## RIBUNE SPECIAL REPORT THE TANKING OF AN AMERICAN DREAM

Third of a three-part series



New York Times photo file photo

In 2000, Vice President AI 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

√ leek 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

SUNDAY

PART 1:

STARTING UP The concept for an 80-mile-per-gallon

MONDAY PART 2: **SHIFTING INTO GEAR** 

car is born.

After a slow start, engineers make impressive headway.

**► TUESDAY** PART 3: HITTING THE BRAKES

70 miles per gallon—and then a dead stop.

PLEASE SEE SUPERCAR, PAGE 22

#### 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 agree

## SUPERCAR:

# Execs feared high costs of production

ONTINUED FROM PAGE

a mountaintop moment for

merica." In the spring of 2000, by all In the spring of 2000, by all outward appearances, Supercar was perfectly on track. The Big Three automakers — Ford, General Motors and Daimler Chrysler — were touting their concept cars, politicians were jockeying for credit and the engineers in the streament was a superstalled. the trenches were congratulat-ing one another on a job well

his one another on a yor wendone.

But behind the scenes, a far different story was unfolding.

The Big Three automakers were privately telling their government partners that they though four years remained in the 10 year project and the companies had not put a single highly fuel-efficient car in the show-room.

ly fucl-efficient car in the showroom.

Covernment officials were
willing to consider industry's
concerns, but not during this
critical election year, when
Gore, the most visible cham
join of Supercar, was running
between the construction of the control
a scientist who had triesely fought for the project at the outset, was increasingly oneering
his fellow 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 currain rose on the

his loyalities 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

#### Cost becomes issue

More than a dozen engineers at each of the Big Three comparies 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 DatimlerChrysler—the successor to Chrysler. Dearborn, Mich, while engineers from Damler Chrysler—the successor to Chrysler frantically called suppliers for needed parts. "There were a lot of guys missing sleep," recalls Gerald Clibraise, engineer for Daimler Chrysler.

Speed was of the essence, particularly because the Japanese had already unweiled and start-cularly because the Japanese had already unweiled and start-de selling their own ultra-fuel-efficient car: the 52-mile-pergallon 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 with the companies were working on an entirely different with the companies were working on an entirely different with the companies were working on an entirely different with the companies were working on an entirely different with the companies were working on an entirely different with the companies were working on the companies were working on the companies were working on the companies were worked their companies were worked the companies were worked to the companies were worked the companies were worked to the companies were worked the companies were worked to the companies were worked the companies were worked to the companies were worked the companies were worked the companies were worked to the companies were worked to the companies were worked to the companies were worked the companies were worked to the companies were worked to

#### 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 efficiuse of fuel per gallon than a gasoline engine.



193.2" 67.9" Weight: 2,592 pounds Driving range: 380 miles 0-60 m.p.h.: 11.5 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

evel on a tank of gasoline. s, DaimlerChrysler, uscar.org

69.1"

Weight: 2,387 pounds

Chicago Tribune/Hacyoun Park and Phil Geib

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 tan-

186.9"

Driving range: 660 miles

0-60 m.p.h.: 12 seconds

dem.
The problem was cost. According to government and in-dustry officials, the automakers increasingly felt that they could not mass-produce Supercar at a price consumers would be will-ing to pay.
GM and Ford would not reveal

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.

maining 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 \$30 million apiece—as the goal was simply to prove that it was technically possible to achieve \$0 miles per gallon.

that they would consider addressing the industry's concerns.

"Our constant message to industry well be an experiment's Supercar director during this period." We understand what you're saying," recalls John Sargent. But for during this period. "We understand what you're saying," recalls John Sargent. But after the project was the government's Supercar director during this period." We understand what you're saying. "recalls John Sargent with produced the 80m.p.g., idea. But after the project was formery. There will be an open content to reducing this period." We have been suited by the supercar having conducted the studies that produced the 80m.p.g., idea. But after the project was formery. There will be an open content to reducing this period. "We foun't want you to waste a lot of concernment will be an open content to reduce the whole day our fire." Supercar having the experiment and industry were to fully committed to the goal thing. All the subject is fall to general the struck out on his own. For the last few years he and his staff of I centiment and industry were to fully committed to the goal thing. All the subject is fall to the project, which was supposed to entitle years and the supercar might provide his opponent, it have been a committed to the goal. It is a supercar might provide his opponent, it have been a committed to the goal. It is a supercar with provide his opponent, it has the project was sufficient to the project, which was supposed to entitle years he and his staff of I centiment and industry were controlled by our fire."

Frasa Gov George W. Bush, the supercar and the Big Three in 1988, and over the new the supercar and the Big Three in 1988, and over the new the supercar and the Big Three in 1988, and over the new the supercar and the Big Three in 1988, and over the new the supercar and the Big Three in 1988, and over the new the supercar and the Big Three in 1988, and over the new the supercar and the Big Three in 1988, and over the new the supercar and the supercar supercar find the pr

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.

the Evangelical Presbyterian Church, he knew the EPA's

Church, he knew the EPA's might 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.

was.
At one point, an independent panel of experts reviewing Supercur's progress called Gray before the committee to get to the botton of the issue.
For an hour and a half, they grilled him. And for an hour and a half, cray dodged their questions.

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 Pantimenbers, he said, were upset. "They felt they had been given a snow job."

snow job."
Initially, Gray's motivation for secretly inventing his own car was to prove that his idea of at 80-mp.g, ehicle was possible, in case anyone in the Supercar effort claimed that it was not.

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

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 increased in using his work to save fuel for the mation, what was wrong with had?

His hydraulic ear had come a long way time the days when four bulky torpedo-shaped nitrogen tunks 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 duffen hags and made of a lightweight carbon-composite material instead of seed.

composite material instead of seel.

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 the later.

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

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

Hanging in the balance
That fall, Gray ast 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. If
wasn't until five weeks later
that Gray and the rest of the nation learned that Bush would atually become the 43rd president.

dent. 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 acenda dent.

work on his invention. When Bish 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 autor epresentatives.

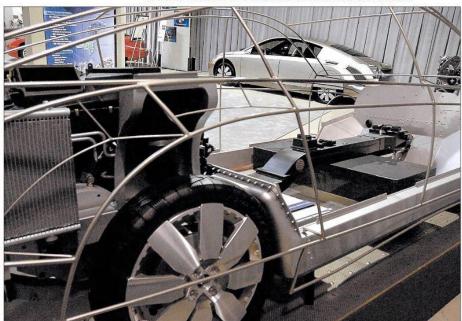
One Energy Department doc-

One Energy Department doc-ument shows that GM sent a po-



#### SECTION 1 CHICAGO TRIBUNE

#### SPECIAL REPORT: THE TANKING OF AN AMERICAN DREAM



Tribure photo by Scott Tribure photo by Scott

CONTINUED FROM PREVIOUS PAGE

Stiffing page on April 2, 2001, to a senior Energy policy advises, rather a senior Energy policy advises, rather a senior Energy policy advises, rather a senior and a senior senior senior senior energy flat and starting that a better approach would be for the government to conduct long-term research. CMS paper didn't mention Supercar, but if did start Fasher than focusing on the failed policies of the past, a better approach takes a longer-tierm vision of moving to a hydrogen enough with fuel control of the senior production of the senior production of the senior senior

cells."

A week later, Energy Secretary
Spencer Abraham announced to reporters that the agency wanted to cut its budget, including much of Supercar's funding.

He said that after consulting with auto-officials the sowern-

He said that after consulting with auto officials, the government decided that a "refocusing" of the Supercar project was needed because it was "inconsistent with where the market is headed."

headed."
He told reporters that Super-car had been geared toward building a family-size sedan, but consumers were increasing-ly interested in buying SUVs.

Is interested in buying SUVs.
At the time, it wasn't precisely clear what Abraham meant by "refocusing." Supercar But it soon became apparent that the defining features of the project—the 80-m.p.g. goal, the 2004 deadline and the participation by many government agencies.
While this meant Supercar was essentially dead, there was little unbile protest.

white this linear supercias was essentially lead, there was little public process was sessible to the was little public process. The was not conservatives including Ralph Nader and New Hampshire Congressman John Sumunu. opposed Supercar They saw it as corporate welfare—tax dollars subsidizing efforts that the industry should be doing on its own.

And some leading environmental groups thought Supercar's engine of choice, the diesel, would produce too much smog. They also thought the automakers and politicians were using Supercar as an excuse for not tightening fuel economy rules.

Throughout the summer and all of 2001, industry executives

fall of 2001, industry executives flew from Detroit to Washington about once a month to meet with Energy Department officials to discuss what should replace Su-

discrise when the control of the con

In the end, industry prevailed on both points.

This past Jan. 9, at an auto show in Detroit, Energy Secretary Abraham stood with Big Three executives and announced that a new program would be replacing Supercar It would be called FreedomCAR, and it would focus on trying to build cars powered by hydrogen fuel cells. fuel cells

fuel cells.

Supercar; Secretary Abraham
said, was too wedded to oil as a
energy source. "We can do better than that," he said. "We can

look beyond current technology ation of vehicles."

iook beyond current technology and current fuels to a truly new generation of vehicles."

The idea was to use high-pressured hydrogen gas and oxygen from the air to create electricity in make the car go. The ordy to clean that, in theory, one could drink it from the tailpipe. But even ardent fuel call blackers and the Energy Department acknowledged it would likely be 20 to 35 years before hydrogen cars were on the road in significant numbers. Not only were there huge technical barriers, but the nation's infrastructure would have to change dramatically. Thousands of the country's gas stations, for example, would have to be converted to Plus. FreedomCAR, would have less money than the Superar project, fewer government.

Plus. Freedom.CAR would have less money than the Super-car project, fewer government participants, less oversight and no deadflines to produce any vehicles.

But Energy Secretary Abrain promised those gathered at the Detroit auto show that with the new Freedom.CAR program, "the gas-guzzler will be a thing of the nest".

of the past."

He sounded a familiar refrain: The effort would reduce oil imports, improve the environment and make the auto in-

## ronment and mass ... dustry more competitive. Supercar's swan song

This past June in Washing-on, on a muggy Wednesday ton, on a muggy Wednesday night that gave way to thunder-storms, a wake was held for Su-percar.

It took place near the Capitol

It took place near the Capitol at the Dubliner, a popular Irish pub with a long wooden bar. A handful of government staffers organized the event, including John Sargent, the Commerce of-ficial who had directed Super-

ficial who had directed Super-car.

When the mourners arrived at the bar, they pushed together some wooden tables, ordered Guinness on tap and said good-bye to the project that many of them had worked on for nine years.

Years y passed out Supercar Tuburs, pins and hars played Supercar trivia; and arranged for a told the project should be supercar trivia; and arranged for a long with substitute lyries to mourn their lost cause.

By 9 o'cock, two dozen people

mourn their lost cause.

By 9 o'clock, two dozen people
had showed up, and after a couple of rounds, one could barely
hear above the din.

But Sargent was noticeably
down

But Sargent was noticeanly down.

He was wearing the same shirt he wore the day the constitution of the same shirt he wore the day the constitution of the same shirt with the Superare logo stitched above the pocket. And at one point, he got up on a small stage and read his version of Psalm 23, including the lines:

George Bush is my Shaphered; Shall not want-fuel efficiency.

He marketh me to lie down in oil dodon postures; fie leaded in the bestiet the still waters of the Persian Culf. (1997).

Gulf.

During Supercar's better days, Sargent occasionally talked to his boss about how maybe they should create a permanent monument to the Supercar effort — perhaps a historic mark-er at the Commerce Department or a time capsule. "It would show, here's what



Ford engineers work on a hydrogen fuel car. The White House is touting this technology after killing the Supercar project.

fuel economy of their existing fleets.

But mileage for Big Three passenger vehicles has remained flat since 1993, while the horse-power has shot up 27 percent.

The automakers are, in effect, holding the line—giving American drivers the increased power they crave while keeping fuel economy stable. "It think you got to look at what the customer wants," says Bob Culver, head of USCAR, a Big Three umbrel group that helped coordinate Supercar research.

USCAR, a Big Three umbrella group that helped coordinate Supercar research.

Many say that was not the point of the Supercar program.

"That was a bitter disappoint ment — that they would take these advancements and unabashedly reinvest them in increased power," says John Gibbons and a leader in the Supercar efter and a leader in the Supercar ef-

ford engineers work on a hydrogen fuel car. The White House is touting this technology after killing the Supercar project.

we were doing, here's why we did it, here's who the players were, here's what we were thinking at the time.

On the night of them's failing the strength of the here is the strength of the here is his hands he held a framed Supercar poster, signed by his old friends and colleagues.

More pledges from Big 3

Today, the Big Three automakers per their concept is prevailed to the players of the supercar project, which is hands he held a framed Supercar project, which is the supercar poster, and the supercar poster, and the supercar poster, and the supercar project, which is hands he held a framed Supercar poster, and the supercar poster is supercar poster, and the supercar project.

The Big Three have repeated by his observed to mink few and the supercar project.

The Big Three have repeated by his observed to mink the players and the supercar project.

The Big Three have repeated by his observed to mink the players have a minument of the players and the supercar project.

The Big Three have repeated by his observed to mink the promised to mink the proposed to mink the proposed to mink the proposed to the players and the supercar project.

The Big Three have repeated by his observed to mink the promised to mink the proposed to mink the proposed to mink the proposed to mink the proposed to the players and the proposed to the supercar project.

The Big Three have repeated by his off the proposed to mink the proposed to mink the proposed to the players and electric more for power.

But miles produce these highmink report investing roughly and early supercar project.

World produce a hyse highhave been quietly scrapped or the save sees as the life of the wave been quietly scrapped or the saving set

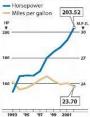
will show little improvement over the conventional models:
OM predicts the new trucks will get just 2 miles more per gallon in the city and no more on the highway.

Sord promises to produce late next year a hybrid version of its Escape, the company's smallers SUV. The company estimates SUV. The company estimates SUV. The company estimates Suver the mileage will be in the high 30s for city driving and about 25 on the highway (Hybrids of the produced of the properties of the produced of the produced of the project's will be a made to the work.)

work.) Willie U.S. automakers are planning to produce hybrids in the oming years, Japanese carmakers. Tuyoti and Honda are

#### Faster but less fuel-efficient

While fuel efficiency has stalled, cars driven in the United States have become 32 percent more powerful over the past decade



ce: U.S. Environmen ection Agency

on the highway The company reports selling 15,500 in the Unit-ed States last year and expects that number to rise to 20,000 this

ar. The Prius has even become a cause celebre in Hollywood, with Leonardo DiCaprio and Cameron Diaz among the own-

rs. Though Toyota initially lost

Though Toyota initially lost money on the car, the company reports the Prins is now breaknewer. It is \$19.980 price tag is about \$33,500 more than the comparably sized Toyota Corolla. In an ironic twist, the U.S. government is helping sell the Japanese hybrids. Consumers buying a hybrid receive a one-time \$2,000 tax deduction from the IRS.

billying a hyorat everyer a one-time \$2.000 tax deduction from Some see a replay of the 1970s, when Japan's finel efficient cars clobbered the American auto in-dustry throwing tens of thou-sands out of work and helping plumpe the U.S. economy into a tallspin from which it took years to recover." and the con-crete the control of the con-crete the control of the con-crete the control of the con-trol of of the con-tro

Americans, he says, like big,

Americans, he says, like big, fast vehicles.

Still seeking progress
Charles Gray's hydraulic Still servair with the idea of Supercar isn't dead—even if 80 m.p.g. no long-terie-floor laboratory with well-ordered look of a modern repatir shop.

The tree full like well of the interest of

took the car for a spin in the parking lot. Without the outer shell of a body, it still looks like a low-riding dune buggs, with plexiglass covering the engines in front and back.

Wearing dark ble pants and his favorite purple dress shirt, the 56-year-old Gray leans against the roll bar of his car and says he remains bitterly disappointed that the Supercar project was killed. No other effort could have made such an impact on so many of America's problems—"except this," he

project was killed. No other effort could have made such an
impact on so many of America's
robblems—"except this," he
says, jabbing a finger at his car.
Since Supercar was launched
in 1986, oil imports are up 36 percent. Imports from the Midesar
also are rising and a cause for
cent. Imports from the Midesar
also are rising and a cause for
the control of the control of the control
tilty and US. Batter for a costble war on Irnq.
The FPA calculates that if the
fuel economy of U.S. pussenger
whicles improved by 10 m.g.g.,
America would save a billion
narrels of oil a year—enough to
stop importing any from the
Persian Golf.
Scientists, meanwhile,
irreasingly blame greenhouse
gus-emitting cars for global
warming rends. Floods, fires
and droughts—calamities once
salely attributed to acts of Godhated in the context of cars,
rucks and SUVs. About 20 percent of U.S. greenhouse gas
emissions come from passenger
whicles.
Gray says the death of Supercar means he will have less monyot to combat these problems.
The EPA budget for fuel econmy and global warming issues
has been cut by a thirt, or \$10
million, meaning less money for
his hydraulic Supercar. Over
he past time years, he estimates
he spent \$20 million of Luxpayer
This past summer, an unlikely figure tried to help restore
some funding: John Dingell,
Gray's old adversary from Congress.

It had been nine years since
he summer of 1993, when Gray

gress.

It had been nine years since the summer of 1993, when Gray was trying to sell the Supercar idea to the automakers while Dingell was warning them to be careful.

ireiui. But Dincell was facing his tightest congressional race in years and running in a redrawn district that included Gray's lab. The veteran lawmaker re-quested a tour.

quested a tour.

Leaning on a cane, the 76year-old Dingell inspected
Gray's Supercar, sat in the driver's seat, and posed for photographe

graphs. In July Dingell wrote to an in-

In July Dingell wrote to an aking that money be restored for Gray's work. So far there has been no change

The cutbacks came just as Gray felt he was finally reaching his dream of building an Som n. p.g. car. Recent tests showed his car achieving 75 to 85 m.p.g.

— but that was when he removed amotor in back making. moved a motor in back, making the car likely too slow for con-

moved a motor in back, making the car likely too slow for consumer tastes.

While he hasn't abandoned the Supercar dream, he is now focused on his contract withdream and the supercar dream the supercardenal teach and the supercardenal super

#### ON THE INTERNET

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

