

British Car Personalities

Frank Costin

by Bob Vitrikas



Frank in his 'Wellies' posing with one of his radical monocoque plywood race cars.

Twelve years ago I wrote a column on one of my favorite, but little known, British sports cars, the Marcos. Now I find myself writing a series of articles on British car personalities and today I'd like to focus on one of the co-designers of the Marcos, Francis 'Frank' Albert Costin. Frank is a really interesting fellow, some might even call him "eccentric". I choose to call him a brilliant out of the box engineer. Here's his story.

In his youth Frank was a Olympic level swimmer and later in life he composed music. Quite the Renaissance man, eh?

Frank began his engineering career with the de Havilland Aircraft Company where he worked on the design of the Mosquito bomber which was constructed mainly of plywood. Hey when you don't have much aluminum and you are at war fighting for your country's survival, you use what you have. Turns out the Mosquito was quite a good airplane and delivered the goods (bombs) on Germany. In 1954 his brother, Michael, formerly a de Havilland engineer and laterly working for Colin Chapman at Lotus Engineering Ltd, (and partnering with Keith Duckworth in the wildly successful Cosworth Engineering firm) asked his brother to design an aerodynamic body for the new Lotus race car. The design specification was a car that would do 125 mph with just an 85 hp engine. Quite a challenge! Frank's answer was the Lotus Mark VIII, the first enclosed body Lotus race car that mated up with a space frame chassis that weighed just 35 pounds and was described at the time as "the most nearly perfect sports car chassis". All good things must have a negative side. The engine had to be disassembled in order to install it in the frame. It should be noted that Frank did NOT design the chassis.



The Lotus Mark VIII in all its naked beauty! Photo courtesy of Wikipedia

In 1956 Colin Chapman was selected by Tony Vandervell to design a Formula 1 race car to “beat the bloody red cars” Ferrari and Maserati. Rule Britannia! Chapman liked Frank’s work so much he recommended him to Tony Vandervell to design the body. Costin and Chapman’s design was so successful that in 1958 Vanwall went on to win the inaugural Grand Prix Constructors’ Championship. Take that Ferrari!

Costin went on to design aerodynamic bodies for Lister and Lotus road cars. Frank later went on to partner with Jem Marsh in the design of the aforementioned plywood chassis Marcos as well as chassis for Maserati, and Lotus. Ever his own man, in the 1990s Frank Costin went on to design the ultra-light Dragonfly glider in partnership with his old engineering friend Keith Duckworth. While in his early 70s, he personally flight tested his creation! It would be Frank’s last aviation project. Together Frank and Keith made quite a team right to the end!

Quoting from Independent News obituary dated 6 March 1995:

“Frank Costin's name will be forever linked with the sleek green body which graced the Vanwall cars entered in grands prix in the 1950s by the millionaire industrialist Tony Vandervell. Costin's work on that car's distinctive aerodynamics was seminal, yet was but part of his story. Frank Costin was not a man to suffer half-baked projects gladly, and he was never afraid to speak his mind if he disagreed with something. He was a dedicated nonconformist, and more often than not he failed to receive the credit and recognition that were his due. Those who knew him well always spoke fondly of the kind, warm-hearted man sometimes hidden within the hard outer shell with which he protected himself from the many disappointments he suffered in the ethics of his motor-racing colleagues. Francis Albert Costin, car designer: born 8 June 1920, died 5 February 1995.”

Rest in peace Frank Costin. We are deeply in your debt.



Costin’s masterpiece, the sleek 1958 Vanwall that won the inaugural Constructors’ World Championship. Photo by Motorsport Images.