## Wisconsin Motor Mfg. Co. - Part II

Thanks to all of you who responded to our last issue's article with information to help solve the mysteries of "Wisconsin Motors," including Jack Hoffman, John Weickelt and Tom Siebers who provided helpful information and insight. I am particularly indebted to John Stimac who provided many specific facts and lent to me his autographed copy of the definitive history of Continental Motors, which acquired Wisconsin Motor Mfg. Co. in 1943.

To correct, or elaborate, on some statements contained in January's article, the references in the early 1920's West Allis histories and City Directories to a 44th and Burnham location for the Wisconsin Motors plant led me to believe that is where the factory was. In fact, it was located at 53rd Street and Burnham, 9 blocks west! My further research first detected this fact in the 1932 West Allis City Directory (which showed the precise address as 1910 South 53rd Street). This change was apparently the result of a renumbering of the north-south streets in much of the metropolitan area. Indeed, the old factory buildings are still at 53rd and Burnham, but they were vacated by Wisconsin Motors soon after production at that location ended in 1992. The original factory buildings and the later constructed office building facing 53rd Street are vacant, but many of the other factory buildings are occupied by various other businesses.

Another of the mysteries was solved by many of you who advised that "North Milwaukee" is the neighborhood surrounding 30th and West Villard, at the end of the old street car line. This area was known as the Village of North Milwaukee, into the 1930's. This was the location of the modest wooden building where Charles John and A.F. Milbrath built the prototypes of their first engine (designed by Milbrath), before moving to the West Allis location in 1910.

I found that Stutz wasn't the only famous purchaser of the sturdy Wisconsin T-head (4-3/4" bore x 5-1/2" stroke) Type A engine, used to power the Stutz Bearcat. Other early autos using Wisconsin engines were State of Wisconsin based Case of Racine and Kissel of Hartford. Another Wisconsin user of the Type A engine was the Four Wheel Drive Co., of Clintonville, which produced trucks for the military during World War I. In fact, during the war, the entire Wisconsin Motor factory was devoted to war-time production of that single engine. Regrettably, at war's end this left the company with this engine as its only product, and one primary source of demand, the war effort. Stutz began its own engine production in 1916.

Coincidentally, as with the first extensive use of Wisconsin engines in Stutz racing cars, Wisconsin engines found their way into other race cars in the 1920's. These were driven by many famous drivers, including Ralph de Palma and Sig Haugdahl. The "Wisconsin Special," driven by Sig Haugdahl, was the first automobile to be clocked at 180 mph. This was accomplished in 1921. However, the company was having a very hard time, as fewer and fewer independent car companies, which had relied on outside engine manufacturers, survived, while the larger companies, which built their own engines, became more dominant. Due in part to very difficult times in the depression, the company was reorganized and ultimately became Wisconsin Motor Corporation in 1938, after many creditors were paid a fraction of what they were owed.

Curiously, a different source helped the company through the lean period of the 20's -the need for fast Coast Guard patrol boats during prohibition, which became effective in 1920.
Powerful Wisconsin water cooled marine engines became the primary engine for the U.S. Coast
Guard. As the story goes, rum-runners who tried to outrun the patrol boats along the U.S. coasts
found they needed Wisconsin engines in order to have any chance at success! This marine
engine, called the "Whitecap" engine, soon became a significant contribution to company sales.
Wisconsin Motors also developed less exciting markets, particularly by supplying power for
agricultural, industrial and construction equipment, as well as autos, tractors, trucks, and buses.

Only water cooled engines were produced until 1931, when Wisconsin air cooled engines were first developed and introduced. These were so successful, and the company's market for automobile engines had so dwindled, that by 1941, the company no longer made water-cooled engines for automobile, marine or truck use. By this time it was exclusively manufacturing air-cooled engines of between 2-1/2 hp and 31 hp. However, the company was barely surviving until World War II created increased demand for Wisconsin engines. After Continental Motors acquired control of Wisconsin Motors in 1943 (\$620,000 for a 72% interest in the company), Continental invested heavily in the plant and equipment, primarily for the war effort.

The oft-quoted story of how Continental acquired Wisconsin Motors provides an interesting insight into the leaders of both companies. As the result of the company's financial difficulties during the depression and its reorganization in 1937, First Wisconsin National Bank of Milwaukee acquired most of the company's stock and became its major creditor (the company was deeply in debt and there were questions whether it would have the ability to repay). Concerned about repayment, and recovering its investment, the bank placed its employee, Harold A. Todd, in charge of the company, as President. His tasks included instituting tighter financial controls and a better organization, as well as improving manufacturing methods, in an attempt to turn the company around. Ultimately, fortunes improved at the company, debt was reduced and profits were generated (due primarily to Mr. Todd's efforts and in part because of war-time production).

By 1943, Todd believed he had an understanding with First Wisconsin that he could purchase a controlling interest in the company from the bank. According to the story, on the eve of the transaction, Continental's hard-driving, workaholic President, Jack Reese, was having dinner with Mr. Todd in Chicago and, over drinks, Mr. Todd in his exuberance shared his exciting personal news with Mr. Reese. Sensing an opportunity for himself, instead of returning to Continental headquarters in Muskegon, Michigan, Jack Reese got up very early, traveled to Milwaukee and arranged a meeting with the bank's top officers, and quickly negotiated Continental's purchase of all the bank's stock in Wisconsin Motors! This gave Continental control.

The story is that Mr. Todd never forgave Jack Reese for, in effect, stealing the company out from under him. Harold Todd continued as President, but instead of being top man (and owner in control), Mr. Reese was his boss. According to one source, animosity continued and, when these two strong-willed men were forced to attend board meetings of the company, they

would "just glare at each other." Nonetheless, Jack Reese permitted Harold Todd to run the company with practically no interference and the company prospered under Todd's leadership. Harold Todd served as President and leader of Wisconsin Motors for thirty years until his death in 1967.

By 1953 the company had built its 2 millionth engine and according to its publicity, it was the largest producer of air cooled industrial-type engines in the world (sold in 71 countries), and employed 1,850 workers. Its product lines were very diversified and it supplied engines for 500 different companies, including makers of air compressors, lawn equipment, concrete mixers and generators.

By 1963 the company dominated the market for heavy duty air-cooled engines (6-60 hp). Due to expansion, it had 4 separate manufacturing facilities in Milwaukee, including the rental of a former Pabst plant on the Northwest side of Milwaukee devoted exclusively to military engines. By 1968, employment had expanded to 2,400 from the 1,850 in 1953. Engines for farm machinery, supplying power for stationary and portable conveyors, hay balers, irrigation equipment, and the like, became the largest component of its business.

The company's corporate structure changed dramatically in the 1960's. Continental Motors Corp. acquired the remaining stock of Wisconsin Motor Corp. and, by 1964, Ryan Aeronautical Co. gained control of Continental. In 1968, the conglomerate Teledyne took over Ryan, and, eventually, Wisconsin Motor Corp. ceased to exist as a separate corporation and it became merely a division of Continental Motors Corp. (now owned by Teledyne). The company then became known as Teledyne Wisconsin Motor. Further worldwide developments included the licensing of Fuji Heavy Industries to produce various Wisconsin engines in Japan. In addition to the usual uses, the company's air-cooled engines, including diesel versions in some applications, were now used in vehicles unheard of just a few years prior, such as snowmobiles, all-terrain vehicles and hover craft.

It seems that Wisconsin engines are no longer made in Wisconsin. Most appear to be made by "Teledyne Total Power," located in Memphis, Tennessee. Interestingly, not even the huge Teledyne Industries conglomerate survived as an independent corporation. Toward the end of last year it merged with Allegheny-Ludlum, and the surviving entity is known as the Allegheny-Teledyne Corp.

Certainly many changes have occurred since 1911, when Wisconsin Motors, located in West Allis, built its outstanding water-cooled automobile engine, initially its only product, which powered the very first Stutz. That engine performed flawlessly as it finished its maiden run at the very first Indianapolis 500 race. From that auspicious beginning, Wisconsin Motors built a reputation based on one of its watchwords, "Consistent," which continued to be emphasized throughout its glorious history.

I would like to thank and acknowledge William Wagner, the author of the book "Continental! Its Motors and its People," published in 1983, which book included significant parts of the Wisconsin Motors story.

John Haydon