

The Whitehaven Meeting

Report on the well-attended July International

THE second International Slot Racing GP to be organised by the Model Car Section of the Marchon and Solway Sports and Social Club was held at Whitehaven in Cumberland on July 1st, and the meeting attracted enthusiasts from many parts, including entries from the U.S.A. and New Zealand. Mainly responsible for the excellent preparation and facilities provided were the two well-known slot protagonists, Duncan Laycock and Ken Wolstenholm, both of whom worked indefatigably to ensure the success of a most interesting event for all who attended. Following the Leamington Spa International, the Whitehaven GP provided another opportunity for the rapidly increasing slot fraternity to gather, discuss and study some of the most outstanding models constructed to date for this form of electric miniature car racing.

From the technical viewpoint the models that undoubtedly attracted the closest attention were the

tiny $\frac{1}{2}$ scale Mini Minors developed by Mike Carr. Mike, who is rapidly becoming known as "Light" Carr, has certainly provided food for thought with his featherweight models. The simplicity of design and excellent workmanship involved in the Mini chassis, coupled with the ingenious modifications incorporated in the Scalextric motors used, were greatly admired, and the constructor was kept extremely busy discussing his ideas and theories with numerous individuals during the course of the meeting.

Another model which operated with considerable promise was a belt-driven Mercedes 300SL, an elastic band and pulleys providing the drive. Still under development by its builder, Duncan Laycock, it certainly has great possibilities because its speed and road-holding compared very favourably with the majority of conventionally driven models.

Also present were a group of competitors from the Blyth Model Car Club who specialise in front-wheel-drive. In fact all their model cars utilise this method which they report having found highly successful. One of their members, Bob Gair, produced an attractive FWD Cisitalia and it is understood that he plans an authentic four-wheel-drive version in the near future.

Mention should also be made of an excellent model Ferguson fitted with four-wheel-drive through Eldi gears. This car, built by G. C. Vacey-Ash of Holmes Chapel, was noticeably fast and exceptionally steady on the corners, circulating in a manner similar to the full-size prototype.

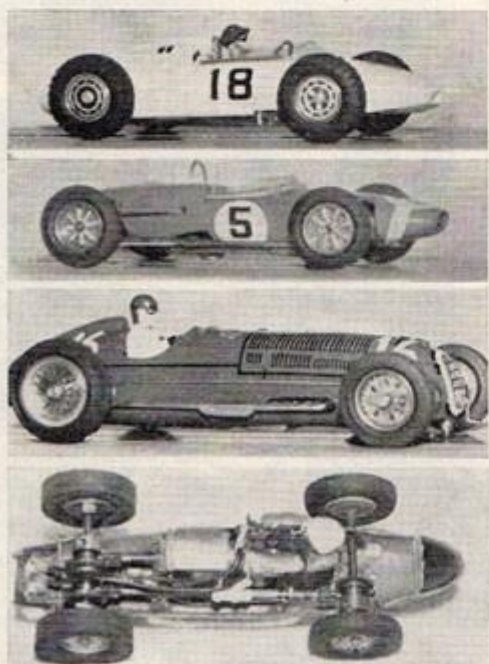
The "paddock" was full of interesting models, many of which incorporated ingenious ideas in their construction, and the variety, types and ratios of gearing used is certainly significant of the possibilities and scope provided in this particular form of model car racing.

For this year's events the Whitehaven circuit had been lengthened and re-laid with S.R.M. tape. In fact, work on the track was only completed a week or two before the meeting, so the "home" club had therefore little, if any, advantage over visiting competitors. This made the eventual results all the more interesting.

THE SPORTS CAR RACE (120-LAPS)

Pre-race heats resulted in a line-up for the Sports Car final of the following: Cunningham, Dallas Dolan (Portland, Oregon, U.S.A. Proxy driven by D. Laycock), Jaguar 3.4, John Matthews (East Birmingham), Jaguar XK 120, John Riddick (East Birmingham), Mini-Minor, Mike Carr (Whitehaven). The two Jaguars were both entered by John Matthews who successfully qualified them for the final, the XK 120 being driven by last year's winner John Riddick.

At the start the amazing little Mini, driven by Mike Carr, shot into the lead, hotly pursued by the two Jaguars with the Cunningham also in close attendance. For a number of laps the positions remained unaltered, except that the three extended their lead over the Cunningham which was proving rather a handful to control. Approximately only



Top are two models, both front wheel drive, by Dick Parker of Blyth, No. 18 a Porsche, Scalextric powered, and No. 5 a Lotus, K powered. The Concours winner was the plastic and balsa bodied 1937 12-cyl. 4.6 l. Alfa Romeo by K. Martin of New Zealand. Bottom, G. C. Vacey-Ash of Holmes Chapel brought this four-wheel-drive Ferguson, which uses three sets of Eldi gears.

two yards separated the scuttling Mini from the speedy XK 120 and its team-mate. The two Birmingham drivers were trying their utmost to catch Mike and it only required the slightest error on his part to enable them to do so. Inevitably it happened on the 30th lap—the Mini “ran out of road” at Quarry Bend and both Jags streamed past into first and second positions. However, the Mini soon re-started and set off in pursuit. Meanwhile the Jaguars were providing the spectators with plenty of excitement. For lap after lap they circulated neck and neck, first one then the other taking a lead of inches with both drivers on the limit at every corner, controlling their cars superbly without a fault. As this battle progressed the astounding Mini was beginning to gobble up their lead and there was nothing they could do about it! Soon, in the cheekiest manner possible, the midget edged its way past first one then the other of the fighting Jaguars to regain the first spot. The steadiness on the corners and remarkable acceleration out of them by the tiny projectile amazed everyone, and Mike, who had now settled down into a regular rhythm, was making very few driving errors so that he gradually extended his lead as the race went on and succeeded in lapping both Jags, to the consternation of their drivers! Having proved it could be done once the Mini proceeded to repeat the performance and in the closing stages it gained a lead of three clear laps over its nearest opponent, John Riddick's XK 120, which in turn had managed to fight its way clear of its team-mate. During all this excitement the Cunningham was lapping rapidly in the rear and was by no means lacking in speed. However, unsteadiness on some of the corners forced it to lose considerable ground each time round with the result that Duncan, try as he might, was compelled to battle along gamely at the tail end of the field. Eventually the Mini streaked triumphantly over the line to win convincingly, with John Riddick, last year's winner, finishing in second place.

RESULT:

- 1st M. Carr, Mini Minor (Whitehaven), 120 laps.
- 2nd J. Riddick, Jaguar XK 120 (E. Birmingham), 117 laps.
- 3rd J. Matthews, Jaguar 3.4 (E. Birmingham), 116 laps.
- 4th D. Dolan, Cunningham (U.S.A.), (Driver D. Laycock), 11 laps.

THE WHITEHAVEN GRAND PRIX (240-LAPS)

In 1961, John Riddick, of the East Birmingham Club, scored a double victory by winning the Sports and GP races at the Whitehaven meeting, and this year he gained the distinction of qualifying the 1961 winning Alta again for the Grand Prix. This speedy, reliable car, therefore, lined up on the grid accompanied by Alan Youd's BRM (Bolton), Mike Perry's Ferrari (E. Birmingham) and a works-entered VIP Ferrari driven by Dave James (Whitehaven). Thus the scene was set for the 1962 GP, and its length of 240-laps was certainly likely to prove a test of endurance for all four finalists on the extended circuit.

Soon after the quartet had got away the VIP Ferrari nosed ahead with the BRM right on its tail. Both these cars circulated within inches of each other during the opening laps until Alan Youd edged the pale green BRM past into first place. Soon after this both cars “ran out of road” due to simultaneous errors made by their drivers. First away was the BRM—still in the lead, and the Ferrari also made

a quick recovery and re-started rapidly to maintain its second spot. Meanwhile, the wily John Riddick was lying a comfortable third and well within striking distance, biding his time, like a cat watching two mice! On the 18th lap Mike Perry made a pit stop which dropped the Birmingham Ferrari well to the rear. The high speed at which the race was being run made such a stop disastrous and Mike's chances of recovering his lost ground were, therefore, slender. Obviously having decided to challenge, John gradually began to close up on the leaders with the Alta until all three cars were within a yard of each other. Here he remained for a few laps, harrying the two ahead. Then seizing his chance, he shot the car past the VIP Ferrari and moved effortlessly up on the tail of the BRM which he passed to take the lead on the 33rd lap. However, Alan Youd immediately made a fight for it and kept the BRM close to the speeding Alta for a considerable period, until slowly but surely the dark green car began to creep further and further away under the calm, unflurried control of the expressionless Riddick. Gradually, as the race progressed, John, who was driving magnificently without a fault, extended his lead and by half distance was comfortably ahead by five clear laps. Interest, therefore, centred on the desperate fight for second spot between the BRM and VIP Ferrari. Both these cars were continually changing positions and Dave James, controlling the latter, gave the BRM driver no respite as for lap after lap the pair hurtled round the circuit. During the closing stages of the race a rapid pit stop made by the BRM decided the issue beyond doubt and enabled Dave to whip past into a secure second place. The end came with John Riddick scoring a well-deserved victory for the second time in two years, the Alta crossing the line eight laps ahead of the VIP Ferrari, with the BRM a close third.

RESULT:

- 1st J. Riddick, Alta (E. Birmingham), 240 laps.
- 2nd D. James, VIP Ferrari (Whitehaven), 232 laps.
- 3rd A. Youd, BRM (Bolton), 232 laps.
- 4th M. Perry, Ferrari (E. Birmingham), 219 laps.

THE “CONCOURS d'ELEGANCE”

Outstanding among the many fine models entered for this award was an immaculate 1/24 scale replica of the 1937, 12-cylinder, 4.6 GP Alfa Romeo, constructed by K. Martin of New Zealand. Fitted with a Pittman motor and Eldi gears the detail and finish on this model were evidence of considerable painstaking work on the part of the builder deserving the highest praise. Detailed suspension was also incorporated and throughout the model the workmanship was exceptionally neat and clean. Undoubtedly this superb little car thoroughly deserved the award and K. Martin is to be congratulated on his craftsmanship.

Runner-up was a very neat little model of a Healey-Sprite that reproduced in miniature the form and characteristics of the prototype with excellent effect. The builder was J. Matthews of the East Birmingham Club.

The meeting concluded with the presentation of the awards by Marion Ellison, Secretary of the Marchon & Solway Sports & Social Club, the Model Car section of which is to be congratulated on a very successful event. The thanks of all who attended are also due to the ladies who prepared the excellent running buffet which added considerably to everyone's enjoyment.

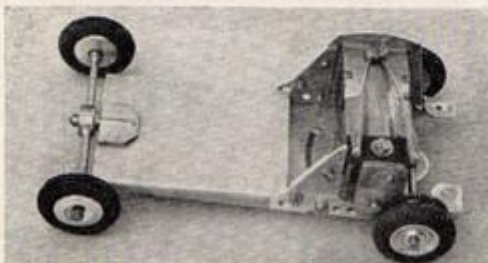
The Whitehaven Winner—

Project ADO 15/32

By J. M. Carr



GENERALLY speaking plastic kits do not interest me, that is, of course, because they are usually not suited to motorising for one reason or another. Very often the scale is wrong or alternatively the kit price is too high. The Airfix range, so far limited to four cars, does, however, appeal as all four cars featured are to be seen regularly taking part in competitive motoring events either on the race track or the rally routes. Of the four, for me at least, the Mini appears most attractive. The fact that I run a Mini van does, I suppose, influence me to an extent, but what could be more fascinating than watching a full-size Mini challenging the big boys on full-size circuits? The little box with a doughnut at each corner is certainly a great favourite everywhere.

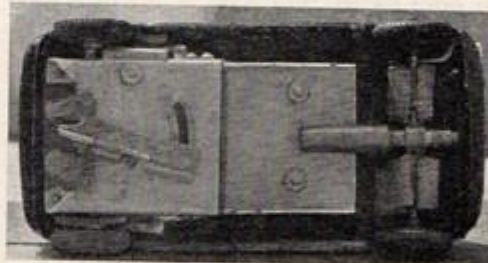


My decision to try and emulate in miniature such Mini experts as John Whitmore, Micky Claire or Christobel Carlisle was a difficult one to make. My own experience told me that a good big'un would always beat a good little'un and if I wanted to win races it would be better to make a good big'un—after all, room in a $\frac{1}{2}$ scale Mini would be severely limited. Before finally making the decision to proceed with the project I purchased a kit and checked up very carefully just what room was available. Just as in the real thing, there was a lot more room than I had imagined there would be, and so I decided to go ahead.



With projects such as this I like to set down on paper a specification, then sketch out several schemes and try to eliminate most of the snags before starting work in metal. It is so much easier and quicker to tear up a piece of paper or use a rubber than to scribe out another piece of aluminium or brass! So far as this Mini was concerned I decided that it would be front wheel drive and that the motor would be based on a Triang.

The next stage in the proceedings was rather more difficult. There were numerous ways in which the



chassis could be made and also numerous layouts which could be adopted, but after considerable thought I came to the conclusion that there was only one way that would be really satisfactory. This was to use a shortened Triang mounted transversely and driving the front wheels through spur gears. I preferred to do it this way rather than using a layout similar to my Lightweight Chassis (February 1962) because with a wheelbase as short as that on the Mini the centre of gravity of the motor would be too far from the front axle. This factor is most imperative when employing front wheel drive in just the same way as it is imperative to keep the centre of gravity as low as possible. The final chassis design differed from any others I



have seen in that it is made up from two distinct parts. The forward part, which is the more complex of the two, has the motor mounted upon it and also carries in its sides the bushes for the front axle. The very front of it has been shaped to hold a Paxolin plate on which the pickup brushes are mounted and the bottom contains a curved or radius slot which limits the movement of the shoe. It will be seen from the photograph that an arch sweeps up over the motor magnet. This, together with the shallower, bent-up off-side, keeps the chassis rigid. By adopting this arrangement the thicknesses of the chassis sides and bearing bushes are not added to the overall length of the motor when calculating the minimum practicable track as in cases like this every little helps. Undoubtedly the magnet could have been ground away but for performance sake the larger the magnet the better.

The other part of the chassis is a simple platform which is securely screwed to the front part and which not only holds the rear axle but also acts as a platform on to which the body can be simply and securely attached. The height of this second section was so arranged that the body fitted it with no modifications other than the removal of the "battery" and a little filing here and there.

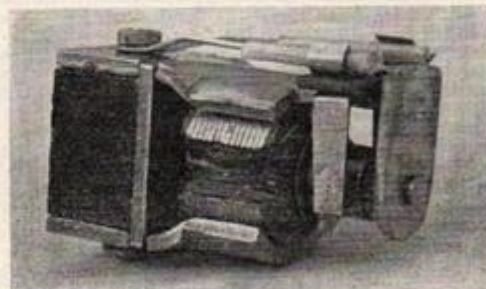
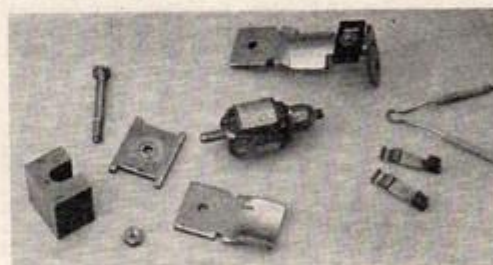
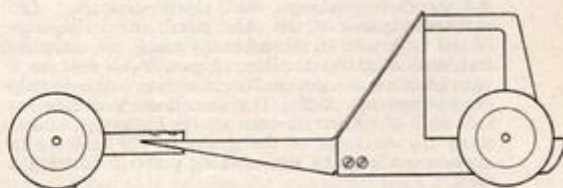
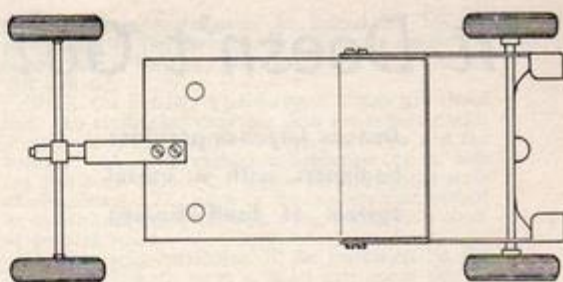
The bushes for the front axle were turned from Sifbronze, which is a brazing rod, and were made on a Selector Unimat. It is probably not essential to fit bushes but they do undoubtedly prolong the life of the chassis. The front axle is of $\frac{1}{16}$ in. diameter silver steel and the wheels are ex Corgi. Undoubtedly it is possible to bush wheels like this without the help of a lathe but I would rather not try. The front wheels were bushed with brass as they were to be soldered to the axle, and the back ones with Sifbronze. In the case of the front wheels the bushing was extended to carry the driven gear on the off-side, and on the near-side it acted as a spacer between the wheel and the chassis.

The rear axle is very simple in conception. This too is made of $\frac{1}{16}$ in. diameter silver steel and is centrally pivoted. The wheels are retained by 12 B.A. nuts, the ends of the axle being died to this size. Small turned rings soldered in place stop the wheels from moving up the axle. This is obvious from one of the photographs. The pivot for the rear axle is itself $\frac{1}{16}$ in. silver steel and is soft soldered to a small piece of brass which in turn is attached to the chassis with two 10 B.A. screws.

So much for the chassis. In view of the fact that the motor is rather different from previous motors I or others have described I think a few words and a photograph will help those wishing to produce similar ones. Although it started as a Triang Mk. IV, any similarity is now quite coincidental. The most significant change is in the bearings. The originals were scrapped and have been replaced with plain bronze ones which are the same length as the thickness of the plates into which they are soldered. The upper pole piece is shortened in the way previously described in this magazine and the commutator end plate, one end of which has been removed, is riveted and soldered firmly into position. The other pole piece is shortened still further, it

[Continued on page 454]

Chassis drawing above is actual size, exploded view at right explains assembly. Chassis photographs are of Mk. II and include one or two minor alterations.



MINI [Continued from page 449]

being cut level with the end of the armature laminations. Although it is largely a matter of personal choice whether the driving gear is fitted inside or outside the end plate I feel the factors in favour of the layout shown outweigh the less dimensionary-critical alternative. In the first place the armature can be removed and the motor stripped without unsoldering anything. This means a replacement armature can be fitted with the minimum of time and equipment. It also means that the gear ratio can be altered very easily, a replacement armature with a pinion of different size being easily installed in the chassis.

The body itself presented very few problems. The under tray was cut away forward of the front seats to accommodate the motor. It was then painted and assembled in the usual way. Two 8 B.A. screws hold the body in place, these being located just in front of the rear seat and passed through both plastic floor and the rear part of the chassis. Two small blocks of foam plastic were placed between the rear axle and the under tray and were adjusted to allow

a little well-damped movement of the axle.

Well then, that was Project A.D.O. 15/32 ready for running. Initial tests on the track were extremely encouraging; slight alteration in the brushes was made and also in the shoe, the final layout being clearly visible in the photograph of the underneath of the car. The most amazing part of the car was in the way in which it handled. I have on many occasions stated that any similarity between one of our models and the prototype it represented must surely be purely coincidental but in this case undoubtedly my "Mini Mini" handles just like the real thing. Its first competition appearance on the 1st July at the International meeting at Whitehaven surprised not only myself but several others present, at least one person being fooled when following me into thinking that his car would go round the corners as quickly as mine. Quite a number of the experts have driven the car and all have expressed amazement at the way in which it holds the road. So amazed in fact were some of them that I think we're going to see some more Minis on the tracks of the country in the near future!