

Chrysler Turbine Car Book Tells Quite an Auto Tale

By Gerald Scott
Editor
U.S. Auto Scene

As a kid, local attorney and car guy Steve Lehto used to see the Chrysler Turbine cars around town.

A generation later, it becomes the subject matter for a well-received book that he recently wrote entitled, "Chrysler's Turbine Car: The Rise and Fall of Detroit's Coolest Creation."

Lehto's book has been positively reviewed by the national press and the adventure took him out to California, where he was able to ride around in, and actually drive one of the few Chrysler Turbine cars remaining – one that is owned by Jay Leno.

"There's a couple different issues here that inspired me," Lehto said in an interview at his Royal Oak legal office.

"I grew up in this area, I'm 48, so I was 4-5 years old when these cars were on the road. There were still cars around after the program ended and you'd see them from time to time.

"It was not uncommon to see these cars in the late 1960s driving around the area because a Chrysler executive would take one home or something.

"I remember seeing one of these cars when I was a little kid – you can't get that out of your head. They all looked the same, all 55 cars were (painted) Turbine Bronze. They all looked the same, but they all sounded like jets.

"You can't imagine a cooler car to a little kid – a jet car."

Indeed, the Chrysler Turbine car program exhibited the Detroit auto industry at its post-war finest. Chrysler was known for its engineering expertise and it was the first mainstream car company to try to bring turbine engines into the automotive mainstream.

For a year or more in 1963, Chrysler actually loaned out the turbine cars to everyday people and families to test-drive for three months at a time – all they had to do was gas them up and go.



The Chrysler Turbine Car was designed by Elwood Engel, a former Ford designer who crafted the similar T-Bird from that era. The Turbine Car, above, was hand-built by Ghia in Italy and only 55 cars were ever made. Over time, 46 of the cars were destroyed and only 9 survive to this day.

The program generated plenty of attention in the post-war, big-tailfinned jet engine world of the early 1960s. More than 1.1 million test miles were accumulated through the public test-drive program, circa 1963-64.

Lehto continues with the story: "As I grew older I always wondered in the back of my mind whatever happened to the turbine cars. There's an urban legend that said that they were destroyed because of a dispute with the federal government over taxes – but that's not what happened.

"I started looking into it in later years – and the more I dug into it, the more I became fascinated by the story.

"I was surprised that nobody had written a book about it."

Idea!

"One day I was talking to my brother Rick, who works at Williams International, and he worked with Sam Williams at Chrysler on the automotive turbine project," Lehto continues.

"He realized that there were other applications that Chrysler was not going into. He started making the small jet engines for things like the auxiliary power units of the Black Hawk helicopters, the cruise missile airframe is Williams. They make small jet engines for commuter aircraft – like the Cessna Citation has

their FJ-44s on it.

"It turns out that half the guys I interviewed for the book are current employees or recent retirees from Williams. It was a gold mine – and it just made the book so easy to write at that point."

According to Lehto's research, the larger Chrysler Turbine Car program actually ran 1953-78, although it's the run of the 55 dedicated cars from the 1963 model year that everybody remembers.

The turbine cars were hand-built by Ghia in Italy and shipped to Detroit for final assembly and tweaking.

Ultimately, Lehto says, modern day, real-world problems, including the high cost of tooling, and first-generation EPA tailpipe regulations, combined to doom the Turbine Car program.

"They could have made them . . . economically competitive with a piston-engine car. But it would've required them to build a plant from the ground up, just to make the jet engines," Lehto said.

"And the turbine engines had some parts, internally, that Chrysler wasn't capable of making in their present plants – they would've had to make a whole new plant from the ground up.

"And they estimated the cost of tooling that program up at about \$1 billion in 1966. . . . they ended that program,

they still experimented with it, but the program became much smaller over the years."

From that point on, most of the turbine-related cars they built were one-offs or two-offs (with the turbine engines crammed into a mid-1960s Plymouth Satellite production car)."

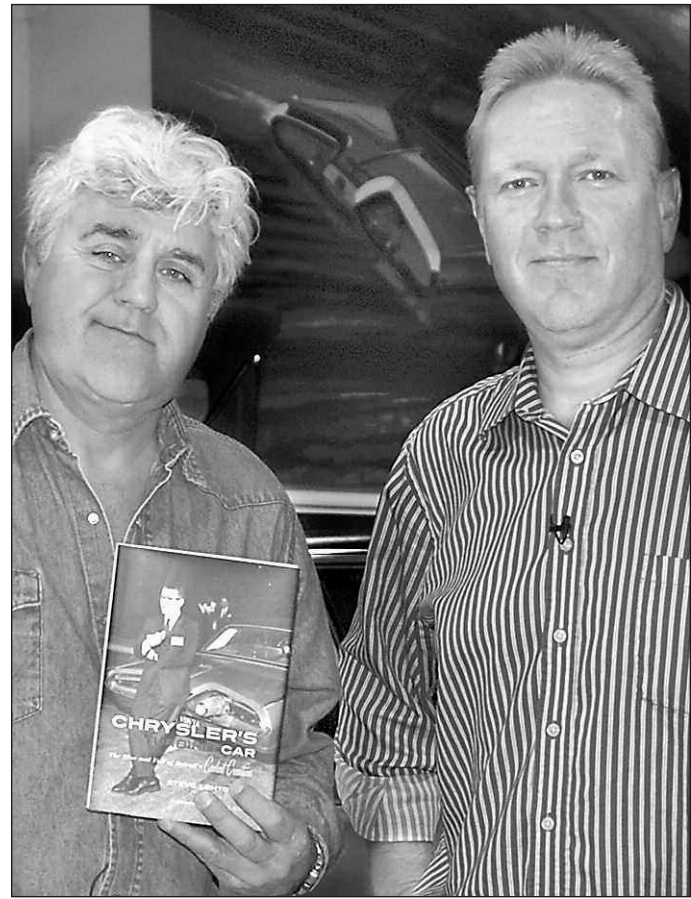
In the end, 46 of the cars were destroyed, 9 survived, most of those still extant today are in museums with a few in private hands, including Jay Leno's – which Lehto got to drive on a visit to Los Angeles.

"I actually wrote a review (road report) of it for *Mopar Action Magazine*. It drove like any other mid-1960s Mopar car – very, very good power steering, a little mushy on the suspension, it had radial tires," Lehto said.

"The big difference is the sound because the car sounds like a jet. You fire it up . . . it's like a sound you hear when firing up a jet at Metro (Airport).

"We were driving with the windows down in Burbank, the sound you could not miss. It sounds like a big vacuum cleaner – the whining sound. Most of the sound was behind you, that was the main thing, it was so different sounding.

"The other interesting thing for car guys is: the tachometer goes to 60,000 rpm and it idles at between 20 and 40



Jay Leno wrote the forward to local author Steve Lehto's history book about the Chrysler Turbine Car program. Leno owns one of the few remaining Turbine cars from the 1960s.

(K). You realize you have an extra zero. Oh, and the temperature gauge goes to 2,000 degrees (F), but it's not measuring coolant – it's measuring the inlet where the fire is.

"For a two-three-year period, these things were in the news constantly, these cars were featured everywhere. There was a time when people honestly thought that turbine cars were the next logical step. The program worked as far as getting the word out.

"The car could run on anything – you could run it on gasoline if you wanted to, but you could also run it on home heating oil, diesel, kerosene, it would actually run on vodka, tequila, they ran them on VO5 hairspray, peanut oil, it was crazy. But the problem back then was gasoline was 25 cents a gallon."

For ambitious overreach by an automaker, you still can't beat the Chrysler Turbine Car program.

Much of the industrial, powertrain and metallurgical research generated during the

1953-78 program run, according to Lehto, went into development of the Abrams battle tank, which Chrysler helped build with the U.S. Army up to the early 1980s, Iacocca years in the automaker's history.

The Abrams battle tank, by the way, still runs on a jet engine. Chrysler engineers who worked on the Turbine Car program over the years either dedicated their knowledge to the tank program, or left the automaker and later worked for jet engine suppliers like the aforementioned Williams International of Walled Lake, he said.

His book's subtitle seems to summarize it all: "The Rise and Fall of Detroit's Coolest Creation." It's amazing what a glimpse of a Turbine Car did for Lehto as a kid, and now 45 years later as an author.

For more details, see the permanent Turbine Car display inside the Walter P. Chrysler Museum in Auburn Hills.

That, or just read Steve Lehto's memorable book.

GM Continues to Support Research at Carnegie

PITTSBURGH – The General Motors Foundation last week announced a \$70,000 donation to Carnegie Mellon University, a collaborator with GM and the Foundation on award-winning autonomous driving projects.

GM Executive Director of Research and Development Walt Dorfstatter made the award on behalf of the Foundation at the Pittsburgh Auto Show. GM's partnership with Carnegie Mellon dates to 1977.

"Our support of Carnegie Mellon is guided by the belief that investment in science and technology education will help shape the automotive future and strengthen the nation's global competitiveness," Dorfstatter said.

"Automotive companies are making great strides in developing and adopting new technologies and Carnegie Mellon's exceptional programs foster a new generation of talent that can significantly accelerate the pace of automotive innovation."

Since 2000, GM, the Foundation and Carnegie Mellon University have collaborated on the next generation of vehicle information technology and autonomous driving. Working together, they won the 2007 DARPA Urban Challenge, a 60-mile course navigated by a Chevrolet Tahoe without a driver.

"Our long-standing collaboration with GM and the GM Foundation is an important part of Carnegie Mellon's focus as we strive to provide skilled leaders and innovators so critical to helping the nation remain competitive in an ever-changing global environment," said Ed Schlesinger, head of Carnegie Mellon's Electrical and Computer Engineering Department.

The grant will be used to fund graduate student fellowships, undergraduate scholarships and student organizations at Carnegie Mellon University.

The GM Foundation has provided more than \$26 million since 2005 to support ed-

ucation initiatives in engineering, manufacturing, design and business across the country.

Since its inception in 1976, the GM Foundation has donated hundreds of millions of dollars to deserving American charities, educational organizations and to disaster relief efforts worldwide. The GM Foundation focuses on supporting Education, Health and Human Services, Environment and Energy and Community Development initiatives, mainly in the communities where GM operates. Funding of the GM Foundation comes solely from GM. The last contribution to the GM Foundation was made in 2001.

About Carnegie Mellon University: Carnegie Mellon is a private, internationally ranked research university with programs in areas ranging from science, technology and busi-



GM and Carnegie Mellon combined efforts to win the DARPA Challenge using this modified Chevy Tahoe a few years ago.

ness, to public policy, the humanities and the arts.

More than 11,000 students in the university's seven schools and colleges benefit from a small student-to-faculty ratio and an education characterized by its focus on creating and implementing solutions for real problems, interdisciplinary collaboration and innovation.

A global university, Carnegie Mellon's main campus in the United States is in Pittsburgh, Pa.

Congress Debates Three Pending Free Trade Deals with Longtime Partners

By JIM ABRAMS
Associated Press

WASHINGTON (AP) – The House Republican responsible for overseeing U.S. trade policy, said last week that Congress should act on all three pending free trade agreements within the next six months.

Rep. Dave Camp, who chairs the Ways and Means Committee, told a hearing that completion of the trade deals with South Korea, Colombia and Panama was "a sure-fire way to create American jobs by growing U.S. exports of goods and services."

The lawmaker cited estimates made by President Barack Obama that the South Korean agreement alone could create 70,000 American jobs.

All three agreements were signed in 2007 but Congress has put off ratification, with Democrats claiming the pacts

didn't adequately address such issues as Korea's restrictions on U.S. autos and beef and violence against labor leaders in Colombia. The United States and South Korea recently reached a deal to further open Korea's auto market.

Rep. Sander Levin, a Democrat who chaired the committee before Republicans captured control of the House, defended the go-slow approach, saying they resulted in better deals. "You may have been willing to pass flawed trade agreements, but we were not," Levin told Republicans. "We went about fixing Peru, Panama and Korea." The last free trade agreement approved by Congress was in 2007 with Peru.

Levin said, that in addition to the recent revision of the South Korean agreement, Panama was now preparing to address tax haven and labor law concerns and the new

government in Colombia appeared to be taking a stance that provided an opportunity to address the serious issues of worker rights.

Camp stressed that time was of the essence because the European Union and Canada have signed, or are poised to sign, agreements with the three countries and "continued inaction on our agreements will result in further missed opportunities to create U.S. jobs.

He pointed to a committee report showing that the U.S. share of Colombia's market for corn, wheat and soybeans fell from 71 percent in 2008 to 27 percent through the first 10 months of 2010. At the same time, the market share for Argentina's exports of these products to Colombia was up by 37 percentage points as the agriculture provisions of its trade agreement with Colombia went into effect.

Woodward Ave. Displays (50) Signs of Its History

by Christine Snyder
Staff Reporter
Tech Center News

Most metro Detroiters know Woodward Avenue was the site of the nation's first paved road and its first traffic light, but for years the significance of Woodward Ave. wasn't apparent to out-of-towners or newcomers to the area.

The U.S. Department of Transportation designated Woodward as an All-American Road in 2009 and now the historic byway will have the signs to prove it.

Fifty signs will go up across the 27 miles of Woodward that stretches from Detroit to Pontiac.

"The signs are part of our branding campaign," said Heather Carmona, executive director of the Woodward Avenue Action Association (WA3).

The first sign went up on 13 Mile and Woodward, by the Northwood shopping plaza where WA3 has its offices.

The rest are starting to go up now and will continue through the spring.

"Most are in Detroit and there is not a consistent spacing of them," said Carmona.

Detroit will have 23 of the signs and Bloomfield Hills and Pleasant Ridge will each have one. The rest are divided among the remaining communities that Woodward spans: Highland Park; Ferndale; Royal Oak; Huntington Woods; Berkley; Birmingham; Bloomfield Township and Pontiac.

"Some are near historic sites and landmarks and some it makes sense because there are stop lights," said Carmona.

Woodward's All-American Road designation provides opportunities for increased funding for planning, preservation and improvements.

The signs were funded with a \$45,000 Federal Highway Administration National Scenic Byway grant and will be maintained and replaced by WA3. There is no cost to local

communities or municipal budgets for the signs.

WA3 is an economic and community development organization that works to promote and improve Woodward Avenue.

Generally, WA3 tends to care for much of the non-Dream Cruise activity that takes place up and down the area's favorite concrete roadway and economic aorta. It is based in Royal Oak.



PHOTO: CHRISTINE SNYDER

Heather Carmona, executive director of Woodward Avenue Action Association, shows the first sign that designates Woodward Avenue as an All-American Road.