

Henry Ford

By Gary Thomson

The father of FordMoCo and the Model T left his imprint on today's landscape far beyond the auto.

This is the year that we are celebrating the sesquicentennial of the man familiar to everyone as the founder of Ford Motor Co., and as the father of the Model T, known as the “Car That Put the World on Wheels”. However, Henry Ford was a 20th Century Renaissance man who left his mark on today's landscape in a myriad of surprising and unexpected ways.

In one example, the typical picture the average man would have of Henry Ford is his removing the wall of his garage, so he could roll out his first automobile for a nighttime drive through Detroit's streets. What would be an unlikely picture to cross most people's minds is the thought of Mr. Ford engaging in experiments in aviation.

Yet Ford Motor Co. produced the Ford Tri-Motor, which was a landmark in the airplane industry as the first passenger airliner providing coast-to-coast flight and service throughout the Midwest, as well as being the first to offer regular freight service by daily transporting parts from Chicago to Ford factories in Dearborn. The Henry Ford Curator of Transportation Bill Anderson said those who drive today by the sign of the Dearborn Inn, and by the walls of the Ford testing grounds lining Rotunda Drive and Oakwood Boulevard, would be amazed to learn that site was once an airport, “and a very busy airport, one of the best at the time.”

At that time there was little money available to invest into airports, Anderson said, while “Ford could afford to be fancy.” Mostly forgotten today was the airport's mooring mast, he said, which was used a few times to land dirigibles. The Dearborn Inn was “one of the first, if not the first” airport hotel, sitting right across from the terminal, and plane passengers could land at the airfield, disembark, and cross the road to spend overnight at the hotel.

Henry's son Edsel Ford was actually the primary impetus behind Ford Motor Co.'s aviation activities, Anderson explained.

“Henry Ford took his first airplane flight with Charles Lindbergh, but he did not care for flying after that,” Anderson said. “But Edsel realized that this was the coming thing.”

Engineer Bill Stout was ready to produce the first prototype for the “Tin Goose” but lacked the resources to proceed, according to Anderson, so his encounter with the Fords was a fortunate coming-together that made the Ford Tri-Motor possible. The plane crash around that time which took the life of Notre Dame

coach Knute Rockne marked the end of the canvass-covered plane, he said, but the Tri-Motor was an early all-metal plane that proved more durable than planes made of wood and cloth.

The relationship between Stout and the elder Mr. Ford proved to be rocky at times, because Ford's approach was to search for a workable model and then stick with it once he found it (like the Model T), but Stout as an engineer was always tinkering with an existing model and trying to improve it, and “he liked to seek after perfection.”

That proved to be one of the factors that would eventually stop Ford from staying in the aviation industry, Anderson said, because airplane engines demanded a far more exacting tolerance than automobile engines, with no margin for error. As the technology of aviation advanced tremendously in the early 1930s, expensive retooling of assembly lines was required to keep pace, so Ford “was out of his comfort zone.”

However, the Tri-Motor experience did likely prove to be valuable for Ford later on, Anderson said, when it had to shift from production of civilian vehicles to war material in World War II. Though both world wars sparked great advances in aviation, and it still could not be known if Ford could provide the tolerances needed for air engines, this time Henry Ford was willing to bend from his previous attitude, “we build the whole plane or we don't built it at all.” From his first-hand knowledge of just how complex constructing planes could be, Anderson believed this made Ford amenable to just producing parts and fuselages for warplanes, and leaving the remaining assembly to others.

More in keeping with Ford's philosophy was his creation of the Rouge complex, which Anderson said was the ultimate example of what we would call “vertical integration” today. Ford's ultimate dream was to bring everything involved in the manufacturing of automobiles under the control of a single management—not just build the cars, but also run the forge making the frames, and own the coal mines in Kentucky providing the fuel to fire the forges.

In its heyday, the Ford River Rouge Complex drew people worldwide to study it as a model for other nations to follow. Anderson said the Rouge complex could control every step of the manufacturing process from raw materials to the finished product, so every day raw materials would go into one end, and Model As would emerge from the other end.

For a couple years, the Rouge complex even included owning the railroad which delivered the raw materials to it. The Detroit, Toledo and Ironton Railroad ran between the Rouge complex and the mines in West Virginia. However, Anderson noted the arrangement only lasted a couple of years, as Ford got tired of the heavier government regulation over railroads, “and Henry Ford was never a big fan of government regulation.”

Russell Doré; whose Northville company Doré Productions does presentations on Henry Ford, Thomas Edison and Harvey Firestone; said that Ford's desire to not include businesses other than his own in the production process led to one of his most ambitious and unusual social experiments—the village industries.

Despite the huge size of the Rouge complex, Ford found he still had to buy parts from other companies, Doré said, “and he did not want anybody else involved.” Henry Ford had the option of making the Rouge complex bigger still, but he settled on a different alternative. Ford decided to go into small villages, and take over buildings to manufacture parts for his car assembly lines (for example, Doré pointed out, a village industry located in his own Plymouth area had made valves).

Many of these 20 village industries were located along waterways, Doré said, because Ford took Thomas Edison's advice to use streams to power his factories. Ford found most of these waterways had mills, which already had waterwheels that could be adapted for generating power, “and if you keep the production costs down, you keep the prices down on your cars.”

Men who normally spent their time farming would actually come into the village factories to work part time. Doré also noted that Henry Ford's own background of growing up on a farm had led him to lead the way in adapting the automobile technology to farming needs, as he started manufacturing the Fordson Tractor.

These industrial facilities that Ford built had another marked effect on the local landscape, in that they helped spur the birth of today's superhighway system. In the early days of the Ford Motor Co., Highland Park was afflicted with streets jammed with traffic. As the Davison developed through the 1920s through the 1940s into the nation's first urban depressed highway, Anderson said, the 12-15 minute trip for Ford employees coming into work at the Highland Park factory was cut to only three to four minutes after the Davidson expressway was built.

Another expressway was built 1942 from the Dearborn-Detroit border to Ford's Willow Run facilities (now part of today's I-94). It handled the expanded Wayne County-Washtenaw County traffic from the turnover in work shifts to meet the demands from War World II manufacturing. Because the start of the Detroit area's network of freeways being so groundbreaking, Anderson added, today's motorists do experience stretches of expressway which lack the width, ramp design and “all sorts” of other characteristics to meet modern freeway design standards.

Because the builders of the Davison and Willow Run had no models of previous superhighways to follow (only Germany's autobahn and the Pennsylvania Turnpike existed at that time), Anderson suggests that they had no sense of how long an expressway was supposed to last, and tended to err on the safe side.

Examples of their overbuilding were the stone arches of the Southfield Highway and Willow Run Expressway interchange (torn down when it was drastically redesigned years later), and Davidson being paved with road materials capable of lasting 50 years (in fact, Anderson observed, dynamite had to be used to remove the old roadbed when Davidson was finally rebuilt!).

Henry Ford also left his stamp on considerable portions of the geography itself in the Detroit area. As his factories grew, housing had to be found for all the new workers attracted to the region. By way of example, Doré said, the new Mortgage Hill subdivision was constructed in Plymouth in Doré's very own home area, with Ford supposedly providing the money for the mortgages.

Steven Stanford operates H is for Henry Publications in Howell, and specializes in subjects involving the early auto industry as an author and lecturer, with Henry Ford being a favorite theme. While he is not knowledgeable on the history of Henry Ford's hometown, Stanford said, "given the amount of land that he owned at one time it is not hard to conceive that he could have had a say, and had sway with local governments in determining how lines were drawn. I don't know the time-line involved."

However, Stanford is certain that Henry Ford's impact was direct in developing the Ford Homes district in Dearborn, since Mr. Ford developed those houses. Those 250 homes still stand in the Henry Ford Homes Historic District, bounded by Military Street, Nowlin Street, Monroe Street and the Michigan Central Railroad tracks.

Mike Skinner, a former advisory committee member and tour guide for 34 years with the Henry Ford Estate, and who leads tours of Ford sites throughout southeastern Michigan, also confirmed that Ford was directly involved with constructing the Ford Homes from 1919-21 for his tractor plant workers (having resided himself in that historic district from 1987-93) though he believes Edsel and Clara were more behind it than Henry. He said the start of the Aviation and Springwells subdivisions had some Ford involvement, though he added Springwells was probably due more to Edsel.

As a former president of the Dearborn Historical Society from 1994-96, Skinner said he had heard it spoken about Ford actively working to form the city of Dearborn, to prevent it from being absorbed into Detroit, but had never verified the truth of this. However, Skinner said Ford was definitely involved with the Fordson Factory (which eventually became the Rouge plant), and was definitely involved in creating the city of Fordson (which eventually merged with the village of Dearborn).

What there can be no doubt about, Skinner said, is the impact in the growth of this area from the founding of the Rouge complex, the \$5-per-day wage offered by Ford, and the building up of operations toward eventually producing the Model

A. In the 1920s, he said, the impact of this led to growth of Melvindale, Lincoln Park, Allen Park, and “everything around them.” Inkster was started to house African American workers for the Rouge, and according to Skinner, during the Great Depression Henry Ford even set up a community kitchen there in 1931 and supported the entire municipal budget out of his own pocket, to keep Inkster going.

In giving his historical presentation celebrating Dearborn Heights' 50th anniversary, Dearborn Heights Library Director Michael P. McCaffery reveals that one of Dearborn Heights' prime subdivisions today was once the Dahlinger Estate.

Right on the road to the Fords' Fair Lane mansion, Henry Ford built an estate for his friends Ray Dahlinger and Evangeline Dahlinger. It included a gatehouse, nine-fireplace house with eight bathrooms (with a separate house for Ray apart from the main house), a barn around a horse race track, a blacksmith shop, a six-car garage, guest house, and a skating house.

“In many ways, it was bigger than even Fair Lane itself,” McCaffery said. “Most still exists today, it's really a neat area.”

The present-day River Oaks Estate subdivision has tried to revamp the skating house, McCaffery said, as he showed in his presentation a picture he had taken a couple of years ago of the old Dahlinger main house, which is located at the end of small cu-DE-sac in River Oaks.

“It's kind of an interesting house of mystery—I've always wanted to explore it more,” McCaffery said. “If you were to go along the river, there's houses, there's boathouses, swimming pools and all the stuff that's overgrown by weeds.”

Ford would take an electric boat up the river to call on the Dahlingers, according to Doré, and there was supposedly a secret staircase up to Evangeline Dahlinger's bedroom. The strong rumors on her were never proven, Doré said, though her son John did write a book about Henry Ford.

While Fair Lane itself was indeed far from being the most opulent house of its era, Doré confirmed it was designed more to satisfy Henry Ford's love of tinkering and gadgetry. Rather than hook into the city's utilities, he said, the mansion had its own powerhouse, with pipes running through a tunnel from the powerhouse into the house. Ironically, a big storm flooded the powerhouse at the end of Ford's life, Doré said, “so he died the same way as he came into the world, heated by a wood stove and lit by candlelight.”

Outside, the residence's rough-hewn Ohio limestone harmonized with the surrounding grounds, designed by landscape architect Jens Jensen to transform

farmland into natural native landscape, incorporating existing features in accordance with Henry Ford's wishes. Wife Clara saw to the planting and tending of extensive gardens, including vegetables, 1,000 peonies and 10,000 roses. Five acres of these grounds and gardens, along with the powerhouse, remain on the national historic site today.

In one of his presentations on Henry Ford, Stanford said while Henry Ford created a revolution with his Model T, many may not know he also played a “behind the scenes” role in promoting expanding road structure that would support the automobile.

The “Good Roads Movement” promoted by bicyclists as the 20th Century dawned led to the establishment of local government road commissions, Stanford said, and Henry Ford joined Cassius R. Benton and Edward N. Hines as the original three Wayne County Road Commissioners (Hines would serve far beyond the other two until 1938). Among the commission's ground-breaking accomplishments cited by Stanford was the first mile of concrete highway on Woodward Avenue and the Davison Freeway.

Henry Ford would continue working with Hines and the commission on road paving and dam building (on the Rouge River), he said, and Ford began converting the old mills into hydroelectric plants for his Village Industry program in the 1920s.

Henry Ford's mills for the village industries were also responsible for the formation of the Edward Hines Park, with the help of a Ford crony on the Wayne County Roads Commission, John Haggerty (whose house was in Canton Township on the Haggerty Road which bears his name today). To build the hydro-dams he wanted for his village industries, Ford struck a deal with the Commission: in return for being allowed to build the dams, Ford would donate all the land around them for parkland.

Ford had two things in mind while making this deal, said Nancy Darga, director of the Piquette Plant (within the Piquette Avenue Industrial Historic District in Detroit). Ford's first concern was stopping communities from dumping raw sewage into the Rouge, which was flowing down to his Fair Lane Estate.

His second objective was to preserve the floodplain around the Rouge River, she said, and Ford “knew that if the county made it into parkland, then the area would never be developed.”

Next to the Rouge complex, the most visible imprint Henry Ford left along the Rouge was his Edison Institute complex, which a few years ago changed its name to honor its original founder. Being effectively The Henry Ford's first curator, Mr. Ford actually started the collection about 10-15 years before the museum opened in 1929, according to Anderson.

Ford was always interested in antiques, Anderson said, especially old clocks and watches (as repairing these timepieces is what started Ford on the road to being a mechanic). Since Ford had reached the point where he could buy anything he wanted, he said, and people started sending him tips and actual items once word got out that Ford was buying antiques, eventually it became necessary to store his collection in a warehouse.

So part of the reason for starting the Henry Ford Museum and Greenfield Village was to “come up with a way to store and use all of that collection!” Anderson explained that Henry Ford's infamous “History is bunk” in 1919 was actually a quote out of context, that Mr. Ford was not dismissive of history at all, but rather of the way it was taught, from textbooks that centered on great men and wars between nations.

What Henry Ford really desired, Anderson said, was a “real education” centering on the common man and the spirit of innovation. He did not want this education to be from textbooks, but from actually seeing and experiencing the machines, woodworking and science in action. Anderson also gives Ford great credit in not “just glorifying his own achievements” by putting his original quadricycle vehicle into the collection, but also including the vehicles of his competitors such as the Duryea and the Oldsmobile runabout, so “he sought to display the whole history of the automobile.”

With this end in mind, Ford collected from everyone things such as plows and tractors, with the ultimate objective for the collection to be experienced by museum visitors, and by the students who attended the schools Ford set up in Greenfield Village (which continued to operate until the 1970s). Anderson thinks that Mr. Ford anticipated today's educational trends of homeschooling, charter schools, Montessori schools, etc.

“It's not the first time he would be ahead of the curve,” Anderson said. “We've reopened the school and we've been teaching in the way that it was taught before, and the model still works all these years later.”

Doré cited another example of Ford's interest in education, in which he would go around the country building one-room schools at his own expense. The thrust of Henry Ford's philanthropic initiative was directed at any community that had no schoolhouse, he said, or any community in which Mr. Ford had developed an interest.

Since young Henry had been educated in school by McGuffey Readers, Doré added, and discovered in his adult years that some books addressing various academic areas could not be found—thus began Henry Ford's search through bookstores selling old book collections. Ford would buy any McGuffey Reader volume he came across.

When he had collected the whole series of McGuffey Readers, Henry Ford then had the series returned to publication. Many of the old one-room schoolhouses in today's historic villages will hold demonstration classes to show children how school was taught in the 19th Century, Doré said. If these touring pupils are using the complete series of McGuffey Readers, it is because Henry Ford made it possible.

Doré pointed out that Ford's philanthropic efforts extended to hospitals as well. Besides providing the site for the Veterans Administration Hospital in Allen Park (since closed and torn down to make way for a shopping center), today's Henry Ford Hospital was also named to honor its founder. While the hospital was in existence, Doré said it hardly amounted to much prior to Henry Ford taking an interest in it. It was Ford who was responsible for bringing in staff from John Hopkins Hospital, and providing the facilities of a first-class hospital.

Another intriguing example of Henry Ford's foresight, Doré said, was a picture from the early 1940s showing him swinging a sledgehammer into the trunk of a car manufactured totally from soybeans, and not making a dent. Henry Ford did heavy experimentation into converting soybeans into food and automotive products, he said, and while they ultimately proved to make no economic sense at the time, "remember they did not have fiberglass and plastic at that time.

"But Henry Ford was certainly ahead of his time because fiberglass and plastics are now a major component in our lives today," Doré said. "Ford was always thinking about making improvements, about new ideas, even later in his life."

As part of celebrating Henry Ford's life and accomplishments in the 150th year of his birth, a tour has been set up along the Woodward Avenue corridor to highlight milestones in Mr. Ford's life. The stops will be the Henry Ford Fairlane, a drive-thru by a number of sites in the Henry Ford Museum and Greenfield Village, the Rouge plant, at Malcomson in Detroit (where Ford first met Thomas Edison), the Bagley site on Bagley Street, the Masonic Temple, St. Paul's Cathedral, the Piquette Plant, the Boston-Edison Ford House, the Highland Park Plant, Henry Ford Hospital, and the Ford family cemetery. People wishing to participate, Darga said, should call Mike Skinner at (586) 445-0041 or go to the website www.piquettes.org.

While attending a school in Dearborn in his youth, the author personally recalls one of the students in class presented a report on Henry Ford. The report ran down through a number of things in Henry Ford's life that cast a poor light on him (I do not recall the specifics, but suspect it was a mixture of exposing Mr. Ford's genuine dark side, and of his traditional values that would likely make him seen as a politically-incorrect Tea Partier today). The student summed up his presentation with intended irony: "And when he died, the newspapers called him a great American."

On the other hand, in listening to an interview of a biographer of Mr. Ford on WJR a number of years later, I heard the host ask her how she felt about her subject after finishing her book. Her response was swift: "I liked him!" What impressed her about Henry Ford, she said, was that Ford would see a lawn of grass, and somehow see something new which everyone else had missed.

Ford has been described as simultaneously having both the highest angelic and basest devilish impulses ever possessed by a human being, and it seems either way he had the gift of stirring storms and controversy that tended to obscure the actual man and his accomplishments. But whether you think his life was wonderful or not, one thing about Henry Ford should be safely beyond debate. If he had never been born 150 years ago, the world would certainly be different in many ways today.