"Australia's Fastest Square Rigger MG TC" (description from Australian Motor Sports Magazine

Story by Lionel Ayers

Without a doubt, the most popular sports car available post World War II was the MG TC manufactured by the MG Car Company Ltd, Abingdon on Thames (as part of the Nuffield Organisation).

Developed from the pre-war MG TA-TB series, the 1250cc MG TC was to become the backbone of Australian motor sports in the 1950s.

I purchased an MG TC from Sydney in 1952. Soon afterwards the car was entered in the Strathpine Airstrip ¹/₄ mile sprints organized by the Queensland Motor Sporting Club.

With some cylinder head modifications and increased compression ratio, it soon became an under-1500cc sports-car record holder on 21 Nov 1952. Many more records, along with further modifications, continued to be broken through 1953-1955.

A popular venue at Coorparoo, a Brisbane suburb, was a challenge on dirt road for hillclimb competition. On our second meeting held on 16th March 1953, we broke the existing 1500cc sports car record!



Lionel in the TC at White's Hill on 16th March 1953.

The TC was sold and replaced with a TD model fitted with a new higher ratio crown wheel and pinion. A very successful competition result at Leyburn was achieved in the under 1500cc sports car scratch race. This TD (Mk I) was soon replaced by a TD Mk II which was raced briefly at Mt Druitt (NSW), Strathpine etc.

It soon became obvious that too much valuable time was being wasted in converting a road registered sports car to a race car complete with alloy cycle guards, alloy door panels, alloy bonnet and petrol tank – all necessary for a lightweight sports racer.

Towards the end of 1954, a badly smashed MG TC was advertised for sale at Wallangarra. This wreck was duly purchased; a broken engine block casting and bent differential axle housing were all in the 'deal'. Also, at this juncture, a pre-war MG TB fitted with a Tickford Cabriolet body was purchased; a car in poor condition but with all the necessary parts to complete a car with the badly smashed TC and the spare parts became very important.

One of the first modifications in the rebuild was the introduction of a small amount of negative camber into the rear axle housing to help overcome the wild oversteer problems of normal TCs. 16" wire wheel conversion, cool air ducting to the brakes, competition brake linings, cables from the chassis forward to the top of the kingpins to rid the TC of the dreaded front axle tramp under heavy braking, lightweight alloy cycle guards, and aluminium doors completed the exercise. The compression ratio was raised to 12.5:1 on a larger bore 1386cc engine.

Post war, methanol became the fuel of choice as 'pump petrol' was rated at approximately 72 octane ... not good for racing engines. Other blends of alcohol/petrol were available with BP, Shell and Mobil as the main suppliers.

The 'race car' was completed in due course and made its first competitive appearance at Southport circuit in November 1955 at the Qld Road Racing Championship meeting. Road registered for towing purposes, NAW 660 on Qld plates was taken to circuits with an A frame. Head gasket problems resulted in a retirement at Southport, a problem quickly solved but unfortunately not on that day.

A single axle trailer was soon to be built to transport the TC behind the bronze TD Mk II to make race days a lot easier.

A special competition camshaft as supplied by the Nuffield Organisation was installed in conjunction with the special 'extractor' exhaust system as detailed by the MG Factory. Extensive cylinder head modifications were again carried out. Extra special large inlet and exhaust valves were made for the race engine by a brilliant local engineer, Dave Duncan. Engineered from Dufor KE965 material, these valves proved to be 100% reliable – no gas flowing in those days – however it all worked with much increased performance. The usual 1¹/₂" SU Carbs in combination with the larger and better porting all helped.

Strathpine Airstrip, situated on the northern fringe of Brisbane, became the popular and convenient race circuit. An ex-Spitfire fighter airfield, it was modified with a short loop at the northern end and later on sported a more extensive loop through some trees on the southern section.

Lowood airstrip was used occasionally. It was later to be owned by the Qld Racing Drivers Club (QRDC) and then established as a permanent road racing circuit.

Hillclimbing at White's Hill, Samsonvale, Warwick, Toowoomba, Burleigh Heads, Currumbin and Terranora were the main venues for competitive racing.

Mid 1956, the engine was enlarged from 1386cc to 1500cc with a Len Cumming (Sydney) sleeve conversion. Len (LJC Motors) had established a good reputation for high performance MG tuning. With new pistons and 12.5:1 CR it proved to be a formidable performer.

June 1956 was the date set for the second Burleigh hillclimb event. Fastest time of day went to the TC against all comers. The highly modified MG TC was proving to be unbeatable as an under 1500cc (unsupercharged) sports car.



Lionel in the TC at the Burleigh hillclimb in 1956.

During the latter part of 1956, my main mechanic, Dud Anderson, and I looked at the Australian Land Speed Records for Standing and Flying Mile. We engaged a qualified surveyor to "peg out" the necessary accurate mile on the new highway between Oakey and Dalby towns to sit between the rise and fall guidelines. The necessary pegs were all certified and in place. It was proposed to close the highway just after dawn. However, after many protracted negotiations with Qld Police and the Mains Rd Dept, it was eventually canned by the authorities. (It was not long after this that BP set up the record attempts at Coonabarabran (NSW) when Jim Johnson tragically lost his life in a special bodied MG TC. No Queensland cars were invited to compete.)

Towards the end of 1956, one of the best aspects of Australian motor sport occurred – the involvement of the oil and fuel companies. BP, Shell, Mobil, Esso and Castrol became involved in sponsorship with circuits and drivers. All companies were eager to showcase their products and support motor racing.

I was approached by BP Fuels and Oils (George Lukin was in charge of BP's motor racing activities) and with a signed contract to be renewed on a yearly basis, it ensured our motor racing success.

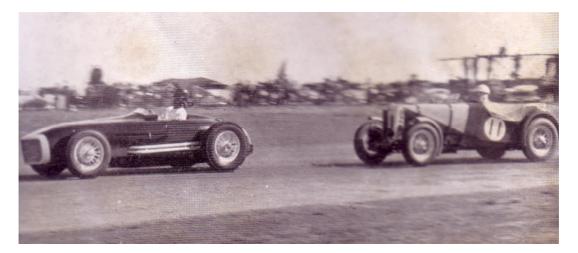
My loyalty to BP was to be of great benefit when we constructed the first "big banger" sports car in Queensland in 1968.

When the TF 1500cc was released, and spare parts became available, I was able to source a new engine block and crankshaft from the MG agents (Howards) in Brisbane. This enabled us to build a new 'short' engine with 13:1 CR pistons.

One of my regrets was that we did not continue with the adoption of $1\frac{3}{4}$ " SU carburetors. We had manufactured two cast aluminium manifolds to link the 2 SUs. Performance figures did not show a marked improvement immediately and we were reluctant at that time to upset the tried and proved $1\frac{1}{2}$ " SU set up. It was a pity!

The TC chassis was undertrayed with very light gauge alloy sheeting in an effort for improvement. However this was not to be and the idea was scrapped.

I was lured to compete in the QMSC sprint meeting at Strathpine Airstrip on the 13th October 1956 to contest the Class F Sports car records. The TC shattered all existing 1500cc sports car records with a 16.12 sec standing start ¼ mile and 9.4 sec for the flying ¼ (approx 95.7 mph/154 kph). These were excellent times considering the short Strathpine airstrip length of approx 7/10 mile (1127m). The new established times of the 1500cc TC were faster than the new record established on the day by Lloyd Whittaker in the race-tuned TR2 2000cc with class record times of 17.76 and 9.9 for the standing and flying quarter miles respectively. It was a great result for the TC.



Des Kelly (Holden Special) and Lionel (MG TC)

We enjoyed many memorable dices at Lowood in 1957, in particular with the late Des Kelly who had purchased the immaculate Norm Crowfoot Holden Special race car. We swapped places repeatedly. By now, all the Triumph TR2s, Austin Healey 100s, MGA/MG TC/MG TD/ MG TFs were fitted with the lighter and more aerodynamic Buchanan fibre-glass bodies but were no match for the 'square-rigger' even on the fast '2000 yard' Lowood circuit straight.

Early in March 1958, George Websdale from NSW entered his Buchanan fibre-glass light weight bodied MG TC 1500cc for the Strathpine Road Races. George had an unbeaten record and was anxious to do battle! On race day, our cars were never more than 'feet' apart in the Group A scratch race. George was the victor on this occasion (our TC had developed a slight misfire) beating the TC by a metre or so. Jack Edwards in the Godfrey Special race car filled the third placing. We soon achieved our revenge on George at the Bathurst Easter meet!



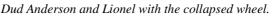
George Websdale (Buchanan MG TC 1500) and Lionel (MG TC 1500) in the southern loop at Strathpine on 9th March 1958

The MG TC 'square rigger' was entered for the Bathurst 100 meeting at Easter, April 7th 1958 as a race car (without guards etc). The TC was slotted up against sports and racing cars in a lesser supporting scratch race. The Frank Walters So-Cal Ford V8 Special looked to be our greatest opposition as well as George Websdale in the field of MG Specials, some supercharged etc. The TC from Qld won very convincingly against all the Bathurst regulars with Noel Barnes (MG S/C) and Gordon Stewart (MG Special) filling the minor placings. Our TC made fastest lap of 3m 14.5s and won by a whopping 19 seconds. George Websdale was 4th. The So-Cal Ford V8 was 6th.



Lionel (117), Frank Walters (So-Cal Ford V8) and Paul Samuels (MG TB Special) at Bathurst, April 7th 1958. In the main race, the Bathurst 100 (run as a Handicap event), we had the misfortune to collapse a rear 16" spoke wheel in Forest Elbow at the top of the Con Rod Straight whilst racing in a great position for handicap honours. The TC was to be written up in 'Australian Motor Sports' magazine as 'Australia's Fastest Square Rigger TC', a name that really stuck hard and fast. Our TC had stamped its authority on a very difficult circuit at this meeting.





George Pearse of Sydney had developed a highly tuned 1250cc motor and installed it in a modified Cooper 500cc race car chassis. Front-engined, supercharged at 14 lb per sq in, MG TC gearbox, with lowered drive train linked to an independent rear end, it was a potent race car. Unfortunately George, in the Cooper MG S/C and Alex Mildren tangled disastrously on the narrow rough and irregular Southport Australian Grand Prix circuit. The badly damaged Cooper MG was sold to Ray Revell (of Speedway fame), repaired and raced briefly.

With the huge success that we had enjoyed in the 'square rigger', we envisaged great potential in this race car which we duly purchased.

Out 'square rigger' TC was sold to Blair Shepherd, a Queensland speedway ace, who raced the car with success for a short time. It was later sold to Denis Geary who also raced it.

The Cooper MG was fitted with an MG TF 1500cc block and crankshaft. I had a suitable cylinder head with Lucas Laystal shaping in the combustion chambers, at approximately 10:1 CR with flat top pistons. All waterways on the block and cylinder head were castiron welded by our engineer Dave Duncan as water transfer was effected by external piping. A solid copper gasket was used in conjunction with special high tensile studs for cylinder head location.

A new J100 Marshall-Nordec supercharger capable of a boost pressure of 22 lb per sq in was installed.

The latest TF 1500 crankshafts were changed frequently; however, the Nardi (Italy) forged alloy conrods with enlarged gudgeon pin diameter gave tremendous reliability

with a trouble-free bottom end. Unfortunately, forged pistons were not available for the MG in this period. Cast alloy pistons proved to be the weak link, even with lowered boost to 14 lb per sq in.

As an example of sheer performance, our Cooper MG led the field in a scratch race at Lowood on October 26 1958 that included notables Bill Pitt (Jaguar D type), Glyn Scott (Repco Holden racing car) and Ern Tadgell (Sabakat-Lotus). Unfortunately the Cooper MG ran out of fuel! Many races were contested with the Cooper MG at Lowood, Strathpine and Bathurst. There was also some hillclimbing at Milmerran (FTD) in Queensland, not always with the success deserving of the car's potential.



Lionel (Cooper MG S/C No12) and Curly Bryden (Ferrari No 9) at Bathurst on 30th March 1959

The Cooper MG S/C 1500 was sold in 1962 as a new Lotus 20 FJ race car was purchased. Thus ended an era of MGs, fastest in Queensland history. However, the purchase of the new Lotus 20 FJ opened a new pathway in our motor sporting career.