

time when wars were fought on land and sea, and military authorities scorned any prophecy of aerial defense or contest. In the article Carl said:

"With Atlantic, Gulf, and Pacific coast lines of thousands of miles extant and with a very great proportion of the nation's population lying along and comparatively close to these water frontiers, most especially the Atlantic seaboard from the Potomac north, the problem of adequate defense in repelling invasion cannot be solved solely in terms of naval arms, battleships through the list to submarines, nor in terms of adequate ships supplemented by a vast enrollment of militia. . . ."

"What must be provided for in every detail is an aviation fleet of airplanes—not a few hundred or even a few thousand—in plain English, not less than ten thousand of them."

In this article, as in many other ways, Carl was ahead of his time.

America entered the war two years after this, in 1917. No races were held on Speedway in 1917 and 1918. The struggle for supremacy between American and European cars was forgotten in the greater struggle for human survival. Boys who had been racers on Speedway left for war. Some became heroes. A few would not return from the battlefields of France.

Doc Allen went to war with his boys, specializing in plastic surgery on European battlefields, to return with even greater skill and medical wisdom to head the hospital at Speedway.

The track itself went to war. Speedway was the halfway point between two great aviation terminals—Dayton, Ohio, and Rantoul, Illinois. The War Department saw its strategic value and transformed the broad infield into a landing field for military planes. The Government built an aviation repair depot, and hundreds of planes halted at Speedway to be serviced. Once an entire fleet of airplanes arrived, commanded by General Lee of the British Royal Air Service. England had sent them to help make America air-minded. The English planes staged sham battles through the Middle West to impress upon Americans the wartime value of fighting planes.

The racetrack partners, Carl, Jim, Wheeler and Newby, built

hangars to house the British air fleet. The problem of plane guidance came up at this time, and Carl, after considering the problem, sent crews of painters to draw large numerals on the roofs of barns and other buildings between Dayton and Rantoul. Elegant arrows, visible from the air, for miles, pointed to emergency landing fields. These roof signs that originated at Speedway during World War I later became recognized symbols for directing peacetime air travel.

The war contribution of the racetrack did not diminish in World War II; for then, across the road from the track, General Motors Allison Division poured out engines that powered some of the most formidable combat planes to see action in the war.

The Allison engine had its beginning when Carl and Jim sought more powerful engines for greater speed to propel their yachts, Carl's *Shadow H* and Jim's *Seahorse*.

Jim left Miami Beach for Indianapolis and the Prest-O-Lite engineering department to design the new engine. When he returned he told Carl of his success. "It will be an engine with 1,100 horsepower; but," said Jim, "the first motor will cost us two hundred and fifty thousand dollars to build."

"Oh, that's simple," was Carl's ready answer; "I'll take two, you'll take two, and we'll sell six."

The liquid-cooled Allison had tremendous power for its size and weight. After it was displayed at the 1939 World's Fair, it quickly became one of the country's top airplane motors.

War had interrupted progress on the Lincoln Highway and Miami Beach. But convoys of army trucks, moving over the continent on the almost finished Lincoln Highway, proved how wisely Carl had planned.

At this time Carl was a dollar-a-year man, contributing his time and effort to aviation. For aviation had come a long way in the five years since Carl flew in the Wright brothers' plane during the first aviation meet at Speedway. But its war role was still a minor one.

With Carl's ceaseless war activities to guide me, sometime during the first World War I grew up. I discovered that a woman in wartime has a bigger job than simply being a wife and home-