Two Families, Many Sisters, Part 1: The Wilson's and the Miss Canada series

People tend to forget that even in the 1930's, most businesses were still operating and most still had paying work. People needed food and clothing and cars and knives and forks and nuts and bolts; commerce went on, there was just less of it. There were fewer employees at the factory, but they were still busy. Companies that were unburdened with debt were still viable, those with debt, such as Ditchburn usually had to be financially restructured, but in many cases, operations continued, and staff went in and out of the main gate; the managers and owners changed. There was still spending on entertainment and leisure, movie attendance was actually up, bettors went to the track, baseball filled stadiums in the summer and hockey filled arenas in the winter; spectators continued to gather at the water's edge to watch canoe, sailing and sometimes motorboat races. Attention began to shift away from 1,000 hp Gold Cup monstrosities to small zippy speeders, resulting in the formation of the 225 and 135 racing classes. The hulls were light and small, between 15-18 feet long, and could be made cheaply out of cedar and plywood. Plywood as we know it was around since the mid 1800's, but it took off as a consumer product after appearing in the familiar 4 by 8-foot sheets in 1928. In 1930, the use of phenolic resins created waterproof (ish) plywood for marine and other wet environment use. In 1932 Ford came out with the first version of the flathead V-8, at 221 cubic inch displacement, putting out roughly 85 hp. You could go to the local scrapyard and buy a wreck, pull out the engine and steering wheel and add a steel shaft, propellor and rudder and with a little artifice and effort, have a viable racing boat.

Earnest Albert Wilson was a businessman who owned Ingersoll Machine and Tool Co. Ltd and John Morrow Screw and Nut Limited. He was born in England and moved to Canada as a toddler, growing up in Montreal and living in Michigan, then St. Catharines before moving to Ingersoll, Ontario to set up a machine tooling and fastener businesses. Born in 1911 Harold was the only boy of three children and in accordance with the attitudes of the time, would eventually inherit the businesses and the family name. Daughters only very rarely ascended to the executive of the family business, and only if there were no sons, or the sons were not up to the job, and only if they showed an exceptional talent for the work. More often, the father would bless a marriage to a capable fiancé who would be invited into the company to eventually take the helm. Ingersoll was only a short train trip to heavy industry centers like Brantford, which was good for this business, but in terms of recreation, this was waterless, viewless, pancake-flat farm country, and the Wilson's purchased a cottage in Muskoka. A boat was a necessity, and a launch was purchased from the Ditchburn works that became Miss Canada. This was not a

racing boat, just for cruising. Wilson was part of the cottager-business community in the area, and over 1929-30 was approached by colleagues with the idea of setting up a high out put boat manufacturing concern that would appeal to the mid-range of the market and focus on planing hull runabouts, which were replacing the long-deck displacement launches. Wilson became both an investor and director of the new Rainbow Craft, which opened in grand style in the spring of 1931 and after a short production burst, closed in the fall that same year. The operation was more or less idle for two years, while Tom Greavette managed what little there was to manage and try to move the still unsold inventory. In 1933, the operation was reconfigured as "Greavette Boats Limited", but this time only as a custom builder. Wilson became the President, with Greavette as the key man. I think Wilson's duties were relatively limited, he was still running the Ingersoll businesses, Greavette and Gravenhurst were several hours away by train (more by car) and the company, in the middle 1930's was about the same size as it's Bracebridge competitor, Minett-Shields; probably not much more than a five- or six-man team working on one boat in one corner of the otherwise empty production building.

Harold started racing "25 hp" outboards (viz. class D Elto Quad/Johnson VR series 4 cylinder racing engines) in 1928 when he was 17 and graduated to inboards in 1932. The first Little Miss Canada was a one of the Dart licensed Rainbow Craft models, one of many unsold hulls in the at the plant. His second boat, Little Miss Canada II was built at the Rainbow-Greavette plant, based on a Hacker design, but with a more substantial engine. It was built in the "gentleman's runabout" style, with the driver's cockpit at the rear and a second passenger cockpit forward of the engine. At least it provided some work for a few local workmen who had such high hopes for the company when it rolled out in spring 1931, only to close a few months later. It had a much more powerful engine and won some local races, but with the inauguration of the 225 class in 1932, the father and son decided to build a dedicated racer. It was good for both, Greavette would have a project and if it turned out to be a winner, a great advertisement to help rebuild the company. Indeed the power came from a marinized Ford Flathead. The first class "world" championship was held at the CNE in 1934. The term really meant North America only, perhaps there was hope that European countries would "cross the pond" to enter, but this never happened, the 225 and later 135 classes remained a North American phenomenon. The battle came down to Little Canada III v. the American entry Emancipator, with Little Canada III, not the fastest but the most consistent, eventually taking the trophy on points. Little Miss Canada III was succeeded by Little Miss Canada IV. This was to be a showcase for Greavette's boat craftsmanship, with its cigar shape and mahogany finish. I had mentioned that the small 135 and 225 classes could accept every type of boat, whether made of the cheapest or finest woods and finishes; those with the means, such as business owners could afford something

more refined. Some of the 225 racers were works of art, notably Little Miss Canada's III and IV, Delta and the later 1937 Miss Shepherd; all intended both to won races and advertise the builder and designer. Emancipator, owned by Mortimer Auerbach, a department store heir, was a little simpler in design, with white painted straight sides but still sporting as stylish curving mahogany planked deck. Wilson ordered Little Miss Canada IV and repeated the win at the 1935 event.

What engine was actually in Little MC IV? We know III had a Ford Flathead and the iconic and much reproduced photo (below) of IV at cruising speed shows an engine cover that looks like a breadbox with plumbing pipes sticking out (it has the circular air vents so common on the late 1920's Ditchburn's). The flathead in racing trim had two downdraft Carter carbs mounted on top of the engine, giving it a high profile which I assume is the reason for covering and the air pipe set up. It works for the photo because it balances the visual weighting of Wilson and Reid in the back of the craft.

Harold Wilson and his fiancé, Lorna Reid take Little Miss Canada IV for a run Archives of Ontario photo

Again, but with the engine hatch cover off

The second shot is less used due to the effect of cutting off the bow and stern of Little MC IV, but the engine bay cover is off. The engine is obviously not a Ford, but my understanding is that the Wilson's moved to using a straight 8 FB model Lycoming and the engine in the shot is clearly a straight something, with the carbs and mounted on the side. The mid-30's FB is actually 250 cubic inch, (later models were 280). How were they able to sneak an extra 25 cubes into the 225 Class I do not know, not every engine builder made engines that conformed neatly to the class displacement limits, perhaps there was a little leeway on each side.

Little Miss Canada V was unsuccessful as a racer, but Wilson simply moved on, admittedly it would have been difficult to hold the builder to account, given his father's position! VI was more successful, but speeds seemed stuck at 65 mph, the engine had reached its limit. In 1939 Harold teamed up with Charlie Volker and designed an ultralight high-powered engine that turned up to 6,000 rpm. The plan was to have the family business, which had extensive

fabrication capacity, build a limited run of these engines and sell them to the racing community. The prototype was completed and tested in late summer 1939, boosting speed to 78 mph, but the war put a hold on the production plans, and after hostilities ended and racing began to pick up again, the dual overhead cam design of the Wilson-Volcker was outlawed. This setup allows four valves per cylinder, two intake, two exhaust, more breathing and higher performance, one would think this is exactly what the race community would want (the stock Ford Flathead, so common in 225 Class, is valve in block, two valves per cylinder). Politics runs deep in every aspect of life; competitive racing is no exception. My best guess is that the Wilson-Volcker would be too expensive for most average racers and build an elitist vibe into what was intended to be a more accessible pastime. VI was the last of the Little Miss Canada series.

In the late 1930's the Wilson's began eyeing the unlimited racing class and the Gold and President's Cup events. All the boats up to 1936 were Hacker designs. Although John Hacker had a "contract" with Minett-Shields at the time, he remained open to anyone requesting his services and provided the hull design for Canada II. Like most Hacker racing hulls, this had a step design, the standard for all racing boats at the time, and now with the reversal of the APBA's rather silly ban on stepped hulls from 1923, they were now back on the unlimited class course. The engine was a 732 cubic inch Miller. Harry Miller had been the definitive name in high performance auto and boat racing engines in the late 1920's. The cars and engines were very expensive, up to $10-12,000 each but they won races. The original Miller engine line was an inline 4 cylinder and 8 cylinder, including a mad concoction of a W-24, three 8 cylinders stuck together using an elaborate system of gears to drive common crankcase. Miller expanded into performance boats with a V-16, most notably 620 and later 732 cubic inches. With its blower, the 732 could put out a maximum of 650-1000 hp. Some research mentions a V-12, but available information does not indicate that Miller made a V-12, only the V-16. The 732 went into Miss Canadas II and III. Father and son team E. A. and Harold started off with Canada II in the 1936 President's Cup, but the engine quit on the third heat. This was just to get a feel for competition. The serious challenge was for the 1937 Gold Cup, but the rudder shaft bent under the stresses and that ended the challenge. There were other problems. The hull bottom was made with cross laminate strips, glued together. After racing the bottom began to spring multiple little leaks and it became an effort to track the leaks and plug them. Rather than fiddle with Canada II, the Wilsons had Greavette's new star designer Doug Van Patten create Miss Canada III and relocated the Miller into this new craft. Although there was mention that Miller himself built the engine in 1935, the design was actually from 1927 and was most likely built at that time and was purchased used by the Wilsons. Miller had sold his company to Cord in 1929, but not yet ready to retire, had used the funds from the sale to start a new race engineering firm

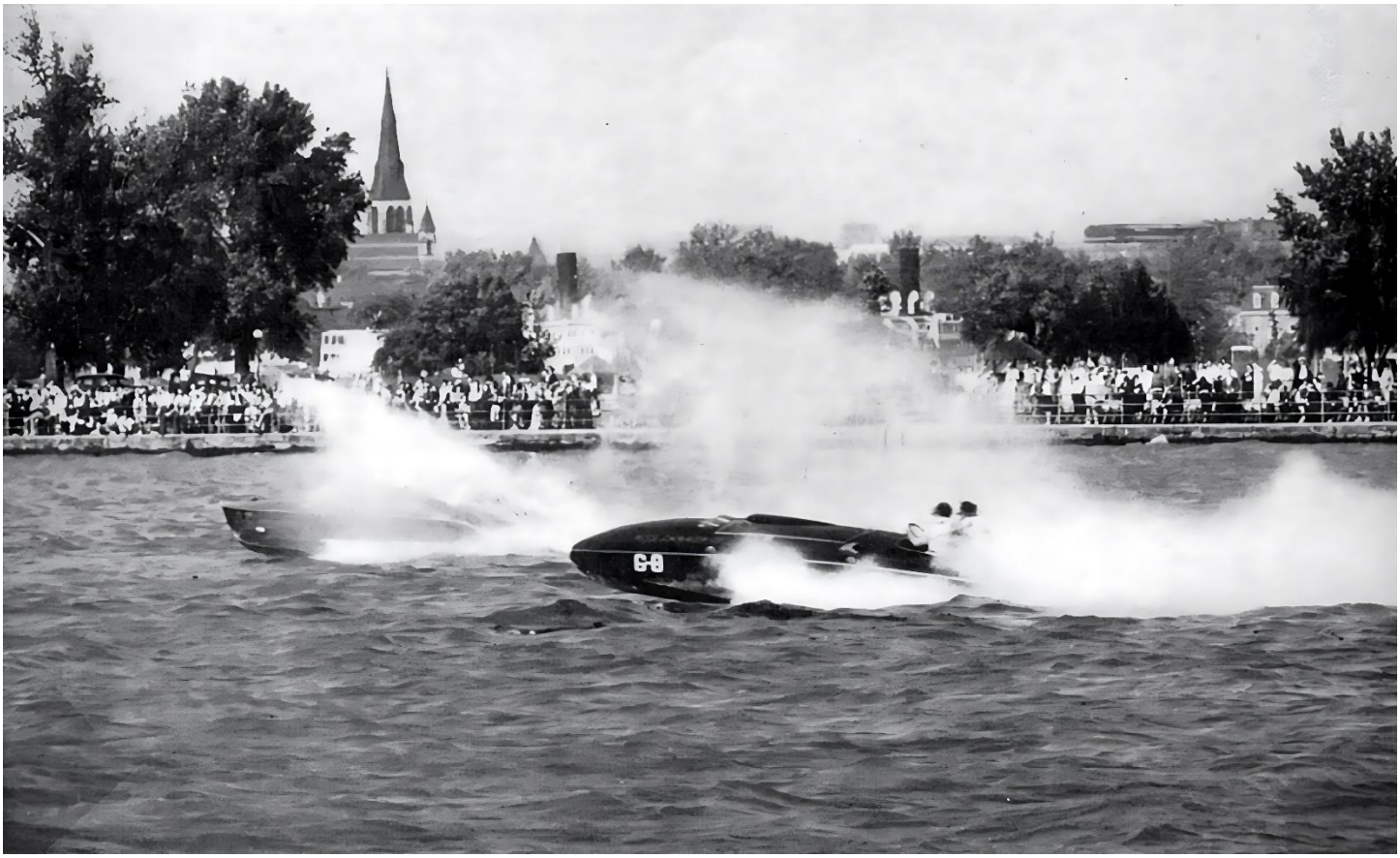
in 1930, bringing along his loyal team, including master mechanic Fred Offenhauser. But Miller's magic touch, so prevalent in the 1920's, departed in the 1930's and the new firm went under, and Offenhauser bought the assets of the company and became the new source (and brand) for racing engines. After that, Miller stumbled from one failed project to another, nearly broke at the end, finally passing in 1943.

The Miller 732 12 cylinder

Wilson won the first heat of the 1938 Gold Cup with Canada III, and then the oil pump broke down. There was no such thing as Fedex in those days and it was not possible to effect repairs in time. The Wilsons took their best shot at the 1939 President's Cup on September 24-25 weekend. At the time the Wehrmacht was cleaning up the remains of Poland, and Canada was technically at war, but the Allies were still in a wait and see mode and the wartime restrictions

would not come into play until 1941. Two earlier contenders, My Sin, owned by Zalmon Simmons, tuned up by the legendary Zumbach's custom shop in New York City, and Why Worry, a project of outboard racer turned Gold Cup driver Bill Cantrell, both hit logs and were out of contention. In the first heat, Miss Canada III came in second after Notre Dame. Both had the same time of 14 minutes 31 seconds but Notre Dame had 400 points to Canada II's 300, so Notre Dame won. I don't understand the points system, but it was moot when Miss Canada took the second and third heats. It was the first major motorboat racing trophy Canadians won and the first big one since the sailing sloop, also Canada won the Canada's Cup (the Great Lakes equivalent of the America's Cup) in 1896. As noted in Book II, Harry Greening had won the 1924 Cup with Rainbow IV, at least he finished with the fastest time, but the competition whined up a storm about the elongated lapstrake hull configuration, claiming that this qualified the craft as a hydroplane, or had the equivalent effect. The decision was that Greening and Rainbow had violated the spirit of the law, if not actually the letter. Even to a non-engineer such as the author, that sounds pretty far-fetched, but that was the end of Greening as a Gold Cup contender; after that he stayed in local competitions, building six more racing Rainbows.

Harold Wilson picked up the President's Cup from Franklin Roosevelt in person, FDR magnanimously noting that there were no hard feelings, "My dear friend, Canada is not a foreign country. It is a brother country of the United States. Take the trophy home, Mr. Wilson." The Wilson's put the Miss Canadas in storage after the 1939 season.



G-8, Miss Canada III

Powerboat racing did not get back on the water until 1946; the war only ended in August of the previous year, and it was too late to organize anything so late in the summer. More engine breakdowns occurred, and even then, the appearance of the war surplus Allison it was clear that the Miller era, like the late Miller himself, was truly over. The Miller, at best, would put out 1,000 hp, while the final production Allison in 1944 would give over 1,600 hp. The Merlin put in the Lancaster would put out something similar, 1,600 hp and now these engines were also in surplus availability. The Wilsons purchased one and put it in Canada III. This did not start out well, as in the Silver Cup races in 1947, Canada III kept falling behind Notre Dame and its relic Duesenberg engine, dating from the Miller era of the 1920's. It reached a Gold Cup class speed record of 119 mph in June 1948, but the Gold Cup that year was another blowout, the wind was high and the water was so rough several boats were damaged including Canada III, with a long lateral hull split. The boat and driver turned in a solid performance, but it was outclassed by Such Crust (sponsored by a bread company) and Tempo VI, driven by Guy Lombardo. I'm not being mean by ignoring good Canadian Guy Lombardo, but his game changing cup-winning racers Tempo's VI and VII were American built, the first by Apel's Ventnor Boats in New Jersey and the second by Les Staudacher's shop in Michigan. Miss Canada III's time had come, and it

was time for a new boat.

Miss Canada III, a new restoration ca, mid 1980's Author Photo

The Wilson's now began to plan a boat for the Harmsworth Trophy. The Harmsworth was the ultimate international speedboat race (the Gold Cup was strictly North American and entry was

on a team basis, location and country didn't matter). It began in 1903, sponsored by Alfred Harmsworth, creator of "red-top" trash rags Daily Mail and the Daily Mirror. It was intended primarily to showcase superior British technology, which it did for a while until the Dixies 1-IV over 1909-12 and then the long reign of Gar Wood's Miss America series all through the 1920's and 1930's. Wood had vanquished all comers and when he pulled out in 1933, the event simply ended; the times made it difficult to spare the hundreds of thousands of dollars needed. As well, Miss America X seemed to have reached the speed limit of these style of boats at 124 mph. More money and new technology was needed, this would have to wait. By 1949, there was a new economy and new business wealth, boosted by wartime spending and new machinery, boosted by wartime ingenuity.

The Harmsworth was country-determinant; it was U.S.A. versus Canada versus Britain or anyone who had the means to mount a challenger. The owner, driver and builders all had to be from that country. This worked for the Wilson's, the builder Greavette Boats, but Douglas Van Patten. Born, educated and beginning his career in Detroit, he only moved to Canada in 1937 when he joined Greavette on a full time basis as their house designer. Technically this would make him a permanent resident, but not a citizen, but the Wilson's were able to obtain a waiver from Harmsworth, rather than hope for the best and get ruled out on a technicality in the future when somebody didn't like them winning. Patten's hull design was a sort of triple step, very shallow rises; the three point system was already almost the standard, this seemed, literally a step backward; Patten was convinced it would be competitive, and much less dangerous than the unpredictable hydroplanes, where everything would be going great until…whoop over you go and that is it. The Merlin was out, the more powerful Rolls Griffon was in. With a supercharger the horsepower would be in to the 2000's. I'd given the Allison some shade for its supercharger issues during the war relative to the more efficient Rolls Royce's, but now it was the Griffon's supercharger that wouldn't perform and they bailed on the Gold Cup, and failed them again in the Harmsworth itself, it would push the engine up to 1,700 rpm when they needed close to 3,000 to be competitive. Finally, they made progress in setting a round the course speed record of 138 mph.

Miss Canada IV

The Wilson's took one more shot at the Harmsworth in 1950, but a hard hit on the water bent the steering apparatus and the resultant wild porpoising damaged the hull and Canada IV was out. The hull was repaired and they tried for a world water speed record, hoping to match and best the very green Donald Campbell (who inherited the speed record business from his late father, Malcom) and Stanley Sayres. A new propellor gets the credit for what happened next, but some context is in order. The propellor was made by Rotol (a joint venture between Rolls-Royce and Bristol Aerospace) and was stainless steel, rather than the bronze more commonly used. But this is where things get a little fuzzy. A propellor alone won't get more speed, particularly with the same boat and engine so there has to be a major change somewhere else. The various histories don't explain it all, but my best guess (feel free to tell me otherwise) is that there were major changes to the gearbox. Leo Villa, the mechanical mastermind behind the Campbell Bluebird cars and boats, had a special gearbox built for the Bluebird boat after the war, to convert the engine's shaft output of 3,000 rpm by 4 up to a searing 12,000 rpm at the

prop. This would in Villa's words be "to eliminate torque" presumably from the wide pitch of a normal racing prop of the time to a much flatter pitch with much higher revs. This may have been the trick, Canada IV reached 183 mph on the first measured mile. Speed records are essentially drag contests, you go as fast as possible with your foot to the floor for the said mile and then have no more than ten minutes to turn around and reset for the second mile back. Your time per mile is the average on that mile and the record is the average of the two miles there and back. A high speed of 190 mph was attained on the return when the gearbox exploded sending shrapnel right through the hull, the forces on it were just too much. Campbell Sr. had been too ill after the war to make much of the upgraded Bluebird, although he did try once, and in 1949 the piston engine was pulled and replaced with a jet engine out of a Goblin fighter and Donald was still practicing before a formal speed attempt.

It turned out that the Griffon was not actually purchased by the Wilson's but was a loaner from Rolls-Royce, and the rental arrangement was up and the engine was to be returned. At any rate, E. A. and Harold Wilson were done with boat racing. In 1951 the Wilson's interests had shifted to road rally, and the boats Miss Canada III and IV and boat engines, including several war-surplus Merlin's to Thompson (the 732 V-12 Miller and the prototype Wilson-Volcker 225 ended up in a museum). Both Miss Canada III and IV were runabouts, and used a series of steps in the hull, following a race boat standard dating from 1911, but by the 1950's, this was old hat. The three point hydroplane would rise out of the water, supported only by the very bottom tips of the two forward sponsons and the propellor. The three-point system had been drawn up by French designer Paul Bonnemaison in 1911, but the huge but weak engines of the time made any practical application impossible (even the aero engines of the time were lucky to reach 40 hp). It was Adolph and Arno Apel of Ventnor Boat Works that built the first workable model in 1935. It is the standard of performance boat racing up to today, although some of the mid-range classes have returned to runabout hulls as they are easier and safer on the turn. It should be noted the term 'hydroplane" covers any sort of faster motorboat and not just the three-pointer, the term was used even in the 1920's and turns up in Fitzgerald's novel The Great Gatsby, as one of Jay Gatsby's many indulgences. Miss Canada IV was moved along to Thompson Racing.

<u>The Thompson's and the Miss Supertest series</u>

If you are of a certain age…

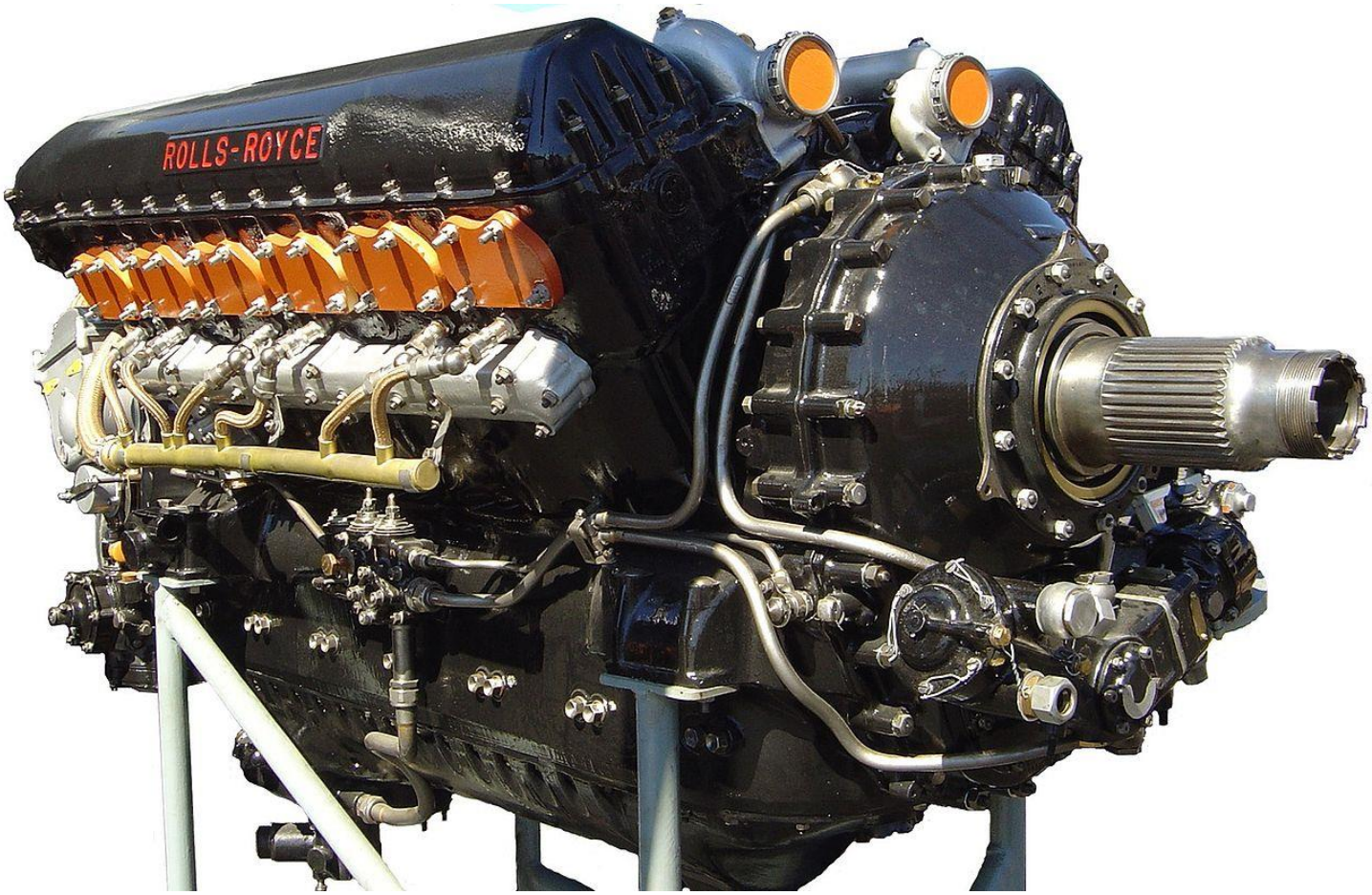
John Gordon Thompson went into the petroleum distribution business in the early 1920's building Supertest Petroleum into one of the most recognizable brands in Canada. Supertest was one of the big eight postwar gas station franchises (and the only Canadian owned, at the time), along with BA (British American), BP (British Petroleum), Fina (Petrofina SA), Esso (Imperial Oil), Golden Eagle (Ultramar plc), Shell (Royal Dutch Shell) and Sunoco (Sun Oil Co). Thompson senior was an active sportsman, a golfer and supporter of sports venues; Thompson junior set his eyes on boat racing, informing his father he wanted to go after the Harmsworth Trophy. This was an ambitious goal, particularly for a Canadian facing Americans with their high-risk, bet the ranch, money-is-no-object approach to sports. The Canada won the Canada Cup in 1899, no more cups would be won by Canadians until sailing sloop Inishfree in 1957. Harold Wilson won an international 225 cu in competition at the CNE in 1934 and 1935 with the Greavette built Little Miss Canada IV. He ordered two serious unlimited contenders, Miss Canada III and Miss Canada IV and won the Silver Cup with III in 1948. Both III and IV were built at the Greavette works in Gravenhurst; both powered by the Rolls Royce Merlin. Rolls-Royce had two principal aircraft engines in the war, the Merlin and the Griffon. The Merlin was the go-to engine for many Second World War Allied aircraft, it powered the Spitfire, the Hurricane, and the Lancaster. The Griffon was larger and supposedly more powerful, but the early versions underperformed relative to the smaller Merlin, and it went through several re-works and began to appear in planes late in 1941, unnerving pilots used to the Merlin as the engine turned in the other direction. 9,000 Griffons were built compared to 150,000 Merlin's; it

never achieved the star power of its predecessor. The American engine was the Allison V-12 1710, which struggled with a poor supercharger that did not perform at altitude, the 1939 P-40 Warhawk used a Merlin licensed to Packard, even the great P-51 Mustang which came on stream in 1944 was still using a later-era license-built Merlin. All these engines were cheap war surplus, they were already mostly obsolete by 1946 with the coming of the jet. All of them were used in unlimited hydro's, at least altitude wasn't an issue, there were no races up in the mountain lakes of Peru.

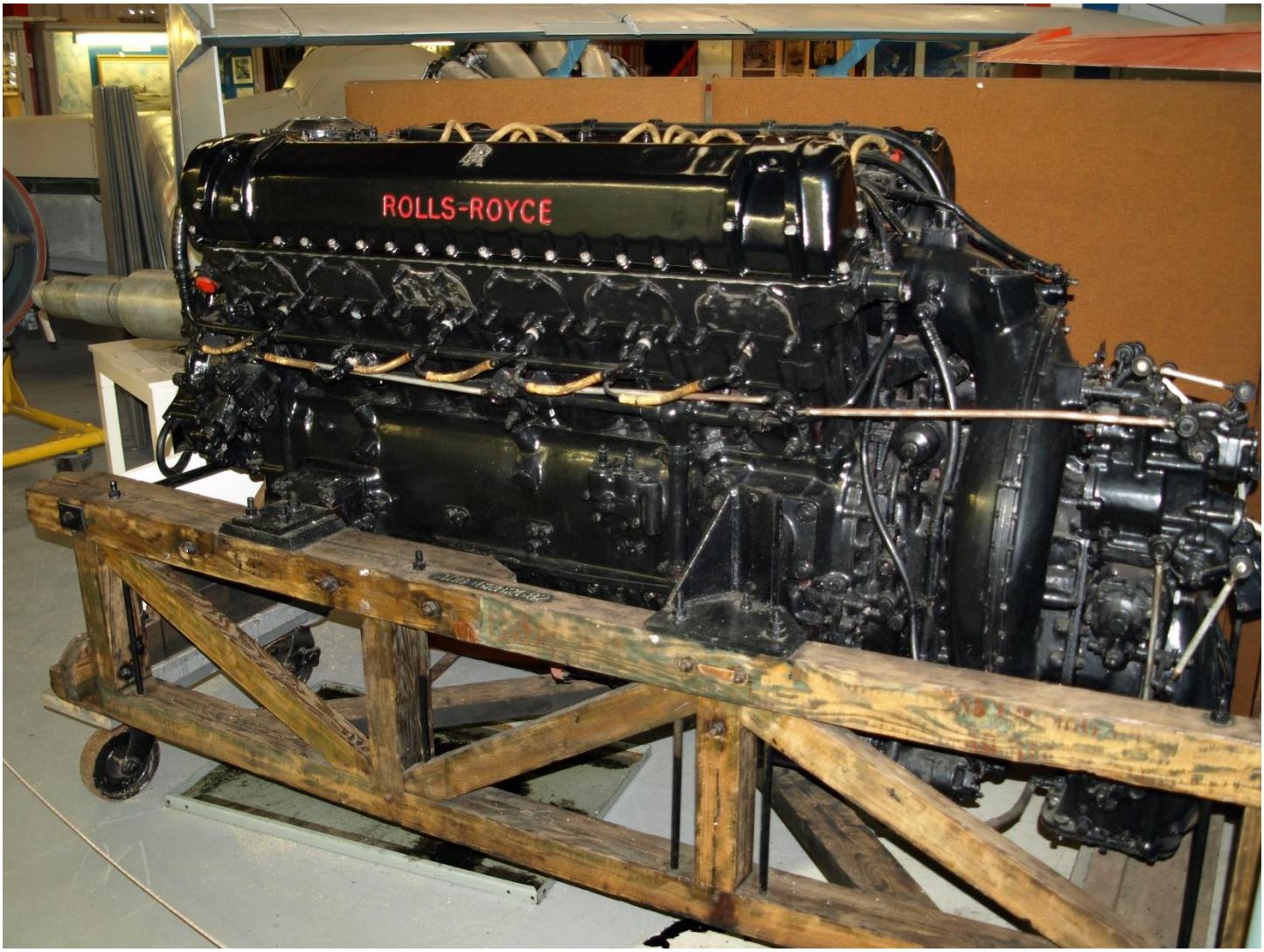
The Thompson's renamed Miss Canada IV as Miss Supertest (I), purchased a Griffon and put it back in the boat and campaigned it with little success in 1952; although this was probably more of a learning process than a disappointment. Still, the engine suffered repeated mechanical breakdowns, possibly the effort of pushing all the wetted surface of a big runabout, even with the multi-step hull configuration was too much for what was an aircraft and not a tugboat engine. They realized the only way forward was to build a three pointer. Thompson had taken two years of engineering at U of Toronto, so he had some idea of engineering design and draftsmanship; he had been studying race boat designs for several years. Unlike the racing sailboat hulls eighty years earlier, which sailed wherever they needed to go, hydroplanes were shipped to their races on a transport truck pulling a flatbed trailer. The boat was too wide to go down the road so it was set up on angled rack, it was easy to see how the bottom of the hull was designed and to see how the interior was designed, all you had to do was walk around the other side of the trailer. Still, given the hypersensitivity at high speed it didn't take much to screw up, an inch too much this way or too little that way and you had a big dog or a wild animal on your hands, the only consolation was that hydro's were cheap to build, you laid the keel, put on a few stringers and then sheeted the boat with mahogany plywood, the hull was flexible enough to withstand multiple reshaping to get the performance just so, as was the case with the engine. By now the two aerial bridesmaids of World War II, the Allison and Griffon had been fitted with superior superchargers and could now put out 2,500 to 3,000 hp. The output was way over their rating, but the juice was only needed for maybe twenty total minutes of in water test and race time per event. As with most modern race engines, they were usually taken apart and rebuilt between each competition. But rather than take a shot at building the boat themselves, in 1954 they contracted Les Staudacher, America's Mr. Hydroplane, to do the job. Staudacher had started his carpentry career building church pews, then pivoted to race boats, putting out a series of winners such as Miss Pepsi, Maverick, and most famously Guy Lombardo's Tempo VII. As noted, under Harmsworth rules, the challenging boat had to be built in the challenging country. The nationality of the builders was not an issue, but Thompson wanted winners, and so Staudacher and his team would drive from their works in Kawkalin, Michigan all the way to the

Mac-Craft plant in Sarnia, a two-and-a-half-hour drive. Mac-Craft had been founded in 1938 to build small mahogany runabouts, this was cut short in 1941 when it was re-routed to military production and despite it's small size it went on to produce several Fairmiles for the navy. In 1946 it returned to boat building, but in 1947 it was taken over by General Products Manufacturing of London, Ontario. General Products, as the name suggested, had multiple product lines and decided to retool the boat making operations from plank mahogany runabouts to plywood outboards, under the trade name "Macrolite". About eight Mac-Craft runabouts survived and are in running condition today; as for Macrolite boats, no such craft exist that I can find, suffice to say that General Products most likely lost interest in the complex manufacturing/high competition world of boat building and quickly phased out this aspect of the business. But the equipment and materials (and some of the original Mac-Craft employees) were still around, making it the most logical place (also straddling the U.S./Canada border) to do the work.

The new boat, christened Miss Supertest II was completed in Canada, by Americans, which was acceptable under the rules. Miss Supertest II was 31 feet long and 12 feet wide, weighing three tons, one of which was the Griffon engine. The first driver hired was Bill Braden, a nephew of 1920's Muskoka racing star Harry Greening. Braden was already a successful racing driver and Thompson hired him to pilot the boat in the 1956 Harmsworth Trophy. Braden won the first heat, then he passed out while driving in the second one, the official cause was a buildup of exhaust fumes, but given that the cockpit was completely open and fresh air was blasting into his face at 100 mph, I can't see how this could be an issue; however it is still possible that there was a fracture in the engine exhaust manifold as he was behind the engine, but again given the huge amount of airflow, it's hard to say. He was helped ashore to recover, he lost the remaining heats and the Harmsworth trophy stayed in the U.S. Braden left Thompson Racing and was replaced by up and comer Art Asbury. Asbury was well known in Ottawa, racing outboards at Mooney's Bay in the early fifties, his trick was to turn up the power just as he came alongside the bridge and drench the gathered row of spectators with a watery rooster tail.



The Rolls-Royce Merlin, 150,000 were made. Power source to Miss Canada IV/Miss Supertest I Photo by JAW of English Wikipedia



The Rolls-Royce Griffon, powering Miss Supertest's II and III Photo Nimbus 227

The all-American Allison V-12 1710 had its good days, and some bad days. Photo by Peripetus

Asbury sets off in Miss Supertest II.

Asbury started off with a big moment, reached a straight speed record of 184 mph in Miss Supertest II, the fastest speed reached by a propellor driven boat, although the record only held for a few weeks. The world water speed record at the time was in the mid 200's, held by Donald Campbell in the fastest and last of the Bluebirds, K7. But K7 was powered by a jet engine, a Vickers Beryl and simply used exhaust for thrust, not a propellor. According to his biographer Dave Cunnington, Asbury had reservations about II as a competition boat; it was a fact the boat did not perform well in choppy water, and water tends to get very choppy in a boat race. But he had way more concerns about the new project, Miss Supertest III. Even as mechanics Bob Hayward and Vic Leghorn were trying to firm up the performance of II, Thompson was on his next and most important build, the boat that would become Miss Supertest III. III was purpose built to compete for the Harmsworth, although on the surface it didn't seem all that different from II, same engine, a tuned-up Griffon, a thousand pounds lighter than II, same look and

shape. Thompson and his team did the build themselves this time, at least they had II as a model to go on. If Asbury had some concerns about the professional Staudacher team build of II, he had a laundry list of concerns about the home-built III and sent several memo-letters to Thompson about what he felt were necessary changes to the just-finished boat. Thompson did not take the criticism well and Asbury left in 1957 to pursue his own racing career, finding multiple wins with his Grand Prix boat Miss Canadiana, his spot at Thompson Racing was filled by Hayward.

There is some confusion in the storylines of Bob Hayward, which tend to make him into an out-of-nowhere prodigy who simply climbed into a hydroplane and started winning races; in fact he was already a very experienced amateur when he joined the Thompson team in 1957. His family was originally in the egg business, on a small scale. The father died when the boys were relatively young, and he helped run the run the farm along with his mother and older brother. His brother was the entrepreneur in the family and built up a trucking business; Hayward, a self-taught mechanic did the vehicle service work. Hayward built himself an outboard hydro and competed for several years and then moved into cars. In the days after the end of the war, the stock car movement had not yet come to Canada, local racers were more of the rat-rod variety, basically making race cars of bits and pieces scavenged from the local wrecking yard. One of his stick-together cars reached 132 mph on the local drag strip, clearly he already had the knowledge and a growing reputation. He was hired by Thompson principally as a mechanic, and secondarily as a backup driver to Asbury. Hayward had already run a few races and had impressed Thompson so when Asbury left, Hayward moved into the job. Still there were problems with II right off, a piece of the hull burst while Hayward was driving, putting a hole in the bottom.

Miss Supertest III

The human factor was high speed on the turn. In Hayward's own words:

"We turn the rudder hard a couple of hundred feet before the curve, at the same time slowing down. I try to hit about 120 where the curve begins. By the time I'm into the turn, the boat is skidding, broad sliding. At the end of the oval, if things are going right, I'm down to about 80. Then I accelerate again, still in a sort of controlled slide. I should be going about 110 as I hit the straightaway."

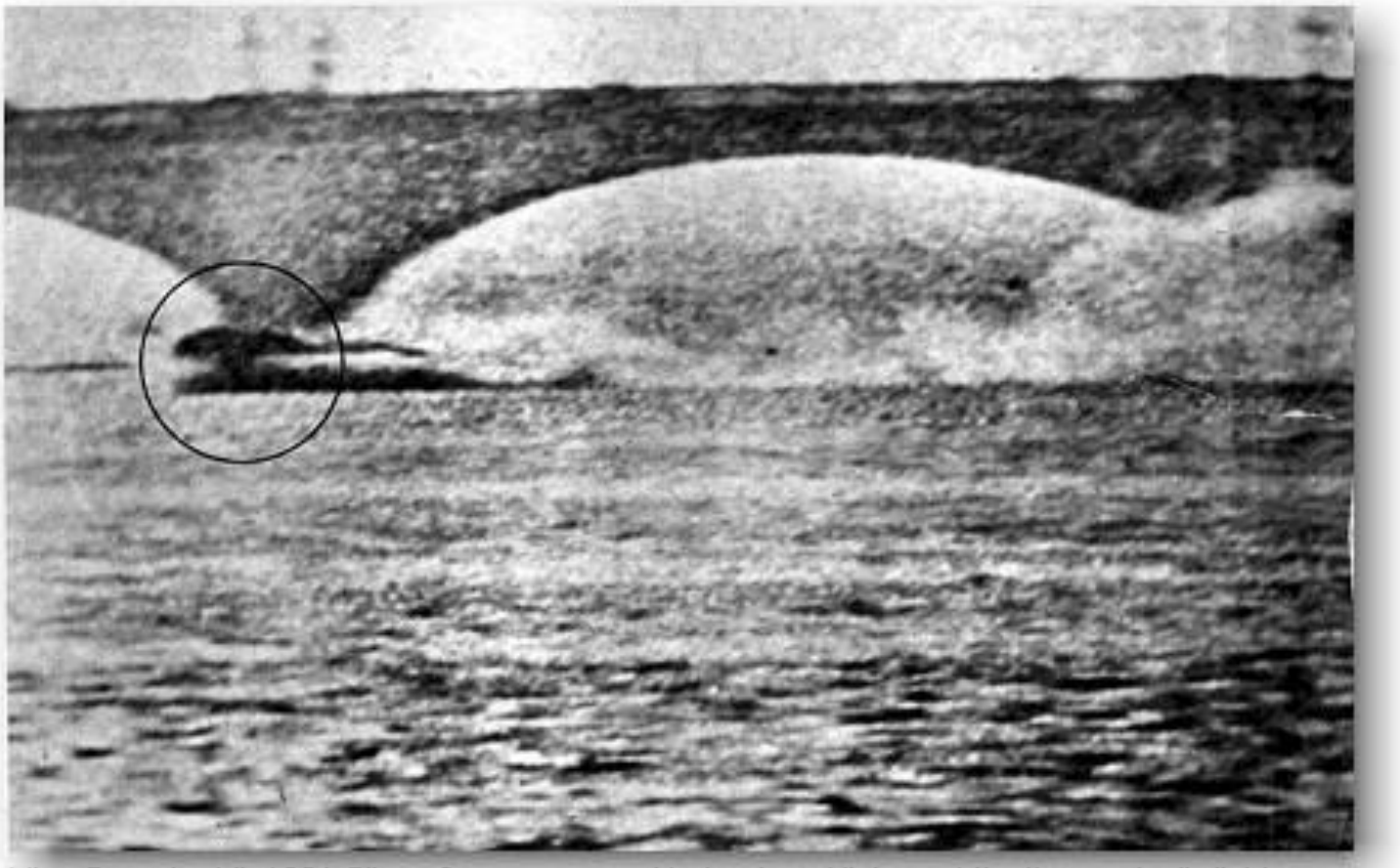
Hayward had to work on this, in his first Harmsworth in 1959. The American was Maverick, as noted a Staudacher boat with the upgraded Allison 1710, driven by Bill Stead and owned by W. T. Waggoner, a Texas oilman. Hayward was careful on the turns on the first heat, slowing increasing his speeds, but not enough to overtake Stead until the Allison supercharger broke down. Stead and Maverick won the second day but bogged down with more engine problems in the third and finally lost out in a quarter spin and Supertest went on to win the day, best two out of three and take home the trophy. Some of it was luck due to mechanical issues with the Allison, but engine problems are simply part of the deal; Hayward and Leghorn were fanatically fussy with keeping the boat and engine to as close as foolproof as they could. The 1960 Harmsworth saw an old problem resurface; there was not one American challenger this year but

three. This issue had already been brought up in international competition for the America's Cup race of 1859 where the defending Americans put several schooners into the race against the solitary British entry, even going so far as replacing a damaged boat with yet another boat, like a relief pitcher in baseball; the British lost and filed a complaint. The American Yachtsmen's Association had to agree with the British and thenceforth in international competitions each country was permitted only one boat, and no substitutions. This had been the standard rule for a century, then all of a sudden the American Power Boat Association, (the motorboat racing version of the Yachtsmen's Association) simply waived the rule for the 1960 year only, as if that was somehow fairer. Even though the Canadian's held the right as the previous year's winner, they did not raise any objection. The main American competitor was Gale V, driven by "Wild Bill" Cantrell, a talented but very uneven driver who tended to spin out of control on the curve; finding himself in some strange places, including once getting hung up on a ship anchor chain and later running up a beach and into a flower garden (after this his fellow drivers would wind him up by referring to him as "Wild Roses"). The other two boats were Nitrogen 1 and Nitrogen II, driven respectively by Norm Evans and Ron Musson; Gale was owned by Lee Schoenith, an electrical contractor but the Nitrogens were both owned by Samuel W. DuPont of the DuPont chemical fortune, so I guess that was where the money was talking. Our most famous general, Arthur Currie once said; "Thorough Preparation is the Key to Success", the Mischief team put a truly obsessive amount of work into readying their sailboat against the Atalanta in the 1883 challenge as did Gar Wood with his long uninterrupted stretch of winnings from 1916 to 1933. But the Americans were surprisingly poorly prepared this time, Gale's engine quit on the first day, Nitrogen II on the second, Nitrogen I simply didn't have enough puff to catch Supertest. It wasn't the fault of the drivers but once again the notoriously buggy Allison. Only Gale had an improved supercharger, Nitrogens I & II had out of the box stock engines. The Allisons were very thirsty compared with the Griffon, Gale's engine used a methanol mix and guzzled it so quickly it had to take 500 extra pounds of fuel. None of the Americans had any real time to test and deal with problems, Du Pont and Schoenith had bid for the Harmsworth, but the APBA had hemmed and hawed over the multiple entrant request and only made the decision three weeks before the race. Cantrell and the Nitrogen crews had to drop all their other planned races and head straight to Picton, they only had a couple of days and then only were able to go for only one test run. Cantrell was not impressed and sent a letter to the suggesting they stick with the original one-boat, one-country format. This did not help the following year when Chuck Thompson (no relation to the Supertest guys) arrived, again with little preparation and his Miss Detroit conked out with engine trouble in both the first and second race days, letting the Canadians keep the trophy for another year. After this humiliation he applied himself to getting Detroit's engine up to snuff for the forthcoming Silver Cup races now just three weeks away.

Hayward and the Canadian Thompson's intended to compete in the Silver Cup as well, but for reasons that were never clear, decided to park Supertest III and campaign Supertest II.

Today, all hydroplanes are much more safety oriented, the driver wears a helmet and a fireproof racing suit and is enclosed in a cockpit designed for an F-16 Fighter jet. In the event the aircraft breaks up due to accident or enemy action, the cockpit unit will stay intact and protect the pilot long enough to eject; so in the case of a crash of the boat will go to pieces but the capsule will remain intact and shield the driver from the force of the water or parts of the boat (or someone else's boat). But at the time the cockpit was fully open, the driver had a crash helmet and that was it, which offered little protection when the worst did happen, which it invariably did at speeds over 100 mph. The accident came about with Hayward doing what he did best, high acceleration on the turn. He had a disqualification on the first heat due to hitting a marker buoy and was already way behind in points and needed to put on an extra effort to catch up to his main rivals, Chuck Thompson driving a much-improved Miss Detroit and Bill Muncey driving Miss Thriftway. The marker buoy issue was strange, apparently Hayward was sure he hit it (illegal) and confessed this to the judges; apparently they didn't see it until Hayward mentioned it. It's easy to appreciate this move as a sign of superior character; I have to appreciate Hayward's honesty, but I think just about every other racer in any sport would just have sat on it and wait and see. Perhaps he felt the need to overcompensate in the second heat. Thriftway and Detroit were both on the port side around the turn, Hayward tried to wedge his boat between the two at close to 140 mph, 30 mph faster than his preferred maximum speed. He began to rock side by side on the combined wake of his rivals, his left sponson dug in hard and Miss Supertest flipped and landed upside down, and with no protection, Hayward took the full force of the water on his head, breaking his neck.


CA-3



Miss Supertest II, 1961 Silver Cup Hydroplane History <http://www.lesliefield.com>

Video clip taken from television news footage of the moment of the crash, showing under side of Miss Supertest II as it goes over.

In fact Hayward corkscrewed Supertest II, it turned over and the force of the water upside down actually bounced the whole craft right back again, but the very brief second upside down meant Hayward hit the water. The boat continued on for a few hundred feet, until the fatally injured Hayward's foot came off the accelerator and the engine went down to idle.

Hayward was such a revered figure in the sport that Miss Supertest II sometimes gets the blame for the crash. It was true that the boat tended to bounce from sponson to sponson in rough water, but the real culprit in the tragedy was Hayward himself. He was a great driver, but he simply messed up. He knew just how fast he needed to go in the turn and exceeded it anyway. The racing community was devastated, but the higher speeds meant more risk: Braden had already died in a flip in 1958, killed by a propellor he had loaned to one of the other entrants, Ron Musson died during what was known as the "Black Sunday" President's Cup race on the Potomac River in 1966. Musson flipped Miss Bardahl in the second heat, two more drivers

collided and died in the third. Chuck Thompson died a few weeks later in a crash. Bill Stead died, not on the water but in a midget racing plane accident in Texas earlier that year. Muncey's fatal turn was in 1981, in Acapulco. According to outboard racer Bill Tenney, Muncey was suffering from a loss of vision at that point and was still hard at it when he should have called it years earlier. Norm Evans survived racing, but was murdered in 1997, the official police reported motive was disputed by the family. Of all the 1959-61 Harmsworth drivers, only "Wild Bill" Cantrell lived to a comfortable old age, passing at 87 in 1996.

James Thompson and his father ended their involvement with boat racing altogether after Hayward's death. Miss Supertest II was recovered from the water; ironically it had suffered little damage in the crash but was parked and several years later it was destroyed in a fire. Miss Canada IV, (Miss Supertest I) and Miss Supertest III have since been restored.