SYDNEY'S PIONEERING HOOPER 500

The Sydney-built Hooper 500, which first appeared in January 1948 at Hawkesbury hillclimb, was not quite the first Australian-built 500. But it was the first "real 500," in that it was the first east-coast car to use purpose-built chassis and suspension, unlike the naive, almost clumsy, cars which had appeared earlier. Even more encouraging for the infant Australian 500cc movement, it was the first 500 to make regular appearances, and almost from its initial appearance it proved faster in sprints and hillclimbs than all but the most powerful conventional cars.

Bill and Jack Hooper ran Davidson & Napier, on the corner of Foster and Blackburn Sts in the Sydney CBD, near Wentworth Ave's motorcycle alley and immediately behind the Golf Shop in Elizabeth St, which for many years was famous for its rooftop neon sign of a putting golfer. From before WW2 the business had specialised in motorcycle frame repairs and tube and exhaust-pipe bending; Sid Napier later moved to do the same sort of work in-house for the big motorcycle supplier Hazell & Moore. Historian Brian Green-

by Graham Howard

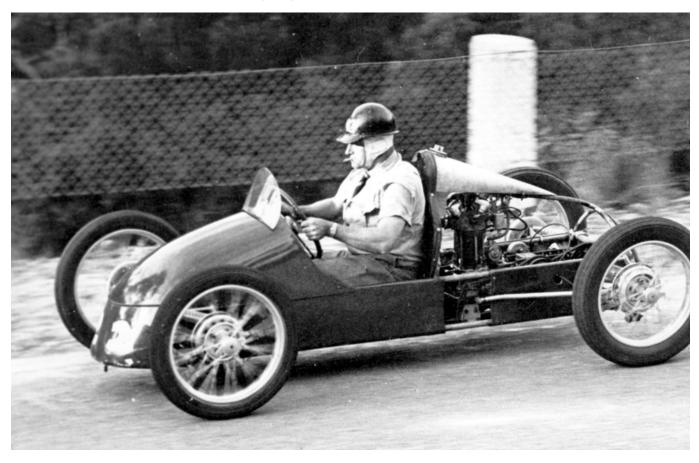
field recalled Jack Hooper had been a useful grass-track motorcycle racer pre-war; hard to say, then, whether this was an unlikely background to have produced such a well-thought-out four-wheel racer, or whether the Hooper brothers' specialisation in two-wheel machinery meant they had nothing to unlearn.

No question, however, that it was their small workshop and their professional skills which allowed them to build the car in just ten months, and even that time – as Fred Schubach pointed out in his March 1958 story about the car in Australian Motor Sports magazine - involved "working leisurely," and only at weekends.

It was an admirably light and simple car. Schubach wrote that it copied Fiat 500 track and wheelbase dimensions, but otherwise the car was highly original. It had a chassis of two pairs of 1.5 inch 14g chrome moly tube, with cross members and 8" vertical joiners at front, rear and behind the seat. The chassis was said to weigh 80 lbs and the complete car, without nose panelling, weighed 450 lbs.

Suspension at each corner used a short transverse quarter-elliptic spring as a bottom link, and a top wishbone made from pairs of 1.5 x 0.25 inch steel strip, drilled for lightness. Each wishbone pivoted on a Model T Ford kingpin. There were no dampers front or rear, the car relying on interleaf friction. Fabricated front uprights incorporated 1930s Morris Minor axle ends. Fabricated rear uprights used the outer ends of a Minor rear axle with a second bearing carried in a bolted-on machined alloy housing, and later there was a long radius arm on each side. Driveshafts were from WW2 Norton sidecars, which had a powered third wheel.

Brakes were Morris Minor, operated by motorcycle clutch cables; during 1949 the rears, and later the fronts, were converted to hydraulic. Front wheels were 19-inch Minor, rears 18-inch from a Raleigh three-wheeler. Steering was by Model T Ford epicyclic reduction box and drop arm, a beautifully light and compact system. The track rods needed to be mounted ahead of the pedals for space reasons, but if the Ford drop-arm was ahead of the pedals



it would reverse the steering action. The drop-arm was therefore located behind the axle centreline, operating a pivoted fore-and-aft idler arm running between the clutch and brake pedals and connected to the two track rods at its forward end. It was the car's only apparent compromise. It also had some geometric faults, and during 1949 it was replaced by a rack and pinion – mounted ahead of the pedals! – manufactured by Bill Hooper.

Mostly driven by Jack Hooper, the car ran its first year with a heavily-modified 1928 TT Triumph single-cylinder pushrod engine, in which form it was very effective. However, from early 1949 this engine was replaced by a year-old ex-Vic Duggan five-stud JAP, with a big improvement in performance. The engine, the upright Norton gearbox and the final drive axle, were carried between a pair of steel plates running the length of the engine bay and rubber-bushed at the front. On debut the car had simple alloy side panels only, but

Left: Jack Hooper coasting down to the start at Hawkesbury showing the lowered headrest/fuel tank used with the JAP. Photo from Brian Greenfield. Right: Jack and cigarette at Leura, January 1952. Below: Jack with the Triumph engine at Foley's Hill, February 1949. Photos this by page by Byron Gunther.





from its second outing it also had a simple two-piece nose cowl. Despite later claims that the Hooper never had bodywork or hydraulic brakes, these features were all mentioned in reports from the period

The car had a total of 27 starts between 1948 and 1952, but only in sprints and hillclimbs (the Hoopers claiming lack of suitable race competition) and never outside NSW. It was only with the arrival of Ron and Austin Tauranac's ES2 Norton-powered 500 in 1949 that the Hooper even had another 500 to run against, and the Tauranac car took nearly three years to become closely competitive.

With its Triumph engine, the Hooper's best quarter-mile time was 18.25sec, but with the JAP it came down to a best of 16.65 at Castlereagh in November 1949, where its two-way average was 16.71. It never approached these times in later years, its best time at the 1951 Australian Records meeting at Mt Druitt being an average 17.86. At the Australian sprint championships in 1952, the Hooper's 17.44, against Dick Cobden's 17.07 with the 500cc Mk5 Cooper JAP, was writing on the wall.

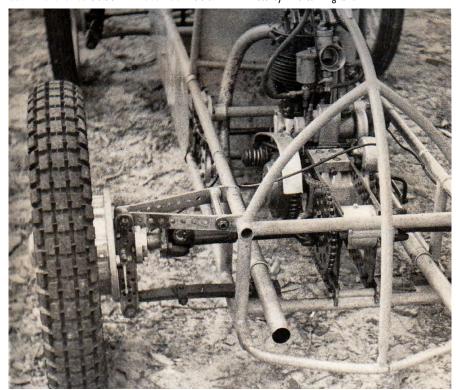
While Triumph-powered, the Hooper's only hillclimb appearances were at Hawkesbury, where it got down to a best of 64.5sec. This dropped by a neat four seconds on its first outing with the JAP, improved further to 59.2 in November 1949 when the car set outright FTD, and came down further to 58.99 in November 1950.

It twice set FTD at Foley's, its best a 21.56 in February 1951, just .01 slower than the then outright record held by George Reed's Ford V8. In July 1952 the Hooper ran 21.63 when Cobden's Cooper 500 ran 21.23 and – significantly – Ron Tauranac ran 22.03. At King Edward Park in October 1952 both Cobden and Tauranac were faster, and while the Hooper was clearly off-tune, this was its final appearance.

It was later owned by motorcycle racer Tony Fatouros, who fitted it with a singlecam Norton engine before selling it to Austin Tauranac. When it re-appeared it had bigger brakes, beefed-up suspension (including telescopic dampers) and a complete new alloy body painted lemon yellow. The stumpy Hooper wheelbase does not appear to have been changed. Austin raced the car for just on a year, between mid-1955 and mid-1956, (as a Norton Special; he did not enter it as a Ralt), and won a number of handicap races at Mt Druitt, although not as many as later claimed. He also finished an impressive third in a Cgrade three-lap scratch race at Mt Panorama at Easter 1956. Next owner lived in Broken Hill, from where it moved to Adelaide in the late 1950s; by the early 1960s it had dropped from sight.

Brian Greenfield remembered Bill Hooper as "Very taciturn; Jack was more

Below: the Hooper on debut with twin-exhaust TT Triumph, Hawkesbury, 1948.
Photo by Eric Cunningham.



the front man." Fred Schubach recalled that the Hoopers never joined the 500cc Car Club - "They were outsiders." In the early 1950s Brian Johnson, who was working at Omodei's, the motorcycle dealers in nearby Pitt St, was planning a 500 of his own. He often visited the Hooper shop at lunchtime and remembers Ron Tauranac dropping in to talk. While the Tauranac 500 was probably started about the same time as the Hooper, in early 1947, it took longer to complete, but the two cars had several features in common, notably the use of strip-steel wishbones and Model T steering box. As well, the Tauranac carbut only for its first two outings—followed the Hooper in not using dampers.

At least two later NSW-built cars, the JAP-powered car built by Bob Joass and first raced by Ash Marshall and the Rudge-powered car built by Dave Stephenson, showed some Hooper/Tauranac influence. Both used Model T steering boxes, while the Marshall 500 (where the influence was more Tauranac than Hooper) also used strip-steel front wishbones.

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After starting Loose Fillings in 1999, Graham Howard has retired from full time duties as Editor. He has edited — and written a great deal—of the first 40 issues and we all owe him our gratitude for bringing so much air-cooled racing car history to light. Graham will continue to contribute to Loose Fillings. Publisher Garry Simkin will look after news, views, gossip and small ads. Production editor Terry Wright will handle major articles and photographs on air-cooled history or technical topics. However, please contact either on any matter.

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