

## NZ TRIPLE-M REGISTER

### "R" and "Q" Types

#### Q Types:

*Produced from May – October 1934*

*The Q Type is a supercharged race car, which superseded the J4. It was available as a spartan two seater.*

*The Q type had an 8" longer wheelbase, 3" wider track than its predecessor and had N Type axles. The engine was a P type block with a modified crankshaft to reduce the capacity to 746cc. The supercharger was a Zoller which gave up to a 2 bar (28psi) boost, at which engine produced 113 bhp (84kW) at 7,200 rpm. "Development of the Q Type came from an amalgamation of several previous models including the N and P Type MGs. It incorporated the N type steering gear and brakes although larger special drums were used. The Q Type had a pre selector gearbox as used on the K3, but differed in as much as it had a special clutch which was designed to slip automatically above a certain torque figure, which avoided the possibility of damage to the N Type rear axle". (MG Owners Club). The gearbox was a 4 speed, Wilson pre-selector"*

*Total Q types produced: 8*

*Chassis # QA 0251 – QA 0258*

#### R Types:

*Produced from April 1935 – June 1935.*

*Superseded the Q Type. A supercharged, independently sprung, single seat race car.*

*The R type had a slightly wider track than the Q Type and a ~4" shorter wheelbase. The engine was as Q type: 746cc., Zoller*

*supercharged with similar output. The gearbox was a 4 speed, close-ratio Wilson preselector.*

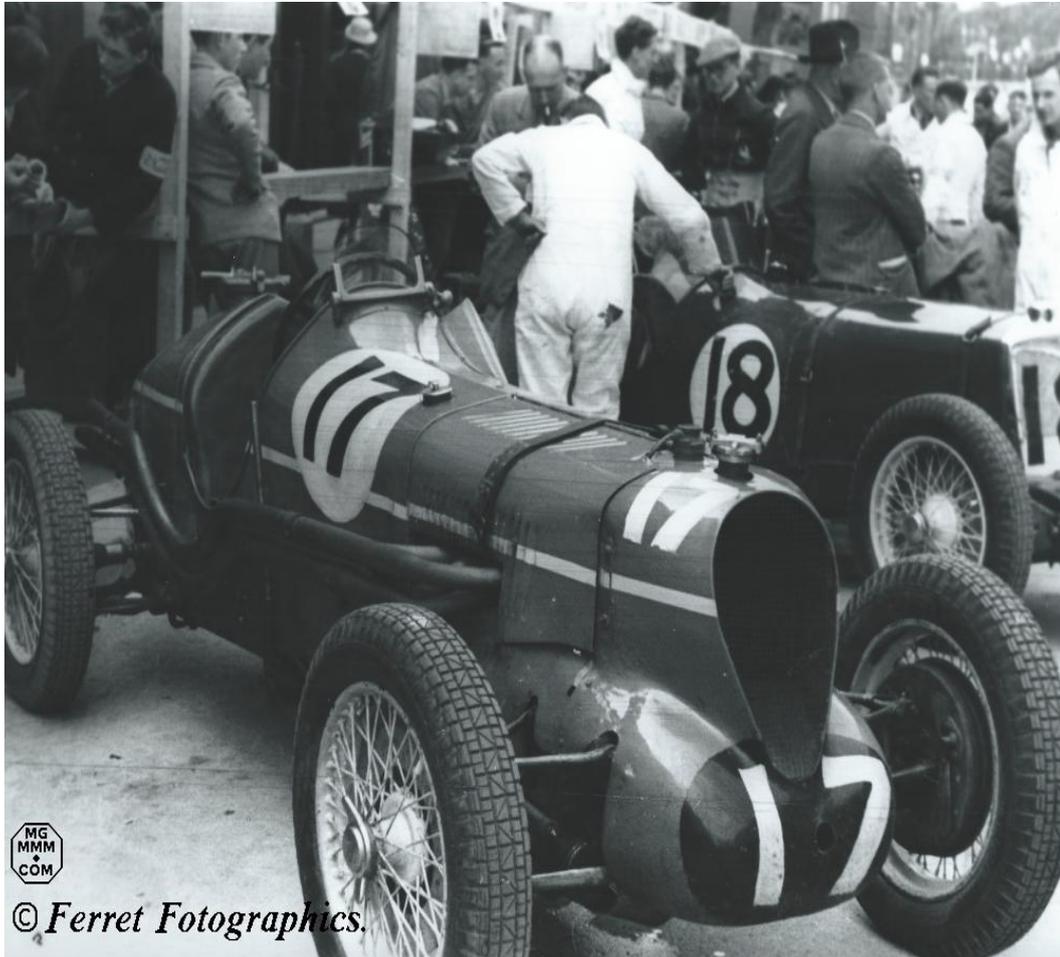
*Total R types produced: 10. Available to buy in 1935 ex factory for £750.*

*Chassis # RA 0251 – RA 0260*

*Last amended 10<sup>th</sup> February, 2019*

1935 "R" Type MG race car: RA 0253

The most interesting MG in New Zealand?



MG RA 0253 photographed in 1936 when owned and raced by Bellevue Garages.  
(Photo reproduced with kind permission of Ferret Photographics)

## Introduction

There were only 10 "R" Types race cars ever built and they were the only pure race cars ever produced by MG Car Company – they were not developed from an existing production car – they were designed from the outset, to be a mini-Grand Prix race car to compete in the <750cc race category.

The first three R types produced – RA 0251/0252/**0253** formed a race team for the 1935 race season, fronted by Capt. Eyston.

MG Car Company was sold to the Morris Motors in July 1935, shortly after "R" Type production commenced, putting an end to all MG racing and development. As a result, two of Eyston's team cars, RA 0251 and **RA 0253** were sold to Bellevue Garages (Racing) in late 1935.

Bellevue Garages (Racing) commissioned Pomeroy & McEvoy to develop a double overhead cam (DOHC) head late for the R Types late 1935, with the objective of keeping the R Types competitive in the 1936

race season. Bellevue commissioned three DOHC heads, sold two to defray some of their development costs and fitted one to one of their R Types: **RA 0253**. It was the only "R" Type owned by Bellevue Garages (Racing) Ltd to be fitted with the DOHC head. It produced ~140+bhp.

**RA 0253** was raced regularly in 1935/6 at Brooklands, Donington Park, Shelsley Walsh hillclimbs and other big races of that era, driven by by Norman Black (1935) and Doreen and Kenneth Evans (Bellevue Garages) in 1936

**RA 0253** was imported into NZ in 1960In 1964 **RA 0253** was acquired by Purchased by Southward Museum, Paraparaumu (near Wellington) and has subsequently been partially restored. **RA 0253** is now on display in their museum.

### [Background to MG the R Type Development.](#)

Triple-M cars were produced between 1929 and 1936, when MG Car Company produced a range of sporting Midgets, (powered by 4cyl OHC motors), and 6 cyl. Magna and Midgettes also powered by OHC motors. A total of 11,581 were produced in the 7 years of production. Like virtually every classic car manufacturer, it is the manufacturers' racing history which, although often many, many years ago, still elevates the perception of subsequent models to classic status. It was, in my opinion, these 7 years: 1929 -1936 which created the MG Marque, just as it was the late 1920 Le Mans victories which created the Bentley marque.....(*"W.O. Bentley was clear in his reasons for supporting motor racing - gaining publicity, generating sales and establishing the Bentley marque"*)<sup>2</sup>. It was GP victories in the 1920/1930s which created many of the other classic marques too: Alfa, Maserati, Mercedes etc. and who would buy a Bugatti Chiron today (at \$3M USD), had Bugatti had not been so successful in the 1920/1930 racing scene? During the seven years of Triple-M production, MG cars became synonymous with motor sport: racing, rallying, trials and hillclimbs.

Triple-M cars began when MG produced their first "mass production" car, an MG Midget: the "M" Type. 3,235 M types were produced. The early cars were fitted with a canvas body over a wood frame, and were powered by an OHC 4-cylinder motor producing all of 20 bhp, (slightly less than my Ride-On mower)!! Nevertheless, some brave souls entered their M Types in the Monte Carlo rally in the early 1930s, driving through Scottish snow, before they even reached the snow-covered Alpine passes!

In the 6-7 years of subsequent production and development, MG took the same motor and, if you purchased a Q Type MG race car from the factory in 1934/5, although only 750cc (to comply with race categories) it was producing 113bhp in supercharged form. A 500%+ increase in bhp over five or six years, using basically the same block, is pretty impressive. The problem now was engine development for racing was far exceeding MG chassis design. Keeping all the wheels on the road on fast corners and mitigating wheel spin under acceleration were major problems on the rough tracks of that era, such as Brooklands - with the 750cc Midgets now capable of exceeding 120mph (~200 kph). The well respected motorsport writer of that era, S.C.H.Davis, Sports Editor for Autocar commented *"I have never believed that a car is right which drives most of the time on one rear wheel, and steers on one front wheel"*. The "Q" Type MG, which preceded the "R" Type, had grab handles fitted to the floor so that the racing mechanic had something to hang on to to stay in the car! It was the "Q" Type chassis shortcomings which prompted MG to develop its first race car from scratch – a 'small scale' grand prix car. Originally identified as Ex 147, the new race car became known as the "R" Type.

**Acknowledgements:** Not having owned an R type I have been totally reliant on the work of others who know and have researched the histories of R Type MGs, but no one had, as far as I know, specifically documented the history of the only R Type in NZ: RA0253. I should especially like to acknowledge the assistance of Bob Milton (the UK Triple-M Registrar and R Types expert). It was Bob's published articles which appeared in Triple-M Year Books:

*"Finding & Buying R types" (2010) and*

*"The History, Design and Development of the Pomeroy / McEvoy Twin Cam Overhead Camshaft Cylinder Head as fitted to RA 0257" (2011),*

which created the interest to research the specific history of RA 0253. Bob subsequently sent me his summary of RA0253's history and I have quoted extensively from this, his published articles and his answers to my many questions. In this article, all quotes, unless specifically identified, are Bob's input. Bob used to own two R Types himself, (RA 0257 and RA 0258). He also knew Peter Stevens very well. Peter was the RNZAF officer seconded to UK who purchased RA**0253** and brought it back to NZ.....with some assistance, at the time, from Bob!

**RA 0253** is particularly rare, as it is one of only three (of the ten) R Types to be subsequently fitted with the cast iron, DOHC head after factory support from MG for racing and development had, by corporate directive, ceased in July 1935. This directive together with the transfer of MG Car Company to Morris Motors signalled the end of the Triple-M era.

## The “R” Type MG

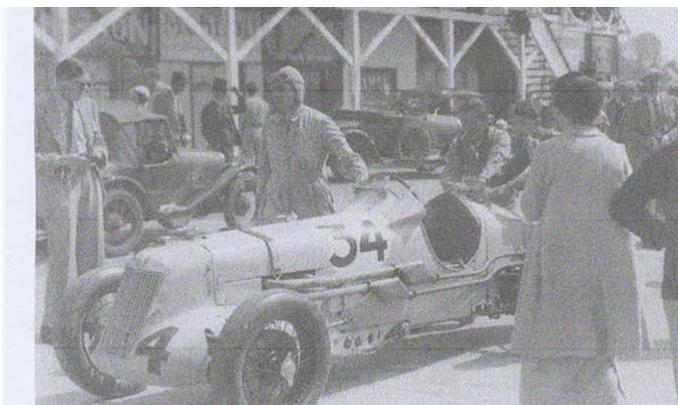
The R Type was announced 29<sup>th</sup> April, 1935, superseding the “Q” type mentioned. Whilst the “R” type had a similar motor to that used in the “Q” type, and also a monoposto (single seater) body, the chassis was a completely new design.

The “R” Types brought about a radical change in design from how MGs had previously been manufactured. *“The design by H.N.Charles had 4 wheel independent suspension employing wishbones and adjustable torsion bars all mounted on a very strong welded sheet steel chassis frame in a “Y” formation weighing only 57lbs. A chassis frame design later adopted by Colin Chapman for his Lotus Elan road cars, which had a very close resemblance”.* It was the first British car to use all round independent suspension.

However, after only ten “R” Types had been built, MG Car Company was sold. The MG business had, up until then, been Wm. Morris's personal property but, effective from 1 July 1935 he formalised the sale of MG Car Company to his holding company, Morris Motors Ltd. The last “R” Type was built 06.05.35 the car's production run lasting only a few days! The change of ownership and direction brought an immediate end to all MG competition and development work. It also resulted in all future MGs being required to use Morris pushrod motors, and other Morris components, as found on the next generation of MG Midget cars: the 1936 MG “TA” and subsequent models. The Wolseley based OHC motors used up until then by MG in Midgets, Magna and Magnettes had to be phased out!

## **Capt Eyston's 1935 MG Race Team**

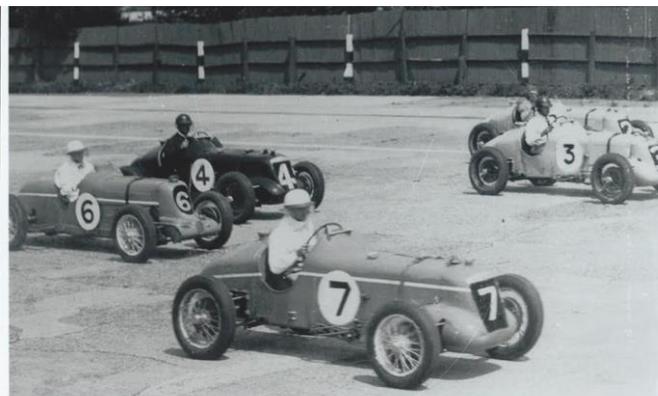
The first three “R” Types off the production line were 'sold' to Capt. Eyston (RA 0251,0252 & **0253**). Eyston was a director of Wakefield Oils (Castrol) and was a keen race driver in the 1930s. He effectively 'fronted' a team of 'Works' MGs. This arrangement avoided upsetting the Owner, Wm Morris, who was not at all keen in supporting motor racing. After MG factory development and support was withdrawn in July 1935, Eyston 'sold' his three “R” Types. Two of his “R” Type team cars (RA 0251 & **RA 0253**) were purchased by the Evans Family (Bellevue Garages Ltd). The Evans family were well known in motorsport circles at that time. So, **RA 0253**, the car in Southward Museum near Wellington, was part of Eyston's 'works' team in the 1935 race season and part of Bellevue Garages Race team in the 1936 season. RA 0252 was taken back by the Works and possibly dismantled for experimental purposes – it never raced again after the British Empire Trophy Race at Brooklands,1935)<sup>1</sup>.



**George Eyston wheels RA 0251 to the start of the BRDC British Empire Trophy Race at Brooklands 6<sup>th</sup> July, 1935. This was the last occasion in which “R” types were entered in his name (photo National Motor Museum).**

**The photo below of R Types at Brooklands, believed taken at the British Empire Trophy Race, 6<sup>th</sup> July, 1935. Car # 2, furthest**

away, is RA 0252 driven by Wal Handley, did not finish. Car # 3 is RA 0253 driven by Norman Black, 5<sup>th</sup> overall and 2<sup>nd</sup> in class. Car #4 is RA 0258 driven by Dougie Briault, 9<sup>th</sup> overall and 3<sup>rd</sup> in class, Car # 6 is QA0254 driven by Dennis Evans, 14<sup>th</sup> overall. Car #7 is RA0255 driven by Kenneth Evans. Did not finish – engine failure and block had to be scrapped. (Picture and caption provided to me by Bob Milton).



### Bellevue Garages (Racing) Ltd.

Bellevue Garages Ltd were MG agents and, through Bellevue Garages (Racing) Ltd, ran an MG race team. *“Bellevue Motors were prolific privateer racers.....and throughout the summer season the Evans family could be seen at all the leading socialite races and hillclimbs....”*<sup>2</sup>.

*“Bellevue Garages Ltd was owned by Kenneth Evans and located in Wandsworth, South London, but the Evans family were into property (Edwin Evans & Sons, Estate Agents, Auctioneers and Surveyors, a large London firm with offices in London's West End. Being in property and owning some houses adjacent to their Garage business enabled them to convert the adjacent properties into a proper racing shop complete with dynamometer. Setting up the new Bellevue Garages (Racing) Ltd. cost something like £2000, and the preference shares were divided £1500 to the Evans family (Kenneth, Dennis & Doreen) and £500 to Wilkie Wilkinson. Wilkie was actually with Bellevue Garages from about 1931, firstly as a mechanic but very shortly afterwards promoted to Foreman and then became a Director of the new and separate Racing Company. He not only prepared the cars but, on occasions, actually drove them in competitive events”.* Bellevue Garages (Racing) enjoyed a reputation for presenting well prepared race cars.

Wilkie was previously a riding mechanic for drivers, including Eyston, prior to joining Bellevue Garages. (Later, Wilkie Wilkinson was to team up with Reg Parnell, after WW2, at Highfields Garage, Derby which is where **RA 0253** and a number of other race cars were stored during the War. Wilkie Wilkinson was to become famous after WW2 as the chief engineer behind the 'Ecurie Ecosse' Jaguars' Le Mans successes in 1956/57).



**Kenneth Evans, and Doreen Evans, driving a PA which she raced at Le Mans in 1935. (From 'Speedqueens' website)**



By the end of 1935 Bellevue owned RA 0255 which they had bought new, plus RA 0251 and **RA 0253** which they had purchased from Capt. Eyston/MG Car Company (Bob tells me Eyston never actually owned these 'Works' cars). Bellevue Garages Racing also owned a "Q" Type at that time, which looked very similar. In 1935 it is generally accepted that the Eyston Team cars (RA 0251, RA 0252 and **RA 0253**) were driven by Capt. Eyston, W. Handley and Norman Black respectively.

**Doreen Evans on the Shelsley Walsh hillclimb start line September 1935. This is RA 0253, the ex. Captain Eyston Team Car soon after it had been acquired by Bellevue Garages being driven here by Doreen Evans. She was second fastest in the <750cc class.**



### **"R" Types – Racing history - 1935**

*"Identifying from race reports the exact MG 750 cc racing car that the Evans (family) entered has proved very difficult for most historians as, apart from **RA0253**, they also purchased RA0251 which was one of the Eyston team cars. They had already purchased RA 0255 from new. All compounded by also owning and entering QA0254 which reports often confused as an "R" type! So, for the remainder of 1935 any race descriptions or results regarding Bellevue participation could apply to one of four cars".*

Indeed, researching the history of **RA 0253** we found articles in which the writer has identified the wrong "R" Type.

The R Types proved unreliable – as is often the case with a new race car design – and certainly the independent suspension was not quite right, the car leaning over on fast corners to a degree which most drivers found either uncomfortable or alarming! It could have been rectified by factory development but the corporate restructure prevented any such further investment.

The first competitive appearance of the "R" Types was 5<sup>th</sup> May, 1935 at the JCC International Trophy Race at Brooklands. The 5 assembled "R" types, (including the three Eyston cars, RA 0251/0252 & **0253**) were entered. They were driven by Capt. Eyston, Wal Handley & Norman Black. It is believed that Black drove **RA0253** in this race. None of Eyston's team cars finished. The other two R types in the race fared better, (RA 0255 was driven by Doreen Evans and RA0260 was driven by Sir Malcolm Campbell & Bill Everitt. They finished 7<sup>th</sup> and 6<sup>th</sup> at average speeds of 80.63 & >82mph respectively).

20<sup>th</sup> May, 1935. Mannin Meg (Isle of Man). A 4.6-mile street circuit around Douglas, Isle of Man. All three Eyston cars failed to finish due to suspension problems. **RA0253** was driven by Norman Black, car # 18.

September 21<sup>st</sup> was the 500-mile race at Brooklands. **RA 0253** was driven by either Kenneth or Dennis Evans but failed to finish.

Quoting from from Mike Hawke's "R is for Reticence" article which appeared in Triple-M Year Book, 1986/7: *"We now come to one of the minor mysteries of the 1935 season so far as "R" Types are concerned. In July and August Reggie Tongue and Kenneth Evans took two cars on a continental tour where their first event was the Albi Grand Prix, held two days after the Nuffield Trophy race. The question is which two cars did they take? It was probably two out of the three Eyston (or, by now perhaps) ex Eyston cars. It is possible to speculate that Kenneth Evans took **RA 0253** because this car belonged to him by the end of the year ....this leaves Reggie Tongue in either RA 0251 or 0252. The climax of their tour was the Prix de Berne, held 25<sup>th</sup> August, one of the major Continental Voiturette events. Evans finished 11<sup>th</sup>.*

Bob Milton, however, says *"we know that during August of that year Kenneth Evans campaigned RA 0255 in Italy"*, so it seems **RA 0253** was not the car campaigned in Italy.

## The DOHC Engines.

At the end of the first race season (1935) for the "R" Type, with no future factory development, Bellevue Garages (Racing) commissioned the development of three DOHC heads, retaining one for their own race team, and selling two to offset development costs. The one DOHC head fitted to a Bellevue Team Car was fitted to **RA 0253**, and this is the ex Eyston team car now in the Southward Museum near Wellington.<sup>3</sup>

The initial quote from the DOHC head designers was £150 per head but *"with regard to the three twin cam cars I think Kenneth's main problem was that although each of the three owners were paying £150 for the conversion, a lot of the extra work required was carried out at Bellevue who bore this cost"*. The designers also considerably under-estimated their development time and costs!

*"The original 750cc SOHC engine was supercharged at 28psi running on a methanol fuel producing 113BHP. The twin OHC engine design initially achieving about 130BHP, well below its design figure of 140+ BHP. I was fortunate to both correspond and meet one of the original draughtsmen and one of the designers, Laurence Pomeroy who advised me of their future plans"*.

The DOHC motors had a Zoller supercharger mounted on the (near side) inlet manifold of the engine, set at between 25-45psi boost. This configuration necessitated the exhaust side from the engine being switched to the off side making the DOHC "R" Types in 1936 easy to identify in photos from the SOHC "R" types, with near side exhaust manifolds. The DOHC modifications took the maximum power up to ~130 bhp initially and later, using nitromethane laced fuel, 140 - 160+ bhp, both considerably more bhp per litre than the famous works Auto Union and Mercedes Benz Grand Prix cars of that year! The heads were designed to withstand <45psi pressure and, although never achieved in a car, it is claimed (but I'm not sure ever verified), that fitted with an 8" Zoller blower ~200bhp was achieved on a test bed.

## **1936 Race Season, and the appearance of the DOHC head**

4<sup>th</sup> April 1936: début day for the R Type twin cam motors at the British Empire Trophy Race at Donington. Two of the R type DOHC powered cars failed to finish (RA 0257 & RA 0258) but **RA 0253**, Car # 2 in the race, driven by Kenneth Evans completed 91 laps in the 100 lap race having, earlier on, been in second place behind a 1500cc ERA, only 0.1mph slower.



This picture provided by Bob Milton, is taken at the start of the British Empire Trophy Race at Donington, 4<sup>th</sup> April, 1936 – the first outing for the DOHC cars.

Car #1 is RA 0257 driven by Ian Connell,

Car # 2 is RA 0258 driven by Dougie Briault and

Car # 3 is RA 0253, driven by Kenneth Evans.

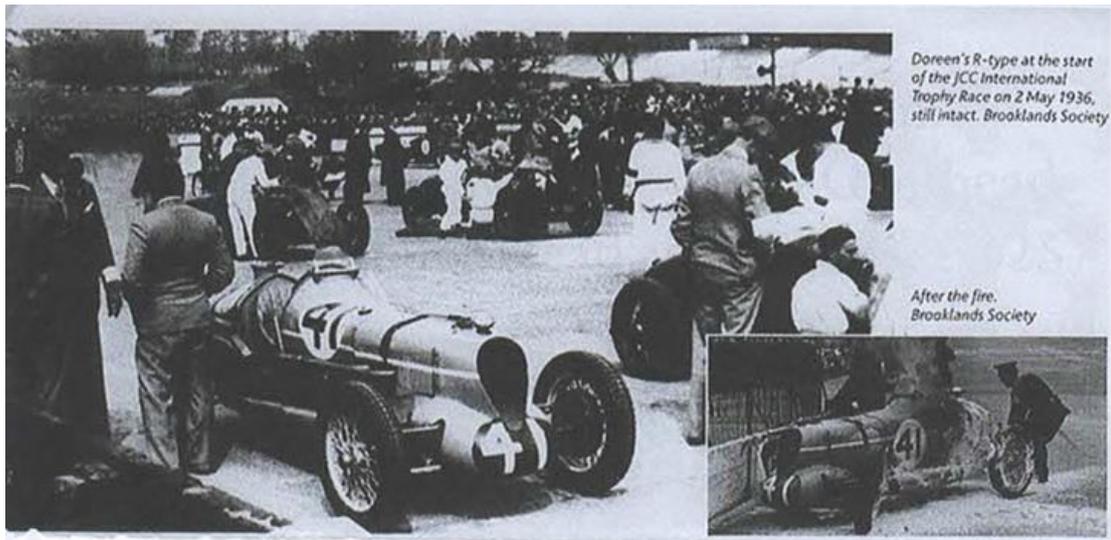
(Note, no exhausts on near side).

In 1936 the three DOHC cars are each easily identifiable in photos, from their different radiator cowlings.



Doreen Evans at the JCC International Trophy Race at race at Brooklands, 1936 driving a DOHC R type, as evidenced by the offside exhaust. This is R Type 0253.

2<sup>nd</sup> May: JCC International Trophy Race at Brooklands. At this time, **RA 0253** was developing 141 bhp at 7,300 rpm with a 25psi boost. Doreen Evans drove **RA 0253** in this race. Again, none of the DOHC cars finished, although in the case of **RA 0253** the car's race ended on lap 52 when friction caused by the prop shaft rubbing against the tunnel ignited fuel which was trapped on the under-tray after a refuelling stop. The car then burst into flames. 'Motor Sport' described the scene at the time: *"In 1936, Doreen drove the R-Type at Brooklands, finishing third in the BARC Second Mountain Handicap. She entered the Brooklands International Trophy in the same car, but suffered a dramatic accident. The car started to blaze just as it came off the Home Banking, but Miss Evans kept her head, and leapt out as she slowed the car down on the Member's Hill side of the Finishing Straight, leaving the car to roll driver-less across the track into the railings. She escaped with slight burns"*



The start of the JCC International Trophy Race, 2<sup>nd</sup> May 1936 at Brooklands. Note the exhaust manifold on the right-hand side of the Bellevue Garages' race car, so it can be definitely identified as RA 0253. Insert: after the fire.



Photo reproduced with kind permission of Ferret Fotografics

**RA 0253** was probably repaired in time for Kenneth Evans to enter the Shelsely Walsh hillclimb the first weekend in July, and the Nuffield Trophy Race at Donington a week later. Again, the car did not finish.

### Racing Colours

Bob tells me that Eyston's Team of R Types were originally cream coloured with dark wheels as the 1935 photos suggest. Bellevue Garages' race cars were Cambridge (light) blue with a white stripe each side extending from the front to the back, and cream wheels.

### Life After Bellevue Garages Ownership

At the end of the 1936 race season the 750cc international race category (Class H) collapsed and that

winter (1936) Bellevue Garages placed all their R Types up for sale. *“At the end of 1936 Bellevue sold the car (RA0253) to Ashmores Ltd. a transport company in the Midlands run by two brothers Fred and Joe who both raced it at Brooklands and Donington without any traceable success during 1937. In May 1937 we know RA 0253 was entered in the Coronation Trophy at Donington Park by Ashmores Ltd., driven by F. Ashmore.*

*“The Ashmore Bros. were well known in the racing fraternity, and were friendly with Reg. Parnell, together forming Highfield garages. With the outbreak of WW2, they arranged the storage of many racing cars for the duration of the War, including RA0253.*

*Sometime in 1941 RA 0253 was sold to R S Shapley of Skegby Hall near Mansfield who, after the war raced it once on the 6/7/46 at the Middlesborough & District Motor Club sand races at Redcar. It was not until 1963 that I traced Mr. Shapley to Leeds which, at that time, was quite near to where I then lived in Huddersfield, so was able to meet him and confirm the foregoing together with the fact that the head had been copper plated to assist cooling and he bought the car for £110.00. In 1947 he sold it for £600 to C E Reynolds of Reynolds' Garage, Barnsley. Reynolds Competition history is as follows:*  
*12/7/47 Middlesborough & District Motor Club sand races at Saltburn, Redcar.*  
*1st. 1500cc race; 2nd 2500cc race & 2nd 5000cc race.*  
*28/9/47 Yorkshire Sports Car Club Sprint at Tholthorpe – 2nd 1100cc racing.*  
*4/10/52 Waterloo & District Motor Club Altcar Speed Trials, Liverpool. DNF*

*Reynolds part exchanged RA 0253 at Mercury Motors in Wembley in 1953 for a Cooper 500 into which he fitted a SOHC MG Engine that he had as a spare for RA0253, and referred to in 'Autosport' as an “R” Type engine when this car eventually ended up, in 1958, with Peter Glead in Derby as a potential F1 entrant under the rules that allowed engine size up to 750cc s/c or 2500cc us/c. (living in London at that time I (Bob Milton) was able to visit Mercury and confirm these details).*

*In August 1953 RA 0253 was sold to Henry Hay Edwards, 84 Oak Road, Redcar Subsequent letters I (Bob Milton) sent in 1965 to this address were returned as unknown).*

*Edwards attempted to race the car but suffered a damaged block fitting a P type block No. 1666A/135P together with the twin cam head. He partially removed the R type body and commenced fitting a road-going body. It was road registered in December 1954 with the number LPY915. The log book shows chassis number as RA60 ? (As an aside in 1959 I managed to trace and purchase the original single OHC engine and supercharger, number 2258AP/R3, as a new block had been used in 1936 for the twin OHC head).*

*In December 1955 Edwards sold the car to Alan Booth, 162 Lord Street, Redcar who I managed to correspond with in 1957. He confirmed removing the racing and other body parts and fitting a Microbond Stilleto or Toledo fibreglass all enveloping body together with full electrical equipment. He retained the central steering position, shortening the column and confirmed that a Solex carburettor was fitted in place of the SU. (This happened in 1954.)*

**How RA 0253 looked when purchased by Peter Stevens.  
Why would any previous owner do that to an R Type MG??**



*The car was advertised by Booth in January 1957 and purchased by Peter Stevens, unseen, in March of that year for £200”*

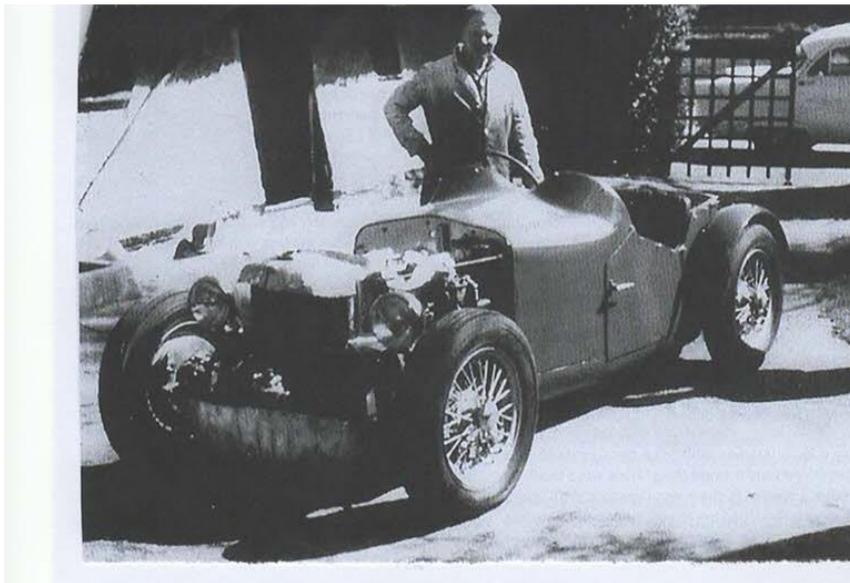
### **Enter New Zealand:**

Around January 1957 **RA 0253** was advertised for sale in Autosport magazine, and Peter Stevens, a RNZAF officer, stationed at Henlow, on a 3 yr secondment to UK, purchased the car, unseen, for 200 pounds, from Alan Booth of Redcar. Ted Loversidge (Canterbury MGCC) tells me *“Peter sold his PA when he knew he was going to England for a few years. This was, I think, 1956. Peter had a great desire to own a McEvoy/ Pomeroy twin cam R type. His idea was to modify it and fit a fibreglass sports body. Surprisingly such a thing was advertised in 'Autosport' just a few weeks after he had arrived, and Peter bought it.”* (We have details of Peter's ex PA in the NZ triple-M Register).

The car was delivered to RAF Henlow by British Rail and found to have a 'Microbond' fibreglass two-seater body, it still had a central steering wheel, but no supercharger although it was road registered.

*“Peter commenced a rebuild in the body style of a road going J2 MG, fitting rack and pinion steering, telescopic front shock absorbers, all threaded suspension bushes were replaced by Karrflex bushes but, unfortunately, this left the metal too thin on the front carrier and had to have a bead of weld around each side to stiffen it up. Peter returned to NZ in early 1959 and, together with my step-father, we (Bob Milton) towed 0253 in its nearly completed new state to the London Docks for onward shipping”.*

**RA 0253** was exported to NZ June 1960



**RA 0253** after a “J2” style body fitted and rack and pinion steering so the steering wheel could be re-positioned.

*“Peter persisted with the car running it in but finding the power very low and little boost although the handling was superb. Eventually changing the plugs to allow the points to reach into the combustion chamber (the originals were well masked to prevent oiling-up) machining broke through into water jacket and machining of subsequent welding-up and valve seat inserts exposed blow holes etc”.*

*Late 1965 Peter decided to sell the car and all drawings for £400 to Len Southward at the Southward*

*Trust Museum where a rebuild in the car’s original monoposto form was undertaken”.*

## Southward Museum

Sir Len Southward's Museum ultimately set about restoring the car to its original state, aided by drawings and information supplied by Bob Milton. Whilst, for the average museum visitor, the R Type looks superb, the Peter Stevens J2 style bodywork having been replaced by an original looking SOHC R type monoposto body built by Steve Roberts (Whanganui). Steve is recognised internationally as a perfectionist, hence the car’s superb appearance today.

In reality the Museum has only been able to partly restore the car. To bring this car back to how it would have been during Bellevue Garage ownership will cost a great deal of money. There are no shock absorbers, the original (and unique) steering box connecting independently to each front wheel has not been fabricated (whilst the rack & pinion has been removed, the car now relies on a Massey Ferguson tractor steering box...such ignominy for an R Type!) The dashboard is missing some instruments, including a tachometer. Arguably, the radiator cowling which replicates the style of the SOHC R Types, is incorrect – a modified cowling was adopted by Bellevue Garages on this car after the DOHC head was fitted. The DOHC head has been skimmed by previous owners to a point where the Museum are reluctant to start the motor too often – it does run, but runs roughly. The Museum has not attempted to restore the engine. I imagine this engine has not run properly since the days it was prepared by Wilkie Wilkinson for Bellevue Garages. But it still has the Wilson pre-selector gearbox. The DOHC brass cover plates on the cam covers both show “#7”. The block number is impossible to see, but it seems probable that it has not been changed since Edwards fitted the DOHC head to a P Type block around 1953 (block # 1666AP/135P).

I guess that for the average Museum visitor, so long as the car looks 'right' there is no benefit to them from restoring parts which are out of sight. Whilst it would be great to see this car fully restored MG enthusiasts should be grateful to Sir Len Southward for saving this unique car. Without the Museum’s commitment the car may not have existed today.



**R 0253 on loan from Southward Museum being paraded at Manfeild Race Track, during MGCC Wellington Centre's 'Whittaker' Race meeting.**

## **The Car Today**

**RA 0253 in Southward Museum, April, 2018**





The DOHC engine (nearside) with Zoller supercharger and horizontal SU carb.



**RA 0253 cockpit today. Obviously missing instruments but the pre-selector shift to the left of the steering wheel is correct and was positioned there deliberately so that gear changes could be completed without the driver removing either hand from the steering wheel.**

Geoff Broadhead  
MG Car Club (Auckland Centre).  
geoffbroadhead01@gmail.com

## Footnotes

**Footnote 1.** From Mike Hawke's "The Hawke History of Triple-M competition Cars".

**Footnote 2.** From an article headed 'R Types' by Martyn Wise from (probably) 'Enjoying MG'

**Footnote 3.** The other R Types fitted with DOHC heads were RA 0257 and RA 0258 which were owned and raced at that time by Ian Cummings and Douglas Briault. There are rumours a fourth DOHC head was made, but these rumours are unsubstantiated. **Bob Milton tells me:** "Four twin cam heads, heard the rumours but never seen one, supposedly a bronze head casting reported to be seen, if true, may have been copper plated iron as the head on 0253. Knowing the costs to Bellevue, and Kenneth Evans comments to me, I guess that they would not have wanted to entertain a fourth. My guess is that the so called fourth head is actually the six-cylinder twin cam head used by Reg Parnell on his K3, based on the 4 cylinder one. And, as an aside, still performing very well. **Just so that you are aware, a modern twin cam head has been produced by Baynton Jones in the UK for the Triple-M cars.**"

## RA 0253: Technical Data

The original engine fitted to RA 0253 was 2258AP/R3.

When the DOHC head was fitted for 1936 race season, Bellevue Motors fitted the new head to a new block.

This block was damaged racing during Edwards' ownership (from 1953) and he fitted 1666A 135P block. Bob Milton tells me *"I purchased it (the original block) from Bill Shortt being advised that it was the ex-Horton engine. This I never proved, Horton did have a very rapid C Type C0254 fitted with a single seat body establishing some National & International Class H Records at Brooklands in 1934 and, although I have no evidence, it would have been possible to fit the 3 bearing P type engine thus giving it the appearance of an R engine. (This) car was purchased by H Clayton in 1938 and entered at Brooklands. Unfortunately (he) crashed and I believe was killed. The car was subsequently scrapped and the engine & gearbox sold. All supposition, but a possible explanation for it being claimed as ex. Horton. However my*

notes from the late 1960s when I sold this engine to Charlie Duerden, owner of RA0251 state the engine number to be 2258A. 165P !! The difficulties in trying to document accurate history" Charlie Duerden died some years ago and his car and all spares including the engine were purchased by Karl Wiessmann owner of not only RA 0251 but also RA 0254 & RA 0260". "However, you are correct (Geoff) in as much Stevens used the cylinder block he received with the car, all my notes tell me is that he sleeved it back to standard bore (assume 57mm) using Cromard liners".

- R Types cars were fitted with Girling cable operated brakes and finned brake drums.
- Close-ratio, pre-selector gearboxes
- Zoller blowers – 24 psi at factory
- Luvax shock absorbers
- Steering – 2 gears driven by common gear off steering column, independently attached to a drop arm for each front wheel.

## RA 0253 Race History

The following pages are reproduced from Mike Hawke's "Triple-M Car Competition History.

RA0253			
		Engine number	2258AP/R3
		Body	Single-seat racing
		Colour	Cream, dark wheels, by 9/35 Blue, Cream wheels
Date	Event	Driver, Results, Comments	Entry Number
29/4/35	Guarantee plate issued.		
1935	Eyston Team, see note under RA0251.		
6/5/35	JCC International Trophy, Brooklands	N. Black / R. Gibson. Entrant G.E.T. Eyston.	36
29/5/35	RAC Mannin Beg, IOM	N. Black	18
6/7/35	BRDC British Empire Trophy, Brooklands	N. Black / R. Gibson, 2nd 750cc, 5th overall. Entrant G.E.T. Eyston.	3
7/35	The M.G. Car Company Ltd. retires from racing. Sold to Bellevue Garage (The Evans Family) who also acquired RA0251 at this time in addition to RA0255 which Bellevue owned from new. At the same time as Bellevue were entering 'R'-types in 750cc Class events they were also entering their 'Q'-type single-seater QA0254. It is not always possible to tell from contemporary race reports or from race meeting programmes if it was the 'Q'-type or one of the 'R'-types being driven by which member of the family. Where photographs exist the 'Q'-type can be identified. If a programme is available, with the 'R'-types only RA0253 after conversion to DOHC is identifiable. Entries marked * indicate that the entry was either RA0251 or RA0255. Entries marked ** indicate that the entry was in either RA0251, RA0253 or RA0255. All entries so marked are listed in all chassis numbers applicable.		
13/7/35	D&DMC Nuffield Trophy, Donington Park	D.G. Evans**, Junior Handicap. B. Williams**, Senior Handicap.	51
5/8/35	BARC Brooklands	The Evanses entered Class H cars in five races but DNS. K.D. Evans raced RA0255 in Italy at this date.	
21/9/35	BRDC 500 Miles Race, Brooklands	D.G. Evans** / R.E. Tongue**, DNF. T.H. Wisdom** / A.L. Phipps**, DNF. Entrant D.G. Evans.	1 2
28/9/35	MAC Shelsley Walsh Hill Climb	K.D. Evans / Miss D.B.M. Evans**, DNF. K.D. Evans**, NP 750cc Racing. D.G. Evans**, NP 750cc Racing. Miss D.B.M. Evans**, 2nd 750cc Racing.	3 4 5 11

		Entrant K.D. Evans.	6
		Miss D.B.M. Evans**,	
		DNS Second October Long Handicap.	7
		K.D. Evans**,	
		NP Second October Mountain Handicap.	4
/10/35	BARC Brooklands	Blue/Cream.	
		K.D. Evans**,	
		750cc Mountain Circuit Lap Record 75.24 mph.	
July 1936		New engine fitted with McEvoy DOHC cylinder head installed.	
/3/36	BARC Brooklands	Miss D.B.M. Evans**,	
		3rd Second March Mountain Handicap.	6
		Entrant K.D. Evans.	
		K.D. Evans**,	
		2nd Fourth March Mountain Handicap.	6
		Blue/Cream.	
/3/36	CUAC Inter Varsity Speed Trials, Syston Park	A.R. Phipps**, 850cc Racing and All Comers.	51
/3/36	BRDC British Empire Trophy, Donington	K.D. Evans**, 850cc Racing, 3rd All Comers.	50
		K.D. Evans / D.G. Evans, DNF.	2
/3/36	JCC International Trophy, Brooklands	Miss D.B.M. Evans / D.G. Evans,	
		DNF, crashed, caught fire.	41
		Entrant Miss D.B.M. Evans.	
/3/36	D&DMC Nuffield Trophy, Donington Park	K.D. Evans**, DNF Nuffield Trophy.	2
7/36	MAC Madresfield Speed Trials	Miss D.B.M. Evans**, 1st Ladies' Cup.	
/3/36	IMRC Limerick GP	K.D. Evans, DNF.	
8/36	SMC Southsea Motor Races	K.D. Evans**, Entrant D.G. Evans.	17
3/36	MAC Shelsley Walsh Hill Climb	K.D. Evans**, 750cc Racing.	80
		Miss D.B.M. Evans (Mrs Phipps)**, 750cc Racing.	2
3/36	B&HMC Brighton Speed Trials	K.D. Evans**	3
10/36	BARC Brooklands	N. Lloyd**,	83
		NP Second October Mountain Handicap.	8
		Entrant D.G. Evans.	
		K.D. Evans**,	
		DNS Oxford and Cambridge Mountain Handicap.	8
		Blue/Cream.	
/3/37	BARC Brooklands	J. Ashmore,	
		NP First Easter Long Handicap.	5
		NP Second Easter Long Handicap.	4
		NP Easter Short Handicap.	7
		NP Second Easter Mountain Handicap.	15
		Blue/Yellow.	
/3/37	D&DMC Coronation Trophy Donington Park	F. Ashmore, 850cc Handicap, 1500cc Handicap, 5000cc Handicap.	30
		Entrant Ashmores Ltd.	
Mentioned in <i>Motor Sport</i> as owned by R.S. Shapley, Skegby Hall, Nr. Mansfield.			
<i>Motor Sport</i> reports R.S. Shapley of Leeds has had 'R'-type throughout the war.			
16	M&DMC Sand Races, Saltburn, Redcar	R.S. Shapley, 3rd 850cc(s)/1500cc(u/s) Racing.	
	Sold by R.S. Shapley to C.E. Reynolds, Reynolds' Garage, Barnsley.		
/47	M&DMC Sand Races, Saltburn, Redcar	C.E. Reynolds, 1st 1500cc Race, 2nd 2500cc Race, 2nd 5000cc Race.	
/47	YSCC Sprint, Tholthorpe	C.E. Reynolds, 2nd 1100cc Racing.	

1953	Part exchanged at Mercury Motors by Reynolds for Cooper 500 fitted with SOHC M.G. engine referred to as an 'R'-type.
7/8/53	For sale at Mercury Motors, Wembley.
15/8/53	Sold by Mercury Motors to H.H. Edwards, Redcar. Edwards raced the car without success. Engine failed, damaging the block. 'P'-type block No.1666A/135P used as a replacement and fitted with the DOHC cylinder head. Edwards fitted a road-going body.
6/54	The original engine 2258AP/R3 that had been replaced in 1936 was advertised for sale in <i>Motor Sport</i> by Bill Shortt together with a No. 8 Powerplus supercharger and Solex carburettor. Bob Milton bought the engine c.1959 and sold it to C. Duerden (RA0251) in the late '60s.
1/12/54	Registered for road use, LPY 915.
5/12/55	Sold by Edwards to A. Booth, Redcar. Booth fitted a new 2-seater Microbond fibreglass body, and electrical equipment, including starter and dynamo. Booth retained the 'R'-type steering gear, the car having a central steering position but with a shortened steering column. A Solex carburettor was fitted at this stage.
11/1/57	Advertised for sale in <i>Autosport</i> by Booth.
3/57	Car purchased by P. Stevens, RNZAF, Henlow, Beds. Stevens rebuilt RA0253 fitting a new body similar to a cycle wing 'J2'. He also fitted rack and pinion steering and telescopic front shock absorbers.
Mid-1959	Shipped to New Zealand by P. Stevens. Used on the road in New Zealand. Various surplus parts (shortened steering column, steering box, other steering parts, radiator, dashboard and stays, firewall stamped 0253) given to Bob Milton
	RA0253 parts sold to C. Duerden, 2000 to Karl-J. Wiessmann.
c.10/65	Sold to Len Southward by P. Stevens. Subsequently rebuilt.
2015	In the Southward Trust Museum, Paraparaumu, near Wellington, New Zealand.

### Owner's details

Southwards Museum,  
Paraparaumu, Wellington

## Annex. R Types.

### **Copy of article about R Type MGs from MG enthusiast Magazine, December 1990/January 1991.**

#### Note:

The picture on p4 of the MG Enthusiast Magazine article shows Kenneth Evans racing in the Nuffield Trophy race, the caption says in 1935. This is incorrect.

The car does not appear to be a SOHC R Type but a DOHC R Type which means the car is, in fact, RA 0253 which, in 1936 was #2 in the Nuffield Trophy Race at Donington Park, driven by Kenneth Evans.

(#2 in the 1935 Nuffield Trophy race was an R Type driven by Handley/Gibson).

The article also says a development R type was sold to Reg Parnell's friend Joe Ashmore. Ashmore purchased RA 0253 from Bellevue Garages (Racing) after the 1936 race season.

# REVOLUTIONARY R-TYPE MG AHEAD OF ITS TIME

"...And after round five of the FISA 1991 Formula One World Championship, MG leads the Constructors' Championship by 10 points from McClaren-Honda, Benetton-Ford..."

Had not Leonard Lord's Morris takeover of MG led to the termination of MG's racing programme and the revolutionary new R-type racer, these may well have been the words of some excited race commentator today.

For the R-type was a dedicated single-seat racing car, like that driven by Ayrton Senna – and it was available to anyone who could afford its £750 purchase price.

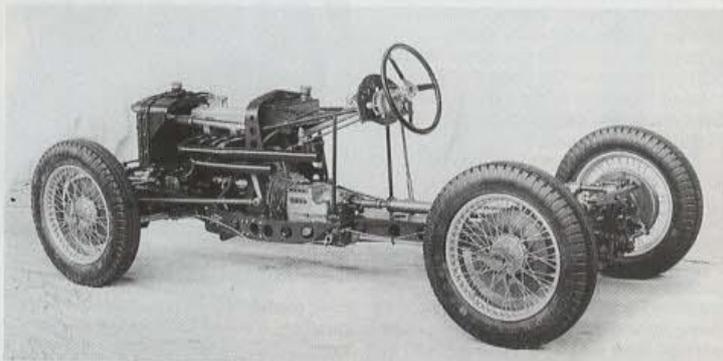
Since the first MG Midget, Cecil Kimber's sporting drive pushed his MG cars through an unparalleled race and record-breaking half-decade of international achievement that went hand-in-hand with the production of popular road cars. During this golden era the MG factory held a small nucleus of highly talented engineers, designers, draughtsmen and mechanics able to produce world-beating cars.

By 1935 the momentum that had been built up by this specialist factory, under the direction of marque founder Kimber, and through the race victories of Midget and Magnette sports cars and their record-breaking derivatives, peaked with the announcement of a revolutionary racing car co-incidentally called the R-type.

Revolutionary in that designer H. N. Charles and his team used two radical ideas to build a race car around the potent Q-type engine from which MG engineers were extracting close to 150 bhp. Derived from the P-type powerplant, which was in-turn a progression from the earliest Wolseley Hornet unit used in the M-type and similarly being a small shaft-driven over-head camshaft type, this engine was producing the highest specific output of any engine in the world at the time, with an equivalence close to 200 bhp/litre.

Successfully applying all this considerable power to the race track was the job that had yet to be done for, unlike flat-out speed records set on the relatively smooth straight surfaces such as autobahns and smoothly-curved tracks, much of racing was conducted on tortuous uneven circuits or even like the Mannin Beg – public roads.

Clearly the supercharged J and Q-type Midgets had chassis that did not match their engines: "You never see a picture of a Q-type with all four wheels on the deck. For Brooklands we had to fit



*The revolutionary R-type single-seater boasted independent suspension and a Y-shaped, lightened chassis. This true monoposto was really a single-seat racer in miniature.*

grab handles on the floor so that the mechanic could keep himself in the car," remarked MG riding mechanic Alec Hounslow.

The two ideas that made the R-type unique amongst MG – and pretty special just about everywhere else – were a backbone chassis and all independent suspension. So, H. N. Charles designed a backbone chassis that branched into two to assume a tuning fork shape with the suspension held by the branches, the engine/gearbox held between them and the rear suspension and differential supported on a swelling at the base of the trunk. This highly stressed electri-

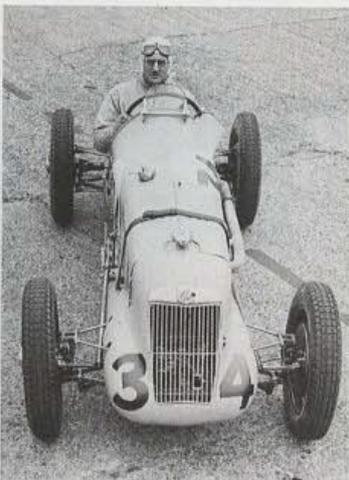
cally-welded box-section fabrication weighed a mere 571lbs, thanks to the many lightening holes drilled in its broad faces. Augmenting this rigid light-weight backbone was all-round independent suspension.

Ex-Abingdon general manager, John Thornley, takes up the story: "It seemed that the only way in which the Midget could be persuaded to keep its feet on the ground, under fierce acceleration and high speeds, would be by means of a serious attack on unsprung weight, and this, amongst other things, was what independent suspension achieved."

Independent suspension was a departure for MG. Theoretically, it offers the chance for each wheel to act independently so that a bump taken at one side does not affect the opposite, as is the case with a beam axle, thus minimising disturbance to the chassis/body. Independence would also seem to maximise traction by allowing each wheel to follow its own course – thus minimising disturbance and maximising traction.

Unsprung weight refers to that which is not suspended. The chassis/body is suspended – the hubs, wheels, axles and brakes are not. Having a lighter mass of metal in motion – from bumps and undulations – is easier to control and more compliant than a larger one.

Initial progress was – as is so often the case – by experiment. Sydney Enever and Reg Jackson had used axle shafts as torsion bars to control a wishbone assembly fitted to a cut-down J2 chassis. Tests on the factory track convinced Kimber; and the frontal set-up, produced to complement the rear



*George Eyston in the 1935 International Trophy race car. Note the bulbous front end cowl which MG patented.*

*Continued on next page.*

## MINI-PROFILE: MG R-TYPE SINGLE-SEATER

*Continued from previous page.*

application, worked well – all being done with little more than an engineer's ratchet eye.

Of course, for the R-type, ex-Aston Martin man Bill Renwick joined H. N. Charles, and Jack Daniels at Abingdon. Says Daniels: "Renwick designed the wishbones and I drew them." So thin they appeared like knitting needles; Daniels continues: "The original five-sixteenths jobs were quite strong enough, really, but they looked so skinny that we made them of three-eighths instead." Renwick's calculations having been confirmed by record-car man Reid Railton.

Controlling these wishbones were longitudinal torsion bars, anchored amidships, whose thickness had been initially arrived at by machining until they looked about right!

Therefore, the whole chassis approach was new. Rather than the traditionally flexible platform chassis being sprung on high rate/low travel cart springs, here was a rigid chassis held by high compliance wishbones – whose lower members held the car through the torsion bars.

This new chassis would inherit a powerplant and transmission similar to that used for the 1934 Q-type Midget. Still a two-seater, the Q-type was more of a race than a road car and was sold for £550, excluding wings and lights. Its long K3 Magnette wheelbase chassis used a lighter N-type rear axle but this still couldn't prevent the 120mph Midget being seriously bothered by bumpy Brooklands; and the same powerplant was going into a new, hopefully lighter, R-type.

Already highly developed, this four cylinder 746cc shaft-driven over-head camshaft engine of 57mm bore and 73mm stroke received stronger con rods, while the weight-saving deletion of major electrical equipment brought other changes. The shaft-driven dynamo was now superfluous apart from bearing the same shaft that drove the valve gear, so its internals were stripped. The distributor was replaced by a magneto while no starter meant provision had to be made, and for this a blower reduction gear was extended through its casing to engage a sliding spur gear for the handle. As push-starts were normal, this, nevertheless, came in handy for adjusting the tappets.

Bolted to the front of the engine was an eccentric vane-type Zoller supercharger; not as an add-on for the blower had been developed in conjunction with the P-type engine, including a mutual effort by both MG's H. N. Charles and supercharger men Frank McEvoy and Laurence Pomeroy. Driven at approximately three-quarters engine speed the supercharger gave 25-28 lbs/sq.inch boost for, what Kimber estimated, 50bhp drain.

To save the N-type final drive from this potent Zoller-boosted engine and its



*Not much room inside the cockpit. Note the pre-selector gear lever.*

ENV manufactured Wilson pre-selector gearbox, a safety-valve clutch slipped against the flywheel in times of stress such as gear changes and starts – a limited-slip of sorts. A traditional universally-jointed propeller shaft carried the power to the bevel-gear final drive, where one would look for the limited-slip diff now. The differential was contained in its casing, bolted to the chassis.

This brings us to the subject of Pistominium – not a means by which the MG management limited toilet facilities, but the name coined for the alloy made by melting down scrap aluminium, mainly in the form of old pistons which formed the lightweight final drive casing.

From the diff, two short universally-jointed shafts followed closely the rear wishbones to minimise their telescoping as the suspension worked. Equal length upper and lower wishbones made for parallelogram action by the two rear

wheels while at the front unequal length wishbones maintained track width and steering accuracy, regardless of wheel deflection.

On this theme, a Cam Gears worm and peg twin steering box with two drop arms and two drag links was bolted to the small firewall bulkhead frame which, like the chassis, featured lightening holes too.

Jack Daniels relates: "I drew the steering box with those twin steering levers and when we got the first one we found the cams were handed the wrong way so when you steered right it went left and vice-versa. I'll never forget Sam Nash driving that car through the factory with reversed steering, doing a slalom in and out of the girders – and quite fast, too!" Over and again, one can't help but think these dedicated people had a ball building their marvellous MGs in their own high-spirited way.

The idea behind the twin-box was to maintain the front wheels' independence by preventing kick-back from one wheel running through the steering and affecting the other. As the steering box was bulkhead mounted, directly over the bellhousing, the steering column was very short and bang-central; benefiting a true monoposto.

Cable operated 12-inch drums with Girling backplates were activated from a right-hand pedal. A left-hand pedal worked the gear selection, while the accelerator was found centrally over the gearbox.

The R-type ran on 18-inch centre-lock wire spoke wheels, separated by a seven foot six-and-a-half inch wheelbase and tracking three feet ten-and-a-half inches at the front and a variable three feet nine-and-a-half inches at the rear!

An integral 21 gallon fuel tank formed the rear of the body, behind the driver, while at the front a detachable section –



*Restored by South African Ralph Clarke the ex-Doreen Evans R-type (seen here and opposite) is one of the most valuable MGs in the world today.*





like those used on today's racing cars – covered the supercharger and radiator. MG were rather proud of this cowl and registered the design; though, with its raked dummy radiator and bulbous bottom, it remained, aesthetically, an acquired taste. Apparently after the prototype chassis was completed, it was propped up on a couple of trestles while the rest of the car was built. Indeed, looking at the cobbled body, one could well believe it; the car looking like a ripe banana in some shots.

However, the new car weighed just 12.5cwt – fulfilling the design brief by beating the succeeded Q-type by 0.5cwt while its fully-faired body must have reduced its drag co-efficient also.

Thus the new R-type was announced in April 1935 as MG's first dedicated single-seat race car, though, characteristically, on-sale for £750 with the unspoken message: go racing young man, written all over it.

It was as *Motor Sport* said: "...a genuine Grand Prix racing car in miniature. Nothing like it has been within the reach of motor racing enthusiast..."

Certainly, those fortunate enough to drive the R-type had known nothing like it. That became apparent after the JCC International Trophy race held at Brooklands. Working round the clock the factory rushed out six R-types for the race. Just two finished; the others retiring with valve trouble. However, one of the finishers was record-breaker Sir Malcolm Campbell. He won the 750cc Class and

helped by Hall's K3 that came third-overall, MG took the Team Prize. Campbell's car was found to have split its chassis in the process but had been the most comfortable racing car he had ever driven.

Kim accounts for this thus: "The biggest departure from accepted racing car practice was the amount of vertical movement allowed to the wheels. The fronts had an amplitude of about four-and-a-half inches and the rear five-and-a-half inches. When it is realised to obtain controllability at speed with conventional springing meant limited axle movements to about one-and-a-half inches in front and two inches at the rear, with very powerful friction shock absorbers controlling the movement, you will realise how revolutionary this design was."

However, the new MG's pronounced roll and awkward wheel angles disturbed drivers. Says John Thornley: "With parallelogram action in the suspension, the centre of roll is on the ground and the centre of gravity being some distance above this, the whole car heels over outwards on a corner, taking the wheels with it. But for all that, all four wheels remained firmly on the ground under all conditions. It seemed almost impossible to make the car slide on a corner, a much greater proportion of the available engine power could be used for acceleration, and braking was revolutionised."

The year's Mannin Beg was bad news for the R-type. The undulating roads that

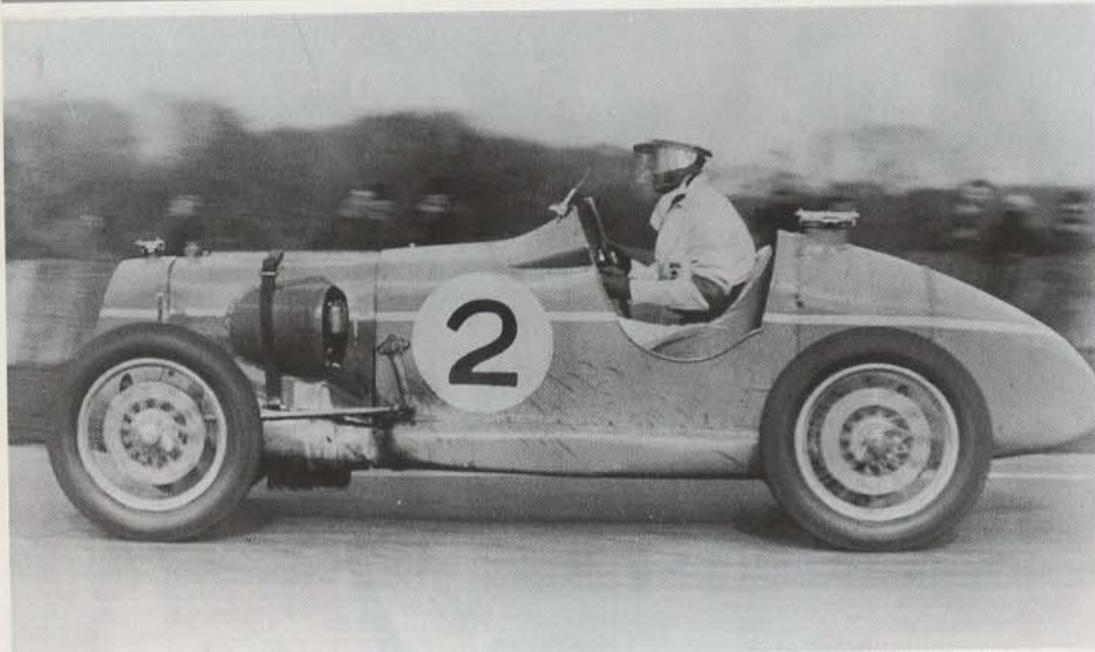
had seen off the K3s a couple of years earlier were the R-cars undoing. Broken drive-shaft universals, caused by over-extended suspension through overheated hydraulic shock absorbers, put Kimber's above statements in a different light; though even he acknowledged the R-type's short comings: "Where this design failed was in road-racing; as the wheels folded over on a corner. It was precisely this short-coming of independent suspension on all four wheels that finally brought back the Grand Prix Mercedes and Auto Union to the de Dion-type back axle in which the two rear wheels are connected with a beam axle which forms no other purpose than to keep the rear wheels square with the road and thus stabilise the whole chassis," he said.

Since the R-type launch it had been an hectic and exciting two months at Abingdon but the heady days ended with the Morris Motors axe that cut out MG's heart: the design office, the experimental shop and the racing department. Only Sydney Enever and Bill Renwick were left as design liaison men. Now it was R-for-rationalisation not R-for-racing.

As for the R-type, just ten examples were produced. Cruel though it is to say it, a Mark II version was planned. There was a mechanical fuel pump that would have eliminated even the small six-volt battery and carried to power the electric device. But according to Jack Daniels MG patented a pre-loaded anti-roll bar.

*Continued on next page.*

## MINI-PROFILE: MG R-TYPE SINGLE-SEATER



**Kenneth Evans at the wheel of the family R-type seen competing in the 1935 Nuffield Empire Trophy race at Donington Park.**

*Continued from previous page.*

Also, gyro-controlled engine-driven hydraulic system was planned to fit the scheme of the ground roll centre and the centrally-anchored torsion bars. Active suspension, no less; planned by MG a half-century ago!

Daniels continues: "We'd dealt with the rolls problem, all right ... And we'd have followed up with an MG road car to the same design – but then the Morris axe came down on us."

Daniels got the chop at Abingdon, but some of his expertise and some of the R-type MG found its way into that landmark car the Morris Minor: "So far as the torsion bars were concerned, the R-type design did influence the Minor," he confirmed. Nice to know at least something of the revolutionary R was salvaged.

In fact the R story did not end as abruptly as the Morris axe fell; development continued in the private sector with the car receiving a twin-cam head through the work of Pomeroy and McEvoy for Bellvue Garage, London, whose Evans family ran a team of R-types. Bellvue had assembled and tested the engine to achieve a power output of 100bhp, in April 1936. Later, Reg Parnell became involved in the project, buying the design and the jigs, whilst a development twin-cam was sold to his friend, Joe Ashmore. Without factory backing though, the R-type was left high-and-dry.

So the short-but-sweet few pages in the final chapter, of the glorious story that was the MG pre-war golden era, ended with the abandoned R-type.

The die was cast and the end of the all independent R-type was also the end of the all-independent MG.

MODEL	MG R-type	
PRODUCTION	Period	Mid-1935
	Total	10
BODYTYPE	Monoposto single-seater with integrated fuel-tank and removable front cowl	
CHASSIS	Lightweight Y-shaped welded steel box section backbone	
ENGINE	Material	Iron
	Cylinders	4
	Valve gear	Vertical Shaft-driven OHC
	Capacity	746cc
	Bore/Stroke	57mm x 73mm
	Carburettor	SU HV8 fed by McEvoy Zoller eccentric vane supercharger
	Output	113bhp @ 7,200 rpm Zoller supercharger
TRANSMISSION	Gearbox	Manual 4-speed Wilson pre-selector
	Clutch	Twin plate torque-slip
	Drive	Prop shaft, bevel coupling, prop shaft
BRAKES	All-round 12-inch drums with Girling backplates	
	Operation	Cable
SUSPENSION	All-independent by wishbones & torsion bars with hydraulic damping	
	Wheels	18-inch centre-lock wire spoke
	Tyres	18 inch x 4.75 inches
OVERALL CHASSIS DIMENSIONS	Wheelbase	7 ft 6.5 inches
	Track	Front 3 ft 10 and three-eighths inches
		Rear 3 ft 9.5 inches



like those used on today's racing cars – covered the supercharger and radiator. MG were rather proud of this cowl and registered the design; though, with its raked dummy radiator and bulbous bottom, it remained, aesthetically, an acquired taste. Apparently after the prototype chassis was completed, it was propped up on a couple of trestles while the rest of the car was built. Indeed, looking at the cobbled body, one could well believe it; the car looking like a ripe banana in some shots.

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However, the new MG's pronounced roll and awkward wheel angles disturbed drivers. Says John Thornley: "With parallelogram action in the suspension, the centre of roll is on the ground and the centre of gravity being some distance above this, the whole car heels over outwards on a corner, taking the wheels with it. But for all that, all four wheels remained firmly on the ground under all conditions. It seemed almost impossible to make the car slide on a corner, a much greater proportion of the available engine power could be used for acceleration, and braking was revolutionised."

The year's Mannin Beg was bad news for the R-type. The undulating roads that

had seen off the K3s a couple of years earlier were the R-cars undoing. Broken drive-shaft universals, caused by over-extended suspension through over-heated hydraulic shock absorbers, put Kimber's above statements in a different light; though even he acknowledged the R-type's short comings: "Where this design failed was in road-racing; as the wheels folded over on a corner. It was precisely this short-coming of independent suspension on all four wheels that finally brought back the Grand Prix Mercedes and Auto Union to the de Dion-type back axle in which the two rear wheels are connected with a beam axle which forms no other purpose than to keep the rear wheels square with the road and thus stabilise the whole chassis," he said.

Since the R-type launch it had been an hectic and exciting two months at Abingdon but the heady days ended with the Morris Motors axe that cut out MG's heart: the design office, the experimental shop and the racing department. Only Sydney Enever and Bill Renwick were left as design liaison men. Now it was R-for-rationalisation not R-for-racing.

As for the R-type, just ten examples were produced. Cruel though it is to say it, a Mark II version was planned. There was a mechanical fuel pump that would have eliminated even the small six-volt battery and carried to power the electric device. But according to Jack Daniels MG patented a pre-loaded anti-roll bar.

*Continued on next page.*