

THE FORMULA ONE COOPER

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BRITAIN'S MOTOR SPORTING WEEKLY

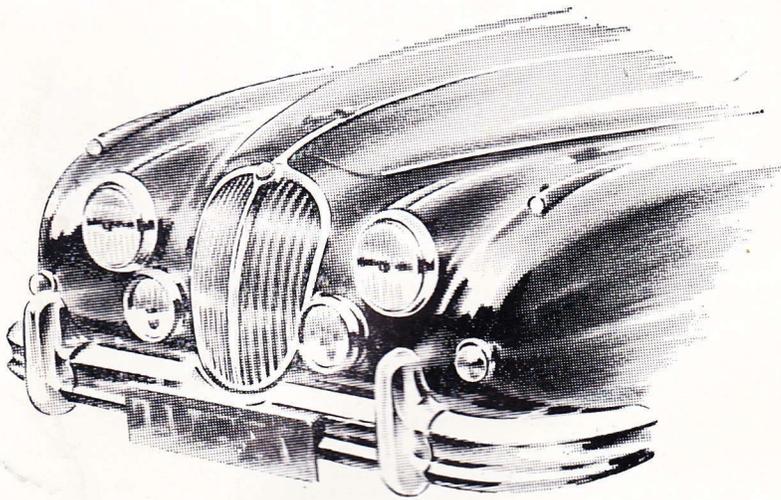
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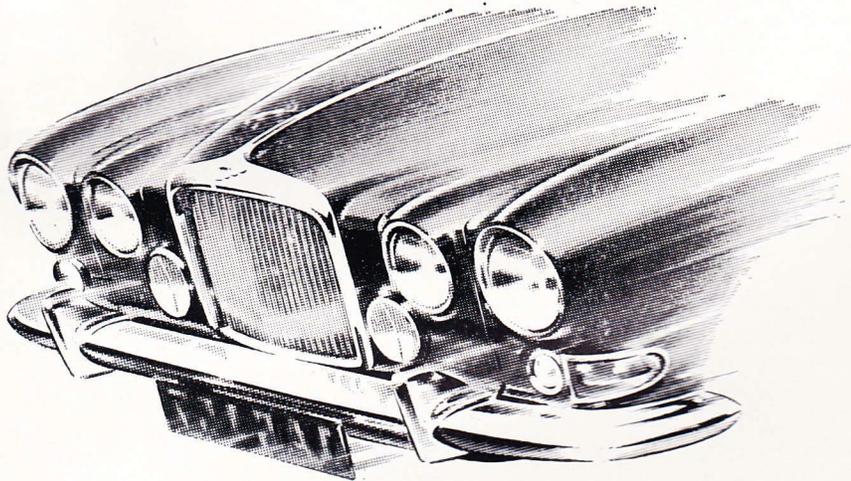
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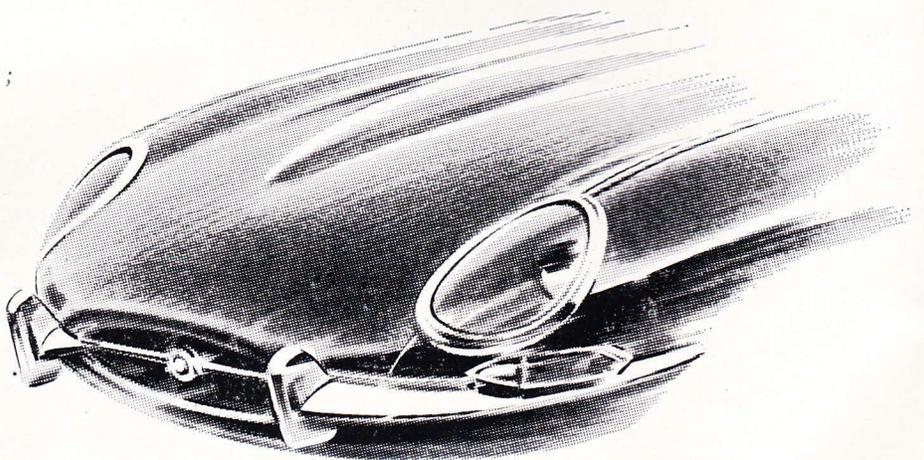
grace...



space...

pace

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JAGUAR

AUTOSPORT

BRITAIN'S MOTOR SPORTING WEEKLY

Registered at the G.P.O. as a Newspaper

Vol. 25 No. 11

September 14, 1962

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EDITORIAL

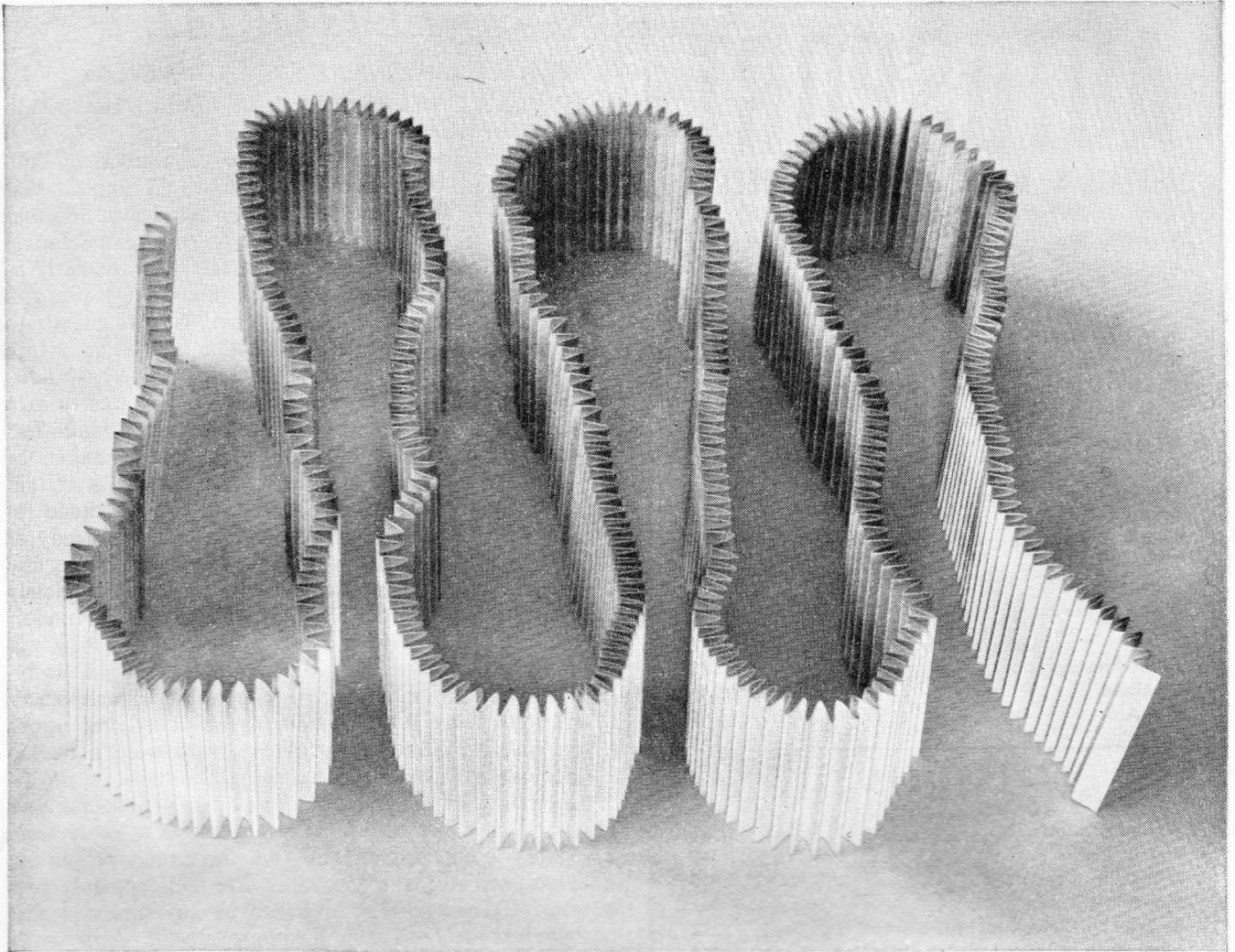
VITAL CHAMPIONSHIP RACE AT MONZA

SUNDAY'S Grand Prix of Italy at Monza is the seventh *S grande epreuve* of 1962, and as such is of vital importance to the potential world champions, of both drivers and of constructors. It would appear that Ferrari has, after all, something up his sleeve, and that Phil Hill may be in a position to restore the fading prestige of the Maranello single-seaters, particularly as this will be the longest race (500 kilometres) ever run under the present formula. Again, Ferrari intends to run five cars, so will be in a position to indulge in race tactics denied to the British and German two-car teams. The success, or otherwise, of this 500 kilometres race will be studied by other promoters, some of whom feel that organized pit-stops may add to the attractions of Grand Prix racing. It is to be hoped that a certain section of the Italian press has changed its attitude towards British drivers and that the unhappy tragedy of 1961 is not dwelt upon in any way. To blame any single driver for that accident was not only completely erroneous, but displayed a deplorable lack of understanding on the part of journalists and publishers not fully conversant with the facts. Dozens of similar incidents occur in motor racing without fatal consequences and it was just unfortunate that the safety precautions for spectators at that particular point were none too adequate. The fact that the Monza authorities, on the suggestions of the Italian motor racing organizers, have completed many additional arrangements to protect on-lookers is conclusive proof that the circuit people are determined to make Monza as safe as is humanly possible. It can also be regarded as an admission that there was plenty of room for improvement. AUTOSPORT would suggest, additionally, that Continental race organizers could improve their standard of marshalling and that a visit to one of the British big events might be of considerable benefit to all concerned with both the safety of drivers and of spectators. With pit-stops a matter of considerable importance the Italian Grand Prix could well be one of the most interesting Grand Prix races for some years. Speed and reliability, although of the greatest importance, of course, will not necessarily suffice as race-winning qualities in this event, and it seems likely that most cars will have to stop for at least one wheel-change. If this leads to the type of Grand Prix race of yesteryear much will be added to the spectacle of Formula 1 motor-racing: longer races, demanding refuelling stops and wheel-changes, provide a degree of spectator appeal which sheer velocity—especially with modern standards of roadholding and "on-the-rails" cornering—can never equal. Whatever is decided by expert opinion on the matter, there will be many British enthusiasts who would wish to see a British Grand Prix run on these lines.

OUR COVER PICTURE

BOWMAKER MAN: John Surtees in action with the V8 Lola-Climax he will drive in next Sunday's Italian Grand Prix at Monza.

Photo: Tüchsen's Pressefoto.



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REGD. T.M.
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THE ex-Essex Racing Stable DBR1 Aston Martin has been acquired by Hon. John Dawnay.

PETER AMON, of R.D.2, Tirau, Wiaakato, New Zealand, a 16-year-old enthusiast, would like to correspond with young British readers of AUTOSPORT.

FORD'S NEW POLICY

It is learned from a very reliable source that executives of Ford of Detroit are studying the influence of racing on design and sales of passenger cars. The corporation is determined to acquire prestige in the field of automotive engineering and intends to enter the high-performance market in continuance of an original policy with the earlier Thunderbird models. Having torn up the so-called Detroit agreement, the way is now open for a proper racing programme. To this end, at least one car will be designed for the 1963 Indianapolis "500", with Dan Gurney suggested as a driver. Technicians are also studying the design of modern European Formula 1 cars and displaying intense interest in the power evolved from the standard 105E engines by British specialists.

Whilst the entry of Ford into Grand Prix racing is the subject of speculation, the rumour is not entirely without foundation. At least one famous European designer-constructor has made more than a few trips to Detroit within recent months. The tremendous appeal of G.P. racing has not been overlooked by publicity-conscious Ford and if the corporation does decide to enter this type of competition there is a strong likelihood that other big manufacturers may follow suit.

RRACE programme at Warwick Farm on 14th October comprises the International Hordern Trophy race (*Formule Libre*) over 23 laps (50 miles), Formula Junior, 1,000 c.c. saloon, sports cars, ladies' handicap and vintage/historic races.

A SAAB 96 saloon set a National Speed Record at Bonneville during the week of 26th August, at the California Time Association's Speed Trials at the Bonneville Salt Flats in Utah. The SAAB, driven by Dick Catron, of Denver, Colorado, broke the former record of 76 miles per hour held by Volkswagen and established a new record of 98.07 miles per hour over the two-way flying mile course. This record is for cars with engines up to 1,300 c.c.s and Dick Catron, with his SAAB, was faced with strenuous competition from Volkswagen, Renault and a 90 horse-power Morris.

GRAHAM WALKER

WE regret to report the death of Graham Walker, the well-known commentator, former International motor-cycle racing rider and ex-Editor of *Motor Cycling*. Graham was a director of the Montagu Museum, being responsible for the collection of historic motor-cycles at Beaulieu. It was at his instigation that the famous Royal Signals dispatch rider section, nicknamed the "Whang Boys", was recruited at the outbreak of the Hitler War. He was 66 years old and is survived by his son Murray, equally well known as a radio commentator on car and motor-cycle matters.

HUMBLE Apologies Department. We apologize to anyone who, on reading our brief preview last week, went to Castle Combe last Sunday to watch the B.R.S.C.C. race meeting. It was in fact on Saturday. Just to make sure that there will be no disappointed customers this week-end, we would point out that the B.R.S.C.C. closed meeting scheduled for Snetterton this Sunday has been cancelled.

PIT & PADDOCK

CLOSING date for all entries in the AUTOSPORT Cars of Yesterday Camera Competition has been fixed for 8th October.

BECAUSE of the Italian Grand Prix Willy Mairesse will not be able to take part in the Tour de France.

DICK PROTHEROE's average speed of 77.02 m.p.h. at Crystal Palace with the E-type was a G.T. record. He and David Piper (Ferrari) share the G.T. lap record with 1 min. 3.4 secs. Protheroe also set up a new Club Silverstone record last Saturday of 1 min. 8.4 secs.

A NEW name which will be seen around the circuits before long is that of *Compania Contienda*, a newly formed racing stable which hires racing cars to members. At present three 500 c.c. racing cars and a BMW 328 are owned by the stable and these are available on hire to any member who can show reasonable car control and responsibility. Some buildings near Tenterden, Kent, have been taken over for conversion to clubhouse, garage and workshops. The offices of the stable are Donkey Bank, Hooe, near Battle, Sussex; it is stressed that the organization is not a racing drivers' training school.

HUNT'S (BIRMINGHAM), LTD., have opened a brand new showroom and service department in the centre of Birmingham. To get to know customers a competition marks the opening, with prizes being given away from the forecourt each day from 17th September-3rd October and an opportunity to win a de luxe Mini Minor, taxed and insured for 12 months.

The new premises carry the Austin and Austin-Healey agency, while the Broad Street showroom is retained for Morris, M.G., Wolseley and Standard-Triumph agencies. Routes is covered by an associate company, Kieft Sports Car Co., Ltd., at Wythall.

Hunt's address is Shadwell Street, St. Chad's Circus, Birmingham, 4 (Central 9101).

FIELDS of Crawley, the Jaguar specialists, market a special reclining bucket seat for your E-type Jaguar. It improves the headroom no end and gives greater comfort and support.

THE Ulster Automobile Club will be holding a race meeting on the new Bishopscourt circuit, Co. Down, on 22nd September. The main race to be held on this three-mile "Irish Silverstone" will be for Formula Junior cars and it is hoped that in addition to all the top Irish drivers, several British entries can be obtained.

HILL-CLIMBING NEWS. George Keylock has sold his 1½-litre supercharged F2-type Cooper-Climax to Gordon Parker, who made B.T.D. at the Brighton Speed Trials last year in his H.K.-Jaguar.

A NEW range of spot and fog lamps made from polished stainless steel has been produced by Wipac Group Sales, Ltd., London Road, Buckingham, for the coming winter. Named the Mini-Major, the rimless lamp bodies and brackets are completely rustproof. A special toughened brass fixing bolt is supplied so that the complete unit cannot chip, rust or tarnish. The new spot and fog lamps are available for 6 and 12-volt. Price, including pre-focus bulb, lead and connector, is 48s. 6d. each.

ARUNDELL WINS ALBI G.P.

Love, Maggs, Hine and Rhodes in Accidents

LAST weekend's Albi Formula Junior Grand Prix was dominated by Peter Arundell's Lotus, which finished the final more than ten seconds ahead of Mike Spence's Lotus. Arundell also won his heat.

The final was marked by a series of unfortunate accidents, as a result of which John Love suffered a broken arm; luckily this was the only injury. "First to go" was John Hine (Lola), who left the course and crashed through a fence, escaping with a badly scratched face. Then Tony Maggs (Cooper) went off, together with team-mate John Love, who had been closely following him. Maggs escaped unscathed, but John Love was taken to Albi hospital with his injured arm. Finally, John Rhodes' Alexis went off the road, without injury to the driver.

This series of crashes put out of the race most of the cars which were challenging for the places, and left Peter Arundell well ahead. Alan Rees, who had won the second heat at a higher speed than Arundell had recorded in the first, was a non-finisher after suffering a damaged piston in his Lotus.

The first heat saw victory go to Arundell at 151.268 k.p.h. from John Love (Cooper), seven seconds down, third was Denis Hulme (Cooper) and fourth Bob Anderson (Lotus), who recorded fastest lap at 154.8 k.p.h., then came John Hine (Lola), Jo Schlessler (Brabham) and Frank Gardner (Brabham). Paul Hawkins (Lotus) and Pilette's Merlyn were among the non-finishers.

In the second heat Alan Rees won at 151.848 k.p.h. from Mike Spence, Tony Maggs, John Fenning (Lola), Gavin Youl (Brabham) and John Rhodes (Alexis). Fastest lap went to Youl at 154.1 k.p.h. The fastest lap of the final, by Arundell, was 154.0 k.p.h.

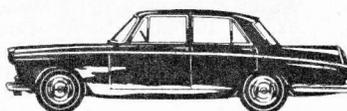
The G.T. race was won by Oreiller's Ferrari at 140.1 k.p.h. from Berney's Ferrari and Garaud's "E"-type Jaguar. Gast's TR4 took 10th place, and fastest lap was recorded by the winner at 144.1 k.p.h.

COLIN DAVIS has been having quite a time lately. He was testing a car of unknown make at Modena when it caught fire, Colin stepping off smartly, and escaping unhurt. Then, on Saturday, a 3½-litre Maserati—also on test at Modena—went out of control by the tribune and departed into a field. Colin received slight injuries, but was not badly hurt.



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SPORTS NEWS

SOUTH AFRICAN NOTES

THE Vintage and Veteran Car Club Rally, sponsored by the *Rand Daily Mail*, has been won by a Model T Ford, the third win for this type. The entry was a record one and included such automobiles as an 1899 Benz, Bugatti, Invicta Sports, B.S.A. and many other cars.

INVITATIONS have been sent out to all works teams by the organizers of the South African Grand Prix to be held at East London at the end of the year. It is hoped that Stirling Moss will be able to take part.



LIEGE VICTORS Eugen Bohringer (left) and Eger (right), who was Fangio's racing mechanic when the Argentine driver was with Mercedes-Benz. The pair lost only 53 mins.

BRANDS HATCH SIX HOURS

SEVENTY drivers will be competing in the Six Hours Touring Car Race at Brands Hatch on 6th October, two to a car. Already several Continental works entries have been promised for this B.R.S.C.C. International meeting, sponsored by *The Motor*. First prize is £500 and there is also a £100 prize for the highest-placed lady drivers and a £200 prize for the car which covers the greatest distance relative to its basic price. A condition of entry is that all drivers must wear safety harness. Grid positions will be determined according to engine capacity—those with the biggest engines in front. Advance spectator booking forms may be obtained from Brands Hatch Circuit, Fawkham, Kent.



JACK REECE

JACK REECE has been appointed chairman of J. Blake and Co., Ltd., of Liverpool in succession to the late Stanley Blake Reece. Jack Reece, of course, has taken part in many International rallies and usually assists B.B.C. commentator Raymond Baxter at race meetings with lap times, lap charts, etc.

MOLYSLIP CHAMPIONSHIP

JONATHAN WILLIAMS now heads the table of the Moly Slip Championship for saloon car races at Brands Hatch. The last round is to be held at the Boxing Day meeting. Leading positions are as follows:

1. Jonathan Williams (Austin A40) 26
2. Alan Peer (1.5 Ford Anglia) ... 25
3. Mike Young (1.0 Ford Anglia) ... 22
4. Colin Hextall (Tornado Talisman) 20
- Chris Craft (1.5 Ford Anglia) ... 20
6. Joe Hicks (1.0 Ford Anglia) ... 15

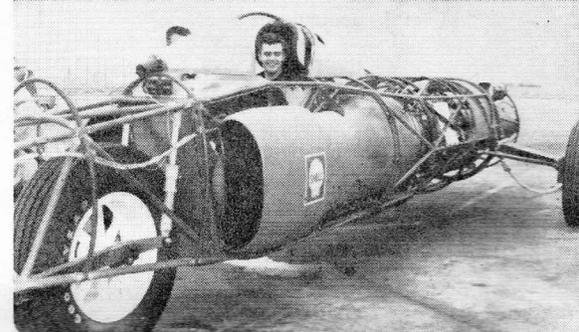
JOHN CAMPBELL-JONES wishes to thank everyone who has written to him at Kreiskrankenhaus, Leonburg-Stuttgart. He hopes to leave hospital in under three weeks.

THE Raydyot racing mirror has for many years been used by Cooper and Lotus and, in response to many requests, a sports car version has been introduced. It is based on the same design as the aluminium racing model but is manufactured from brass and heavily chromium plated. Overall diameter is 4 ins. glass aperture and shatterproof reflective lens which is used in both flat and convex models. Retail prices are 32s. (flat) and 35s. (convex).

PETER HARPER/PETER PROCTER, Keith Ballisat/Tiny Lewis and Rosemary Smith/Rosemary Seers are the driver pairings for the Sunbeam Rapiers which will be taking part in the Tour de France that starts this week-end. A French-entered Sunbeam Alpine is due to be conducted by Jacques Nail and Pierre Francais.

A RACE for *Formule Libre* cars at the B.A.R.C. Members Meetings to be held at Oulton Park on 29th September and Goodwood on 6th October marks a breakaway from the usual "sports car meeting" procedure. It is to be hoped that owners of such mundane machinery as Cooper-Chevrolets, Ferrari 625s, B.R.M.s, Cooper-Daimlers and 1½-litre Lotus 20s will be encouraged to compete in similar races next year too.

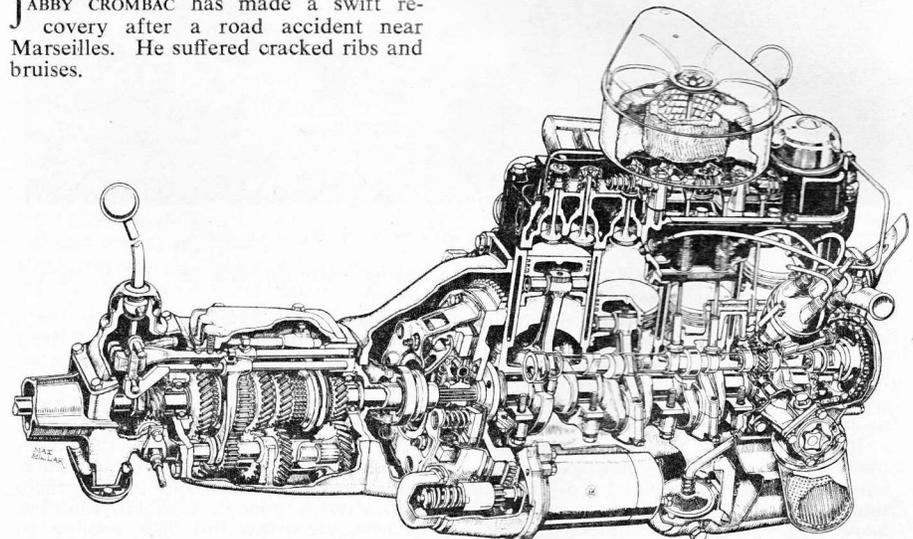
JABBY CROMBAC has made a swift recovery after a road accident near Marseilles. He suffered cracked ribs and bruises.



CRAIG BREEDLOVE, a 25-year-old American who plans to break the world's land speed record at Bonneville in his "Spirit of America". It is powered by a J47 jet engine, stands on three wheels, is 6 ft high, 35 ft. long and 11ft. wide and weighs nearly three tons.

JONATHAN WILLIAMS, the 19-year-old driver whose performances this year in an Austin A40 have been nothing short of extraordinary—especially at Brands Hatch, will be driving a Mark 5 Merlyn Formula Junior car next year. Jonathan, of course, currently heads the Moly Slip Saloon Car Championship.

HERBERT TERRY, of Redditch, Worcs, have designed a stop-watch clip for use on car dashboards. It retails at 3s.



THE NEW FORD five-bearing engine. This 1,500 c.c. engine, now fitted to the Ford Consul Classic and Capri was described by John Bolster in a recent issue.

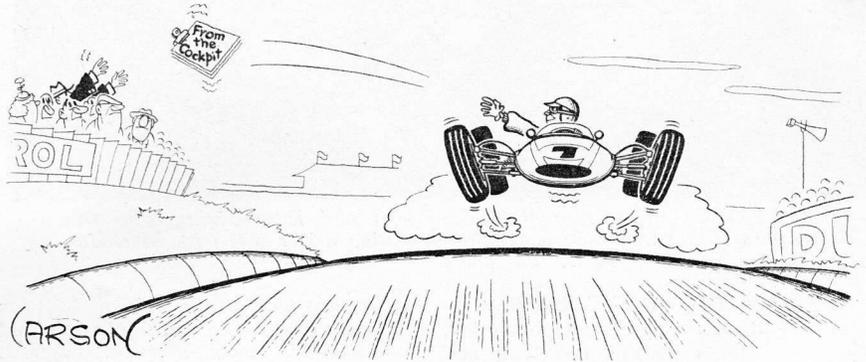
BRUCE McLAREN'S

FROM THE COCKPIT

Hot-Footing It at Oulton Park

WHEN I whistled over the brow of the rise to the pits at Oulton Park with a dead motor and smoke pouring from the cockpit of the Cooper, I wasn't sure whether I should bale out in case the fuel tanks exploded or whether I should ride it within reach of the pit fire crew and then abandon ship. I couldn't see any flames and the cockpit wasn't getting hot, but I knew there couldn't be that much smoke without fire and I was all too well aware of the fuel in the tanks around me.

I was about to pull on to the grass after Lodge, but then I thought I might need the car for Monza and if the car really was on fire I had better see about getting it put out. So I stood on the seat and coasted into the pits. Taking the car right to the Cooper pit didn't seem to be the thing to do in case it decided to blow up, so I slipped it into gear to stop it before the pits, and hopped out. By that time the Cooper mechanics and firemen were attacking it with extinguishers of every shape and size. All it really needed was a squirt of CO₂ and John Cooper was making an

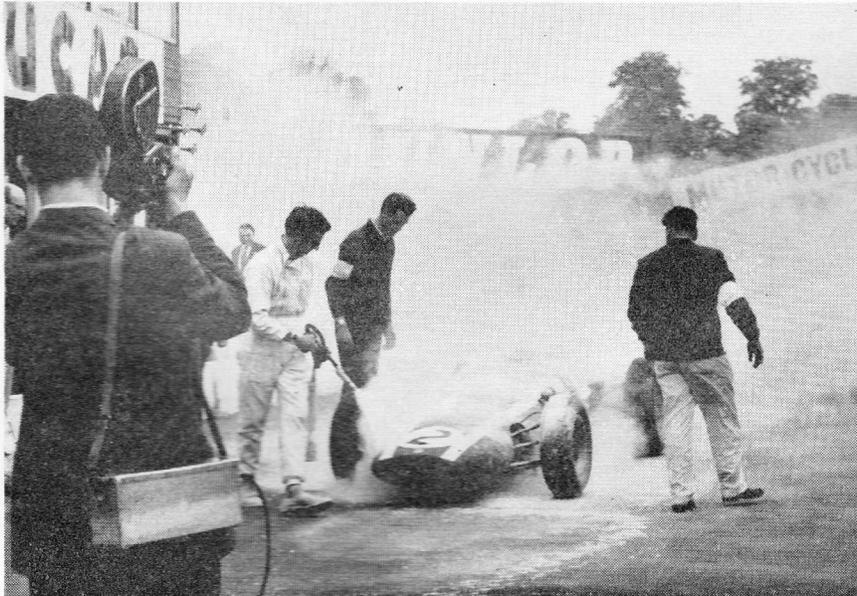


remove the metal-munching foam. Even if they were a little over-zealous, it's nice to know that the firemen are available if needed.

I heard later that Richie Ginther, a spectator after his B.R.M. broke down, was watching my efforts and muttering, "get out, get out, get away from that thing." He should know what he was talking about after his bad burns during

Cooper, Lotus, or Brabham before and he was very interested. He was as much on the ball as ever. While talking to me he noticed the mechanics changing the rear suspension setting.

He commented that the car must handle a lot different from last year's model if it was going to handle when this particular "mod" was completed. Those were my sentiments too, for the change



BRUCE McLAREN'S Cooper being hosed with foam.

(Photo: Maxwell Boyd)

unsuccessful attempt to dissuade the firemen from using their foam extinguishers. I saw one defeated fireman struggling with a live extinguisher and trying to quell the foam by jamming his finger over the nozzle. When the fire crew had finished, the Cooper looked like a runaway advertisement for soap powder.

It must have all seemed a great deal more exciting to the people in the pits who could see the flames billowing out underneath the car as I came over the brow. The cause of the fire was a short circuit from a chafed wire which set light to the fibreglass battery case.

The first job of the mechanics was to

testing with the B.R.M. earlier in the season.

Before this I had been lying in third place to Jimmy Clark, who was romping away out ahead in the works mono-coque Lotus, and Graham Hill, 30 secs. back in the B.R.M. In fact, until my little impromptu act the race was taking fairly much the form I think the championship could follow. Jimmy obviously had the legs of the field and Graham wasn't quick enough to catch him but he was motoring just fast enough to stay out of my reach.

It was good to see Stirling at a motor race again. He hadn't seen the new



STIRLING MOSS back at the track once more, discussing the 1962 Cooper V8 with Bruce McLaren.

we were making was rather drastic and we later changed back to normal.

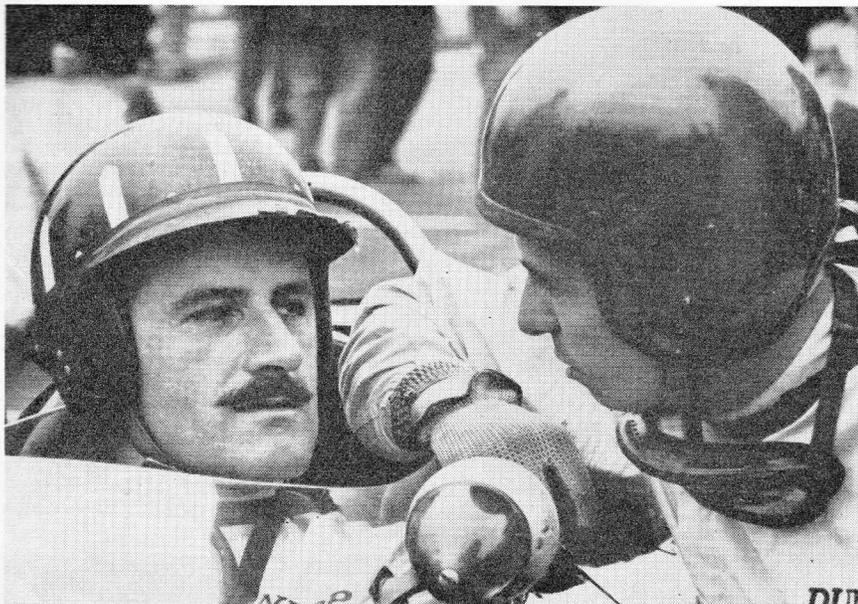
As Stirling wandered on to say "hullo" to the next pit I was left with the impression that the whole thing was rather like a state visit to a factory with the drivers as operators standing by their machines. This impression was heightened even more when a couple of photographers broke off from the clicking, snapping mob that swarmed after Stirling, and hurriedly whispered questions to the mechanics. "Who was that Stirling was talking to? How d'yuh spell it, Mc or Mac?"

I wasn't the only one who had a nasty moment at Oulton. Roy Salvadori's flip into the pond at Cascades when the "3.8" blew a tyre in practice almost cost him his life, and a damp and muddy Roy paid tribute to the prompt action of the marshals who dived in and pulled him out. There is no doubt about it,

(Continued on page 351)

MONZA PORTENTS

BY
DAVID
PHIPPS



FRIENDLY RIVALS—Graham Hill and Jim Clark.

NOT for many years has a Grand Prix race been won and lost in the pits, but there seems to be a chance of this happening in the 33rd Gran Premio d'Italia. For while everyone else runs races of just over 200 miles or two hours duration, the Italian organizers have decided—presumably with encouragement from Maranello—to stage a 307-mile event. It may be uncharitable to suggest that Ferrari, who uses knock-off hubs and has quick-action fuel fillers, had anything to do with this, but the fact remains that the Italian cars are the best equipped for a race in which wheel-changes and refuelling are essential. B.R.M. use knock-off hubs (apart from Ferrari they are the only people who normally do so) but—in standard form at least—can take on fuel only very slowly. Lotus, Lola, Cooper and Porsche all have bolt-on wheels (to minimize unsprung weight) and petrol-filling systems designed for lightness and compactness rather than rapid refuelling. And Brabham, with very limited fuel capacity and bolt-on wheels (13-inch at the front, to make matters worse) has decided not to go at all.

So, on the surface, assuming that everyone will have to change tyres and take on fuel, the race would appear to be a Ferrari benefit. *The point is, will everyone have to stop?* Dunlops say the tyres (D9, not D12) will not last, especially the left rear one, which does most of the work. But Lotus and Porsche, both notably light on tyres, are planning to go through non-stop. Lola are hoping to do so too, but have made up knock-off hubs for the rear wheels just in case (if tyre wear is reasonable in practice they will revert to bolt-on wheels). Cooper are doubtful but hope for the best. They will probably fit 15-inch wheels on the front (in place of their normal 13-inch wheels) and plan that at least one car will run non-stop.

Of the British cars the B.R.M. is heaviest on tyres, but one has the feeling that Graham Hill—with the World Championship at stake—could conserve

his tyres sufficiently to avoid making a pit stop which would cost him several points. If everyone has to stop, of course, he will be able to take full advantage of his car's facilities for quick wheel-changing.

On the question of fuel, the Coventry Climax-engined cars seem to be the most economical. Jim Clark's Lotus did 11 m.p.g. in winning at Spa. The Lotus 25 holds 31 gallons, and no doubt Colin Chapman could squeeze a few more pints in if necessary. The Lola, too, can carry enough fuel for a non-stop run and at least one Cooper will, for the car which was damaged in the television camera incident at Nürburgring has been rebuilt to hold 38 gallons! Porsche plan to go through without a fuel stop, but B.R.M. may not be able to do so. And what of Ferrari, whose hopes rest on the 24-valve, 12-carburettor car? This surely will have to refuel, or carry so much petrol that it will not be able to keep up in the opening laps.

From the Cockpit—continued

we owe a debt of gratitude to the marshals at motor races. All right, so it's probably a pleasant job when the sun is shining, but if it's not—which is all too often—they still have to stand there all day, and always alert.

During the day's racing I went to one of the corners to watch the sports cars.

The whole set-up on this corner was absolutely copybook with a flag marshal, blue flag in hand, and his assistant on the alert with the other flags laid out ready. A few feet behind them stood a fireman with two extinguishers, a pile of whatever they spread on oil, and brooms to spread it. The observer and doctor were in the observer's box, and I noticed a visit by the sector marshal to see that everything was in order.

In all it was the sort of set-up that the G.P.D.A. sometimes longs for on some Continental circuits.

I celebrated my 25th birthday testing

On performance alone everything seems to be in favour of the Lotus and the Lola—unless the new Ferrari has at least 20 b.h.p. more than the 12-valve cars. The Cooper and the B.R.M. should not be far behind, but recent events indicate that neither is as fast as the cars from Cheshunt and Bromley. Nor will the Porsche be far behind.

Taking tyre wear and fuel consumption into consideration, the odds still seem to be on Lotus and Lola—and perhaps Porsche. The new Ferrari remains the unknown quantity, but I shall be surprised if it manages to win on its debut; if Jim Clark's Lotus stays in one piece it will take a lot of beating.

THE Italian Grand Prix at Monza on 16th September has, despite alleged insurance difficulties a few weeks ago, attracted all the top-line teams, in addition to several "independents". It will be held on the splendid road circuit, which has been considerably altered as regards spectator safety.

The distance embraces problems of tyre wear and fuel consumption, and thus it is certain that most entrants will have to allow for an organized stop, which should make the race more exciting for the crowds. Provisional entry list is:—

Scuderia Ferrari: Phil Hill, Ricardo Rodriguez, Lorenzo Bandini, Giancarlo Baghetti, Willy Mairesse.

Porsche: Dan Gurney, Jo Bonnier.

Team Lotus (Lotus-Climax): Jim Clark, Trevor Taylor.

Cooper-Climax: Bruce McLaren, Tony Maggs.

B.R.M.: Graham Hill, Richie Ginther.

Bowmaker (Lola-Climax): John Surtees, Roy Salvadori.

U.D.T.-Laystall: Innes Ireland (Lotus-Climax), Masten Gregory (Lotus-B.R.M.).

Walker-Lotus: Maurice Trintignant.

SSS Venezia: Colin Davis (Lotus "4" or Porsche).

Porsche "4": C. G. de Beaufort.

Others may be added to the list, possibly Gary Hocking (Lotus), Jack Lewis (Cooper-Climax), Tony Shelly (Lotus), Peter Arundell (Lotus), Tony Settember (Sirocco V8), Gerry Ashmore (Lotus-Climax), Joseph Siffert (Lotus-B.R.M.) and Wolfgang Seidel (Lotus-B.R.M.).

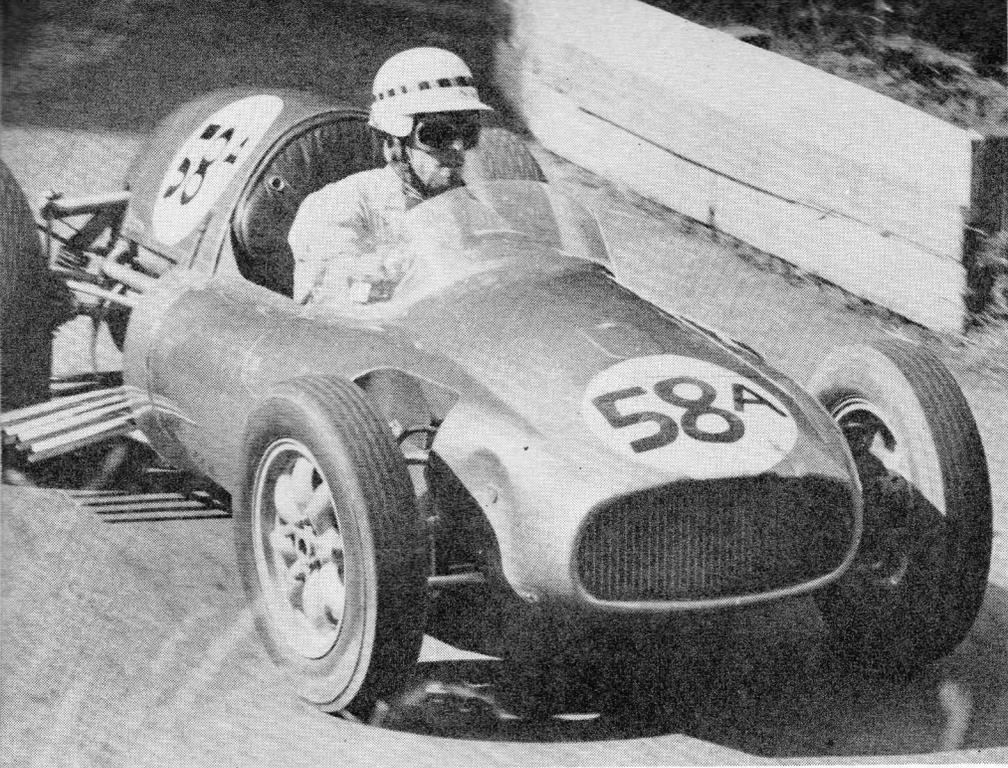
GREGOR GRANT.

the Cooper on the Thursday before the race. B.R.M.s, Jack Brabham and Gary Hocking were also taking advantage of the unofficial practice. Richie was motoring rapidly and smoothly and gave some indication of the performance which gave him pole position on Saturday's grid.

It was the first time we have seen South African driver Bruce Johnstone racing in this country and his first outing in the works B.R.M. V8 was promising.

After only a few races, world motorcycle champion, Gary Hocking, is going indecently quickly with his four-cylinder Lotus, and to use an expression I haven't heard for a while, he is definitely a "coming man".

I wonder if someone can help me with a similar term to describe Christabel Carlisle's fantastic performances in her Cooper-Mini. It seems that lately the works Cooper-Mini drivers have more to concentrate on than winning their class—they have to head Christabel off to do that!



DETERMINED: Peter Westbury comes out of the Esses in his V8 Cooper-Daimler. This car started life in 1957 as a Formula 2 car!

IN finishing third at Prescott last Sunday, Arthur Owen made sure of the 1962 Hill-Climb championship, a title he has won by steady and calculated driving throughout the season. Run under brilliant sunshine (in contrast to Shelsley Walsh a fortnight before) Prescott was to prove yet another sensational round in this year of Hill-Climb surprises. Records tumbled in every class bar one although surprisingly the course record remained intact to Tony Marsh at 48.84 secs. Tony made BT.D., but only just beat the sensation of the meeting, David Good, with his new Mk. 2 Cooper fitted with 1,500 c.c. Climax unit. David, having his first official outing in the car, clocked a magnificent 49.95 secs. to finish just 0.28 of a second behind Marsh.

After Bob Gerard had opened the course in Dudley Gahagan's red E.R.A., the first class came to the line, this being for the 1,100 c.c. racing cars. Mike Ledbrook was first up with his 500 c.c. Cooper with a time of 53.79 secs., good in view of the engine capacity but not good enough to prevent that up-and-coming young driver Brian Eccles from taking the class with a splendid 50.63 secs., a new class record. The only other driver to get in the 50's was Mac Daghorn from Jersey, who made 50.73 secs. (also inside his own class record) with the ex-David Boshier-Jones Cooper 1100. Ian McLaughlin maintained a steady third in his yellow Cooper with 51.18 secs., these three drivers being seconds ahead of the fourth man, Mike Hatton, also in a Cooper. Mike Ledbrook went on to win the 500 c.c. section, and Howard Bennett had the misfortune to lock his front wheels going into Etores bend second time up. It was interesting to note that the only car not a Cooper, in a field of 12, was Gordon March's ex-Rupert Instone Djinn.

There followed a class for up to 1,600 c.c. sports cars which was notable for the most

surprising defeat of Jack Richards by Tom Clapham, in a 1,220 c.c. Lotus Seven. Clapham, who has been making steady progress throughout the season, crowned his achievements by also setting a new class record of 53.88 secs. Gerry Tyack did a little better than of late to come in fourth behind Macklin's Classic engined Seven, while a certain Mr. Strow (Elva-Climax Mk. 3) succeeded in spinning twice on his first run.

Second car on the line in the 1,500 c.c. racing class was Reg Phillips with his pale blue Fairley; this very Porsche-like projectile fairly hurtled off the line and, although decidedly slow on the sharp corners, was extremely rapid on the straight. He clocked 50.77 secs. to come within 0.7 of a second of Tony Marsh's Lotus record. Next fast car up was John Taylor in Bob Gerard's Cooper. He clocked a neat 51.29 secs. and was followed to the line by David Good in his Cooper-Climax; David's time of 51.03 secs. was sufficient to put him in second place ahead of Taylor. Later in the afternoon Reg Phillips had the most rotten luck in breaking a chain at Pardon bend, while Taylor was visibly slower with the Cooper. Not so good. Not content with second place, he hurled his car up in 50.60 secs., to win the class and set a new 1,500 c.c. record for Prescott.

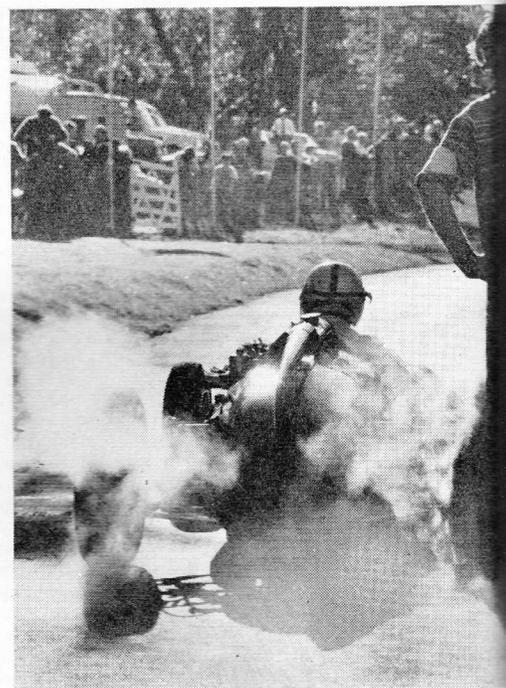
A living history of the marque Bugatti came next, with most types represented. V.S.C.C. president Keneth Neve won in his lovely Type 35b with a handicap time of 58.65 secs. and an actual best time of 61.85 secs., a little slower than Tom Wild's time of 61.23 secs. with a 1,500 c.c. blown model. The Hon. F. J. Somerset and Barry Kain also drove "traditional" Bugattis, but the cars of Wolfgang Zeuner and Peter Bailey left rather a lot to be desired in the body design department.

Gordon Parker's big supercharged H.K.-

Jaguar heralded the heavy-metal racing class. His time of 55.18 secs. stood firm until Ray Fielding leapt up in 51.43 secs. with his ex-Dan Gurney B.R.M. Arthur Owen was surprisingly slower than Ray with 52.28 secs., but Tony Marsh burst into the 49's with a 49.96 secs. Peter Westbury tried just a little too hard and went building sand castles at Pardon. Fielding was slower on his second ascent but Arthur slipped by him with a 50.18 secs. in the Cooper. Tony Marsh was also slower, but Peter Westbury showed better form in clocking 52.54 secs. to finish fourth.

The unlimited Touring and G.T. class was notable for the defeat of Phil Scragg by young Warwick Banks, who drove M. Delingpole's Jaguar "E"-Type with terrific verve, although the only class winner not to break a class record. An interesting car was Dr. Ian Entwistle's 2.5 Ferrari. Once the property of Pagnibon, it is a Type 225 Export, with V12 motor and a body by Vignale. Not a fast car, but very pretty.

The Formula Junior class was dominated by Bill Bradley in his M.R.P. Cooper; he broke his own class record by over a second to finish ahead of Jack Pearce's Lotus 22 and Eric Willmott's Elva. John



DAVID GOOD leaves the start line on his first Championship run in his now Climax-powered Cooper.

Taylor lost it completely on the last right-hander, and Austen May was a disappointing non-starter with his rapid Lotus 18.

Phil Scragg had an almighty slide under the bridge with his 3.8 Lister-Jaguar, but still won the big sports car class by a good margin (nearly 2 secs. in fact). Josh Randles was a surprisingly long way behind, but well clear of Nigel Price in his Aston Martin DB3S.

Rod Embley won the Mini dice and actually managed to get his black peril into the 59's. J. Wales was second in a similar car, and Nick Porter third; the first G.T. car was fifth!

In the Historic Racing Car class H. V. Murray (1935 Singer) was given a ridiculous handicap, and although running with a sick engine walked the class with a handicap time

ARTHUR OWEN—CHAMPION

The R.A.C. Hill-Climb Championship

BY PAUL WATSON

PHOTOGRAPHY BY MICHAEL WARE

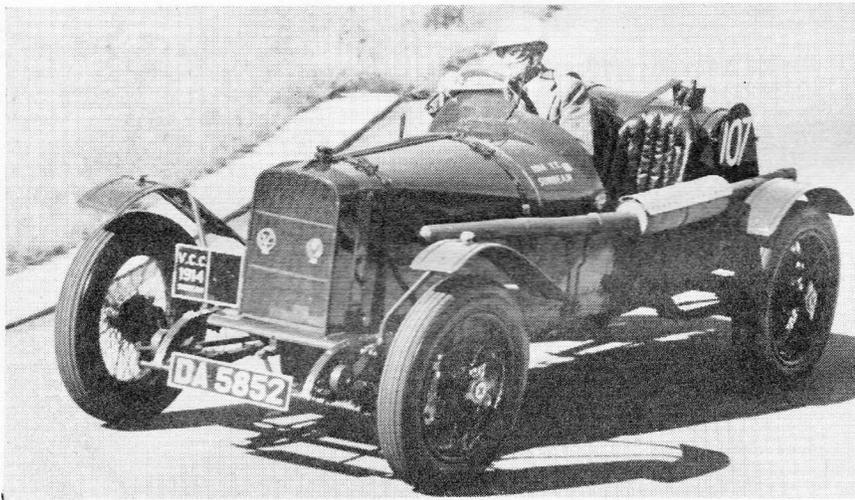
NEW HILL-CLIMB CHAMPION:
Arthur Owen gets away with a look of determination on his face.

of 55.76 secs. and an actual time of 72.16 secs.! Gordon Chapman was the fastest car on speed alone, and climbed in 56.51 secs. from the scratch mark. Dudley Gahagan drove his E.R.A. to record 59.31 secs., and Bernard Harding (1,100 c.c. s/c Amilcar) 62 secs. Ronnie Symondson demonstrated how to control a real monster when driving Sir Ralph Millais's 4-litre Sunbeam "Tiger", and surprisingly beat Arnold-Forster's Delage by nearly 2 secs.

R. Rose repeated his Shelsley win in the 1,600 c.c. Touring and G.T. class, his Elite breaking the class record.

The serious business of the day was of course the Hill-Climb Championship. With the West Essex C.C.'s event now almost certainly cancelled, this was Ray Fielding's last chance of pulling back points lost to Arthur Owen.

First car to the line was Eric Willmott's Elva Junior; he climbed in 52.94 secs. and was followed up by Peter Westbury who recorded 51.37 secs. Ian McLaughlin was



HISTORIC: Stanley Sears drives his 1914 T.T. Sunbeam up the hill. His best climb was in 69.66 secs.

slightly slower than Westbury with 51.54 secs., while Mac Daghorn indulged in a spot of agricultural motoring and recorded a very slow time. Fielding now took the lead from the Cooper-Daimler with a well judged 51.24 secs., a lead he held only for seconds, Owen getting up in 50.53 secs. to move ahead. David Good was the next to the line and got to the top just .2 of a second quicker than the Jersey driver. Tony Marsh was last to go as usual and with a time of 49.67 secs. moved clear ahead of his rivals.

Willmott dropped several seconds on his second attempt, while Peter Westbury only managed to improve very slightly. Ian McLaughlin moved into the 50s with 50.96 secs., a good time for an 1,100 c.c., but Mac Daghorn made no mistake second time up and recorded an even better 50.63 secs., to slip into fourth place. Fielding was surprisingly unable to do anything about Daghorn and was slower with 50.84 secs. Not so Owen; he pulled just that little extra out of the bag and moved into second place with 50.50 secs.

So with second place in the balance David Good came to the line in the Cooper-Climax. He was off the line like a shot,

saving seconds all the way up, but alas, he failed to start the timing apparatus and had to come down for another run. Meanwhile Tony Marsh came up to the start, fully realizing that Good was a real threat to his first run time; everything seemed to go perfectly but his time only came out at 50.14 secs., considerably slower than before. David Good now made a magnificent effort; with a car 1 litre down on the B.R.M., and only having his fifth official run in the car since being fitted with Climax engine, he tore up in 49.95 secs. to finish just under half a second behind Marsh.

Although Marsh and Good were the only drivers to get into the 49's, they were both too far away from Owen and Fielding to change the position in the Championship, so it would now appear that Arthur Owen is Hill-Climb Champion for 1962, followed by Ray Fielding, Tony Marsh and Ian McLaughlin.

Results

Fastest Time of Day: A. E. Marsh (B.R.M. 2.5), 49.67 s. **Second Fastest Time of Day:** D. R. Good (Cooper-Climax 1.5), 49.95 s. **Fastest Time by a Lady Competitor:** Miss I. Robinson (Cooper-Norton F3), 59.04 s. **Touring and G.T. up to 1,000 c.c.:** 1, R. Embley (Cooper-Austin 7), 59.65 s.*; 2, J. Wales (Cooper-Morris MM), 60.03 s.; 3, N. Porter (Cooper-Austin 7), 60.55 s.; 4,

R. D. Broad (Cooper-Austin 7), 60.95 s.; 5, G. G. L. Thomas (Austin-Healey Sprite), 61.99 s.; 6, R. D. Blackledge (Cooper-Morris MM), 62.25 s. **Touring and G.T. up to 1,600 c.c.:** 1, R. Rose (Lotus Elite), 58.15 s.*; 2, D. Richmond (Cooper-Morris MM), 59.15 s.; 3, J. A. Lepp (Lotus Elite), 60.04 s.; 4, W. A. Cleave (Morris Spl.), 60.59 s.; 5, J. F. May (Porsche S90), 61.27 s.; 6, Mrs. C. A. Price (Lotus Elite), 62.54 s. **Touring and G.T. over 1,600 c.c.:** 1, W. Banks (Jaguar XK-E), 55.88 s.; 2, P. Scragg (Jaguar XK-E), 55.97 s.; 3, R. E. Meredith (Morgan Plus 4), 56.40 s.; 4, M. Delingpole (Jaguar XK-E), 58.34 s.; 5, G. Cunane (A.C.-Zephyr Ace), 59.02 s.; 6, T. H. Warburton (Jaguar XK-E), 59.05 s. **Sports-Racing up to 1,600 c.c.:** 1, T. R. Clapham (Lotus-Climax 7), 53.88 s.*; 2, J. I. Richards (Lotus-Climax 7), 54.62 s.; 3, J. Macklin (Lotus-Classic 7), 55.35 s.; 4, G. V. Tyack (Emeryson-Climax), 55.61 s.; 5, A. J. van Moyland (Cooper-Climax), 55.85 s.; 6, P. H. Meldrum (Lotus-Classic 7), 56.24 s. **Sports-Racing over 1,600 c.c.:** 1, P. Scragg (Lister-Jaguar 3.8), 52.80 s.*; 2, J. Randles (Cooper-Climax Monaco 2.0), 54.51 s.; 3, P. H. G. Cottrell (Lotus-Climax XV 2.0), 55.58 s.; 4, N. Price (Aston-Martin DB3S), 57.04 s.; 5, T. D. L. Rose (Aston Martin DB3S), 58.54 s.; 6, M. Wright (Jaguar XK 120 3.8), 59.14 s. **Bugatti Handicap:** 1, K. Neve (T.35b 2.3), 58.65 s. (61.85 s.); 2, P. B. Bailey (T.46 5.3), 58.92 s. (64.82 s.); 3, W. F. Zeuner (T.23 1.5), 59.58 s. (68.88 s.); 4, R. A. Hutchings (T.23 1.5), 59.82 s. (69.57 s.); 5, W. H. Bloomfield (T.46 5.3), 60.41 s. (65.11 s.); 6, T. Wild (T.37a 1.5 s/c), 61.23 s. (61.23 s. scr.). **Historic Racing Cars:** 1, H. V. Murray (Singer Spl. 972 c.c.), 55.76 s. (72.16 s.); 2, G. Chapman (E.R.A. 1.5 s/c), 56.51 s. (56.51 s. scr.); 3, D. H. Gahagan (E.R.A. 2.0 s/c), 57.56 s. (59.31 s.); 4, C. B. L. Harding (Amilcar 1,094 c.c. s/c), 58.60 s. (62 s.); 5, N. Arnold-Forster (Delage 5.1), 58.68 s. (62.58 s.); 6, K. Neve (Bugatti T.35b 2.3), 58.99 s. (62.59 s.). **Formula Junior:** 1, W. Bradley (Cooper-Ford Mk. 3), 51.47 s.*; 2, J. Pearce (Lotus-Ford 22), 52.21 s.; 3, E. G. Willmott (Elva-Ford Mk. 2), 52.87 s.; 4, G. Wilson (Lotus-Ford 18), 54.21 s.; 5, J. M. Taylor (Cooper-Ford Mk. 3), 55.63 s.; 6, F. Jones (Lola-Ford Mk. 1), 57.05 s. **Two- or Three-Cylinder Racing Cars:** 1, B. Eccles (Cooper-J.A.P. s/c 998), 50.63 s.*; 2, M. E. Daghorn (Cooper-J.A.P. 1100), 50.73 s.; 3, I. McLaughlin (Cooper-J.A.P. 1100), 51.18 s.; 4, M. Hatton (Cooper-J.A.P. 1100), 53.10 s.; 5, M. J. Ledbrook (Cooper-Norton F3), 53.79 s.; 6, D. Haigh (Cooper-Norton/J.A.P. 1,132 c.c. s/c), 53.89 s. **Racing Cars up to 1,500 c.c.:** 1, D. R. Good (Cooper-Climax F1), 50.60 s.*; 2, R. W. Phillips (Fairley-Climax s/c), 50.77 s.; 3, J. M. Taylor (Cooper-Ford F1), 51.29 s.; 4, W. J. Camp (Cooper Sprint Spl. 1172 s/c), 53.94 s.; 5, S. P. Neal (Arden-Ford F1), 53.98 s.; 6, T. Norton (Lotus-Climax Spl. 18 s/c), 54.39 s. **Racing Cars over 1,500 c.c.:** 1, A. E. Marsh (B.R.M. 2.5), 49.96 s.*; 2, A. Owen (Cooper-Climax 2.5), 50.18 s.; 3, R. Fielding (B.R.M. 2.5), 51.43 s.; 4, P. Westbury (Cooper-Daimler 2.5), 52.54 s.; 5, J. Horton (Connaught 2.0), 54.77 s.; 6, G. Parker (H.K.-Jaguar 3.4 s/c), 55.18 s. **R.A.C. Hill-Climb Championship:** 1, A. E. Marsh (B.R.M. 2.5), 49.67 s.; 2, D. R. Good (Cooper-Climax F1), 49.95 s.; 3, A. Owen (Cooper-Climax 2.5), 50.50 s.; 4, M. E. Daghorn (Cooper-J.A.P. 1100), 50.63 s.; 5, R. Fielding (B.R.M. 2.5), 50.84 s.; 6, I. McLaughlin (Cooper-J.A.P. 1100), 50.96 s.; 7, P. Westbury (Cooper-Daimler 2.5), 51.35 s.; 8, E. G. Willmott (Elva-Ford Mk. 2 F.J.), 52.94 s. *Denotes new class record.



PETER SARGENT driving the Lumsden-Sargent Le Mans E Jaguar won the Colibri Trophy at Silverstone last Saturday. This was the main event of the Jaguar Drivers' Club second outing at the Midland circuit this year and the four other events, which included the Michael Head Trophy, provided an interesting day's sport.

A Le Mans start began the 100 mile sixty lap event for which Colibri had put up an extremely attractive trophy with gold lighters for the class winners. Robin Sturgess in 2 BBC led after one lap with another E-type, that of Sargent's, close behind.

A compulsory pit stop was included in the regulations for this race and a wheel change was also enforced. The Earl of Denbigh brought his E-type SUE in on the first lap as did Roger Nathan in the McNally Elite. This appeared to be good policy as both of them eventually finished well up the field.

Robin Sturgess after his initial spurt dropped back to third place on lap two with Sargent moving into the lead in the much modified E and Waters too moving up a place. Behind these the order remained roughly the same. By lap 10 the first five were in the same order with the exception of Terry Bone who had succeeded in passing Griffin on the eighth tour. By now twenty-five per cent of the competitors had come in for their stop and the pits were a mass of

START of the Colibri Trophy race. Robin Sturgess is away first in his E-type, and others prominent are R. W. Waters (Lola) and the Earl of Denbigh (E-type).

JAGUAR D.C.

SILVERSTONE

Peter Sargent Wins the Colibri Trophy

BY PATRICK McNALLY

activity, especially for those competitors whose cars were not fitted with knock-on wheels. Lap 15 saw Sturgess give way to the Gilby letting Bone up into third position.

Lap 22 and Sargent came in moving off again in one of the fastest stops of the day—perhaps a little too fast as events very nearly proved. The other four leading cars were holding on ready to make late pit stops, and at this stage it was anybody's guess to whom the trophy was going to go. Waters had moved up into the lead but despite his stop, Sargent was closing fast and lap 27 saw Sargent again in the lead when Waters came in for his stop taking considerably more time over it than Sargent had done.

With thirty laps gone the situation was considerably clearer. Sargent leading from Sturgess, Bone, Griffin, with J. Gould having moved up into fifth place. The Earl of Denbigh, going very quickly indeed, had passed Lambert after the latter had made a stop, these two dicing merrily for quite a number of laps. Waters had dropped right back behind these two after his long pit stop but was closing on Lambert, whom he succeeded in passing on lap 34.

Lap 44 saw drama. Sargent, obviously sensing something amiss, came towards the pits and when only 25 yards from his mechanics a rear wheel flew off high into the air; however, speedy work on the car by well trained pit staff saw him away again and indeed back into the lead from Sturgess by lap 49. Lambert was again hammer and tongs with Denbigh, whom he had succeeded in passing on the 44th tour. However, Jack had to give way in the closing stages to Terry Bone who had moved up to fourth position. Despite Waters' meteoric progress he could not pass Sturgess who held second position, and had to be content with third place overall, comfortably winning the sports car class from fourth

man Bone. J. Griffin, Jack Lambert, The Earl of Denbigh and Roger Nathan followed the leaders across the line.

It was indeed a fine victory for the Sargent-Lumsden E and extremely well deserved. Not surprisingly the fastest lap went to the winning car, a creditable 1 min. 10 secs., and although initially Waters was credited with second place Robin Sturgess actually was second—a small error of time-keeping.

The first race of the day had been a



LOSING his Elite at Copse is Laurie Ingram.

15 lap scratch race for all comers which saw a wide variety of cars on the grid. Robin Waters won this fairly easily from M. Beard (Lotus) in his Lola and also set fastest lap of 1 min. 11.8 secs.

The second race of the day was another all-comers scratch, which proved to be a Dick Protheroe (E-type) benefit although in the initial part of the race Richard Wrottesley had led in the ex-Lee Lister. Dick had nevertheless slipped by on the third lap and as the two leaders were lapping the field by lap 4, heavy traffic had stopped Wrottesley from making a really serious onslaught on the Protheroe Jaguar. Protheroe's fastest lap of 1 min. 8.4 secs. was fantastically quick and must constitute a record.

Immediately after the Colibri Trophy came the 15 lap all-comers handicap event which had awards for Bentley and Lagonda cars. The overall winner was K. Bass in the Gilby who won from R. J. Ward's Sunbeam Rapier. R. Gee was first home of the Lagondas with B. Edwards's M45 in second place. J. Williamson won the Bentley award.

The Michael Head Trophy was the last race of the day. This was quite complicated as there were several cars with credit laps as well as their normal handicap. Rob Beck with 1 lap from 35 second mark won easily from Dick Protheroe.



COMPULSORY PIT-STOP for Richard Redgrave's Lotus Seventeen in the Colibri Trophy race. Here he changes a wheel.

NURBURGRING 500 KMS.

BY JOHN ALEY

HAVING won the race for the last two years there was no doubt Carlo Abarth intended to do exactly the same thing again this year, for he arrived at the Nürburgring for the 500 kms. race several days before official practice with at least 20 cars and some of the best drivers available in Europe for this kind of racing. In practice Hans Herrmann set up a new lap record for 1-litre G.T. cars at 10 mins. 25.6 secs.—about 25 secs. faster than the existing one—in the new 1,000 c.c. Bialbero coupe. It was interesting to note this car was fitted with Dunlop racing tyres, which did much to improve the “twicky” roadholding these



ABOVE: Peter Jackson's Sprite shows the value of roll-bars! LEFT: Carlo Abarth's huge transporter was able to accommodate five cars!



cars usually have. All was not happy in the Abarth camp, however, for three of the Touring 850TC models were crashed badly and the maestro himself was in a very bad temper with drivers who would not drive to orders!

The Le Mans start probably did nothing to improve this, for Herrmann and Herbert Linge in the two fastest cars managed to get their vehicles in such a position immediately after starting that neither could move and the whole field was streaming around the South curve before they could get away. Most impressive start came from Englishman Peter Jackson, whose Sprite was in third spot overall when the field disappeared from sight. What a pity, then, that this car should break an oil pipe early in the first lap, spin in its own oil and overturn. Peter, incidentally, is claiming a new record, for including overturning and righting the car he completed his first standing lap in only 17 minutes!

As the race wore on it looked as though nothing could possibly match the three works Bialberos driven by Herrmann, Linge and Eberhard Mahle, who had taken over the car originally destined for Ben Pon, but at the halfway stage there was a sudden dramatic change in order. First

Linge had a heart-stopping incident when his rear axle broke on a hundred-mile-an-hour corner, and only a lap later the same trouble eliminated Herrmann. This left Mahle well in the lead, but with a car that might well develop the same trouble at any time. Fortunately for Abarth the nearest foreign challenger, Keith Holland's GSM, was now a lap behind and not in a position to constitute a real threat, so it was possible to slow the leading car to a speed at which it was able to complete the necessary 22 laps, although its winning speed was slower than that of Abate, who won last year in a slower car.

Excitement was not confined to the G.T. cars, for throughout the race the more mundane touring cars were having a real ding-dong struggle. As usual the 850 c.c. class produced the fastest, albeit the most brittle, cars, but in both this and the 1,000 c.c. class there were three-cornered fights. By far the fastest car was Gunnar Carlsson's SAAB, but this, after leading the class and the Touring category, failed after 16 laps, leaving the Italian saloon champion, "Pam", in undisputed charge in the Scuderia Santambrosio Abarth 850TC. Incidentally, this young driver has now won no fewer than 11 of the 13

races he has entered this season, and watching him drive I can see why!

The battle for the ladies' award rather fizzled out when the 850 Mini of Jean Aley/Daphne Freeman retired with a blown head gasket towards the end, allowing the hard driven DKW Junior of Mille. Racle and Moni Wallraf to take it easy and finish.

We also had quite an exciting time in the 1-litre class. Hoffman's Cooper, which had been fractionally quicker in practice than my similar car, took the lead from the start from the German Cooper of Dieter Mohr and Jaguar expert Peter Lindner, who was finding a small car rather strange, with Peter Marx's rapid Panhard third. On lap three Mohr retired and Heinz Meier came up into third place with his Auto Union 1000. By half distance, however, I had passed both the Auto Union and the Panhard and now lay in what looked like a secure second place behind Hoffman. In the last four laps however the Swiss Cooper retired, the Panhard ran out of fuel, and I was delayed by an unexpected pit stop, giving Meier the first class win for Auto Union on the 'Ring this season.

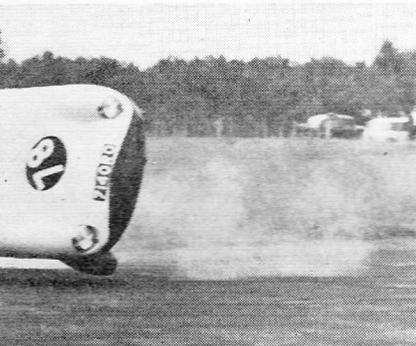
Results

Grand Touring Cars—701-1,000 c.c.: 1, E. Mahle (Fiat-Abarth), 121.5 k.p.h.; 2, "Gustav"/J. Wagner (Fiat-Abarth); 3, K. G. Holland/J. G. Walker (G.S.M. Delta); 4, M. Reid (Austin-Healey Sebring Sprite); 5, J. R. Williamson (Austin-Healey Sprite); 6, G. D. Palmer (G.S.M. Delta). **Fastest lap:** König, 121 k.p.h. **Touring Cars—851-1,000 c.c.:** 1, A. von Oertzen/H. Meier (Auto Union 1000), 109.4 k.p.h.; 2, J. R. Aley (Morris Mini-Cooper); 3, P. Marx/K. Härtner (Panhard). **Fastest lap:** H. P. Hoffmann (Austin Mini-Cooper), 116.1 k.p.h. **701-850 c.c.:** 1, Dr. Kühling/W. v. Wrede (Renault), 102.6 k.p.h.; 2, F. J. Oebel (Renault). **Fastest lap:** G. Karlsson (SAAB), 117.8 k.p.h. **600-700 c.c.:** 1, A. Fischhaber (BMW), 112.1 k.p.h.; 2, H. Schreiber/H. Hülbüsch (BMW); 3, L. Hammer/U. Deussen (BMW). **Fastest lap:** Fischhaber, 114.1 k.p.h. **501-600 c.c.:** 1, Dr. Wiedemann/H. Gilges (NSU), 109.4 k.p.h.; 2, G. Bodmer (Glas); 3, K. H. Panowitz (NSU). **Fastest lap:** Wiedemann, 111.1 k.p.h. **Up to 500 c.c.:** 1, H. Ortner (Steyr Puch), 101.8 k.p.h.; 2, H. Liedl (Steyr Puch); 3, P. Scherrer/G. Steinemann (Steyr Puch). **Fastest lap:** Ortner, 104.5 k.p.h.

THE B.R.S.C.C.'s last club race meeting for 1962 took place at Castle Combe last Saturday. Although the weather had a very autumnal bite the racing was as fast and furious as ever and the 4,000 spectators who braved the cold wind saw six very good races, all of which had their share of thrills, spills and new lap records.

The meeting started promptly at 2.30 p.m. with a 10-lap race for production sports cars of up to 1,200 c.c. David Lewis's D.R.W. was left on the grid but eventually got going some half a lap behind the field. David Porter's Lotus 7 took the lead with Peter Arnold, John Butt and Robin McArthur in close attendance. McArthur spun his Lotus 7 on the first lap and dropped back to ninth. As the three leaders came into Camp Corner on the first lap Butt's Elva slipped past Porter and Arnold on the inside. They both repassed him on the straight and next time round Arnold was in the lead, but once again Butt slipped past Porter. On the third lap Porter pulled out a longer lead and managed to keep it to the end. Mc-

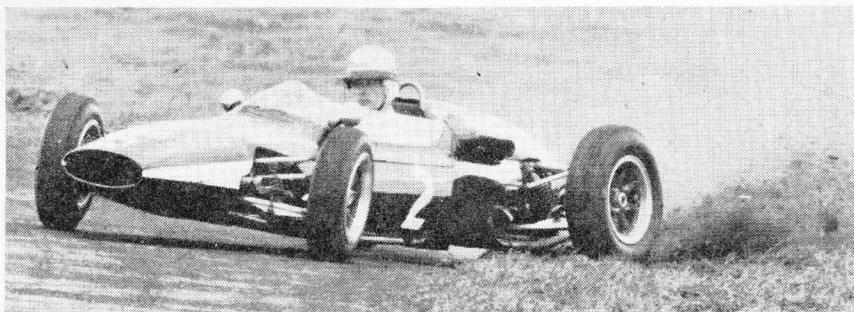
CASTLE COMBE FINALE



LUCKY BOY: Jack Mathe rolls his Speedwell G.T. He was fortunate enough to escape with a cut shoulder—but the car was pretty battered!

Arthur moved up through the field until on the eighth lap he was fourth, behind Butt. He passed Butt on the next lap and very nearly caught Arnold's Lotus, finishing 0.2 secs. behind him and 1 sec. behind the winner. In his efforts to catch the leaders McArthur set up a new lap record of over 83 m.p.h.!

The second event was a 10-lap affair for Grand Touring cars of over 1,000 c.c. Although Ken Baker's "E"-Type lead from start to finish the race was never dull as he was hard-pressed by Geoff Richardson's Ferrari. From the start Tom Threlfall's Elite was behind Baker with Ron Fry's Ferrari third and Richardson, having started on the back row, fourth. On the second lap Richardson passed Fry and Sidney Taylor's Elite managed to get past the wildly sliding A.C., driven by John Dangerfield, into fifth position. Richardson got past Threlfall on the next lap, and on the following lap was only 2 secs. behind Baker.



SPINNING at Quarry Corner is John Taylor, in Bob Gerard's Cooper Junior. He was second in the Formule Libre event.

On the fifth and sixth laps it looked as though Baker's unbeaten record at Castle Combe was going but he managed to keep the "E"-Type in front of the Ferrari, carving 2 secs. off his own lap record in doing so. Tom Threlfall's Elite was an easy winner in the up to 2,500 c.c. class with Taylor's Elite second and Dangerfield's A.C. third.

The main race, for sports racing cars, over 20 laps, attracted some fast machinery and although the lead changed only once it was probably the most exciting race of the day. Roy Pierpoint's well-known maroon Lotus 15 led from the start followed by Mike Beckwith and Nick Garbett both in Lotus 23s. At the end of the first lap these three had a fair lead over the next bunch of cars which included Tony Hegbourne (Lola), Mike Pendleton (Lister-Jaguar), Tony Kilburn's Lotus XI (now with 1,220 c.c. engine) and Angus Clydesdale's Lola. On the second lap Garbett had a moment on the far side of the circuit and dropped back behind Hegbourne. Pierpoint and Beckwith established a lead of about 10 secs. over the rest of the field but there was only about a yard between them. For the next 18 laps Beckwith tried to pass Pierpoint time and time again but the extra power of the Climax engine foiled him every time. Meanwhile, Hegbourne, Kilburn and Clydesdale were battling to get past Pendleton. Hegbourne managed it on the fifth lap. Kilburn on the sixth, by bouncing off the Lister on Camp Corner, and Clydesdale on the seventh. This left Geoff Oliver, in the D.R.W., behind the Lister but he just could not get past. On the last lap Pierpoint was leading Beckwith by about five yards as they came down the straight towards Camp Corner. There seemed to be no reason to think that Beckwith would get past, as he had not been able to on the 19 previous occasions, but as they approached the corner Pierpoint had to go wide to pass a back-marker, Beckwith saw his chance and took the 23 through on the inside to pip Pierpoint by a car's length. Garbett was third overall and second in his class with Hegbourne third. Pierpoint had the consolation of winning the over 1,300 c.c. class, Pendleton coming second. Both Pierpoint and Beckwith broke their respective class records, Pierpoint doing so by over 3 secs.

Chris Summers won the race for single-seater racing cars lapping everyone except John Taylor, in Bob Gerard's Formula Junior Cooper, who came second. The Cooper-Chevrolet left the grid in a cloud of burning rubber and after one lap had a lead of 4 secs. over Eccles's ex-Formula 2 Cooper, with Gaylor third and Colvin fourth, both in

Lotus 20s. Taylor had spun at Quarry but restarted and was eighth after the first lap. The leading "500" was Bennett in a Cooper-Norton. Taylor began to work his way through the field and was second by the end of the fifth lap, in front of Gaylor who had passed Eccles on the fourth lap. Summers continued lapping very fast and reduced his own absolute circuit record by 2 secs. Taylor was the leading Formula Junior car with Gaylor second and Colvin third. Bennett won the "500" class being the only one not lapped twice by Summers.

Although the regulations stated that race five was open to all saloon cars there were only two non-B.M.C. Mini variants on the grid—both 3.8 Jaguars. John Wingfield's Group 3 Cooper-Mini was in pole position but the two Jaguars took the lead with their superior acceleration. Lee's Jaguar lead Crapnell's all the way but Crapnell reduced the gap between them as he was being pushed hard by Wingfield. Excursions into the cornfields were very common among the Minis, which were split into two groups, the lead in each changing on almost every lap. On the ninth lap Thorpe's Cooper-Mini lost a wheel, with spectacular results. On the last lap

(Continued on facing page)

Results

Sports Cars up to 1,200 c.c.: 1, D. B. Porter (Lotus-Ford), 78.19 m.p.h.; 2, P. R. Arnold (Lotus-Ford); 3, R. McArthur (Lotus-Ford). **Fastest lap:** McArthur, 82.59 m.p.h.

Grand Touring Cars Over 1,000 c.c. (Overall Winner): K. Baker (Jaguar "E"-Type), 82.82 m.p.h. **Over 2,500 c.c. Class:** 1, K. Baker (Jaguar "E"-Type), 82.82 m.p.h.; 2, G. N. Richardson (Ferrari 250GT); 3, R. Fry (Ferrari 250GT). **Fastest lap:** Baker, 85.58 m.p.h. **1,001 c.c. to 2,500 c.c. Class:** 1, T. Threlfall (Lotus Elite), 80.54 m.p.h.; 2, S. J. Taylor (Lotus Elite); 3, J. Dangerfield (A.C. Bristol). **Fastest lap:** Threlfall, 81.98 m.p.h.

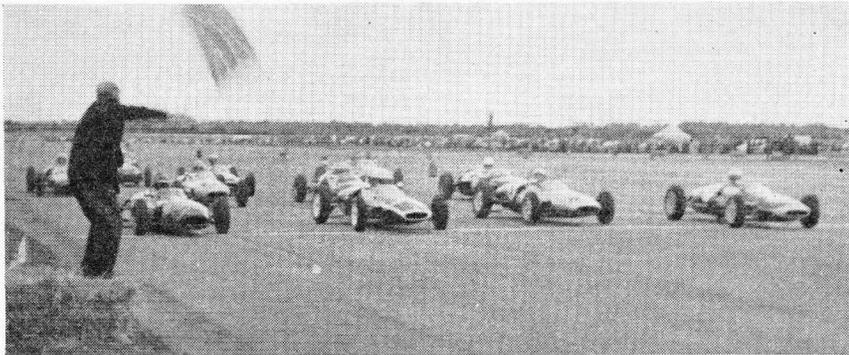
Unlimited Sports-Racing Cars (Overall Winner): M. G. Beckwith (Lotus-Ford 23), 87.37 m.p.h. **Over 1,300 c.c. Class:** 1, R. F. Pierpoint (Lotus-Climax 15), 87.36 m.p.h.; 2, M. Pendleton (Lister-Jaguar); 3, L. M. Macfarlane (Lotus-Ford). **Fastest lap:** Pierpoint, 89.04 m.p.h. **Up to 1,300 c.c. Class:** 1, M. G. Beckwith (Lotus-Ford 23), 87.37 m.p.h.; 2, N. Garbett (Lotus-Ford 23); 3, A. V. Hegbourne (Lola-Climax). **Fastest lap:** Beckwith 88.80 m.p.h.

Single-Seater Racing Cars (Overall Winner): C. Summers (Cooper-Chevrolet), 91.64 m.p.h. **Unlimited Class:** 1, C. Summers (Cooper-Chevrolet), 91.64 m.p.h.; 2, A. Eccles (Cooper-Climax). **Fastest lap:** Summers, 95.72 m.p.h. **Formula Junior Class:** 1, J. Taylor (Cooper-Ford), 83.76 m.p.h.; 2, R. Gaylor (Lotus-Ford); 3, D. A. S. Colvin (Lotus-Ford). **Fastest lap:** Taylor, 87.38 m.p.h. **500 c.c. Class:** 1, H. M. Bennett (Cooper-Norton), 77.99 m.p.h.; 2, N. Rowland (Cooper-Norton); 3, Miss I. Robinson (Cooper-Norton). **Fastest lap:** Bennett, 81.18 m.p.h.

Saloon Car Race (Overall Winner): H. J. Lee (Jaguar), 72.95 m.p.h. **Over 1,000 c.c. Class:** 1, H. J. Lee (Jaguar), 73.95 m.p.h.; 2, V. J. Crapnell (Jaguar). **Fastest lap:** Lee and Crapnell, 75.10 m.p.h. **851 c.c. to 1,000 c.c. Class:** 1, J. F. R. Wingfield (Austin Mini-Cooper), 73.86 m.p.h.; 2, M. G. W. Knight (Austin Mini-Cooper); 3, R. M. Wilson (Morris Mini-Cooper). **Fastest lap:** Wingfield, 75.10 m.p.h. **Up to 850 c.c. Class:** 1, R. J. D. Gibbings (Austin Seven), 68.74 m.p.h.; 2, J. Thurston (Morris Mini-Minor); 3, H. Jones (Morris Mini-Minor). **Fastest lap:** Gibbings, 70.77 m.p.h.

END-OF-SEASON RUFFORTH

Mixed Entry for B.R.S.C.C. Meeting



THE FLAG DROPS for the Formula Junior race. Left to right on the front row are David Prophet (Alexis), Brian Griffin (Lotus), Geoff Breakell (Lotus) and Edwin Dawson (Lotus).

STAGING their last meeting of the season, the B.R.S.C.C. Northern Centre were favoured with ideal weather conditions; the cool northerly breeze which blew during the morning practice gradually fell and the cloudy skies cleared for the seven races for which a mixed variety of 105 cars were entered.

Practice commenced with David Prophet (Alexis) equalling and then bettering the lap record by 1.4 secs. Unfortunately Jimmy Blumer in Diggory's DBR2 Aston Martin suffered a sheared drive shaft and was a non-starter.

Twenty-two cars took the starter's flag for the first race, a ten-lap event for Sports Cars up to 1,200 c.c. From the start it was Wragg's U2 setting the pace with J. Haynes (Lotus 7) in close pursuit and pulling away from the field. This challenge to the leader was quite evident up to lap eight when Haynes burst a tyre and retired, the gap having closed to 2½ secs. On lap three the Lotuses of D. C. Thompson and J. L. Fenton held third and fourth respectively; Brash (Lotus) displaced Fenton on the fourth lap to be himself taken on lap eight by Smith (Sprite), who then made an enormous effort and took second place from Thompson. Only two seconds separated second, third and fourth cars at the finish.

Race two brought only twelve Juniors to the grid for a 16-lapper. David Prophet (Alexis), Brian Griffin (Lotus 20), Geoff Breakell (Lotus 20) and Edwin Dawson (Lotus 22) filled the front row. Unfortunately A. W. Wolveridge (Lola), owing to overheating and a burst hose, never left the start line. The lead was taken in the early stages by Griffin and then Prophet, but this was short-lived for on the third lap it was Bill Bradley (Cooper) with Prophet very close and Griffin holding third place followed by Dawson and Breakell. The track record was broken on this lap at 1 min. 20.2 secs., then on lap five it went to Prophet at 1 min. 19.4 secs. (77 m.p.h.) who took the lead, then a really fast lap by the third man with a new record at 1 min. 19 secs. On the eighth lap the lead went back to Bradley, the first three cars in a continual dice for position. Another record to Bradley at 1 min. 18.6 secs. (77.86 m.p.h.) and Prophet spun at the Esses dropping back to fourth position with

a loss of 11 secs. He retired on the next lap. A well-deserved victory to Bradley with Griffin 1.4 secs. behind.

The third race of ten laps was for sports and G.T. cars up to 2,000 c.c., the front row comprised of Gordon Jones (Marcos), E. C. Booth (Frazer-Nash), Malcolm Wayne (Courier) and John Haynes (Lotus VII). After one lap the leader was Jones, followed by T. D. Simpson (Marcos) and D. Wragg (U2) in close company with Haynes. But on lap two, Simpson was involved in a spectacular roll at Boundary Bend when attempting to take second place now held by Booth; fortunately he escaped with little more than bruising. Booth now took the lead from Jones. The closest racing of the day took place in the remaining laps with Booth holding the lead and Haynes, Jones and Wragg respectively all within 1 sec. over the finishing line!

The sports-racing cars came out for race four and as the flag dropped it was Philip Barak (Cooper-Ferrari) with J. H. Blades (B.B.K.-Climax) and J. M. Wheatley (Lotus) following. It developed into a professional affair with Barak demonstrating the sheer power of his car down the straight and Blades closing up on the bends. Wheatley dropped out on the 14th lap and third place went to J. B. Brierley (Lotus-Climax 7).

A 16-lapper for unlimited sports and G.T. cars came next with the usual dice expected from B. R. Waddilove ("E" Type) and John Mitchell with a similar mount. Again Booth (Frazer-Nash) and Jones (Marcos) filled the remaining two front spots on the grid. Mitchell enjoyed the lead for two laps, but the impeccable handling by Waddilove gave him the lead and there was never a serious challenge. Attempts by Jones to take second place and Haynes third place from Mitchell and Booth respectively never materialized but the race was most exciting. Although lapped by the leaders, Brian Barr (T.V.R.) and Gordon Durham (Porsche) were having the duel of the day, the former finally taking the lead and seventh place.

Eight laps of excitement was next on the programme with modified production saloons in two classes: up to and over 1,600 c.c. Harry Ratcliffe's Minor was on its best behaviour and even the heavy

machinery of Eric Dobson (Jaguar 3.8), Ian Banks (Warwick) and the veteran Healey Elliot of Edgar Wadsworth could not offer a challenge. Second overall was F. P. Kaye (Mini) and A. Lovejoy (Mini) was third. The over 1,600 c.c. class finished in the order given in fifth, sixth and tenth places overall.

The final race of ten laps was for sports and racing cars. Philip Barak (Cooper-Ferrari) rocketed into the lead from the start but was soon dislodged by Brian Griffin (Lotus) who held the lead until he was taken on the last lap by David Prophet (Alexis). Third position was taken by Edwin Dawson on lap six but he retired after spinning, losing his position to Barak followed by Jack Cordingley (J.B.W.-Maserati).

G. L. JOHNSON.

Results

Sports Cars up to 1,200 c.c.: 1, D. L. Wragg (U2-Ford), 66.10 m.p.h.; 2, P. J. Smith (Austin-Healey Sprite); 3, D. C. Thompson (Lotus 7). **Fastest lap:** J. H. Haynes (Lotus 7), 67.84 m.p.h. **Formula Junior:** 1, W. M. C. Bradley (Cooper-Ford Mk. 3), 76.07 m.p.h.; 2, B. H. Griffin (Lotus-Ford 20); 3, E. Dawson (Lotus-Ford 22). **Fastest lap:** Bradley and Griffin, 77.86 m.p.h. **Sports and G.T. Cars up to 2,000 c.c.:** 1, E. C. Booth (Frazer-Nash Le Mans), 66.55 m.p.h.; 2, J. H. Haynes (Lotus 7); 2, G. M. Jones (Marcos-Climax). **Fastest lap:** Haynes, 68.61 m.p.h. **Sports-Racing Cars:** 1, P. Barak (Cooper-Ferrari), 71.98 m.p.h.; 2, J. H. Blades (B.B.K.-Climax); 3, J. B. Brierley (Lotus-Climax 7). **Fastest lap:** Blades, 73.03 m.p.h. **Sports and G.T. Cars:** 1, B. R. Waddilove (Jaguar E), 68.51 m.p.h.; 2, E. J. B. Mitchell (Jaguar E); 3, G. M. Jones (Marcos-Climax). **Fastest lap:** Waddilove, Mitchell and J. H. Haynes (Lotus 7), 69.54 m.p.h. **Saloon Cars:** 1, H. W. Ratcliffe (Morris Minor 1000), 61.43 m.p.h.; 2, F. P. Kaye (Cooper-Mini); 3, A. Lovejoy (Cooper-Mini). **Fastest lap:** Ratcliffe, 63.49 m.p.h. **Sports and Racing Cars:** 1, D. M. D. Prophet (Alexis-Ford Mk. 3), 74.38 m.p.h.; 2, B. H. Griffin (Lotus-Ford 20); 3, P. Barak (Cooper-Ferrari). **Fastest lap:** Prophet, 77.27 m.p.h.

Castle Combe—continued

Thurston, who had already spun once, and Eccles, both in 850 Minis, "touched" going into Old Paddock Bend and Eccles finished on his roof. No one was hurt but Eccles's Morris had a distinctly second-hand look about it. Wingfield finished third, half a second behind Crapnell who was half a second behind Lee. Richard Gibbins won the 850 c.c. class with Thurston's rather dented Mini second.

The wreckage to be removed after the saloon cars caused the last race to start a few minutes late. Ten Sprites and one M.G. Midget appeared on the grid and Richard Paatz's much-modified Sprite took an immediate lead which it never lost. Goodliffe's Sprite was second after one lap but was passed by both Reid and Mathe on the next lap, with Fielden fifth and Paterson's Midget sixth. Mathe passed Reid on the seventh lap but inverted his Sprite on the ninth at Quarry, luckily without serious injury. This let Reid back into second place and Fielden came third having got past Goodliffe.

With three successful meetings at Castle Combe behind them the B.R.S.C.C.'s plans for next season are eagerly awaited in the West Country. Resurfacing will almost certainly be carried out during the winter and a National meeting is on the cards for next season.

PAUL DOUGHTY.

DAN MCALISTER has won the Sexton Trophy for the Eire speed championship for the second year running. His 1½-litre Cooper-Climax is still, unfortunately, *hors de combat* after his Phoenix Park prang. Full Sexton results are not yet available.

CORRESPONDENCE

Formula Facts

MAY I be permitted to make a few comments on the Formula 1 racing scene, whilst there is a small lull between championship races? Having kept an intensive record of events throughout the season, many statistical facts may be determined.

There have, this year, been 22 genuine F1 events up to and including the Gold Cup, 59 drivers having competed in them from 14 nations. (I am not counting the Cape Grand Prix which took place on 1st January.)

Driver with the most starts is John Surtees, with 17, which means that there have been only two races in which he could have competed but didn't, since on three occasions two F1 events have taken place on the same day, making attendance at both impossible. Man with the most retirements seems to be Roy Salvadori, who has 11 retirements out of 16 starts, whilst team-mate Surtees has nine non-finishes to his credit.

Twelve drivers have not retired, but of these only three have competed in more than one race. Most remarkable of these three is Count Godin de Beaufort, who has yet to retire after 11 events. Almost as consistent is Ian Burgess, whose non-finish at Oulton Park last Saturday week was his only one from 13 starts.

Jim Clark has most wins with five, whilst Graham Hill has four, Bruce McLaren three, Dan Gurney and Willy Mairesse two, and John Surtees, Innes Ireland, Masten Gregory, Jack Brabham, Lorenzo Bandini and Maurice Trintignant one "first" apiece.

Of the regular drivers, Jim Clark has the best place average, finishing in an average position of 2.5 a race. McLaren's average is 2.7, as is Phil Hill's (only four finishes), and Graham Hill's is 2.8. Mairesse, with but two finishes this season, has a freak average of 1, having won the Brussels and Naples Grands Prix but retiring in his only two other events.

Taking the number of starts, retirements and placings into account, a "success" table can be formulated, with a "score" for each competitor. First in this table, and therefore the most successful driver to date this year, is Graham Hill, whose score is 4.47. Second is Bruce McLaren with 4.69, third Dan Gurney with 5.33 and fourth Jim Clark with 6.33. Other example positions are 10th Lorenzo Bandini with 7.60, 30th Mike Parkes (one outing, fourth place) with 12.00 and last Heini Walter (one outing, 14th place) with 21.00.

The unfortunate title of "the driver who has spun most" I calculate goes to Jay Chamberlain with six off-course excursions due to human error. Since he has started in only seven races, that makes an average of nearly one spin a race. I have Roy Salvadori recorded as having spun five times, which is indeed surprising. Yet it seems most people make mistakes at some time or the other, for even "steady" drivers like Moss (first lap at Brussels), Trintignant, Clark and Brabham have made unscheduled manoeuvres. Of the top-class drivers only McLaren, G. Hill, Gurney, Bonnier, Maggs and Gregory have clean slates in this department. (No guarantee of complete accuracy, of course, with these statements, but they are, to the best of my knowledge, all correct.)

Several other things I think are interesting: Michel May has not driven at all this season, though he was entered in a Porsche for the Pau G.P.; the New Zealand driver, Ross Greenville, has been entered in a Cooper for the Lombank Trophy, the Lavant Cup, the Aintree "200" and the International Trophy, but nothing has either been seen or heard of him at all; Peter Arundell has had but one F1 drive this year (Rheims G.P.), works Lotus seeming to prefer to lend their spare car to the Swiss driver Joseph Siffert; Richie Ginther has had a miserable season, finishing but four times in 11 races; Ben Pon has had about the shortest F1 season, comprising 2½ laps of the Zandvoort circuit in the Dutch Grand Prix, at which point he spun off; Gunther Seifert's best result in five races is 12th in the Aintree "200"—the only time he was not last (Burgess was 13th); Jim Clark has only once been off the front row of the grid in his 15 races—that occasion being the Belgian Grand Prix, where he had very little practice; oldest F1 racing car currently competing must be the ex-Moss Porsche of de Beaufort, which was probably built in 1959—this car is also the most reliable machine this year, which only goes to show!

MORDEN, SURREY.

JOHN E. THOMPSON.

How to Win Class Awards at Driving Test Meetings

ALL you have to do (according to one organizer) is to get a Mini, supercharge it and then enter it to compete with Heralds, Anglias, Morris 1000s, etc.

This is all very well, but what about the other competitors in the class; won't they object? Well, the organizers say you can't please everybody, and that they are complying with R.A.C. S.S.R.

At the Flather Star driving tests organized by the Malden and District M.C. on 2nd September, a situation similar to that cited occurred. A supercharged Sprite was moved up one class to join M.G.s, Alpines, TRs, and an SP250. As it is abnormal for any of this class to put up times comparable with standard Sprites I consider that it would be unjust for them to compete against a supercharged version, particularly when it is realized that up-classing is to protect the standard Sprite from unfair competition.

At some other driving test meetings when supercharged cars have entered, the organizers simply imposed a 10 per cent. penalty, which is a much more equitable arrangement. It will be interesting to hear the views of some driving test exponents on the subject.

RICKMANSWORTH, HERTS.

M. BISHOP.

Two Thousand Miles in a DAF

JOHN BOLSTER's article in the 24th August AUTOSPORT on the DAF Daffodil made us sick! Tony Gosnell and I had just completed over 2,000 miles—London-Land's End-John o' Groat's-London—in four and a half days and had compiled extensive notes on our impressions of the car. We read the article on our return home and it made us sick because it *must* have been written from our own notes! Word for word!

Seriously, though, one does expect to differ here and there from the findings of road test reports, but here was one with which we were unanimous. This was the more remarkable since we had read two other reports on the car which had slightly prejudiced us against the DAF in certain respects.

The object of our trip was to cover Land's End to John o' Groat's in under 24 hours, which necessitates an average speed of just over 36 m.p.h. Four years ago we had achieved a 38.43 m.p.h. average over the same route in a Goggomobile 300 coupé, and we were a little sceptical as to whether the Daffodil could improve on that. However, on discovering that after the first 100 miles we were 17 minutes ahead of our previous time in the Goggo, we never referred to that trip again!

Our average eventually worked out at 44.19 m.p.h. with 36.13 m.p.g., and much of this into the teeth of a howling gale. At one point we passed a group of energetic cyclists pedalling for all they were worth—downhill.

Our impressions of the car were extraordinarily close to those of J.V.B., and we heartily endorse his remarks about town driving. The effect upon other cars of the DAF's getaway from traffic lights was at times hilarious; on at least two occasions the car "next door" attained astronomical revs. in first before the driver realized that the DAF just wasn't going to change gear!

It would be difficult to single out the Daffodil's best feature, but perhaps the honours should go to the roadholding department, which was ridiculously good. We were both very sorry to part with the car at the end of the run, and we are keeping our eyes peeled for any cheap Daffodils which may come on to the second-hand market in the near future. What a hope!

LONDON, S.W.19.

JOHN FRY.

Standing and Sitting

I THINK I should issue a salutary note of warning to those members of the motor racing public who are naïve enough to believe that a "stand" is a place where they can sit.

At the International Gold Cup meeting at Oulton Park, in the company of a small party, I purchased tickets for the "stand" at Lodge Corner. Once inside we discovered that the enclosure was full to overflowing and promptly made a request for the return of our money. The stand attendant had no authority to do this and we were referred to "the office" nearby. There, in the presence of an august body of gentlemen drinking at a trestle table, I was informed by their spokesman that a "stand was a stand and not to be sat on". He proceeded to amplify this point by saying that the planks had been measured off every 18 ins. and represented standing room for 400 people.

I protested that in many racecourse and football "stands" I had been allowed to sit. At this he became very cross and told me, in effect, that if I wasn't very humble I wouldn't get my money back. Indeed, rarely have I witnessed such a deplorable display of bad manners.

"A word means just what I choose it to mean", said Humpty Dumpty, "nothing more—nothing less".

I'm glad to say that the people who occupied the stand remained seated in comfort and I hold the naïve belief that the cash-paying customer will get his way in the long run.

CHEADLE HULME, CHESHIRE.

JAMES MCCAIRN.

Are karts setting the trend?

JOHN BOLSTER's article in a recent AUTOSPORT regarding F1 machines is indeed interesting. I fully agree with him on most, if not all, of his subjects. It may be interesting to note something on a smaller scale here. Kart racing is now firmly established in the world, and in Britain it is moving ahead with great strides.

On average the 100 c.c. karts with no gearboxes or clutch, which start Indianapolis style (*i.e.*, rolling), are quicker than the 200 c.c. karts with gearboxes! The 100 c.c. karts are geared to attain good straightaway speeds with ample acceleration out of the corners.

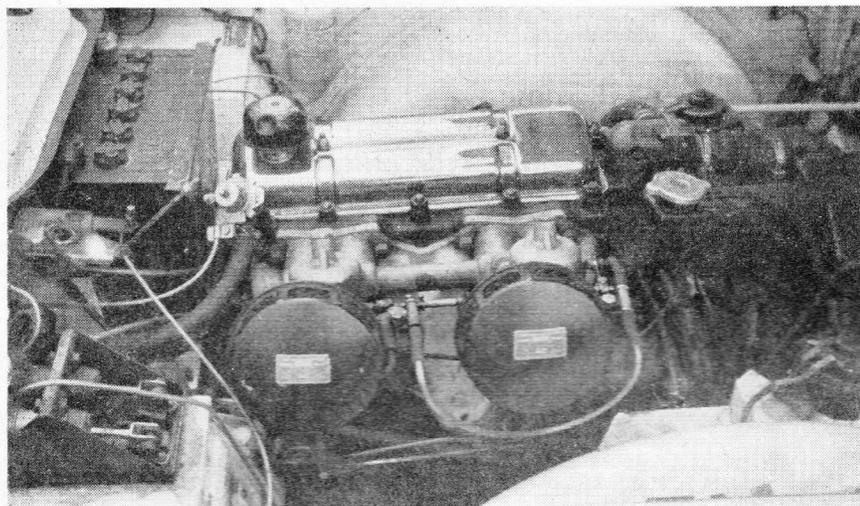
With kart circuits being so exacting it is more practical to have a no-gearbox kart because to change a gear in a three- or four-speed box on a small 500-yard circuit loses a fraction of a second. Maybe this is not noticeable but it is feasible surely? No gear changes give a constant speed and the rev. range of 100 c.c. karts, around the 12,000 r.p.m. mark, makes possible good ratios and lap times.

This, I feel, could be the racing car of the future. Either automatic change or some time-saving device to give a variable transmission with the aid of the driver's foot as Mr. Bolster indicates. Admittedly kart racing and motor racing are poles apart but scaled up there is some comparison. With a 100 c.c. engine a kart can lap a fairly tight 600-yard circuit at over 40 m.p.h.! The 200 c.c. karts with gearboxes do it about the same but *fatiguing* the driver more with gear shifts.

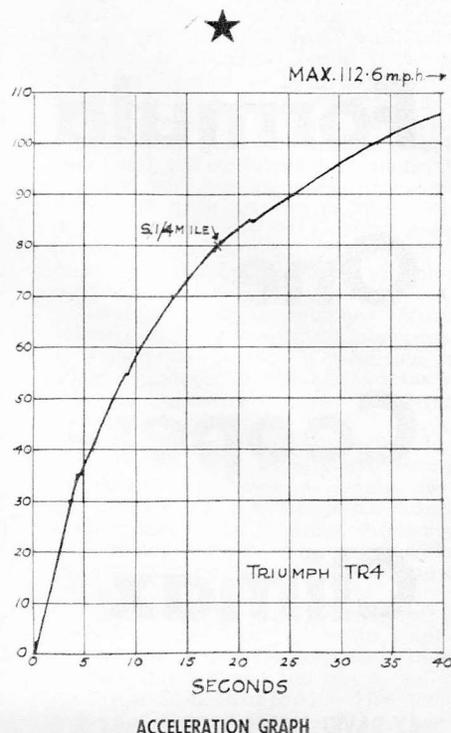
I hope these small items are interesting to the readers of AUTOSPORT. May I add my congratulations to Richie Ginther, that likeable, pint-sized driver of the first car to lap Oulton Park at over the ton! Well done, Richie, and may good fortune at last smile down on you!

LYMM, CHESHIRE.

LANCE WILSON.



WEATHER-STAINED: The TR4 after about 1,000 miles of rally-following, in torrential rains, was completely weather-proof.



★

TWO-POINT-TWO: The four-cylinder 2,138 c.c. engine which develops 105 b.h.p. at 4,750 r.p.m.

THE TRIUMPH TR4

BY
GREGOR
GRANT

**Latest 2.2-litre Car Has
Excellent All-Synchromesh
Gearbox and First-class
Road Performance**

DURING the years the TR series of Triumph sports cars has attained great popularity all over the world. When the TR2 was introduced in 1953 it offered 100 m.p.h. motoring at the lowest cost envisaged in Great Britain for a car of its type. In competitions it rapidly became the most successful rally car of its time, starting off with a resounding victory in the 1954 Rally of Great Britain. The development work put in on the TR2 by Ken Richardson and his men was reflected in the large numbers of machines which were produced, and also exported.

Together with the late Peter Reece, I took a TR2 into the 1954 Lyon-Charbonnières Rally, long regarded as the especial preserve of professional Continental rally drivers. With no opportunity to do the lengthy reces, reckoned to be essential for success in this very tough event, the little white car not only finished without loss of penalty points, but was sixth in general classification, runner-up in the International Sports category, and best foreign entry. A few weeks later the same car, this time with the late Stan Asbury as co-

driver, completed the "Tulip" unpenalized, and was close runner-up to a Ferrari in the sports class.

Soon Triumph TR2s were to be seen in every type of event, and the type was followed by the improved TR3. After a splendid début at Le Mans by the privately entered Wadsworth/Dickson TR2 in 1954, twin-cam versions were entered by the factory and displayed fine reliability. So far, no two-o.h.c. machines have been offered for sale, but this year the Standard-Triumph concern, now controlled by Leylands, announced the TR4.

This is, substantially, an improved version of the TR3, as the basic frame is little altered, the suspension is almost identical apart from revised dampers, and the well-tried o.h.v. (push-rod) engine is retained. However, bodywork has been completely restyled by Michaelotti, with such refinements as wind-up windows, generous luggage boot, more interior room and completely weather-proof hood. The latter kept out the heaviest rainfall I have ever experienced on the Continent of Europe, but until one learns the drill, it is rather a chore

to erect. I counted no fewer than 29 separate press-on fasteners, in addition to a couple of hooks and a reinforcing metal strip—all of which have to be secured before the top is in position.

Heating and ventilation equipment is an immense advance on anything offered before on a TR. In addition to a most efficient electric blower, it is possible to direct currents of hot or cold air to both windshield or occupants' feet, separately or combined. At each end of the fascia, swivelling vents are provided which control the amount of air admitted to the driving compartment.

Seating is well thought out, and a child can be accommodated on the rear bench. The instruments are well placed and easy to read, but I was often puzzled by the coded control knobs, until I became used to the diagrams which indicate their function.

In comparing the TR4 with its predecessors, one notes the adoption of rack-and-pinion steering with most efficient anti-shock rubber joints on the column. As regards directional control, the steering at speeds of up to 60 m.p.h. is

(Continued on page 362)

The Formula One Cooper- Climax

BY DAVID PHIPPS

WHEN Jack Brabham left Coopers many people predicted they would go down the pan. So far they show no signs of doing so. To date they haven't had a particularly successful season, winning only one *Grande Epreuve* (and that by default) and one non-Championship race, but they might have done a lot better if their all-new six-speed gearbox had not given so much trouble. The rest of the car has been extremely reliable, and although it does not incorporate any major technical novelties it is one of the fastest of the 1962 machines, as is shown by the fact that Bruce McLaren has been on the first or second row of the starting grid for every race.

The fact is that other people—notably Lotus and B.R.M.—have learned a lot since 1959 and 1960, when Coopers carried all before them. The success of the Cooper in those days was mainly due to the almost co-incidental marriage of the torquey Coventry Climax 2½-litre power unit and Cooper's traditional rear-engined chassis. In 1959 the Cooper was racing against old-fashioned front-engined cars, and in 1960 against entirely new rear-engined designs beset with teething troubles. Now the imitators have caught up, and in some cases they have gone ahead.

The 1962 Cooper made its debut at Zandvoort, in the Dutch Grand Prix and all concerned immediately began to regret having designed a new transmission when the gearbox input shaft broke during practice. There were even more regrets when McLaren lost fourth gear

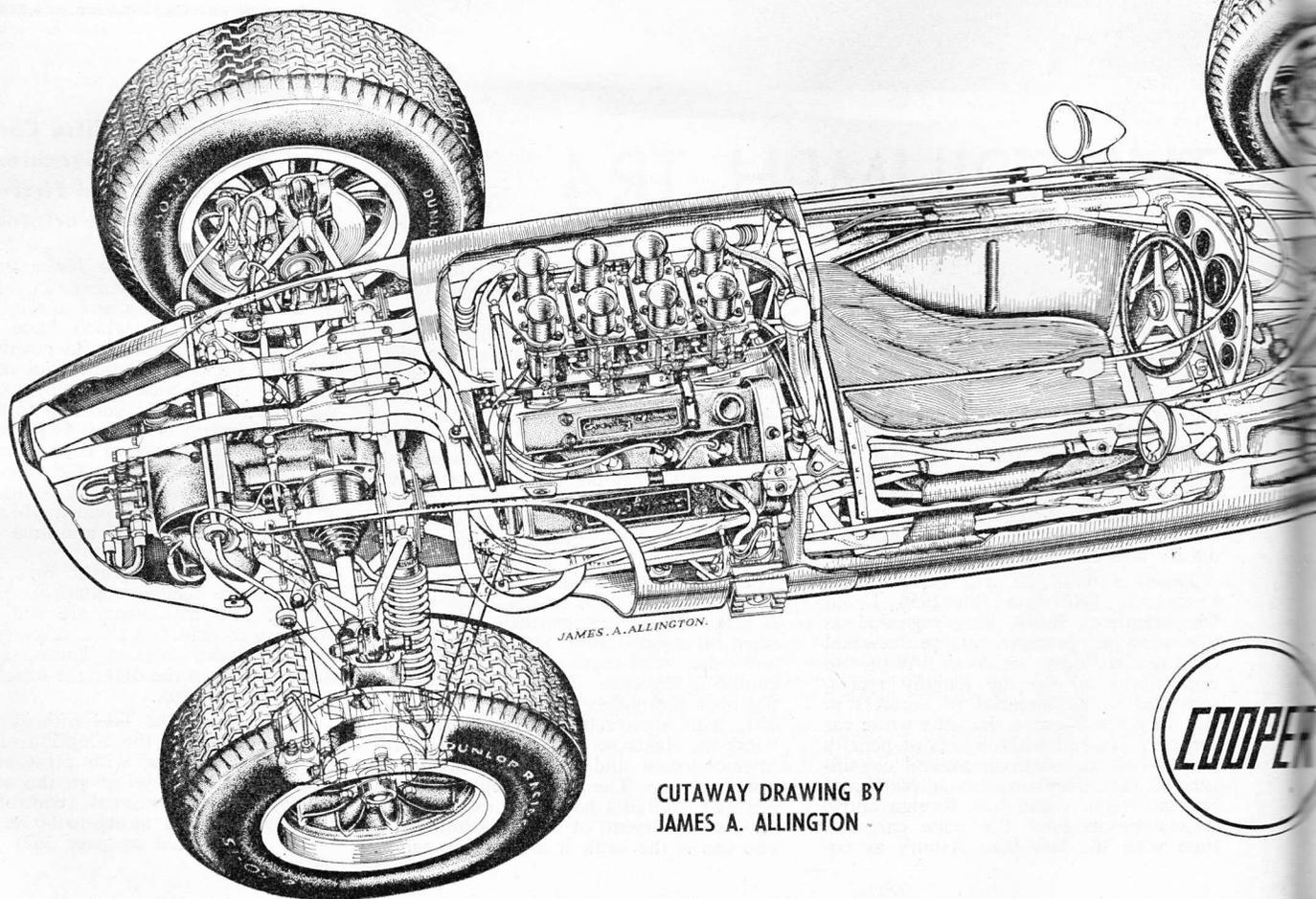
on the warming-up lap, but even with this disadvantage he managed to work up to second place—only to have the thicker, stronger "quill" shaft (installed overnight) break on the 22nd of the 80 laps. A lot of work was done before Monaco, a fortnight later, and it paid off when McLaren won after Graham Hill's B.R.M. blew up only seven laps from the end.

At Spa, as at Monaco, McLaren was on the front row of the starting grid and held second place on the opening laps. However, when Clark took over the lead and began to increase the pace the Cooper could not keep up; it eventually retired with low oil pressure.

Number two driver Tony Maggs had a new, V8-engined car at Spa, having driven a 1961 four-cylinder car in the earlier races, and he drove it very sensibly until forced to retire by gearbox failure; the "shrunk-in" centre part of one of the gears had pulled out.

McLaren took over Maggs's car for the Rheims Grand Prix—and won it. The Rheims race was not a World Championship event this year but nevertheless had a very representative entry, and for both McLaren and Cooper it was a good win—even though Surtees's Lola was much faster and led until half-distance, when a valve-spring broke.

McLaren was on the front row again in the French Grand Prix, but as soon as the race started he began to have trouble with gears jumping out of mesh. This caused him to spin off, but after two pit stops to check the damage he carried on and eventually finished fourth;

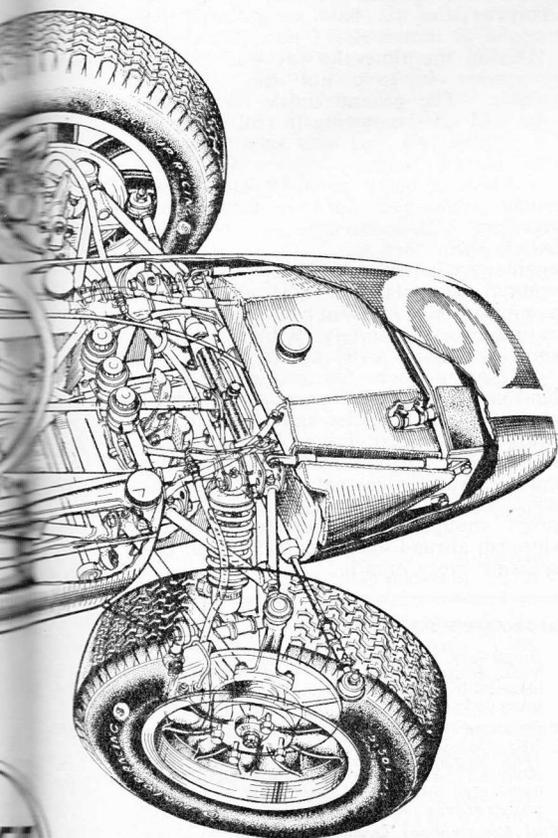


CUTAWAY DRAWING BY
JAMES A. ALLINGTON





BRUCE McLAREN in his Cooper before the Monaco Grand Prix, which he won.



only after the race was it discovered that, as a result of the spin, a wishbone was bent and the chassis was broken. These Coopers are tough! Meanwhile Tony Maggs was on the way to a very meritorious second place, a lap behind the winning car but a lap ahead of the third one. When McLaren's gearbox was stripped it was discovered that the centre of fourth gear (now brazed in) had pulled out; it was the selector dogs, not the gears, which were jumping out of mesh.

At Aintree Clark's Lotus 25 was in perfect order and Surtees's Lola went extremely well, so McLaren had to settle for third place, with Maggs sixth. And at Nürburgring, where most people expected the Cooper to go well in the wet, McLaren seemed quite happy to finish fifth, feeling he would have done a lot better in the dry. Maggs was once again relegated to the 1961 four-cylinder machine, his 1962 being badly damaged in the television camera incident during practice.

The 1962 Cooper was designed by John Cooper, Bruce McLaren and draughtsman Owen Maddock, and built by the racing mechanics in a small garage away from the main factory—if a building in which less than 40 men are employed can be called a factory. Bodies (hand-beaten, like all Cooper bodies, by a father-and-son team) and chassis are made in the main works, the gearbox is built by a small outside firm and the engine, of course, is supplied by Coventry Climax.

Cooper design is very much a process of evolution, and the latest F1 car still appears closely related to the original 500 c.c. machine. Coil springs have replaced transverse leaf springs, disc brakes have ousted drums, and the cars have become progressively lower and more compact, but the family likeness remains.

The chassis, which used to be a series of mounting brackets connected by tubes, can now be summed up as a series of mounting brackets connected by water and oil pipes! (The top left and bottom right longitudinal members are used as water pipes, the other two as oil pipes; the interior surfaces of the tubes have not been treated in any way, but so far there have been no ill-effects.) Structurally it looks most inelegant, but it is strong, practical and—thanks largely to the efforts of Bruce McLaren—torsionally stiffer than earlier Cooper single-seater chassis, even though it is by no means fully triangulated. The material used is mild steel tube, 1½ inch 16 gauge for the bottom longitudinals, 1¾ inch 18 gauge for the top, with 18 gauge tube of varying diameters for transverse and diagonal members.

It is a feature of Cooper chassis design to make everything adjustable—roll-centres, camber, caster, toe-in, spring rates, damper rates, anti-roll bar rates—even though the various settings, once decided, do not change very much from race to race. This year the roll centres are unusually high (another sign of McLaren influence) at around 5 inches and 6 inches, although the various wishbone mounting points allow them to be as low as 2 inches (nearer the level which Jack Brabham might have preferred) if required; Monaco is the only circuit on which the upper bolt holes (providing a lower roll centre) have been used. Surprisingly enough, the roll centres were left high at the Nürburgring, when they

might have been lowered with advantage to suit the wet conditions, even though it takes only a few minutes to change them (by removing and replacing eight bolts, two for each top wishbone).

The basis of the front suspension layout is a Triumph Herald front upright, ball-jointed at both ends—which at least gives the draughtsman two fixed points from which to start. Both wishbones have a relatively narrow inboard base, and the spring-damper units are mounted part way along the lower one; neither of these features is ideal structurally, but nobody at Coopers seems particularly concerned. All joints are fitted with grease nipples—no minimum servicing requirements here!

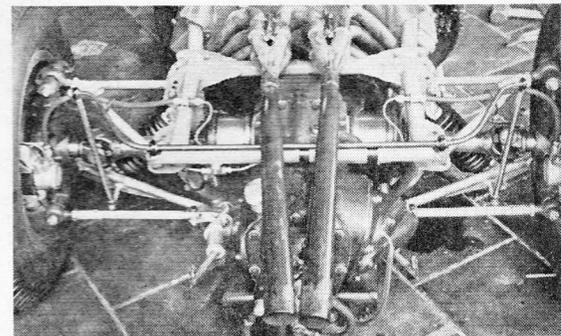
Steering is by a modified Morris Minor rack and pinion in a Cooper case. A variety of pinions is available, to allow adjustment of the steering ratio for different types of circuit. A 13-inch steering wheel is fitted.

At the rear each wheel is mounted on a cast magnesium upright and located by double wishbones—a simple, short one at the top (where camber adjustment is made) and a longer, three-piece one at the bottom, the rear member incorporating provision for alteration of toe-in.

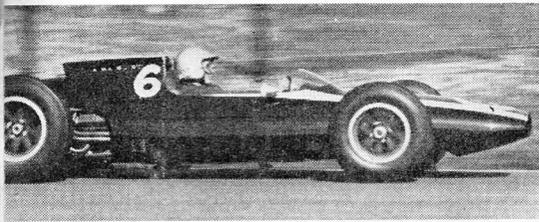
The coil springs are extremely soft at both front and rear, a certain amount of the load being taken by Aeon bump rubbers (fitted round the piston rod on the Armstrong dampers). The thickness—and hence the rate—of these bump rubbers is another feature which can be, and is, changed from circuit to circuit.

Relatively thin anti-roll bars are fitted at both front and rear, mounted at the same point as the spring/damper units. As high roll centres are normally employed, their chief purpose is presumably to offset roll induced by the use of soft suspension. Even so, the Cooper still appears to roll more than the majority of current F1 cars. It also dips its nose very noticeably under braking (less than on previous models, due to the introduction of wishbone mountings virtually parallel to the road, but still very noticeably), promoting negative camber of the front wheels which must have an adverse effect on braking efficiency. The brakes themselves are Girling discs, 10¼ ins. in diameter at the front and 9¾ ins. at the rear, mounted outboard all round. Originally it was intended to fit the rear brakes inboard but, because of a bodge in the drawing office, insufficient space was left between the gearbox and the chassis; the brakes were hastily reassembled outboard, and there they have remained.

(Continued overleaf)



The rear end of the Cooper.



Cooper F1—continued

The gearbox, which is basically very straightforward, is of the two shaft type. All six speeds are in constant mesh, being selected by internal dogs, and ratios can be changed in a matter of minutes by removing the rear cover and sliding out the gears; in all there are 17 alternative pairs, which suffice to provide ratios suitable for circuits of all types; final drive gearing is fixed at 9:41. Apart from the quill-shaft breakages at Zandvoort, most of the transmission troubles which have been experienced have been associated with faulty harden-

Triumph TR4—continued

very light indeed, and it is advisable to avoid an unnecessary movement otherwise there is an instantaneous response. Above 60 m.p.h. the steering becomes almost ideal, liveliness replacing the somewhat "power-assisted" feeling at lower speeds.

The new synchromesh gearbox is as efficient as any to be found on Continental cars, and the provision of synchromesh for bottom ratio will be applauded by all buyers. Incidentally, low gear ratio has been raised from 3.38 to 3.14 to 1, putting up maximum at 5,600 r.p.m. to just over 35 m.p.h. It is now virtually impossible to engage reverse in error, for this ratio has a locking arrangement, necessitating pulling up the lever for engagement.

On the car tested no overdrive was fitted, the resultant rear axle ratio being 3.7 to 1; with overdrive, 4.1 to 1 is standardized. With the normal four ratios performance is all that could be desired, with brisk acceleration and a maximum speed in excess of 110 m.p.h. In the revealing standing quarter-mile tests, the TR4 achieved 17.4 secs., coming out of the measured distance at 80 m.p.h. in third gear. I found that the maximum in this gear, at 5,600 r.p.m., was exactly 85 m.p.h. Changing into top before the end of the "quarter" produced 18.5 secs. as the best time achieved. To reach 90 m.p.h. from rest took 25.2 secs., and to 100 m.p.h. 34 secs.

The engine is undoubtedly free-revving, for during maximum speed trials over 5,600 r.p.m. was registered, and the mean average worked out at 112.6 m.p.h. Curiously enough, the exhaust note was more pronounced in the medium speed ranges, and there was a definite "boom" at 60-65 m.p.h. on top. Power-roar from the twin SU carburetors is also predominant during acceleration, but mechanically the 2.2-litre unit is a good deal less harsh than its 2-litre forebears. The engine is invariably a first-time starter, from cold or hot, and with slow-running set at 700-800 r.p.m., there was no tendency to stall in traffic, which occurred when the throttle stops were adjusted to 500 r.p.m.

During the time the TR4 was in my

ing of gears and selector dogs. Since Rouen, however, the gearbox has been completely reliable, and if it stays this way it could turn out to be one of the best units currently in use. The shift is quick (thanks partly to the use of spring steel selector forks), the ratios (and the ease with which they can be altered) are ideal, there is very little power loss and very little excess weight.

The problem of allowing for variations in drive-shaft length due to suspension movement has been tackled by adapting a Citroën DS/ID 19 coupling, in which the universal joint is fitted inside a large-diameter splined casing at the inboard end of the shaft; the size of the splines and their position reduces binding to a minimum.

Thirteen-inch wheels are used at the front, to reduce wind resistance and unsprung weight; they are fitted with 5.50 tyres on six-inch rims. Fifteen-inch wheels are used at the rear, with 6.50 tyres—the smallest which can safely cope with the 180 b.h.p. of the Coventry Climax engine and the 150 plus m.p.h.

care it was used to cover an International rally; the wider track as compared to the TR3 has increased stability, but there was still a slight tendency to hop about on bumpy curves, indicating that the suspension is still on the harsh side, despite the altered damper settings. However, there was no question of anything but first-class road-holding, and on winding Alpine passes the TR4 is a sheer delight to drive. The Girling brakes are immensely powerful, although pedal pressure is higher than one would expect. There was no sign of fade, nor of any peculiarities whatsoever. Swooping down to those sudden hairpins beloved of Continental road-builders, the synchromesh bottom gear combined with those admirable brakes produced a wonderful feeling of security.

Economy was most marked during the period the TR4 was in my hands, and even 90-100 m.p.h. cruising on motor roads, together with plenty of mountain work, produced almost 30 m.p.g. One never ceases to marvel at the efficiency of the lusty four-cylinder engine, long noted for its economy of operation. Admittedly the engine was not at its happiest on the grades of petrol provided abroad, and tended to run on after switching off at the conclusion of a fast run. Yet it was impossible to make it pink, therefore the 9-to-1 compression ratio cannot be considered to be too high for Continental use. During over 800 miles less than half a pint of oil was required.

I did have an unfortunate experience with the lights, for the car was delivered with British bulbs, dipping to the wrong

of which the Cooper is capable—on seven-inch rims. Wheelbase is 7 ft. 7 ins., front track 4 ft. 3½ ins. and rear track 4 ft. 2½ ins. The bodywork is in aluminium, and the long fuel tanks also act as side panels. The oil-tank, too, serves a dual purpose, its lower half being triangular in shape to duct out hot air which has passed through the radiator.

Like several other current cars, the Cooper is a potential winner at every race for which it is entered. It is very versatile, goes well on both fast (Rheims) and slow (Monaco) circuits, but generally is not quite as quick as Clark's Lotus or Surtees's Lola; whether this is attributable to car or driver is difficult to tell. However, Coopers plan to win all the remaining races this season, and they already have a number of new ideas on the drawing board for next year. By then, perhaps, we shall be able to tell whether the name Cooper is likely to be engraved once again on the Formula 1 Manufacturers Cup—or whether the departure of Jack Brabham signified the end of an era.

side. Several camion drivers soon convinced me that they have certain retaliatory measures. By a lucky chance, my own Continental kit included a set of the regulation bulbs!

Taking it by and large, the TR4 offers a great deal for a comparatively modest outlay. It is a most enjoyable method of transport, with the kind of performance that puts it straightaway in the sporting car category. Nevertheless, it provides comfort far in excess of that offered on earlier TR models, without losing the characteristics that have so endeared the marque to thousands of purchasers.

During the time the car was in our possession it gave not the slightest trouble. The general finish was excellent, and after motoring in really dreadful weather the car was soon restored to showroom finish.

I presume many potential purchasers would prefer the overdrive version for sustained high-speed cruising, but I can assure them that the lusty big 2.2-litre engine can be run at 5,000 r.p.m. all day, without the slightest sign of distress; a comfortable 90-95 m.p.h. gait can be maintained indefinitely, with the clock showing around 4,700 r.p.m.

Without a doubt the infusion of Leyland know-how into the quantity production of quality vehicles has been of great benefit to Standard-Triumph. This TR4 is already acknowledged as a winner, and the knowledge that it is still somewhat difficult to obtain in the U.K. is proof enough that hundreds are being shipped abroad—and production is increasing every month.

SPECIFICATION AND PERFORMANCE DATA

Engine: Four cylinders, o.h.v. (push-rod), 86 mm. x 92 mm., 2,138 c.c., 105 b.h.p. at 4,750 r.p.m. Compression ratio, 9 to 1. Twin SU carburetors. Lucas coil ignition.

Transmission: Borg and Beck single-plate dry clutch. All-synchromesh gearbox, ratios 11.6, 7.44, 4.90 and 3.70 to 1. Open propeller shaft. Hypoid rear axle.

Suspension: Front, independent by helical springs and wishbones. Semi-elliptic at rear; Armstrong telescopic hydraulic dampers.

General: Rack-and-pinion steering. 5.90 x 15 tyres. Girling disc brakes (front), drums (rear). Bolt-on disc wheels (wire wheels extra). Heater, de-misting and ventilating units with booster. Windscreen washers.

Dimensions, etc.: Wheelbase, 7 ft. 4 ins. Track

(front) 4 ft. 1 in., (rear) 4 ft. Ground clearance, 6 ins. Overall length, 13 ft.; width, 4 ft. 9½ ins.; height, 4 ft. 2 ins. Turning circle, 33 ft. Weight (as tested), 20½ cwt.

Performance: Speeds in gears: 1st, 35 m.p.h.; 2nd, 55; 3rd, 85. Maximum speed (mean), 112.6 m.p.h. Acceleration: 0-30, 3.5 secs.; 0-40, 5.5; 0-50, 7.8; 0-60, 10.2; 0-70, 13.8; 0-80, 17.6; 0-90, 25.2; 0-100, 34.0. Standing quarter-mile, 17.4 secs.

Fuel Consumption: (Average, fast driving) 27-30 m.p.g.

Makers: Standard-Triumph, Coventry.

Price £750 (plus £282 5s. 3d. P.T. = £1,032 5s. 3d.).

Available extras: Hard top; "Surrey" hard top; centre-lock wire wheels; Laycock-de Normanville overdrive; radio; fog lamps.

GLORIOUS weather graced the Aintree Circuit Club's race meeting last Saturday when, using the short circuit, a programme of nine 10-lap events attracted an entry of over 100 competitors.

Starting late, the first race was for sports cars up to 1,000 c.c. and a terrific scrap for the first place was waged between the Lotus 7s of K. R. Bailey and F. W. Smith, the former winning by less than a "nose" after a missed gear change on the penultimate lap had nearly let Smith in. Third, some distance behind, came N. H. Wilson, similarly mounted. Incidents in this one included a roll over by M. Ward at Village, luckily without hurt, and a spin by L. G. Arnold (Sprite) at Beechers.

Event two was for 750 Formula cars in which B. Small's Austin went so quickly that it finished over a minute in front of D. A. White's Impala with A. Wontner's Austin A.R.W. third. Spins were observed at Country (R. D. McElroy), at Club (R. D. McElroy) and at Village (T. G. Bloor).

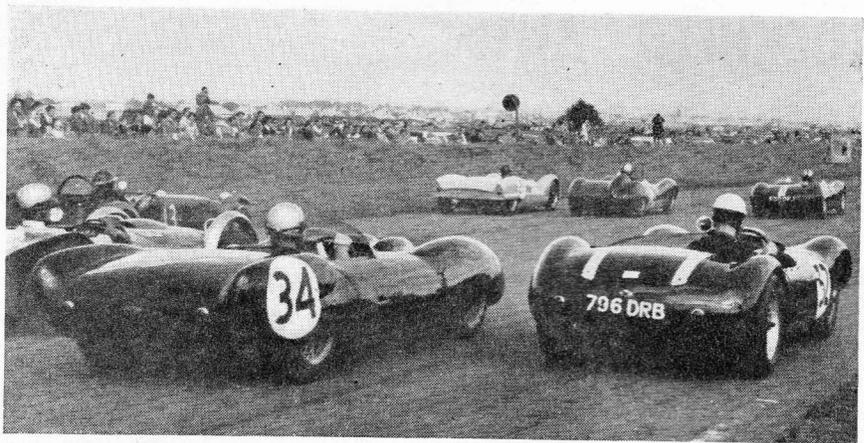
Next came sports cars up to 1,700 c.c. in two heats. In the first of these Tony Lanfranchi (Elva Mk. 6), despite a failing clutch, managed to hold off H. W. Cooper's Terrier. Third place went to a very well driven Lotus 7 in the hands of Miss Natalie Goodwin. P. R. Dickinson spun his Lola at Country and was rammed by G. D. Hill's Elva Mk. 6, which was able to continue; not so the culprit!

The second heat saw F. W. Smith turn the tables on K. R. Bailey's Lotus, this time driven by son K. W., to the tune of some 6 secs., after P. S. Borthwick (Lola), who was second on the road, had been penalized a minute for flag jumping. Third man home was P. Phillips (Terrier Mk. 2). Again spins were noticed, the worst of these being W. G. Smith, who spun his Lotus at Club. He continued immediately in front of another competitor and was black flagged.

Next came saloon cars and a very good race it was too. For the first eight laps G. H. F. Parkes led in his 3.8 Jaguar, hounded all the way by P. T. Middlehurst's amazing A40. Into Beechers Middlehurst got by, but on the approach to Club Parkes repassed but realized, too late, that he just couldn't stop! He didn't. Middlehurst, laughing, took the flag 17 secs. ahead of J. Newman's Jaguar with F. Styner (A40) third. Mention must be made of a terrific scrap between the Minis of J. B. Pemberton and R. G. Smith which put up a wonderful show.

The next race was for unlimited sports cars. On this occasion P. S. Borthwick made no mistake. His Lola won by 19 secs. from J. Scott-Davies (Lotus 17). K. R. Bailey (Lotus 7) was third after an all the way dice with K. W. Yeates (Aston Martin DB3S). N. Cussons, driving a Cooper Monaco, took to the grass some three times at Club and, on the fourth occasion, lost the lot!

Events seven and nine for 1172 Formula cars were run together, and provided a great win for J. B. Moore's beautiful little Warwick Mk. 2, which beat J. Corfield's Terrier Mk. 2 by 6 secs. Third came A. R. Wershat's Lolita. In this event Arthur Mallock's U2 seemed to cross swords with the officials. He was black flagged for restarting after



AINTREE C.C.

AUTUMN RACE MEETING

REPORT AND PICTURES
BY FRANCIS PENN



TOP: The start of the 1,700 c.c. sports car race. ABOVE: J. B. Pemberton and R. G. Smith, who put up one of the most exciting "Mini scraps" yet seen at Aintree. Here they seem to be enjoying a stiff beat to windward!

a spin in front of two competitors. I quote: "Car No. 62 spun at Club on lap three and continued, was black flagged on his next lap; he stopped but continued without reference to the clerk of the course, was black flagged on his next lap and retired".

Marque cars next made their appearance. Up to lap four it was J. B. Rodgers (A.C. Ace) from H. E. O'Brien (Elva Courier); then the position was reversed. Third came J. Thurner (T.V.R.). D. Eva enlivened matters with a couple of spins in his M.G.A Twin-Cam at Club on his seventh and last laps, finally crossing the line without his crash hat!

The last race of the day was for Grand Touring cars and it was easily the best of all. A grand scrap went on between the Elites of D. C. Alderson, who led for four laps. B. J. Smallthwaite, who took over and won by 0.4 of a second, and A. D. Bennett, who was always third. These three were out by themselves, finishing some 45 secs. ahead of the field. D. Rees caused some sensation when the gull wing of his Marcos came unstuck and stayed up!

The organization was good in parts, but could have done with quite a bit of

tightening up, particularly with reference to timing. Also the practice of flagging off competitors before they cross the finish line must cease once and for all (this happened at the last meeting too!) as more than a few drivers were not allowed to qualify as finishers.

Results

Sports Cars up to 1,000 c.c.: 1. K. R. Bailey (Lotus 7), 78.89 m.p.h.; 2. F. W. Smith (Lotus 7); 3. N. H. Wilson (Lotus 7). **Fastest lap:** Smith, 80.66 m.p.h. **750 Formula Cars:** 1. B. Small (Austin), 70.35 m.p.h.; 2. D. A. White (Impala); 3. A. Wontner (A.R.W.). **Fastest lap:** Small, 71.30 m.p.h. **Sports Cars up to 1,700 c.c. (Heat 1):** 1. T. Lanfranchi (Elva Mk. 6), 82.76 m.p.h.; 2. H. W. Cooper (Terrier Mk. 2); 3. Miss N. Goodwin (Lotus 7). **Fastest lap:** Lanfranchi, 85.07 m.p.h. **Sports Cars up to 1,700 c.c. (Heat 2):** 1. F. W. Smith (Lotus 7), 78.83 m.p.h.; 2. K. W. Bailey (Lotus 7); 3. P. Phillips (Terrier Mk. 2). **Fastest lap:** Smith, 80 m.p.h. **Saloon Cars:** 1. P. T. Middlehurst (A40), 75.04 m.p.h.; 2. J. Newman (Jaguar); 3. F. Styner (A40). **Fastest lap:** Middlehurst, 77.68 m.p.h. **Unlimited Sports Cars:** 1. P. S. Borthwick (Lola), 82.62 m.p.h.; 2. J. Scott-Davies (Lotus 17); 3. K. R. Bailey (Lotus 7). **Fastest lap:** N. Cussons (Cooper Monaco), 86.06 m.p.h. **1172 Formula:** 1. J. B. Moore (Warwick Mk. 2), 79.04 m.p.h.; 2. J. Corfield (Terrier Mk. 2); 3. A. R. Wershat (Lolita). **Fastest lap:** H. W. Cooper (Terrier Mk. 2), 82.46 m.p.h. **Marque Race:** 1. H. E. O'Brien (Elva Courier), 78.74 m.p.h.; 2. J. B. Rodgers (A.C. Ace); 3. J. Thurner (T.V.R.). **Fastest lap:** D. Eva (M.G.A Twin-Cam), 80.22 m.p.h. **Grand Touring Cars:** 1. B. J. Smallthwaite (Lotus Elite), 82.75 m.p.h.; 2. D. C. Alderson (Lotus Elite); 3. A. D. Bennett (Lotus Elite). **Fastest lap:** Smallthwaite and Alderson, 84.34 m.p.h.

LOCKHEED "ANTI-LOCK" BRAKING

By GREGOR GRANT

PIONEERS of hydraulic brakes, Lockheed of Leamington Spa have perfected an anti-lock braking device, intended to increase safety on the roads, by eliminating skidding due to wheel-locking, especially on wet roads.

Main idea underlying the Lockheed system utilizes a "skid sensing unit". The principle of detecting and anticipating skids by driving a flywheel through some yieldable means from the wheels has been known for many years, but was rather complicated and expensive to install in normal road vehicles. Lockheed engineers, during the past three years, have evolved a simple and extremely accurate system, which will work efficiently on any passenger car.

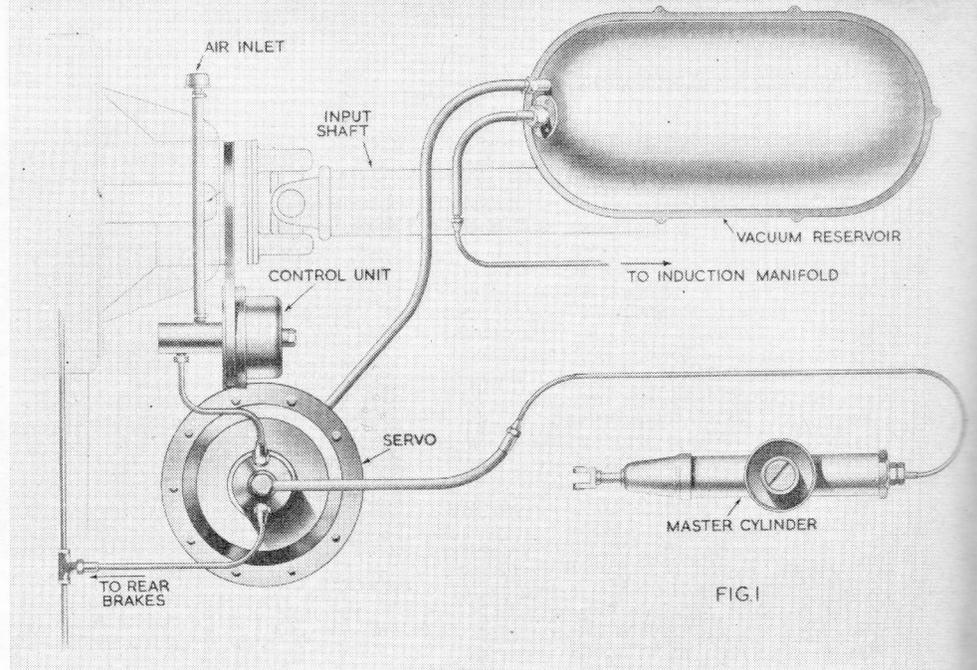
The "skid-senser" comprises a casting with a bearing boss at one end, which contains a simple, normally closed air valve. On this boss is mounted a control unit, containing a flywheel driven by the transmission. The notational drive between the housing and the flywheel is via a cam plate, positively driven from the housing, but possessing axial freedom. This cam plate is spring loaded on to a pair of followers located in a carrier sleeve which is concentric to the flywheel. A clutch between this sleeve and the flywheel completes the drive from the housing to the flywheel.

In normal use, there is a positive drive between housing and flywheel, permitting the latter and the cam plate assembly to revolve as one. Should a rear wheel skid develop, the flywheel will immediately over-run the drive and force the cam followers upwards, displacing the cam axially. This movement allows the reaction valve to open and causes corrective action to be applied to the brakes. Once transmission speed and that of the flywheel become synchronized, the reaction valve will close automatically and the brakes will revert to normal.

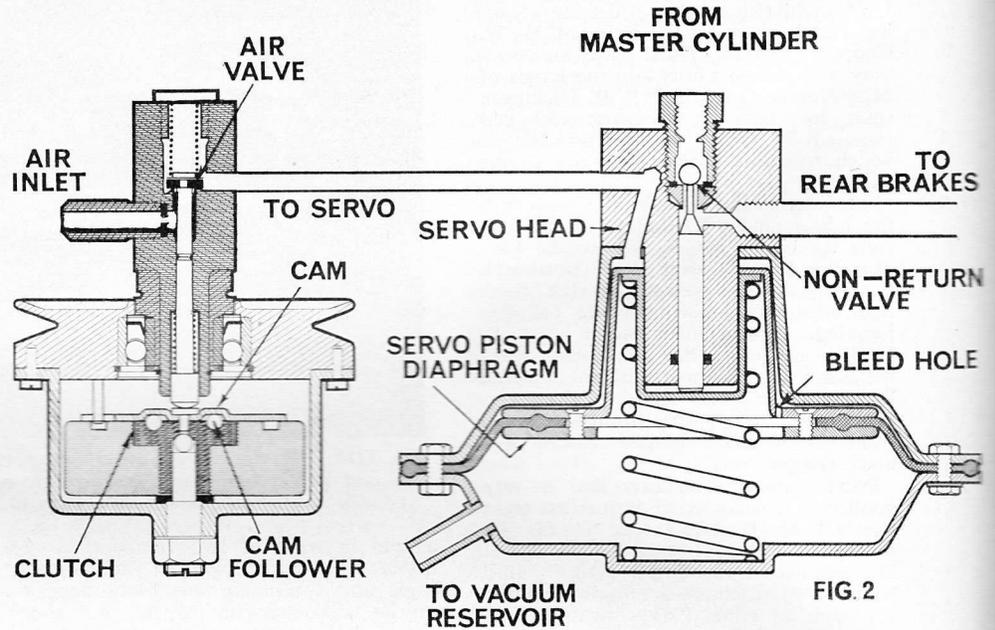
The function of the servo is to isolate the brakes from the master cylinder when the rear wheels begin to lock. This is achieved by increasing the volume of the rear brake system, consequently reducing the hydraulic fluid pressure and so relieving the brakes. The servo unit consists of a casing, containing a piston, through which a small hole is drilled.

In order to prevent the anti-lock system operating during normal braking, a heavy spring is fitted between the servo piston/hydraulic plunger and the non-return valve. Thus, when the brakes are applied normally the non-return valve will not close.

Tests of vehicles fitted with the Lockheed device proved conclusively that with the rear brakes controlled by this system the vehicle will always stop in a straight line on a variety of surfaces—even when the front brakes are deliberately locked. On wet and slippery surfaces reduced braking distance is achieved compared to a four-wheel locked condition.



This illustration (above) shows diagrammatically the layout of the Lockheed Anti-Lock braking system. It will be seen that the piping arrangement is no more complicated than with a conventional power braking system.



When a skid is imminent, the skid sensing valve opens admitting atmospheric air through to the servo which compresses the control spring. This allows a hydraulic plunger to retract thus increasing the volume of the rear brake system and reducing the pressure. The initial plunger movement causes the non-return valve to close thereby isolating the rear brakes from the master cylinder.

This diagrammatic representation (Fig. 3 below) of the sensing unit and servo shows the latter in its normal state in which the servo is vacuum suspended.

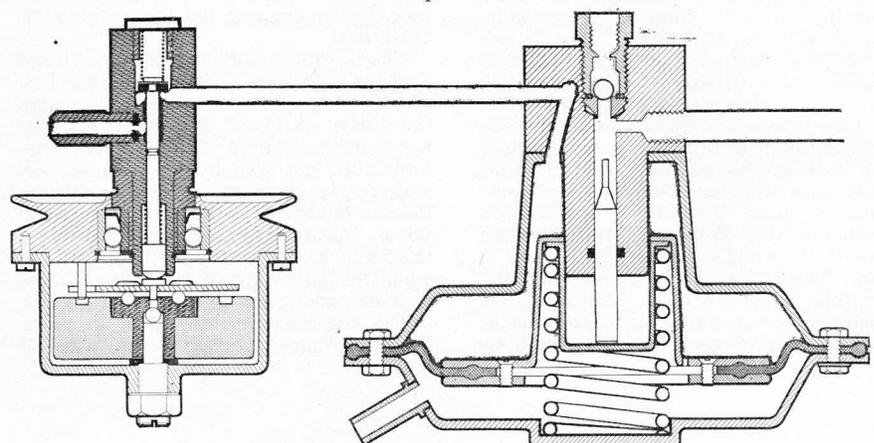


FIG 3

A FIERY ILLUMINATIONS

Pauline Reddy and Horace Beighton Win Tough Event

BY TED ROWLAND

DESPITE the counter attraction of two other Circus Rallies the Morecambe Car Club's Illuminations Rally attracted a high entry, with a strong contingent coming down from Scotland to "have a try" in what was to turn out to be one of the tightest, toughest and possibly roughest events this club has ever promoted. The route was one which made heavy demands on both driver and navigator, and required rather harsh treatment of motors to stay near the time schedule on the many un-surfaced white roads which made up much of the route. All of which goes to show that the winning drive of Miss Pauline Reddy navigated by Horace Beighton (M.G. Midget) was one deserving the highest praise, without sparing the blushes of the male drivers!

Starting from the Midland Hotel, on the promenade at Morecambe amidst the colourful display of "lights", a usual end of the holiday season attraction, this year's Illuminations Rally provoked much favourable interest from the holiday-makers as the cars assembled for scrutineering. Amongst the non-starters were Frank Inglis/G. Youngson (Volvo), two of the valiant Scots, with an unreplaceable U/S generator.

With all the map references for the first half plotted, the first car away was Don Grimshaw's immaculately prepared Healey 3000 followed by Bobby Parkes/Roy Dixon in their almost identical ex-works car. With the co-operation of the police, the first section was an easy run out to Hale Moss, on Map 89, where the work really started, calling for the best performances from driver, navigator and car. Fast short sections followed in quick succession—via Leasgill, Levens Bridge to Tow Top. By now many crews had lost time which the cleverly planned route was not to allow them to regain, as it passed on to Map 88 at Spark Bridge to control 7 at 276837 app. from N.E. Many crews anticipating trouble on the white road loop leading from the yellow road through Woodgate had taken the white roads from Lowick Green through Nettle-slack instead and found plenty in the form of many gates.

On the yellow road to Woodland Station many of the middle numbers were held up by a slow-moving farmer's van, more calamity striking at the Scottish lads when the Sprite of John Eyres/Frew Brydon hit a rock which burst both front and rear near-side tyres. Arthur Senior had a contretemps with a marshal who, after writing industriously for a few minutes, handed back a timing card which was completely blank! John Whitehead/Ian Buckley (Anglia 109) experienced some difficulty in passing some of the slower competitors who had been allocated earlier numbers. Over Dunnerdale more crews lost time. Frank Davies/Ron Hobro (TR3A) were delayed by a badly slipping clutch which eventually forced their retirement.

On Ulpha an unmanned control allowed some time to be made up prior to the tightest section of the night over Hardnott Pass. Prior to the climb over Hardnott some local louts, apparently hiding behind

a wall, seemed to be amused at the sight of cars being damaged as a result of their stupid and criminal act of placing rocks on a particularly twisting and humpy stretch of road near Penny Hill. Amongst the damaged was Arthur Senior's Cooper which suffered from deranged steering for the rest of the night and the Rapier of Bob Lamb/Tony Mason.

The climb up Hardnott to the control at the top, with an allowance of only 3 mins., led to some exciting performances being given, and drivers having to work like stink to stay inside the schedule. Miss Pauline Reddy (M.G.), Ian Robinson (Mini-Cooper) and Doc Edmund (Mini) were amongst the most notable, whilst Don Grimshaw's full-blooded four-wheeled drifts gave the writer one of his most exhilarating rides ever.

An easy run through Ambleside followed the invigorating session over Wrynose Pass, for which 8 mins. were allowed and on through the outskirts of Windermere to Control 18 S.E. of Staveley; then followed another frantic series to the half-way halt near Kirkby Lonsdale, prior to which a control at Haygarth caused headaches for many crews, as the new section of white road through to Hollins is not shown on the map.

After an hour's halt for refuel the second half proved to be in many ways harder than the first, and indeed was considerably rougher. The white roads through 89/

525808 and 507805 cost many a battered sump, scratched wing and broken shock absorbers. Is this sort of thing really necessary?

The final stages revealed many changes in the leading positions. Arthur Senior/Mike Kempley (Cooper-Mini) also had petrol pump troubles to contend with and Dave Black/Ross Finley (Gordini) had dynamo troubles, whilst Len Holt/Geoff Hutchinson (Mini) were forced to retire due to the old "Navigator Sickness".

The road section proper finished back at the Petrol halt, Kirkby Lonsdale, and following breakfast at Carnforth the results were quickly announced in the Midland Hotel back at Morecambe, which showed that the clerk of the course David James together with secretaries Messrs. Best and Derbyshire had produced what will probably prove to be the toughest B.T.R.D.A. Silver Star Championship Event of the year.

Results

1, Miss L. P. Reddy/H. Beighton (M.G. Midget), 6 m. lost.; 2, I. Robinson/R. Heaton (Mini-Cooper), 7 m.; 3, K. Watkinson/M. Rogers (M.G.A.), 7, m.; 4, G. H. F. Parkes/R. Dixon (Healey 3000), 14 m.; 5, A. Senior/M. Kempley (Austin-Cooper), 23 m.; 6, H. W. L. Sharpe/D. Varty (Anglia), 25 m.; 7, R. H. Lamb/A. C. Mason (Rapier), 1 fail/12 m.; 8, M. Baines/R. Stephenson (Zephyr), 1 fail/48 m.; 9, M. Harris/A. Leach (VW), 1 fail/60 m.; 10, A. F. Rogers/I. Willcox (M.G.A.), 2 fails/29 m. **Novice Award:** M. Harris/A. Leach (VW). **Club Team Award:** Morcambe Car Club. **Individual Teams:** G. H. F. Pares/A. Senior.



THE WINNING CREW (above): Miss Pauline Reddy and Horace Beighton at the finish, showing little sign of the hard night's drive.

IS THIS ONE A "GOER"? (below): Ted Rowland plotting hard prior to the start from Morecambe.



Club News

By MICHAEL DURNIN

THE winner of the International R.A.C. Rally is to be invited to participate in the 11th East African Safari, which is due to be run over approximately 3,000 miles of roads throughout Kenya, Uganda and Tanganyika from 11th-15th April, 1963. This has been arranged by the Safari organizers in conjunction with the *Daily Nation* who are paying the entry fee. The organizers will fly the winner of the R.A.C. Rally out to East Africa by the East African Airways Corporation and the hotel accommodation will be provided by Block Hotels, Ltd.

This award, which is worth well over £400, is likely to be much sought after by the drivers in the R.A.C. Rally, which is to be held from 12th-15th November, and once the winner is known it is hoped that it will be possible to arrange for him to have a car as well, although this is not certain at this stage.

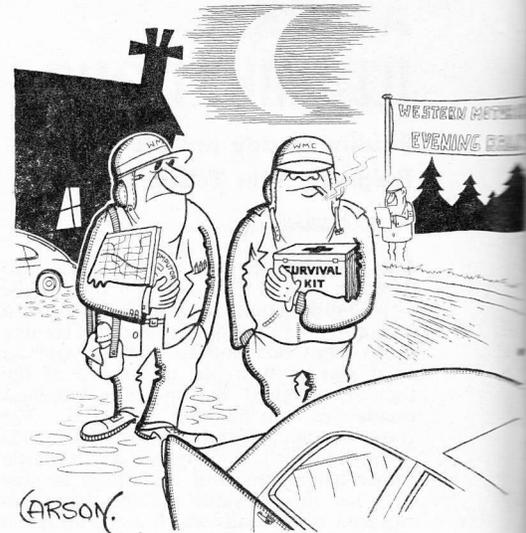
Two thousand pounds has been given by Esso Standard (E.A.), Ltd., to the Safari. Of this £1,000 will be used to boost the prize money, which will be distributed to winners using Esso products. The other £1,000 is a contribution by Esso Standard (E.A.), Ltd., towards the cost of running the event.

The Esso Can of Gold Challenge Trophy, which carries a £300 cash prize, will go to the outright winner. This will be in addition to the £250 for the Champion Spark Plug Trophy together with the £100 which the outright winner receives if he was using Champion spark plugs. The outright winner will not be eligible for an Esso class prize.

This prize brings the outright winner's total prize money to £650 and the total cash prize money for the event to £3,000. . . . The Midlands Centre of the **Seven-Fifty M.C.** will again be holding their successful Motorist Fair in Birmingham between 18th-26th January. . . . The N.E. Centre of the **M.G.C.C.** are running a restricted driving test meeting on 30th September on the Marston Moor Airfield, near York. The event is open to all clubs in the Northern Association and qualifies for the Flather Star. Regs. from A. J. Sinclair, 14 Axholme Road, Doncaster, Yorks, and entries close on 27th September. . . . The **B.A.R.C.** are holding closed race meetings at Oulton Park on 29th September and Goodwood on 6th October. Events for *Formule Libre* cars will be staged.

. . . The **Lancs and Cheshire C.C.** are to hold a standard car trial on 23rd September, starting at the Rose and Crown Hotel, Allgreave, near Macclesfield, Cheshire. The event is open to members of the B.T.R.D.A., Shenstone and D.C.C., Hagley and D.L.C.C., Knowldale C.C., Y.S.C.C., North Wales C.C., Cavendish C.C., Mid-Cheshire M.C., Liverpool M.C. and S.U.N.B.A.C. and entries can be sent to Brian S. Harrison, 77 Parsonage Road, Heaton Moor, Stockport, Lancs. . . . The N.W. Centre of **B.A.R.C.** are holding an Autumn Sprint on the Aintree club circuit on 6th October. Clubs invited are Aintree Circuit C., B.R.S.C.C. (N.W.), Chester M.C., Hagley and D.L.C.C., Knowldale C.C., Liverpool M.C., Lancs A.C., North Midland C.C., M.G.C.C. and North Staffs M.C. Regs. from J. A. Fisher, 10 Hollytree Road, Wootton, Liverpool. . . . The **Forces M.C.** have their Cotswold-Continental Rally on 3rd-4th November and it is a B.T.R.D.A. Silver Star championship event. It starts in northern Gloucester and the route will be approximately 300 miles long. Invited clubs are B.T.R.D.A., B.A.R.C., London M.C., Hants and Berks M.C., Steel Co. of South Wales A.C. A.W.R.E.M.C., West Essex M.C., Herefordshire M.C., South Wales A.C. and Southsea M.C. Full details may be obtained from the secretary of the event, John Raper, 1 Pond Head Lane, Earley, Reading, Berks. . . . The **Maidstone**

and **Mid-Kent M.C.** and the **Rochester, Chatham and D.M.C.** hold their Seventh Windows Rally on 29th September, a short night handicap navigation rally. . . . The **London M.C.** are to run their third London Slalom, a closed event, on part of the Finmere Circuit on 7th October. There are classes for standard saloons, modified saloons, series production sports cars/G.T. cars and specials, but if owners of Appendix C sports cars or Formula Junior cars wish to enter, classes will be found for them! This high-speed "wobble-wobble" should be fun! . . . The **Shenstone and D.C.C.** Buxton Trophy Rally is to be held on 13th October. It counts towards the B.T.R.D.A. Silver Star championship and is open to members of member clubs of the Midland Association of Motor Clubs whose secretaries have accepted the invitation and entrants in the B.T.R.D.A. championship. Regs. from M. F. Finmore, 3 High Street, Sutton Coldfield, Warwickshire. . . . The **Soar Valley M.C., Leicestershire C.C. and Mallory Park S.C.C.** are holding their closed First Autumn Rally on 22nd-23rd September. . . . The **B.R.S.C.C.** are to hold a closed hill-climb at Wiscombe Park on 23rd September. Secretary of the meeting is D. G. Thompson, 30 Hunters Drive, Kingswood, Bristol, to whom all entries should be sent. . . . **S.U.N.B.A.C.** hold their Vesey Cup Production Car Trial on 7th October. Open to members of North Staffs M.C., Shenstone and D.C.C., Hagley and D.L.C.C., M.G.C.C. (Midland), Dudley M.C., 432 M.C., Leicestershire C.C., Midlands M.E.C. and Lancs and Cheshire C.C., it starts at Prestbury, Gloucestershire, at 11 a.m. Regs. from J. D. Woodhouse, 106 Jockey Road,



Sutton Coldfield, Warwickshire. . . . The Midwinter Rally, co-promoted by the **North Staffs M.C., Mid-Cheshire M.C.** and the **English Electric M.C.**, is to be held on 6th October. . . . A veritable mass of motor clubs have been invited to take part in the **Advertising M.C. Adman Rally** on

(Continued on page 368)

Coming Attractions

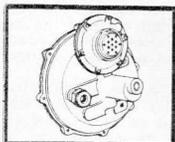
15th September. Peterborough M.C. Race Meeting, Silverstone, near Towcester, Northants. Starts 1 p.m.
Lancs and Cheshire C.C. Race Meeting, Oulton Park, near Tarporley, Cheshire.
Brighton and Hove M.C. National Speed Trials, Sea Front, Brighton, Sussex. Starts 9.15 a.m.
S.U.N.B.A.C. Hill-Climb, Razley Park, near Alcester, Warwickshire. Starts 2 p.m.
Seven-Fifty M.C. Sprint, Wellesbourne, near Stratford-on-Avon, Warwickshire. Starts 12 noon.
Chelmsford M.C., Romford E.C.C. and West Essex C.C. Driving Tests, North Weald Aerodrome, Essex.
15th-16th September. "Double 400" Meeting, Bridgehampton, New York, U.S.A. (G.T. Classes 1, 2 and 3).
Rhayader M.C. Sycamore Rally, Starts Smithfield, Rhayader, Mid-Wales, at 11 p.m.
Godiva C.C. Fifth Godiva Trophy Rally, Starts Coventry and Bolton at 7.30 p.m.
Rochester, Chatham and D.C.C. September Rally, Starts Winsor Garage, West Malling, Kent, 8.30 p.m.
Shell (Stanlow) and Chester M.C. Shell Rally, Starts Gateway Service Station, Ewtloe, North Wales (M.R. 109/296667), at 10.30 p.m.
Mascot M.S.C. Rally, Starts Phoenix Motors, Epsom, Surrey, at 8.30 p.m.
Halifax M.C. West Riding Rally.
15th-23rd September. Tour de France.
16th September. Italian Grand Prix, Monza (F1, F.J.).
Bentley D.C. Hill-Climb, Firlie, near Lewes, Sussex. Starts 2 p.m.
Knowldale C.C. Hill-Climb, Baileys Dam, near Kirkby Lonsdale, Westmorland. Starts 2 p.m.
B.A.R.C. (Yorks) Hill-Climb, Stockton Farm, Harewood, nr. Leeds, Yorks. Starts 2 p.m.
Sevenoaks and D.M.C. Sprint, Brands Hatch, near Farningham, Kent.
Swansea M.C. Sprint, Pembrey Airfield, Llanelly, Carmarthenshire.
Yeovil C.C., West Hants and Dorset C.C., Taunton M.C. and Burnham-on-Sea M.C. Sprint, Yeovilton, Bridgehampton, near Ilchester, Somerset (M.R. 177/565239). Starts 1.30 p.m.
Caernarvonshire and Anglesey M.C., North Wales C.C. and South Caernarvon M.C. Driving Tests, Mona Airfield.
Mini-Seven Club Driving Tests, U.S.A.F. Denham, Bucks. Starts 10 a.m.
Southsea M.C. President's Trophy Trial, Deers Hut, Longmore, Liphook, Hants. Starts 10.30 a.m.
West Lancs M.C. Autocross, Spout House Farm, near Ormskirk, Lancs. Starts 2 p.m.

Allard O.C. Concours d'Elegance, Biscot Mill Hotel, Luton, Beds. Starts 4 p.m.
21st-22nd September. London M.C. London Rally, Starts London, Manchester, Bristol and Birmingham during afternoon.
22nd September. B.A.R.C. Race Meeting, Goodwood, near Chichester, Sussex. Starts 2 p.m.
Seven-Fifty M.C. Race Meeting, Debden, near Saffron Walden, Essex. Starts 1 p.m.
Bristol M.C. and L.C.C. National Dyrrham Park Hill-Climb, near Bath, Somerset. Starts 1 p.m.
B.A.R.C. (N.W.), Aintree Circuit C. and Bolton-le-Moors C.C. Autocross, Aintree, near Liverpool, Lancs. Starts 2 p.m.
22nd-23rd September. 432 M.C. Evening Despatch Headlight Rally, Starts Smithfield Garage, Birmingham, at 9 p.m.
Windsor C.C. and Seven-Fifty M.C. Ninth Windsor/750 Night Rally, Starts Merry Meeting Cottage, Pinkneys Green, Maidenhead, Berks.
Hunting A.C. Hunters Moon Rally.
Glossop and D.C.C. Burgess Bowl Rally.
29th September. Snetterton M.R.C. "Autosport" Race Meeting, Charterhall, near Berwick-on-Tweed, near Greenlaw, Berwickshire.
B.A.R.C. Drag Sprint, Church Fenton, near Tadcaster, Yorks. Starts 2 p.m.
Mid-Cheshire M.C. and B.R.S.C.C. Sprint, R.A.F. Wilmslow, Cheshire.
B.R.S.C.C. Hill-Climb, Wiscombe Park, near Honiton, Devon. Starts 12 noon.
South Wales A.C. Hill-Climb, Castel Farm, Llangynwydd, near Bridgend, Glamorgan. Starts 2.30 p.m.
Austin-Healey C. Sprint, Church Lawford, near Rugby, Warwickshire.
Morris Commercial Apprentices M.C. Autocross.
Southport M.C., West Lancs M.C., Wigan and St. Helens M.C. Autocross, Legh House Farm, Mere Brow, near Southport, Lancs (M.R. 100/413189). Starts 2 p.m.
Haslemere M.C. Merrydown Rally.
26th-30th September. German Rally.
29th September. Snetterton M.R.C. "Autosport" Three Hours Race Meeting, Snetterton, near Thetford, Norfolk. Starts 2.30 p.m.
29th-30th September. Laguna Seca, U.S.A. (S., F.J.).
6th October. B.R.S.C.C. International Six Hours Touring Car Race, Brands Hatch, near Farningham, Kent. Starts 12 noon.
7th October. American Grand Prix, Watkins Glen (F1).
Coupes du Salon, Monthléry, France (F.J., S., G.T., T.).
7th-21st October. Argentine Touring Car Road Races.
14th October. Riverside Grand Prix, U.S.A. (S., F.J.).

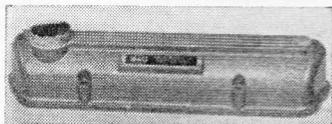
LAST-MOMENT BRAKING AT RALLY SPEEDS CALLS FOR MOT-A-VAC POWER BRAKES

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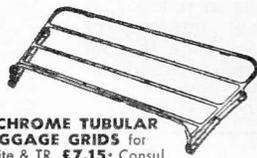


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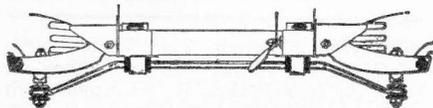
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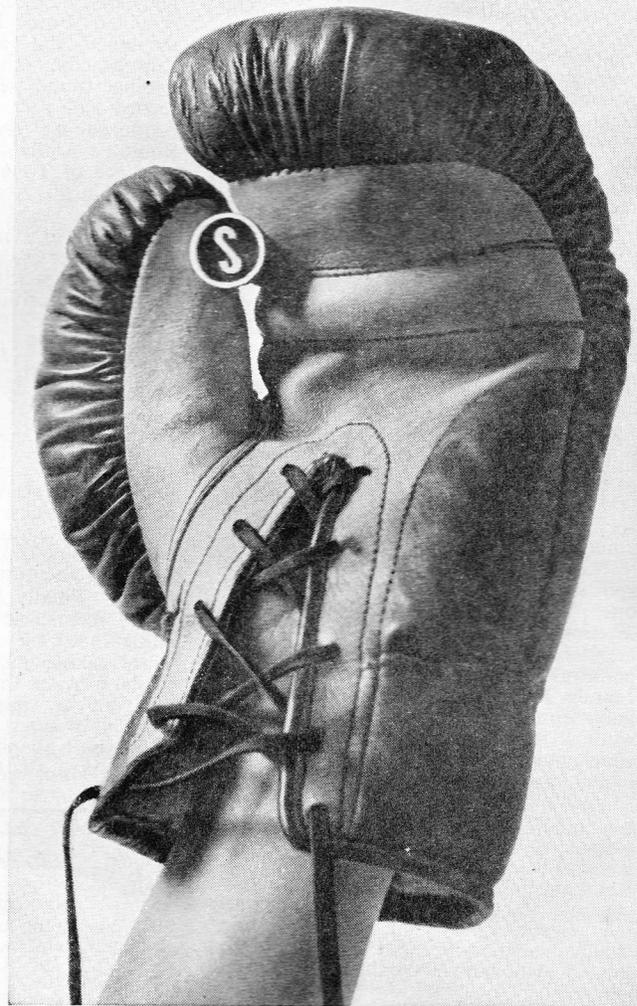
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B.A.R.C. (WEST MIDLANDS)

AUTUMN SPRINT

THE final B.A.R.C. (West Midlands Centre) sprint of 1962 was run off at Wellesbourne Mountford recently in almost ideal weather conditions. A slightly smaller entry than usual was further depleted by non-starters, but some 50 competitors attempted the one-mile-plus course, over which B.T.D. was eventually to go to the Speed Sport Lotus Seven-Climax of Paul Ivey which, with a determined run in 47.1 secs., was unapproached in the small sports-racing class, proving yet again the point of the advocates of the proposed up to 1-litre class for sprints and hill-climbs next year. "Tiger" Tim Cash found, not for the first time, that the clutch of his Mk 2 Terrier is not up to the job of coping with the power available from his Ford engine, but he was nonetheless able to get down to 49.2 secs. This time was equalled by Dennis Firkins, with his Lotus Seven-B.M.C., who indulged on his first run in a spin of phenomenal proportions at the chicane, an activity which cost him the class, since the award was made to Cash, in view of the tie, on the basis of the best aggregate time. Ray Terry's Lotus Seven-Ford, despite coming to a halt on its first run with throttle linkage trouble which was to persist throughout the afternoon, offered a serious challenge with a run in 49.3 secs., which was quite fast enough to annex third place.

The amalgamated class for large sports-racing cars amply demonstrated one of the outstanding features of this meeting, this being the enthusiastic manner in which the various lady competitors went about their attempts. Mrs. Joanne Richardson, with a remarkably hairy on-the-limit run in Geoff Richardson's R.R.A.-Jaguar, clocked 53.1 secs., which not only assured her of the ladies' award but also took the class from Ruskell's XK 120, which was unable to better 53.2 secs. The racing cars were something of a disappointment, with Frank Ward's immaculate new F.J. Brabham-Ford doing a comparatively leisurely 49.2 secs. on its first ever competitive excursion to win the class, while Randy Vaughan brought his Elton into second place with a creditable 50.9 secs. unopposed.

The class for small sports and G.T. cars was sub-divided and the F.W.D. sub-class provided one of the major surprises of the day when John Wales's astonishing 850 c.c. Group 3 Mini-Minor,

with 53.1 secs., proved to be consistently faster than Nick Porter's Downton Mini-Cooper, which was unable to improve on 53.7 secs. for second place. Mrs. Cynthia Stephens with her Austin-Cooper kept the flag flying for the ladies, while in the corresponding class for R.W.D. cars G. Day sent the marker drums flying into the air with his Sprite at the chicane before going out for a second time to return 54.4 secs., taking the class from Alec Poole's similar machine, which got down to 55.6 secs. and was closely challenged by S. L. Courts's rorty and much-modified Ford Escort, this latter car assuming the most alarming angles through the hairpin, but nevertheless getting round very quickly indeed to record 55.7 secs. The next larger class produced no real opposition to Paul Pimlott's Alpine, with 54.2 secs., and the presence of Tony Yorke-Brooks and his M.G.A. in the 2-litre class promised some excitement; sure enough, this combination, not without a certain amount of dramatic grass-cutting at the chicane, took the class with 50.3 secs. in the face of stern opposition from Mike Warner's Austin-Healey 100, which took second place with 50.7 secs. and was subsequently piloted round in a rather more sedate manner by Mrs. Jennifer Warner.

Rob Ordway, with his Jim Whitehouse-tuned Group 2 Arden Mini-Minor, took to the grass on his first run but recorded 56.7 secs. to win the small touring car class with ease, while the next larger class saw another tie, with both Tom Keegan's ex-works Rapier and Bill Clifton's similar machine doing 56.4 secs., Keegan eventually taking the award. Finally in this group came the heavy metal and some of the most exciting motoring of the day, with Frank Ward taking his scarlet 3.8 Jaguar on to the grass at the chicane to return 52.8 secs. in a vigorous but unsuccessful attempt to wrest the class from the 3.8 of Herbert Shepherd, which covered the course in a shattering 50.5 secs.

HOWARD BILEY.

Club News—continued

6th-7th October—you must be a member of at least one of them! Regs. from Miss Linda Nash, 92 Brompton Road, London, S.W.3. The A.C.S.M.C. Championship qualifying event has a 120-mile route, divided into several sections, starting near Guildford. . . . The Knowldale C.C. have their Mini-Miglia Rally on 20th-21st October. It is a qualifying event for both the B.T.R.D.A. Silver Star and *Motoring News* Championships and the following clubs are invited: Fylde M.S.G., Bolton-le-Moors C.C., B.T.R.D.A., Lancs A.C., Lancs and Cheshire C.C., Cavendish C.C., London

M.C., North Staffs M.C. and Y.S.C.C. The 200-mile event starts near Chester and regs. are available from M. Sutcliffe, Birchcliffe Mills, Royton, Lancs. . . . Finally, we quote a letter recently received from the Yorkshire Centre of the B.A.R.C. It seems that it is too late to give details of the mentioned events!

It has been mentioned recently that there is an upsurge of interest in sprints and hill-climbs and, as an example, I would quote three coming events to be promoted by the B.A.R.C. Yorkshire Centre.

Quite recently we sent you copies of the regulations for these events—a closed hill-climb at Harewood, near Leeds, on 16th September, a restricted "Drag Sprint" at Church Fenton R.A.F. Station near Tadcaster, Yorkshire, on 23rd September, and a jointly promoted hill-climb with the East Yorks Car Club and the Jaguar Drivers' Club at Oliver's Mount, Scarborough, on 14th October.

Regulations for these events were posted to our members and to Invited Clubs in the case of the "Drag Sprint" on Friday, 31st August, and entries opened on Monday morning, 3rd September. By the morning of Friday, 7th September, a total of 223 entries for the three events had been received.

The Harewood hill-climb was over-subscribed by Wednesday, 5th September, and we have to obtain permission from the R.A.C. to increase the permit limit from 75 competitors up to 100 to get most of the potent machinery in.

The "Drag Sprint", which will be held at Church Fenton R.A.F. Station on Sunday, 23rd September, will be of particular interest as it is the next, and I believe final, round of the AUTOSPORT National Sprint Trophy, 1962. Already we have had 62 entries with another 10 days to go before entries close so it would be fairly safe to forecast over 100 entries for this event. Sydney Allard is bringing the Allard Dragster along whilst Reg Phillips has entered a "Fairley Creepster" which, on enquiry, proves to be the well-known hill-climb car geared to 440 yard sprints.

As an added attraction, so long as insurance details can be cleared, George Brown will be bringing along his world record attempt motor cycle and doing a couple of demonstration runs. The event starts at 2 p.m. and admission is free with a 5s. car park charge.

The final event of the three is our second hill-climb on Oliver's Mount. This attracted a 120 entry last year and already is up to 79. Last year we had over 200 applications for entries and it would seem that this number will well be exceeded.

Finally, to go back to the event to be held on Sunday, 16th September: this is the first meeting on a brand new course at Stockton Farm, near Harewood, eight miles north of Leeds. This hill is 1,200 yards long, has seven assorted corners and rises some 250 feet. It is situated on the edge of Wharfedale in beautiful scenery and offers almost unrivalled views for spectators. For this initial meeting the farm road is in its bare state, i.e., we have only temporary facilities provided, but if, as we are sure, the event proves a success, we hope to develop this venue up to Championship standard very quickly. Recently Reg Phillips came along to look it over and expressed a view that it was a combination of all the best features of Shelsley, Prescott and Wiscombe.

M. S. WILSON,
Chairman, Yorkshire Centre, B.A.R.C.

SCOTTISH rallyman, Tom Paton, well-known to many rallymen from all over the British Isles, is in hospital with rib injuries after a road accident (not on a rally). He would be glad, no doubt, to receive letters from any of the boys. Tom's home address is 96 Hill Street, Kilmarnock.

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TVR

THE Pathfinder Rally, recently run by the Lowland Centre of the Riley M.C., was a disappointing affair. Thirty minutes before the "off" competitors were given all details of the 35 controls, and from time to time during the event supplementary route-cards were issued. These used only M.R.s, ball and arrow, spot heights and farm names, but too many of the instructions concerned were ambiguous, and the official route was in some cases very dubious. In addition, although "shortest route" was the rule throughout the night, there were far too many sections where the organizers' opinions about this differed seriously from the competitors'.

From the start at McIntyre's Garage, Mearnskir, at the sensible time of 11.30 p.m. there was a very simple first section containing one M.R. and one spot height. This took cars round the excellent white roads at Hazelden House and up the main Kilmarnock road to a control behind the Malleisheugh Inn. Only 11 crews managed this clean in the nine minutes allowed and many missed the route check, showing that straightforward instructions are all that is needed on a good route.

Ambiguity reared its head on Section 2, when a section over the winding roads of the Balgray reservoir and Walton dam found competitors told to visit points A, B and C in that order. The only way to do this was in the order ACBAC. This correct route was certainly fairly obvious, but the instructions did not inspire confidence in the navigators.

Nigel Kennedy reacted differently, succumbing to "mal d'auto" in David Black's Gordini, and Sherwood Skelly/Ross Finlay, after being one of the nine crews to do this section the right way round, found the Zodiac repeating its Polish Rally trick of swallowing brake pads whole, and were forced to give up.

The first shortest route which the organizers had failed to consider came up at 415609. This is a private road, but there is nothing to indicate the fact. Crews who correctly took this road missed a check at the Red House, which had to be scrubbed.

There was more trouble at Burntshields, where there was a double check. Competitors who took the *shortest* shortest route were given wrong directions. A protest was lodged at the finish, which came from a competitor who was unpenalized at Burntshields but had made a navigation mistake later in the section and was interested in having the whole section cancelled.

RILEY M.C.

PATHFINDER RALLY

A Win for F. Inglis/

A. Stubbs (Volvo)

After more examples of shortest routes which had escaped the organizers' notice came the first special stage, at West Dougliehill in the hills above Port Glasgow. Average speed was naturally 50 m.p.h., but the surface east of the farm had improved since the last rally here. Even so, and despite the fact that the first half is on tarmac, the fastest man, Tom Paton in his Cooper, was 49 secs. late. Brian Coyle and Alan Winton, also in Coopers, lost 57, and Frank Inglis (B18 Volvo) and Andy Watson (Mini) were next in 62. The length of this private road is only 1½ miles; so it is obviously pretty tight.

Frank Inglis/Arthur Stubbs were leading the field by this time with no fails and eight minutes lost. The failed section principle should not have been applied on this event, because many of the sections had more than one route check.

At the half-way halt at Struthers' Garage at Lochwinnoch the Volvo was still leading with no fails and 142 penalties, with Tom Paton/Jim Bryden second with one fail and 69 penalties. Ken McIver/Alec Gentles had their VW in third place with one fail and 224, a good performance by non-locals. Nobody else had fewer than two fails, and 28 cars were still running out of the 33 starters.

There were few, if any, complaints about the second half, which began with a simple ball and arrow leading into sheet 60's classic rally country, the Rowbank. Sections of 2, 2, 2, 3 and 2 mins. penalized all but Paton, Winton, McIver, Ian Morrison/Andy Munn (M.G.A) and Fred Hibberd/Tony Wills (Cooper). Tom

and Mary Currie, running-in a new Elf, dropped one minute.

Paul Roxburgh/Colin Milligan took their Citroën into a ditch while trying to turn around in a wrong slot, and the brothers Syer heaved their Super-Mini out of its ditch with such vigour that it careered off downhill on its own and almost plastered itself into a stone dyke.

A new, long and hairy white road was used at Merryhagan, where Tom Paton caught up with and passed the course car, and there were other discoveries at Wardhead and 390489. Next came the special stage at Carswell of a similar distance to the first, and with the first part once again tarmac, followed by a looser surface. There are two farmyards, many blind humps, and a few drops on the outsides of corners.

Ian Morrison made up for overshooting a bend at Dougiehill by making best time, 41 secs. late, Winton was 44, Hibberd 45 and Coyle 47.

The remaining sections to the finish at East Kilbride produced no significant changes in the results. Frank Inglis and Arthur Stubbs were provisionally named winners, but the protest already mentioned has still to be settled. This will also delay the pronouncement of the results of the Scottish Rally Championship, for which this was the final event. If the Pathfinder results stay as they are, Frank will be the new champion, with second-place man in the Pathfinder, Tom Paton, second once again. If the protest is upheld, the positions will be reversed.

Although the rally was not very good, it had a really testing route with many roads never before used or even noticed by the regulars. This, using only the much-rallied sheet 60, was quite an achievement by the clerk of the course, Charlie Kerr.

Unfortunately, the vagueness of many of the instructions in the first half and the "shortest route" errors made a mockery of what could have been the rally of the year north of the Border.

Many of the regular competitors, who are becoming fed-up with Scottish rallying as it is conducted at the moment, feel that it was perhaps a fitting end to a poor Scottish championship season.

ROSS FINLAY.

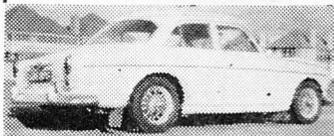
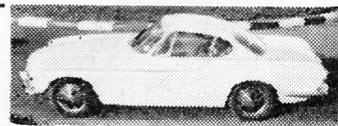
Provisional Results

Premier Award: F. Inglis/A. Stubbs (Volvo), 0 fails, 439. Class Awards: T. W. Currie/Mrs. M. Currie (Riley Eld), 2, 398; K. McIver/A. Gentles (VW), 1, 389; J. Gentles/D. S. Chisholm (Wolseley), 3, 412; T. Paton/J. Bryden (Morris-Cooper), 1, 124. Novice Award: J. Brown/T. Buchanan (Herald), 7, 336.

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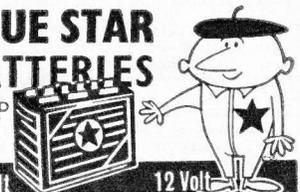
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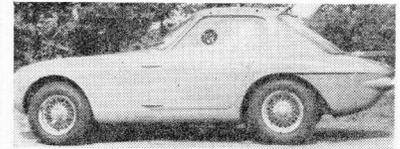
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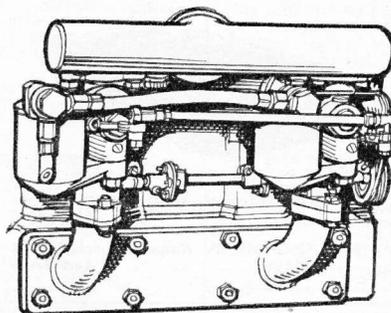
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Regulations for the competition were published in April 13 issue (page 513)

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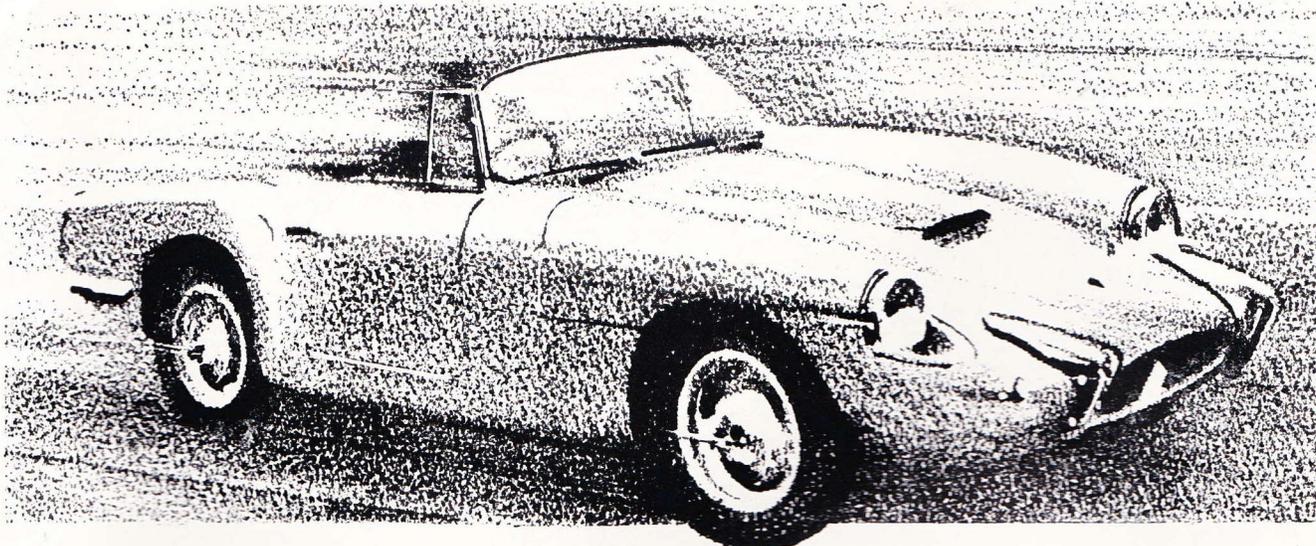
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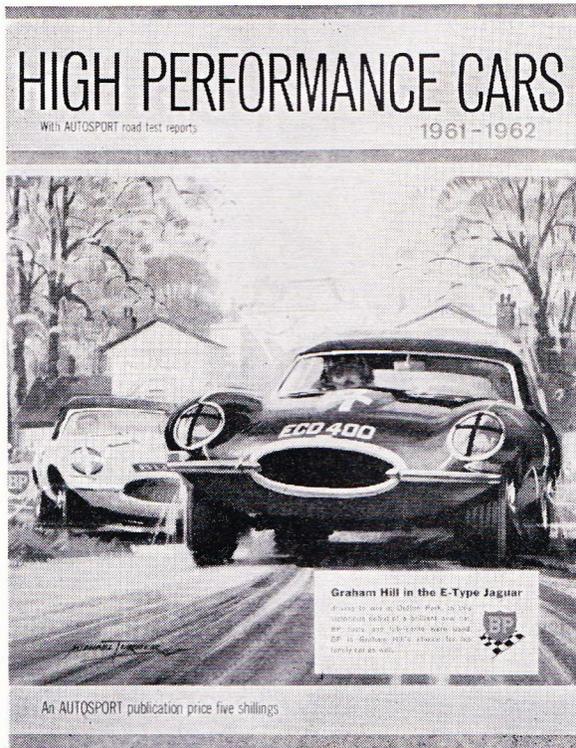
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