SPEED WELL The Fastest Unblown Sprites in the World

The Streamliner on its way to a new Class G Land Speed Record for unblown cars.

by Dennis E. Ortenburger (Reprinted with permission from Moss Motoring, Spring, 1997)

n 1957 a group of enthusiasts including George Hulbert, Len Adams and John Sprinzel, later joined by Graham Hill, formed a company which they called Speedwell Performance Conversions Ltd. The small band of men joined the other "tuners" operating in and around London at the time, and directed their attention to a pair of unlikely motorcars—the Austin A35 and A40 sedans.

Speedwell had done their homework and recognized the tuning potential of the diminutive BMC engine. Careful blueprinting, balancing and clever head work transformed these otherwise staid automobiles into surprisingly spirited performers. Speedwell raced these cars to test their engine and suspension tweaks and soon gained a reputation for winning cars and drivers.

When the Austin-Healey Sprite was introduced in 1958 the firm immediately turned their efforts to the new Bugeyed sports car. They knew at once that the car would respond to their engine and suspension tuning, but something had to be done about the peculiar front end. The science of automobile aerodynamics was getting a lot of press in England due, primarily, to the work of Frank Costin. The racers were learning quickly that significant speed gains could be had, virtually cost free, by careful streamlining.

Speedwell's idea was to design a replacement bonnet for the Sprite, one which combined aerodynamics, light weight and forward opening for improved engine ac-

George Hulbert decided to approach the master himself, Frank Costin. As it happened, Costin read *Autosport* and was well aware of Speedwell's exploits. As luck would have it, Costin was delighted with the project and agreed to join on the spot. He later remarked on the atmosphere of the Speedwell organization, that they were obviously having a great deal of fun, and were involved as much for the racing as for fame and fortune.

... they were obviously having a great deal of fun...

Since Speedwell wanted a replacement bonnet only, Costin was confronted with a couple of major limitations. Heretofore, he'd started with a clean sheet of paper in his designs, but the Sprite presented him with fixed scuttle (and engine) heights and sheet metal inner fender wells which were part of the chassis. Nonetheless, Costin produced a set of drawings in a matter of days and the prototype was fabricated in aluminum. It was immediately recognizable as "Costin"!

The air intake was a small ellipse and fully ducted. The fender angled outward at the rear to facilitate airflow to the sides of the windscreen, and the frontal aspect was nearly parabolic in curvature.

Costin suggested a hard top be added to the car to further improve aerodynamics, and Hulbert agreed. The top was permanently bonded to the car, despite a join line visible at the rear. Great care was taken with its contour and the windscreen, besides having a greater rake than standard, was mounted flush with the top.

The conversion was called the Speedwell GT and sales were quite brisk. This was due in part to the increased performance but also because the car looked remarkably like the Lotus Elite—which sold for twice as much money! On the race track the Speedwell GT was virtually unbeatable, and the works driver, John Venner-Pak, won 14 of 19 starts in 1959 and broke the class lap record in every one!

While Costin and Hulbert were sorting details on the GT, news came from the Salt Flats in Utah, that a super-charged teardrop bodied Sprite had gone 146.95 miles an hour for a new International Class G land speed record. The two men looked at each other and wondered aloud, why not a Speedwell? The notion of a land speed attempt with an unblown, standard production car was ir-

resistible.

They decided to prepare not only a Speedwell GT but also an all out streamliner, using as much of the standard Sprite chassis and bodywork as possible. The

engine and scuttle height were unchanged as was the chassis. The GT nose section was used but with the headlights removed and the cavities filled in with correctly radiused fillets. An alloy tonneau covered the passenger compartment while the driver was treated to a plexiglass canopy.

The Streamliner's underbody was smoothed with a full length alloy panel and the front and rear wheels were shrouded. The rear deck was raised slightly and the back end was cut off in Kamm tail fashion. Williams and Pritchard formed the Streamliner's panels, which were bonded to the stock Bugeye chassis. Testing, incidentally, was done in the very early morning hours on London's North Circular Road to avoid the attention of the police!

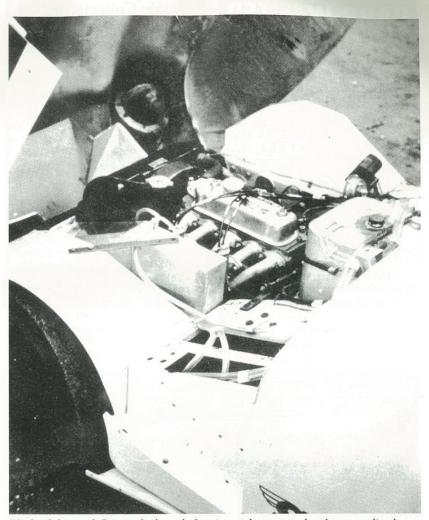
The notion of a land speed attempt with an unblown, standard production car was irresistible.

The Speedwell shop had a chassis dyno which showed the GT's power output at 62 bhp on pump gas, while the Streamliner's netted 92 bhp on a mixture of methanol and nitromethane. By Costin's reckoning, the GT should be good for 100 miles an hour while the Streamliner ought to get up to around 128 mph.

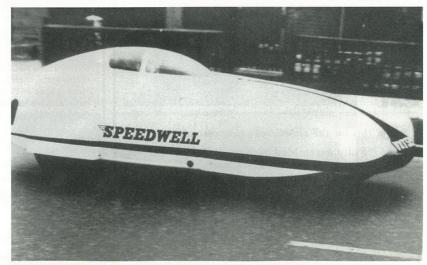
Arrangements for the record attempt were made through the Belgian Auto Club. They had an arrow straight road which went from Antwerp to Liege which could be blocked off for land speed trials.

Thus, the Speedwell entourage arrived in Antwerp on April 13, 1960. The weather was dry but very windy. George Hulbert drove the Streamliner while Graham Hill piloted the GT. Both men thought the conditions were a little 'dicey' but not bad enough to abandon the attempt. At the appointed hour, they were off.

By day's end they had exceeded all expectations and two Class G records were theirs. Graham Hill made four runs over the kilometer and recorded an average of 110.9 miler per hour. George Hulbert was able to make ten runs and achieved an average speed of 132.2 miles per hour! Speedwell had built the fastest unblown Sprites in the world!



Much of the stock Bugeye body and chassis can be seen under the streamlined alloy panels.



The Steamliner was tested on the streets of London, in the wee hours to avoid the attention of the police. George Hulbert did the driving.