

TRIBUNE SPECIAL REPORT
THE TANKING OF AN AMERICAN DREAM

Third of a three-part series



New York Times photo file photo

In 2000, Vice President Al Gore touts a Supercar milestone: concept cars from the Big Three automakers. But this would prove to be the final hurrah for the project.

Political obstacle course proves fatal for Supercar

As the automakers touted their concept cars, they privately maneuvered to kill the project.

By Sam Roe
Tribune staff reporter

Sleek and shiny, lightweight and aerodynamic, the three cars — one gold, one silver and one blue — made a distinct impression, at once vaguely familiar but also jarringly new.

One employed tiny video cameras in place of rearview mirrors. Another had vents on the front grill that popped up only when the engine needed air. The third used the braking energy to help power the radio and headlights.

Most important, all got great gas mileage: more than 70 miles per gallon.

A crowd of 300 dignitaries — congressmen and Cabinet members, scientists and lobbyists — gathered this March morning at a Washington conference center to celebrate the cars' unveiling. When Vice President Al Gore arrived, Bachman-Turner Overdrive's "Takin' Care of Business" blared on the sound system.

With cameras flashing, Gore peered into the windows of the first car, admired the styling of the second and kicked the tires of the third.

Then he turned to the audience. The concept cars before them, he said, represented a major milestone in America's historic Supercar project, the multibillion-dollar effort by the U.S. government and the auto industry to build an 80-mile-per-gallon family-size car. The cars not only were great technical achievements, he said, but they also marked a giant step forward in the nation's long battle to cut air pollution and to ease its reliance on foreign oil.

"This," he told the crowd, "is truly

The series

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PART 1:

STARTING UP

The concept for an 80-mile-per-gallon car is born.

MONDAY

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SHIFTING INTO GEAR

After a slow start, engineers make impressive headway.

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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



EPA engineer Charles Gray, shown working in his Michigan home, pleaded with the government not to allow the Big Three automakers to back out of the Supercar agreement.

SUPERCAR: Execs feared high costs of production

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a mountaintop moment for America.

In the spring of 2000, by all outward appearances, Supercar was perfectly on track. The Big Three automakers—Ford, General Motors and DaimlerChrysler—were touting their concept cars, politicians were jockeying for credit and the engineers in the trenches were congratulating one another on a job well done.

But behind the scenes, a far different story was unfolding. The Big Three automakers were privately telling their government partners that they wanted to kill Supercar, even though four years remained in the 10-year project and the companies had not put a single highly fuel-efficient car in the showroom.

Government officials were willing to consider industry's concerns, but not during this critical election year, when Gore, the most visible champion of Supercar, was running for president.

Even Charles Gray, the federal scientist who had tirelessly fought for the project at the outset, was increasingly angling his fellow Supercar colleagues. He was building his own vehicle—a fourth Supercar—and now was refusing to tell many officials what he was up to. More and more they wondered where his loyalties lay.

So as the curtain rose on the final act of the Supercar saga, and as officials publicly celebrated and privately schemed, Supercar was facing the most difficult and perilous part of its journey.

Cost becomes issue

More than a dozen engineers at each of the Big Three companies had worked feverishly to put the finishing touches on their concept Supercars.

Ford engineers conducted last minute tests of their Supercar at their proving grounds in Dearborn, Mich., while engineers from DaimlerChrysler—the successor to Chrysler—frantically called suppliers for needed parts. "There were a lot of guys missing sleep," recalls Gerald Cillibrasse, engineer for DaimlerChrysler.

Speed was of the essence, particularly because the Japanese had already unveiled and started selling their own ultra-fuel-efficient car—the 52-mile-per-gallon Toyota Prius.

But while the engineers in the back shop were putting in long hours on the concept cars, executives at the companies were working on an entirely different goal.

The automakers told their government partners that they were willing to finish the concept cars, but they did not want to work toward the final milestone: produce by 2004 an 80-m.p.g. production prototype, or a car that could be mass-produced in a few more years, approximately 2007.

The problem, they said, wasn't meeting Supercar's 80-m.p.g. goal. GM's concept car

Big Three concept cars run on diesel-electric systems

In 2000, the Big Three automakers each unveiled a five-seat family sedan that uses a diesel electric hybrid system, which relies on a diesel engine and an electric motor for power. A diesel engine makes more efficient use of fuel per gallon than a gasoline engine.



FORD PRODIGY
72 m.p.g.
Technology: An electric system provides a secondary source of power to the diesel engine. The electric motor allows the car to run at low speed with the engine off.

23—Average family sedan (2003 Ford Taurus LX)



186.9" 69.1"
Weight: 2,387 pounds
Driving range: 660 miles
0-60 m.p.h.: 12 seconds

AVERAGE FAMILY SEDAN (2003 Ford Taurus LX)
Width: 73" Length: 197.6" Weight: 3,336 pounds Driving range: 250 miles 0-60 m.p.h.: 8.2 seconds

Note: Driving range is the distance a car can travel on a tank of gasoline.
Sources: Ford Motor Company, General Motors, DaimlerChrysler, USA Car.



GENERAL MOTORS PRECEPT
80 m.p.g.
Technology: An electric motor powers the front wheels. The engine charges the batteries and drives the rear wheels. At low speeds, the front motor powers just the front wheels. During high acceleration the diesel engine and rear electric motor can kick in.

193.2" 67.9"



Weight: 2,592 pounds
Driving range: 380 miles
0-60 m.p.h.: 11.5 seconds



DAIMLERCHRYSLER ESX3
72 m.p.g.
Technology: An electric motor instantly starts the engine when the driver pushes the gas pedal. The electric motor and battery capture braking energy and reuse it to power the accessories and provide a boost during hard acceleration. The engine runs until the car stops.

192.8" 74.2"



Weight: 2,250 pounds
Driving range: 400 miles
0-60 m.p.h.: 11 seconds

achieved 80 while Ford's and DaimlerChrysler's got 72. All were diesel-electric hybrids—an electric motor and a diesel-fueled engine working in tandem.

The problem was cost. According to government and industry officials, the automakers increasingly felt that they could not mass-produce Supercar at a price consumers would be willing to pay.

GM and Ford would not reveal how much their Supercar might cost if put in showrooms, but Chrysler publicly stated that its car would be \$7,500 more than a conventional auto.

Some government officials thought that was not too high, especially with four years remaining in the project to whittle down costs.

"They were within striking range," recalls Gary Bachula, a former top Supercar official in the Commerce Department. "But the automakers argued that to go forward would require each company to make a huge investment."

The concept Supercars had been relatively inexpensive—about \$5 million to \$80 million apiece—as the goal was simply to prove that it was technically possible to achieve 80 miles per gallon.

But production prototypes were a significantly different undertaking. Those cars needed to show that they could be mass-produced, requiring the companies to spend hundreds of millions of dollars to retool assembly lines.

The automakers did not want to make that investment for a product they weren't sure was going to sell—particularly now that sport-utility vehicles and pickup trucks were the most popular passenger vehicles in the nation, with sales in the hundreds of thousands per year.

"It wasn't going to be the best use of resources," recalls Mike Schwarz, a Ford research director.

Knowing that the agreement to build Supercar was not a binding contract, government officials responded by saying

that they would consider addressing the industry's concerns.

"Our constant message to industry was: We hear you. We understand what you're saying," recalls John Sargent, the government's Supercar director during this period. "We don't want you to waste a lot of money. There will be an opportunity to renegotiate the whole thing—after the election. Hold your fire."

Gore was running for president, and administration officials thought killing Supercar might provide his opponent, Texas Gov. George W. Bush, with ammunition. For seven years, Supercar had been a centerpiece of the Clinton-Gore administration's energy and environmental policies.

And Gore had been personally involved. He negotiated the Supercar agreement between the White House and the Big Three in 1995, and over the next several years hosted receptions for Supercar scientists at his vice presidential mansion and publicly hailed the project as a success.

During the 2000 campaign, he cited the project as an example of what he was doing to reduce oil imports and make business more competitive. He even vowed to "intensify" the effort.

When Gray a top official at the U.S. Environmental Protection Agency, heard through his industry and government contacts that Detroit wanted to renounce on the Supercar deal, he was deeply troubled.

In his 30 years as an EPA researcher and administrator he had heard these arguments from the automakers before. They frequently said they couldn't achieve certain goals, only to prove under the threat of penalty that they could.

He pleaded with his government colleagues to not let the automakers off the hook.

"The country has invested all this time and money," he told them. "We should follow through."

But in some people's eyes, Ford himself was becoming

the Evangelical Presbyterian Church, he knew the EPA's night cleaning staff by name and rarely went to work on weekends, reserving that time for meditation and his wife, Judy.

But when it came to his scientific ideas, Gray had a bravado that rankled many.

Supercar officials likened him to a bratty kid, gleefully boasting that he knew the answer to the Supercar challenge but that he couldn't say what it was.

At one point, an Independent panel of experts reviewing Supercar's progress called Gray before the committee to get to the bottom of the issue.

For an hour and a half, they grilled him. And for an hour and a half, Gray dodged their questions.

"We didn't know any more than when we did when we started," recalls Craig Marks, a member of the National Research Council panel, which annually reviewed Supercar. Panel members, he said, were upset. "They felt they had been given a snow job."

Initially, Gray's motivation for secretly inventing his own car was to prove that his idea of an 80-m.p.g. vehicle was possible, in case anyone in the Supercar effort claimed that it was not.

But by 2000, Gray was being secretive for another reason. He had signed a confidentiality agreement with Ford to develop his hydraulic invention. Under the contract, Ford and the EPA would split some costs on future lab work.

Such contracts were common between industry and federal labs but rare in the Supercar project, which was supposed to encourage agencies to help all of the Big Three automakers, not just one.

Because Gray was still technically part of the Supercar effort, spending millions of Supercar dollars given to the EPA, some felt he shouldn't aid one company and not another.

"I think most everyone found that sort of distasteful," recalls Bernard Robertson, a senior vice president at DaimlerChrysler.

Moreover, Gray was collecting several patents on the work he wanted to complain but decided to let it go. Gray was an in-

fluential EPA administrator, and the EPA was a powerful regulator. "You certainly don't want to go out of your way to make enemies," Robertson says.

Gray felt he had done nothing wrong. He had shown his work to all of the automakers, giving each a chance to capitalize on his invention. If one firm was interested in using his work to save fuel for the nation, what was wrong with that?

His hydraulic car had come a long way since the days when four bulky torpedo-shaped nitrogen tanks made it look like a mobile missile launcher. Now it looked much more like a car, with the nitrogen tanks shrunk to the size of duffel bags and made of a lightweight carbon-composite material instead of steel.

But he still felt his invention wasn't fast enough, so he decided to add yet another small motor to the back of the car. The extra motor took up valuable luggage space and would drop the car's fuel economy from 70 miles per gallon to 68, but Gray would worry about that later.

He tested his more powerful Supercar in the EPA parking lot, where, on a 70-yard straightaway, he floored the gas and raced straight at a chain-link fence, slamming on the brakes at the last second and careering to the left.

The car accomplished 0 to 60 in 8 seconds—faster than some sedans.

His car, he thought, would be the biggest breakthrough in automobiles since the days of Henry Ford.

Hanging in the balance

That fall, Gray sat in his living room with his wife and watched the presidential election returns on television.

He knew what was at stake: If Al Gore won, Supercar would likely remain a high profile project and perhaps even grow. If George Bush won, the effort might be curtailed, as he generally favored big business.

When the networks predicted Gore the winner in Florida, Gray went to bed, thinking that the vice president had won. It wasn't until five weeks later that Gray and the rest of the nation learned that Bush would actually become the 43rd president.

Gray didn't wait for Bush and Vice President Dick Cheney, both former oilmen, to start eliminating energy efficiency programs. He and his staff, he recalls, started changing the names of certain EPA programs to mask work being done under Supercar. He also speeded up work on his invention.

When Bush took office, one of the first items on his agenda was energy. California was experiencing its worst electricity shortage since World War II. Fears grew as residents experienced blackouts, and power was interrupted to schools, businesses and hospitals.

The new president tapped Cheney to head an energy task force and to quickly devise a long-term national energy policy. Over the next three months, in early 2001, numerous closed-door meetings were held in Washington among administration officials and industry executives, including auto representatives.

One Energy Department document shows that GM sent a po-



Ford engineer conducts tests in a Dearborn, Mich., facility. Ford promises to produce a gas-electric hybrid SUV by late 2003.

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