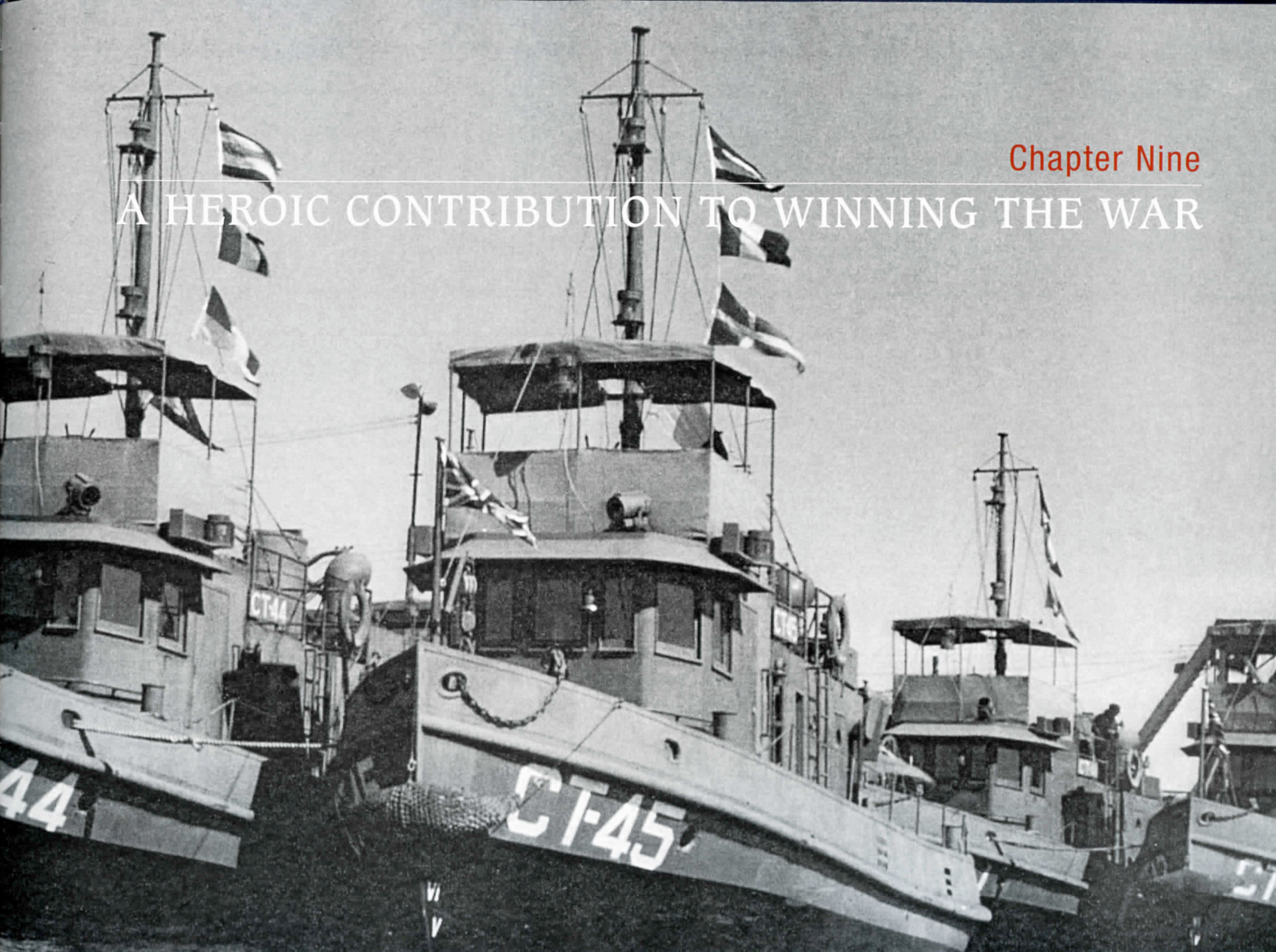

CT-66
CT-67



Chapter Nine

A HEROIC CONTRIBUTION TO WINNING THE WAR

Like many production efforts clouded by wartime secrecy, this story has never been printed, and its telling provides vindication for Ditchburn's recognition as a boat-building genius.

Many friends and neighbours knew that Herb Ditchburn had moved to Trenton, Ontario, in 1940, to be involved in building boats for the war effort. Very few people have an appreciation of how extensive his contribution was, combining as it did all the experience and skills that he had accumulated in a lifetime as a builder and designer of boats. Like many production efforts clouded by wartime secrecy, this story has never been printed, and its telling provides vindication for his recognition as a boat-building genius.

The story actually begins in 1929, with the building of a 45-foot, ketch-rigged sailing yacht for Senator William Alexander Fraser, a prominent resident of Trenton, and a tireless champion for business improvement in the Bay of Quinte area. A few years before the outbreak of the Second World War, Senator Fraser had been successful in securing the establishment of the Trenton Air Force Base, which was to become a huge training complex in the Commonwealth Air Training Plan.

At the start of the war, Canada became a much-needed production resource for every imaginable war material, and contracts were readily available. Small vessels of every type were suddenly in demand. One particular contract came to the senator's attention, and he immediately thought of a solution. The British Air Ministry urgently required fast, seaworthy rescue boats for use in the English Channel, and Senator Fraser realized he knew the man who could build them.

Herb Ditchburn responded immediately to the call, moving to Trenton, where he lived for the rest of his life. Having built many vessels for government service, he understood the requirement and quickly designed an 80-foot vessel much like a motor torpedo boat. A company was incorporated, called Aero-Marine Crafts Ltd., involving Gar Wood and his brother Phil as directors. The Woods could supply the three Liberty engines needed for each vessel. These engines were modified aircraft engines,

Opposite: Portia **is the 45-foot ketch built for Senator Fraser in 1929.**

A sea trial of hospital ship 155 in the Bay of Quinte shows a fair turn of speed. One of six sister ships built by Aero-Marine Crafts Ltd., she was designed by Herb Ditchburn and powered with three Liberty engines provided by Gar Wood.

surplus from the First World War, but they had been used successfully for unlimited racing during the 1920s and 1930s. More modern engines were not available, being desperately needed for aircraft and tanks.

The design specifications were accepted and the contract awarded. In a small factory at the mouth of the Quinte River in Trenton Harbour, construction began on six of the 80-foot "hospital" ships, as the Air Ministry designated them. Their mission on delivery to England was crucial in the Battle of Britain. Their dangerous duty was to dash out into the channel during aerial warfare, rescuing aircrew that had been shot down or parachuted into the Channel. Trained pilots were in very short supply, and

returning a pilot to active service as quickly as possible was a top priority. Since the English Channel is often an uncomfortable stretch of water, and German ships, aircraft, and shore batteries were plentiful, these small ships needed to be fast and manoeuvrable.

Built in record time and to the highest standards, these Ditchburn-designed warships were a credit to their builder. Senator Fraser had found the right man at the right time.

In 1942, a further order came along, but not for hospital ships—that phase of the war had been won. Now the requirement was for welded-steel harbour tugs, which were needed by the Royal Navy in almost every port in a war area, particularly in the Far East. The Central Bridge Construction Co. of Trenton, a company well skilled in steel construction, had never built a boat, but secured the order. Herb Ditchburn was requested by Senator Fraser to join the team and organize the construction of the 64-foot vessels.

While Herb Ditchburn had built over 1,000 boats in his lifetime, none had been in steel. Two hundred highly skilled workers were available, so Herb's task was to organize this force into a production line. Huge problems faced the operation, but they were all overcome as methods were developed for every stage of construction.

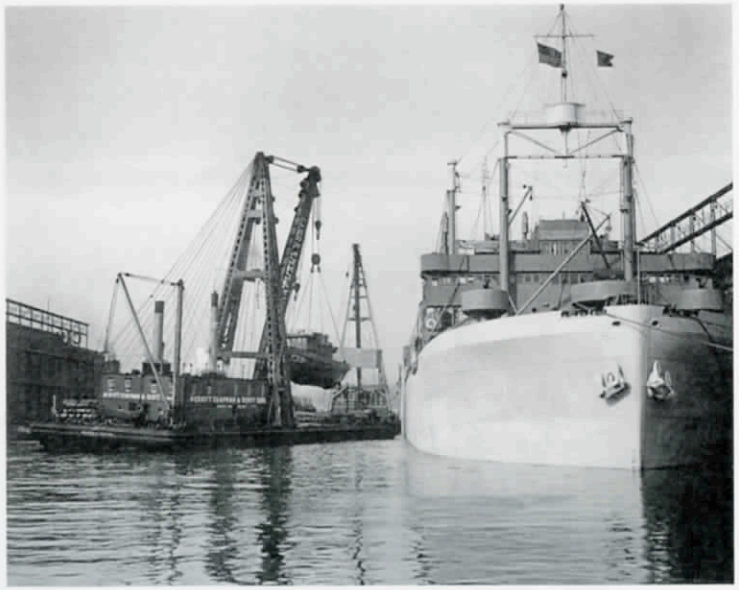
Hulls were built upside down in the building, and then moved outside on completion.

Talking shop. Herb Ditchburn, of Trenton, left, and Hans Sachau, of Toronto, meet in 1943 to discuss war work. Ditchburn was building all-welded steel tugs; Sachau was building 112-foot wooden Fairmiles in his Humber Bay shop.

In the yard outside the Central Bridge Company building, engines, fittings, and superstructures were added to the completed hulls.

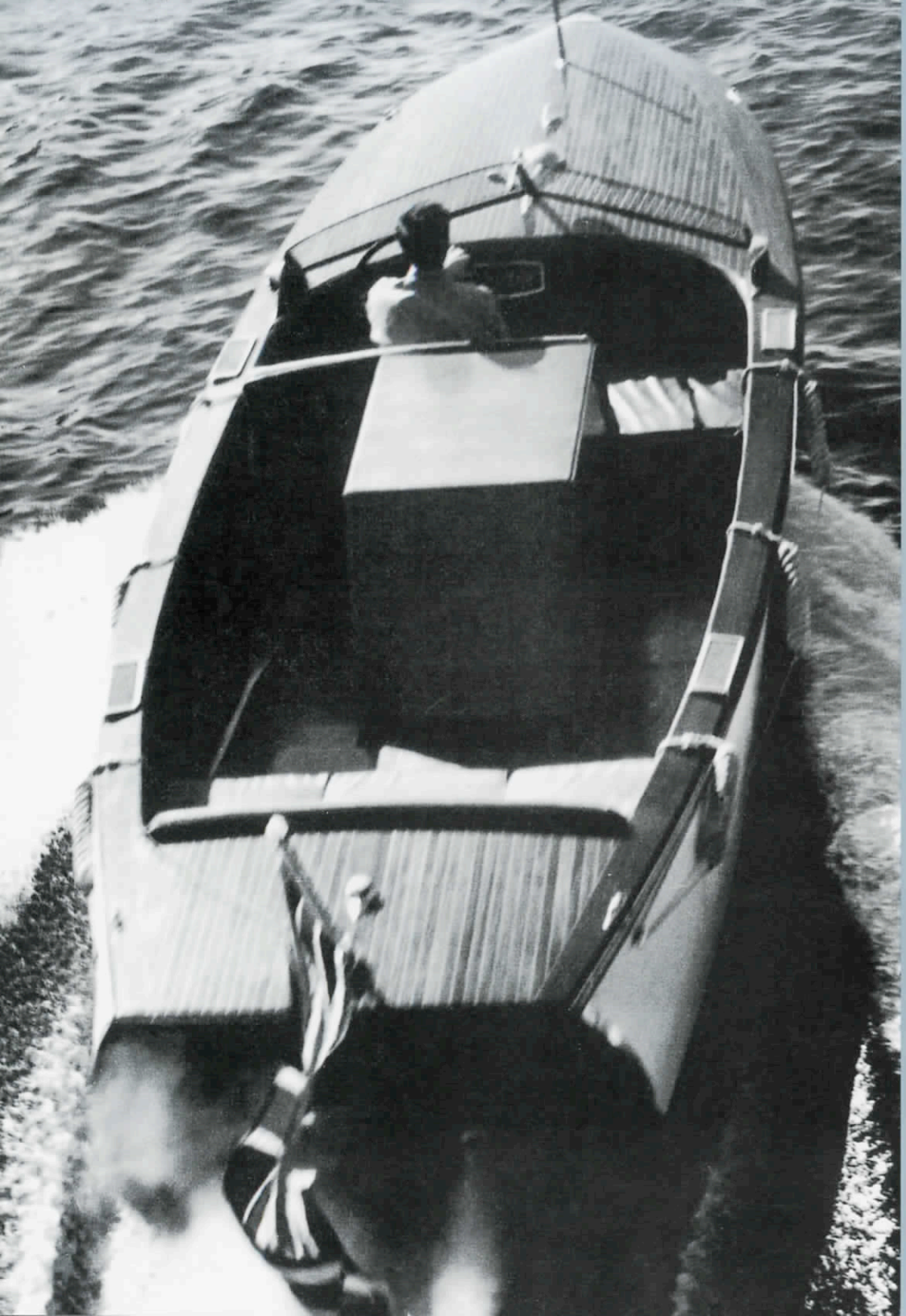
A sub-assembly line fabricated deckhouses and fittings, which were added to the hulls in the yard, along with a 240-horsepower Vivian diesel engine, a massive shaft, and a 1,500-pound propeller. Prefabrication was one of the principal features instituted by Ditchburn, and even the engine-room piping and electrical harnesses were being built in this manner. Each tug, when outfitted for firefighting and with the necessary equipment for harbour duties, weighed in at 74 tons. At first, the building process was uneven, but soon two vessels were being completed each week.

Since the factory was almost 2 miles from the nearest water, a specially built railway was necessary to get the finished tugs to the launch site at Trenton Harbour. After a test run in Lake Ontario, a representative of the British Ministry of War Transport passed the tug. Fleets of completed vessels were made up, travelling on their own bottoms across the lake to enter the barge canal at Oswego, then down the Hudson River to the port of Baltimore or New York for transport as deck cargo to various theatres of war.



Above: **Workmen drive a massive shaft into the hull before fitting the 1,500-pound propeller.**

Below: **A crane barge in Baltimore Harbour prepares to lift a tug aboard a British freighter for delivery to some distant theatre of war.**



A Young Boy with a Dream

When Herb Ditchburn took up residence in Trenton at the invitation of Senator Fraser, he became totally occupied by the requirements of the Canadian government for service vessels needed for the war. But he was not too busy to respond to the boating interest of a teenage nephew of the senator.

Eben James, now a senior citizen and lifelong boater, recalls their first meeting: "We were taken on a school tour of the Aero-Marine plant, set up in a vacant sawmill where the six high-speed hospital boats were being built. Mr. Ditchburn was in rolled-up shirt sleeves, going from worker to worker, checking their progress. Local carpenters were being taught to build these beautiful vessels in mahogany. I was enormously impressed.

"Later, I told my uncle of my interest to build a runabout for myself and he promised to speak to Mr. Ditchburn, who lived on the next street over. That night, I received a phone call from him saying he would love to be involved in the design and construction of a runabout. He invited me to come to his house where he had a drafting table set up. You could tell that he loved anything to do with boats.

"When our design was completed, my job was to procure the materials, which was difficult to do during the war. However, I gathered up oak, mahogany, and cedar and found a new 100-horsepower Mercury V-8 engine, so I was on my way. My father provided a workshop, and my major tool was a bandsaw. Mr. Ditchburn would come down evenings and Saturdays and show me how to fit planks, how to put in a double bottom, and fit other parts. He was very interested in the project, and I relished the time with him. We launched the boat together, put it through its paces, and he said, 'You know, young man, that is a good boat.'

"I was a young boy with a dream, and Mr. Ditchburn made that dream a reality. I will always remember that relationship with him. To this day, when I visit antique boat shows, Ditchburn boats are still considered the finest in design and craftsmanship."

Amateur boat-builder Eben James test drives his runabout built with design and construction advice from Herb Ditchburn. Photo courtesy Eben James.

An astonishing 260 tugs were built at this factory between 1942 and 1945. It was another case of the right man for the job. At war's end a citation of merit was presented to the company, expressing the government's admiration for this remarkable achievement. The citation stated in part: "The shipbuilding history of Canada would not be complete without recording the mass production of all-welded steel tugs for the British Navy by the Central Bridge Company of Trenton. A great many of these sturdy craft have been built and shipped for service in all parts of the world. None of their employees had any previous experience of steel ship construction, yet in the month of April 1944, this company launched 14 steel tugs complete for the British Navy in one day. The constant stream of such an important auxiliary being turned out by them will forever stand to their credit."

The townspeople of Trenton witness a tug launching in 1942.