cars regardless of whether the automakers could make money on them.

At GM, the reaction was similar: interesting idea, but too difficult and too expensive. Disappointed, government officials went to their final stop: Chrysler, the smallest of the Big Three and therefore the corporation with the most to gain from a joint R&D project.

There, the officials met Castaing, Chrysler's chief engineer.

Born in France, Castaing was widely admired as a charismatic, no-nonsense engineer who embraced challenges. He had designed race cars for the Renault Racing Organization in the 1970s, and,

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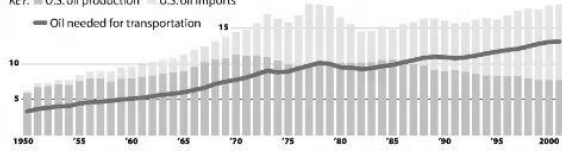
In 1973, cars line up at a New York gas station. Some of Congress' fiercest battles were over fuel economy rules, established in the wake of the Arab oil embargo and the national energy crisis.

The U.S. continues to rely on foreign oil to meet its transportation needs ...

Beginning in 1986, the United States needed more oil for transportation than it produced, increasing the dependence on foreign oil.

OIL PRODUCTION AND CONSUMPTION IN MILLIONS OF BARRELS PER DAY

KEY: ■ U.S. oil production ■ U.S. oil imports



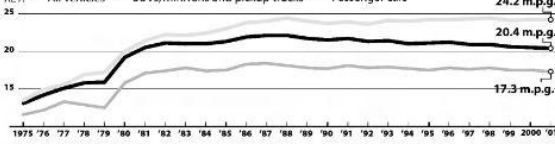
Source: U.S. Department of Energy, Transportation Energy Data Book; Light-duty automotive technology and fuel economy trends report by the U.S. Environmental Protection Agency

... while the drive for higher gas mileage stalls

The average fuel economy of new vehicles on U.S. roads is at a 20-year low, largely because of an increasing market share of SUVs and pickup trucks, which are less fuel-efficient than passenger cars. The average takes into account the number of sales for each model.

AVERAGE MILES PER GALLON OF NEW VEHICLES

KEY: ■ All vehicles ■ SUVs, minivans and pickup trucks ■ Passenger cars



Chicago Tribune/Hayes Park and Phil Geib

SPECIAL REPORT: THE TANKING OF AN AMERICAN DREAM



Auto executives Robert Eaton of Chrysler (from left), John Smith of General Motors and Harold Poling of Ford talk with then-Vice President Al Gore during their first meeting in Washington. To Gore's right is John Gibbons, who was President Bill Clinton's science adviser.

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after joining American Motors Corp. in 1980, helped create the Jeep Cherokee and Grand Cherokee, popular vehicles that helped spark the SUV craze.

So indirectly, Castaing contributed to the very problem that a team of government officials was now asking him to help fix.

At the meeting, Castaing ordered all the policy analysts, lobbyists and corporate types from the room. Only a handful of his best engineers could stay.

Castaing told the bewildered government officials that he was going to treat them like any other design team with a radical idea.

"Prove to me," he said, "that this 80-mile-per-gallon car is possible."

For the next three hours, the two sides scratched out calculations and equations on a large note board as Castaing and his engineers peppered the government officials with questions:

How do you know that for sure? Where does that number come from? Has anyone actually done that?

The EPA's Gray pushed reports around the table, threw slides on and off the overhead projector, answered questions as fast as they were asked.

When the meeting was over, the influential Frenchman was impressed.

Supercar would be nearly impossible to build, he said, but it was worth a shot.

New roadblocks

With Chrysler appearing to be on board, the talks with the Big Three automakers picked up steam. Over the next few weeks, drafts of a deal were exchanged, and lawyers staved off on key language.

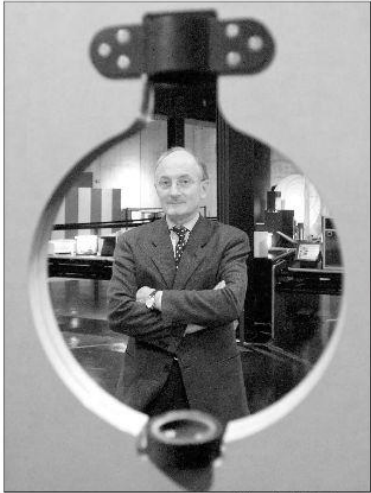
White House aides, confident an agreement was near, started checking the schedules of Clinton and Gore in anticipation of holding a major press event, perhaps on July 4.

But in the halls of the Capitol, trouble was brewing.

John Dingell got wind of the Supercar idea and wrote to the White House to say he had some questions — 48 of them.

Gruff and intimidating, Dingell was the longtime Democratic congressman from Michigan and perhaps the auto industry's most ardent defender. At 6-foot-3, he towered over opponents and earned the reputation as one of the toughest lawmakers in Capitol Hill. As chairman of the House Energy and Commerce Committee, he oversaw the largest budget and staff of any House panel. A photograph of Earth hung in his staff's committee room, and people often said that it represented Dingell's domain.

The White House responded carefully to Dingell, knowing that he would have a major say over any funding for Supercar. But Dingell's concerns did not



Chrysler's Francois Castaing, a renowned car designer who helped usher in the era of SUVs, was asked to join the project.

abate.

"History is replete with the government screwing the industry," he told John Gibbons, Clinton's science adviser, according to Gibbons' notes of the telephone call.

Dingell said the White House was asking the Big Three for too much and offering too little, particularly in terms of protection against future regulation.

When Dingell voiced similar concerns to the Big Three, the automakers began to pull back on the Supercar plan, telling the White House they did not want to get in the middle of a fight between Dingell and the Clinton administration. Talks slowed considerably.

Over the next six weeks, White House aides struggled to assuage Dingell. They wrote letters to him, exchanged phone calls, and met with him at least once. Aides even decided to get the vice president to call Dingell on his birthday.

"Dingell wanted to make sure Detroit didn't get sideswiped by the federal government sweet-talking them into some research project and then turning it into a regulation," Gibbons recalls. "I said, 'Now, John, we're not going to do that.'"

Finally on Aug. 13, the automakers submitted their version of a new draft proposal for Supercar. But missing were substantial portions that both sides had already agreed to. The White House was furious.

"In effect, much of the earlier months spent in good faith by government negotiators was

wasted," an aide wrote to Gore.

The White House restored the deleted language, but the Big Three rejected the changes and requested a meeting with the vice president.

At 5 o'clock on Sept. 3, a Friday afternoon when temperatures in Washington approached 100 degrees and many federal workers were leaving early for the long Labor Day weekend, the Big Three CEOs — John Smith of GM, Harold Poling of Ford, and Robert Eaton of Chrysler — pulled up at the White House.

White House advisers leaned out of an office window across from the West Wing to catch a glimpse of the auto executives walking in. An hour later, the aides watched them walk out.

"They looked grim," one of the advisers, Henry Kelly, recalls, "and we rushed over to get briefed on what happened."

Their suspicions were right: The meeting did not go well.

According to White House notes of the meeting, the CEOs would not budge on their refusal to try to build an 80-mile-per-gallon car.

Instead, Ford CEO Poling proposed that the automakers build a 40- to 55-mile-per-gallon sedan over the next three years — mileage about 1 1/2 to 2 times greater than that of the average car.

"That won't fix," Gore said, according to the notes of the meeting. "We need a goal on the other side of the divide."

"We're in agreement on everything except the goal," Poling reminded Gore.



EPA engineer Charles Gray (right) conceived the Supercar idea, then helped the White House sell the plan to the Big Three.

"The number must stretch beyond the threshold of what one can reasonably expect," Gore responded.

"Exactly," Chrysler CEO Eaton said. "But the 80-mile-per-gallon goal goes too far into the unknown."

With negotiations at a standstill, the CEOs thanked the vice president and said they would get back to him.

White House advisers went home that night thinking Supercar might be dead.

"We were convinced the whole thing had blown up," Kelly says.

Twisting arms for project

Charles Gray knew what was at stake. Never before, he thought, had the highest office in the land and the largest manufacturing industry in the country come so close to an agreement that could save so much fuel.

Unwilling to see the opportunity slip away, Gray decided on his own to do something that he thought might force industry's hand: He began making threats.

He started calling industry officials who understood his crucial regulatory power and warning that if they did not agree to the Supercar plan, he would vigorously push for stricter fuel economy rules.

"I said, 'I will dedicate myself and my staff will, too, to manufacturing the most aggressive set of CAFE standards you could imagine,'" Gray recalls. He told them he would move from Michigan to Washington and "dedicate the next at least four years of my career to delivering on that promise."

Other government negotiations made similar calls. "There was a virtual hammer in the air, waving around," recalls Gibbons, the White House science adviser.

Shortly after these calls, the Big Three automakers notified the White House that they were willing to compromise but wanted to meet again with Gore.

A meeting was set for the following week. Aides, according to briefing papers, advised Gore not to waive the government's

right to regulate the automakers. But he could assure them that if they agreed to Supercar, "it would not be in our interest, and we will not, impose short-term fuel economy requirements that would be inconsistent with achievement of the long-term goal."

The Clinton administration position was clear: If it got Supercar, it would lay aside the "virtual hammer" of forced fuel economy.

At the meeting, the CEOs sat in Gore's office on a long couch facing a fireplace at the far end of the room. Gore sat in a chair nearby, with his usual Diet Coke on a small table. Over the CEOs' shoulders he could see a poster-size photograph of the planet Earth hanging on the wall.

The CEOs told Gore that they would agree to build an 80-mile-per-gallon car but they wanted some wiggle room. They wanted the agreement to read "up to" 80 miles per gallon, according to Gibbons' notes of the meeting.

Gore said that was fine, provided that engineers set their sights on 80.

Next, the industry wanted some reassurances on fuel economy rules.

Chrysler CEO Eaton said the automakers would make some incremental improvements in fuel efficiency, but that they didn't want to be forced by law.

ON THE INTERNET

A special presentation featuring interactive graphics, video, photo galleries and additional features exclusive to the internet.

- Find out the fuel efficiency of your car with a searchable database.
- Supercar definitions detailed in a glossary of terms.
- Learn about some of the project's personalities and their roles behind Supercar.
- Share your thoughts about the Supercar project in a message board.

Site launches Sunday at chicagotribune.com/supercar

"We are prepared to be flexible on the interim stuff," Gore said.

The vice president then mentioned how he and Clinton indicated during the campaign that they wanted cars to average 40 miles per gallon by 2000.

"How do we back off?" he asked, according to notes of the meeting. Perhaps, he went on, "a shift away from such a number would be much aided by other actions, such as the partnership's progress."

In the end, Gore said the administration would back off its campaign promise as well as veto any legislation that tried to turn the 80-mile-per-gallon Supercar goal into law. In an interview with the Tribune, Gore says he believes he did not give up much in this trade-off. Congress, he felt, was not going to approve such a large increase anyway.

"It was a weak bargaining chip," he says.

The deal was sealed with a handshake, and Gore led the CEOs down to the Oval Office to inform the president.

"There were high fives," Kelly says, "and everybody was happy."

Shooting for the moon

Six days later, the Supercar project was announced to the public on the South Lawn of the White House.

The night before the event, Gray helped prepare press packets, while early the next morning other government and industry employees set up small displays of the latest in auto technology on the White House grounds. Back and forth they went, smiling, introducing themselves, lending one another a hand. When some of the workers from Detroit, spotted Socks, the president's cat, they rushed over for photographs.

"We were actually behaving like a team for the first time," Kelly recalls.

About 200 attended the announcement, including members of Congress, the Big Three CEOs, and local schoolchildren brought in by the White House.

Afterward, at a background briefing, reporters repeatedly asked a senior administration official whether Supercar meant the White House was backing off its stated campaign goal for a 40-mile-per-gallon fuel economy law.

The official speaking on the condition of anonymity, said the campaign pledge remained under consideration. The official did not reveal that the pledge had effectively been cast aside under the deal that Gore and the CEOs had struck just days earlier.

A few weeks later, a reception was held at the nearby National Air and Space Museum for the 80-level government and industry scientists who would actually build Supercar. Many had toiled in obscurity for years. Now they were attending a Washington gala.

They milled about the Apollo 11 command module, watched the movie "The Blue Planet" and listened to a former astronaut recall how Apollo engineers had to reduce a computer the size of a refrigerator to the size of a breadbox. It seemed impossible, but they got the job done.

Many walked out that night inspired.

"I just had one expectation," Gray recalls. "We were going to be successful."

The shifting nature of the automobile industry

1950s Cheap oil prices in the post-war auto boom increase Americans' desire for high-performance gas guzzlers. Producing more than 9.2 million vehicles in 1955, the U.S. controls about two-thirds of the world market.



The 1957 Chevrolet Bel Air. Source: Antique Automobile Club of America

1960s Detroit begins losing its industry dominance. Japan's influence remains small, but the country enjoys a 700 percent growth in production since the '50s. Smaller but more powerful cars are top U.S. sellers.



In 1964, Pontiac GTO gave birth to a generation of muscle cars.

1970s Japan accounts for more than half of U.S. imports. Chrysler Corp. barely escapes filing for bankruptcy. As a fuel shortage drives gas prices up, car buyers begin focusing on miles-per-gallon instead of miles-per-hour.



Toyota's lineup of small cars included the 1974 Corona.

1980s Japan emerges as the world's leading auto manufacturer. An increasing number of cars sold in the United States under domestic brand names are made abroad.



Ford introduces the Taurus in 1985 to save declining sales.

1990s Sports utility vehicles and pickup trucks sales soar. In 1995, the four top-selling vehicles in America are SUVs or pickup trucks. Manufacturers struggle to keep up with orders, and factories are refitted to make larger cars.



The 1993 Jeep Cherokee helped popularize SUV market. Chicago Tribune