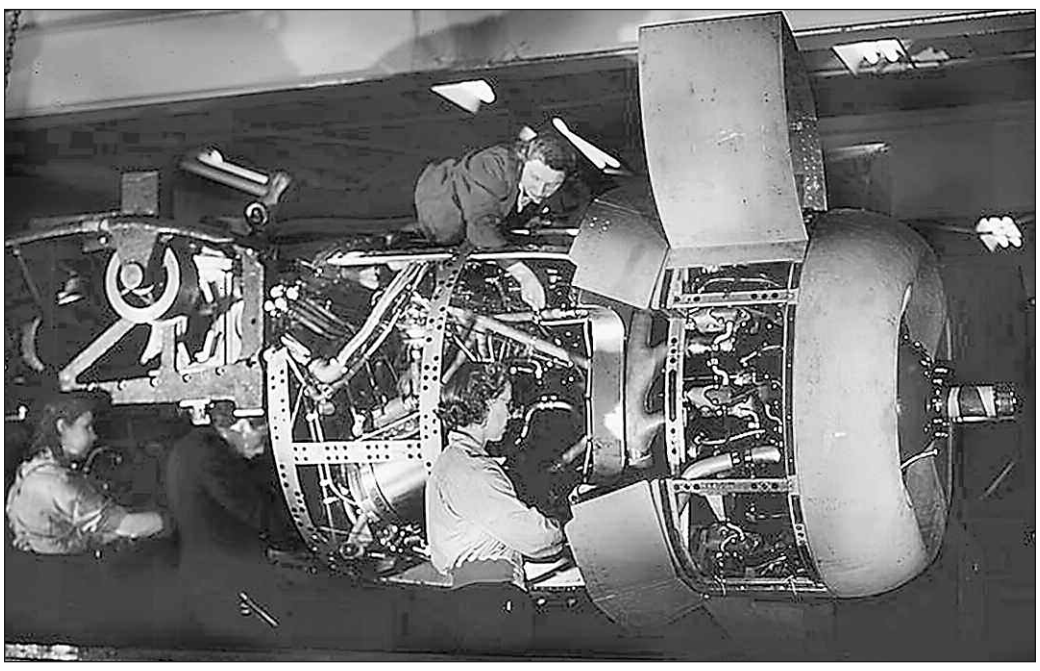


PHOTO: LIBRARY OF CONGRESS

Workers assemble the engine on a B-24 Liberator at the Ford Willow Run bomber factory in Ypsilanti back in 1944. A local historian is writing a new book about Detroit's role in the "Arsenal."

Hyde to Author New Book on Detroit's Contributions to World War II Victory

By Gerald Scott
Staff Reporter

In honor of Veterans Day this week, it seems like it's a good time to reexamine Detroit's role as the Arsenal of Democracy during World War II.

Counting individual books about Willow Run, Ford Rouge and the Warren tank plant, there have been hundreds of books published about the wider topic, but no knockout punch.

One book, "State of War: Michigan in World War II," by Alan Clive (1979), summarizes the state's overall role quite well, while historian Mike Davis' more recent picture book, "Arsenal of Democracy," captures the atmosphere of that day.

But there has never been a nationally acclaimed breakout book, so to speak, describing exactly what Detroit did to help America win World War II.

Charles K. Hyde, 65, and recently retired history professor at Wayne State University, is out to change all that. Published author of eight or nine books on the auto industry, as well as copper mining and lighthouses in the state, Hyde said recently he's researching a fresh book about the Arsenal of Democracy that he hopes would encapsulate the grandeur of the Detroit auto industry's accomplishment – perhaps for a national audience.

"My next book is going to be on the automobile industry and its contributions to World War II – the Arsenal of Democracy," Hyde said. "There have been some picture books. There are very few people left (who worked during that time). My main source of information is an enormous archive that now resides at the National Automotive History Collection (NAHC at the Detroit Public Library).

"During the second World War, the automobile trade group here in Detroit, it was called the American Automobile Manufacturers Association – AAMA – they were in the Albert Kahn Building, kitty-corner to the Fisher Building, headed by the way during the war by George Romney – he was the head of it.

"They reconstituted themselves as the Council on War Production, and I'm only beginning to learn more about what they did. They served as an intermediary between the military and the auto companies.

"(The military) would come to this Council on War Production and say, 'We want to find a manufacturer of gyro compasses, who would you recommend?' The trade association would give them a list of five or six possibilities."

Some of the paperwork related to the Arsenal of Democracy went up in flames when the Yankee Air Museum hangar at Willow Run Airport in Ypsilanti burned down back in 2004, but the Detroit Public Library's collection is still intact.

"The only part not discussed in detail is the relationship that developed over time between the military and the car companies, particularly the engineering departments," Hyde added. "There are remarkable stories about how Detroit did the impossible, just with this 'can-do' attitude.

"When Chrysler was designing the first tank up at the tank plant in Warren, they were given a set of blueprints.
Chrysler said this isn't going to work, especially if we want to mass-produce it. A team of engineers and draftsmen worked 24/7 for 45 days to completely engineer this tank from scratch. Nobody complained, there was really this strong sense of patriotism.

"It's also true we never would've mass produced aircraft without the auto companies. Airplanes were made one plane at a time, hand-crafted (prior to Henry Ford's Willow Run plant)."

Curiously enough, the Willow Run B-24 bomber plant, described by aviator Charles Lindbergh as "the Grand Canyon of the mechanized world," figured in at least two novels.

One was a 2007 spy novel, "Up in Honey's Room" by famed crime writer Elmore "Dutch" Leonard. The other was written by acclaimed 20th century author Glendon Swartout, a Michigan State University professor who would write "The Shootist" (which later became a John Wayne movie) and "Where the Boys Are," about college students on spring break in Florida, which was also made into a popular movie. Swarthout actually worked at Willow Run during the war.

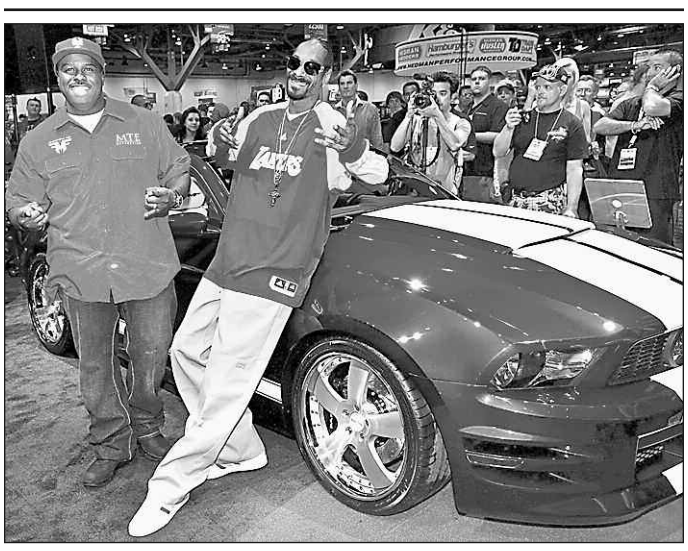
His 1943 novel, "Willow Run," never went anywhere sales-wise, but it did help launch the young author's longer career.

Meanwhile, Hyde envisions his pending book about the Arsenal of Democracy to be a tabletop picture book.

"The book, in the end, is very much going to be a coffee-table book," Hyde said. "The archives that came to the Public Library, the NAHC, includes like 14 boxes of photographs, 8 x 10s, and there's like 6 inches of photographs of women working in the defense plants (as Rosie the Riveters). So it's a gold mine of material out there.

"Also, the (former GM President William) Knudsen's family donated papers to the NAHC, too. He, as much as Franklin Roosevelt, was responsible for our success in the war. In the end, our tanks were not as good as the German tanks but we had more of them and could sacrifice them (in battle)," he added.

"The most precious commodity in the war was the pilots of the B-24 bombers. You could replace the planes, but we were losing all these pilots. We won the war because we produced this stuff in greater quantities."



That's Funkmaster Flex, left, and Snoop Dog with the Funkmaster's tricked out 2011 Ford Mustang on the show floor at SEMA. Flex has become a great hip-hop friend to the Ford enterprise.

Dog's Mustang Gets Tricked Out

Celebrity car customizer Funkmaster Flex has tricked out a 2011 Ford Mustang for his pal – fellow rapper and actor Snoop Dog.

Both Funkmaster Flex and Snoop Dog were in Las Vegas at the SEMA (Specialty Equipment Market Association) show where they both made appearances and signed autographs at the Ford booth.

The exterior of the tricked-out Mustang features Baurtwell custom smoked taillights, Funkmaster Flex logos and a 3dCarbon body kit, sway bars and springs, while Baer brakes provide the stopping power.

Funkmaster Flex has had a relationship with Ford that dates back to 2005 and since then has customized Ford vehicles that include the 2011 Ford Explorer, 2011 Ford Fiesta, the Ford Flex and the Taurus SHO.

Ford Economist Speaks at SAA Event

Ford Motor Co. Chief Economist Ellen Hughes-Cromwell is one of the keynote speakers at the SAA's 23rd annual Automotive Outlook Conference prior to the 2011 Detroit auto show. SAA is the Society of Automotive Analysts.

The conference is held on Sunday, Jan. 9 at Cobo Center in Detroit, just prior to Media Days at the North American International Auto Show.

The event schedule is as follows: 4 p.m. – Outlook begins; 6:30 p.m. – Networking Reception; 7:15 p.m. – Dinner and Keynote Presentation; and 8:45 p.m. – Closing Remarks.

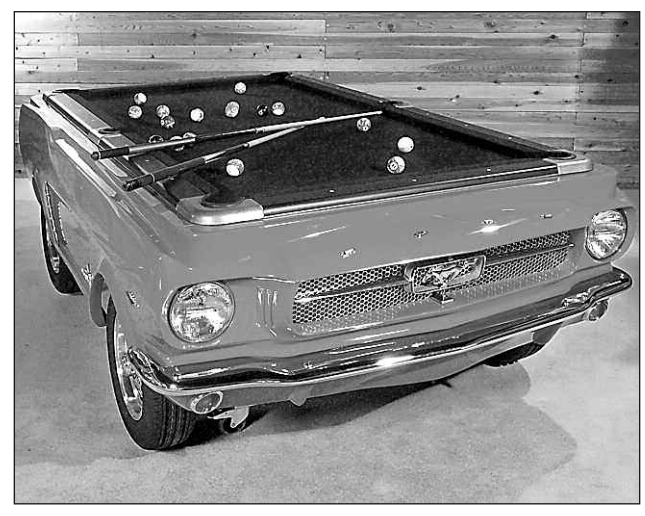
The conference will feature a panel discussion with various respected industry analysts, which will include the opportunity to ask the panelists your questions. Attendees to Outlook will also receive an exclusive Analyst Pass whitch grants access to NAIAS Media Day on Tuesday, Jan. 11.

Besides Ford's Hughes-Cromwell, other featured panelists include Carlos Tavares, chairman, Nissan Americas, Rebecca Lindland, director of Automotive Research for North and South America, IHS Global Insight and Jeff Schuster, Executive Director of Forecasting at J.D. Power & Associates; and William Strauss, senior economist, Federal Reserve Bank of Chicago.

SAA says that automotive industry executives of all types should plan to attend this insightful event. Visit the SAA Web site for registration details. Early-bird rates end on Dec. 17.

Ellen Hughes-Cromwell

1965 Mustang Pool Table



To help promote Ford's new online store, this 1965 Mustang replica pool table was on display at SEMA in Las Vegas last week and was reportedly a hit of the show. Ford's new online store is hosted by eBay Motors, and offers items at a stated price, ranging from Mustang neon signs to Fiesta hoodies. Now available on the U.S. eBay Web site, additional global locations for the Ford online store on eBay Motors will be added in the coming months. All proceeds from the Mustang pool table auction benefitted JDRF charities.

Inforum Economic Panel Meets at Hyatt Regency

At the Inforum club's Economic Outlook event, to be held Nov. 11 at the Hyatt Regency Dearborn, experts will discuss the national and local trends likely to have an impact on the Michigan economy – and your life – in the upcoming year.

Among the speakers will be Michael Finney, president and CEO of Ann Arbor Spark; Camille Humphries Lee, CFA, investment officer at MFS Investment Management; and Sam Stovall, chief investment strategist, Equity Research Group of Standard & Poor's.

The event runs from 11:30 a.m. to 1:30 p.m. Cost is $55 for Inforum members and $65 for nonmembers. Visit the Inforum Web site for registration details.

Inforum, formerly the Women's Economic Club, is a leading business forum for women, with more than 1,800 members from a cross-section of Michigan's business community.

Inforum has been vigorous about bringing speakers and panelists of interests to its meetings in both Detroit and Grand Rapids and membership and attendance are not limited to women, although the club continues to be run with affording benefits to professional business woman in mind.

The Inforum gathering at the Hyatt Regency is one of the last of the calendar year and the club encourages as many people, including newcomers, to attend as possible.

UM-Dearborn's B-School Earns High Praises

The University of Michigan - Dearborn's College of Business is an outstanding business school, according to The Princeton Review's just-published 2011 edition of its "Best 300 Business Schools" guide.

The guidebook is compiled based on a survey of 19,000 students attending more than 300 business schools, as well as from school-reported data.

UM-Dearborn students surveyed for the guide noted an outstanding academic experience, stating that many professors are "clearly experts in their fields" and that "small class sizes help the interaction between students and professors, as well as among peers."

They also noted the advancements that College of Business is making under the leadership of Dean Kim Schatzel to stand out from the competition, stating that, "the program has become increasingly relevant and well-suited for graduate students" and that the academic offerings and facilities are consistently improving.

"The University of Michigan - Dearborn's MBA program has long been recognized for its rigor, relevance and accessibility to business professionals," said Schatzel.

"Our faculty members are passionate about providing students with the experience and knowledge that today's businesses need, so I'm pleased to see the program's visibility and reputation enhanced by this designation."

Meanwhile, the "Best 300 Business Schools" guidebook contains two-page profiles of schools and MBA programs with details about academics, student life and admissions, plus scores for academics, selectivity and career placement services.

The UM-Dearborn's College of Business is home to several nationally recognized programs where students gain valuable hands-on experience.

Ex-Big 3 Workers Building Achates Power Engine

By Stefanie Carano
Staff Reporter

Achates Power, a San Diego-based company backed by a multitude of former Big 3 engineers plus one former pilot, is offering a new automotive engine technology promising greater fuel efficiency and lower engine production costs.

The technology is based on a 1930s Hugo Junkers' Jumo, an opposed-piston, two-stroke compression engine, a famous diesel aviation engine. Its development came about when Achates founder Jim Lemke, a pilot, wanted a better engine for his plane.

The result was the Achates power engine, which has a two-stroke cycle and a variable speed supercharger, minus a cylinder head and valve train.

The engine, according to Achates Power CEO David Johnson, features improved fuel efficiency specifically, reducing fuel consumption by nearly 50 percent compared with a similar gasoline engine and 10-15 percent in a traditional diesel engine. And, lower cylinder pressures and temperatures are expected to reduce the CO2 output.

"Jim basically said to himself (in 2004) and with the partner that he brought on board and with John Walton, who funded the company from its onset, 'What if we applied modern technology, modern engineering tools, modern delivery systems, turbocharging, all of the things that we take for granted today to this old architecture? Could we unlock the fuel efficiency potential of the engine? Because it doesn't have cylinder heads, and yet make it clean, which it wasn't back in the '30s as you can well imagine' . . . It's really something that we can do now that we couldn't do in the past.

"Modern engine computers and engine controls are really critical to the solution of the combustion challenge that is modern combustion, and applying it in our engine has been an additional challenge because, essentially, there aren't many people working on it. We're one of the first to pick it up."

Achates is currently marketing the engine for the commercial truck market, but Johnson said the technology can be applied to a wide variety of engine sizes.

"The basic technology is very scalable," he said. "Like with conventional technologies, four-stroke engines that are on the road today, there are two liters and three liters and four cylinders and six cylinders. All those permeations are also possible with our technology. Because, really, our technology is about the engine architecture and how to make it clean and durable for modern standards."

Johnson said the company is able to demonstrate in its dynamometer laboratory the capability of its engines to deliver its benefits, including the cleanliness of the combustion process.

The engine is cheaper to manufacture due to the reduction in parts and engine mass. Because there are fewer materials – an estimated 40 percent reduction in parts due to the fact that there is no cylinder head, no valve train, no valve spring, no valve keepers, no cam shafts and other parts – there is less cost in producing the engine.

"So, just less parts mean less cost," Johnson said. "In addition, since the engine is a two-stroke, it has the power density advantage so our engine in general can be smaller than the engine it replaces.

"So, there's a reduction just in the mass and therefore the raw materials, the aluminum, the iron, the steel that you might have to buy. But that's on the per-unit. Coming off the line, we save money on every engine we build."

He said the changeover of the factory to make the technology won't require them to change over the cylinder head line or the cam shaft line because the product won't have one.

On Nov. 3, Johnson was visiting Detroit presenting the company's product to potential customers and partners.

Achates Power CEO David Johnson, formerly of GM, Ford and Navistar, introduces Achates' new engine technology for better fuel efficiency.

"Part of my visit here is to visit with various OEMs. With the data that we've generated from our engines running on dyno, we have a very compelling story that's data-driven," Johnson said, "and really, when I think about how we discussed with the major OEMs about the opportunity we're bringing, it's more a partnership. So we don't see ourselves competing with the OEMs so much as we do partnering with and bringing the technology that will help address and respond to the challenges of this decade."

Achates currently employs approximately 50 people in San Diego, which has long been a home to military and commercial aviation.