

Palliser boss Hugh Dibley extols the virtues of the smart WDB2 to the Editor.

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THE PALLISER WDB2:

Driving a Formula Atlantic

By SIMON TAYLOR

Photography by PETER BURN

As far as single-seater racing goes, 1971 looks like being the 1600 cc year. Already we have Formula 2 and Formula Ford with this engine capacity, although at opposite ends of the power and expense scales; next season these will be joined by the new Formula 3, and in this country by the latest class from John Webb's fertile brain, Formula Atlantic.

Shortly after Formula 5000 was announced two years ago I track-tested an early adaptation for that class, Robs Lamplough's Lotus 43. When Hugh Dibley, boss of Palliser Racing Design, offered me a ride in his works development Formula B car it instantly appealed as, although it lacked the last 25 bhp or so that the BDA-powered Atlantics will enjoy, it was in every other respect similar to what Atlantics will be like next season.

The car I tried, the Palliser-BRM WDB2, is the product of a London single-seater manu-

facturer which has only recently started to come into prominence in this country, but in the USA it has been a popular *marque* for some time, and in fact something like 100 Pallisers have been sold on the other side of the Atlantic. Over there they are retailed by Bob Winkelmann (brother of Roy, the famed Formula 2 entrant) and are known as Winkelmann-Pallisers; most have been Formula Fords, but there have also been several Formula B chassis.

Palliser is Hugh Dibley's middle name: he is seen less around the circuits these days and is more often up in the air following his other profession as a BOAC airline pilot, but he used to be a very quick man, first in Lola Formula Juniors, then in a Brabham BT8 sports car entered by Stirling Moss, and later in a Lola T70. Back in his Formula Junior days Hugh got to know Len Wimhurst, who was then working with Lolas and later

became works foreman at Brabham. The first Palliser was a one-off semi-monocoque built for Hugh in Len's back garden, about two years ago Palliser Racing Developments got properly under way in part of the fascinating yard in North Street, Clapham, which also houses Davrian, Gropa, Norman Burt Ray, Jag saloon racer Albert Powell and until recently Gerry Birrell, and his tyre business. These days the Palliser workshop is a hive of activity producing Fords, Formula Bs, the occasional Formula A, a new car for Formula Supervee (which is expected to get under way in this country next season, and is already gaining popularity in the States) and even a monocoque Formula 5000, while a 2-litre sports car is on the way. At the busiest time of the year production is something like five cars a week.

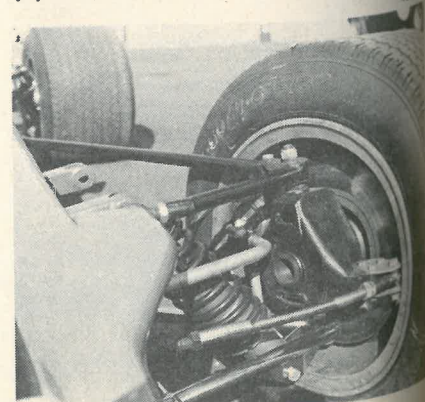
Current Palliser single-seaters, apart from the F5000 and the Supervee, which has to use some VW parts to comply with the regulations, are basically the same: a neat, sturdy space frame of 16 and 18 gauge round and square steel tubing, with front and rear suspension following current racing practice in using top and bottom wishbones at the front and a single top link and reversed lower wishbone at the rear with radius rods. Again following current fashion, recently the front top wishbones on the works development cars has been replaced by a much more widely based link whose rear arm is steeply angled back towards the cockpit, but the geometry remains unchanged and the mod has made no measurable difference.

A large number of parts often bought out by other manufacturers are made by or exclusively for Pallisers, like the magnesium uprights, the smart wheels which are also sold to other manufacturers like Daren, and components like driveshafts, suspension links, oil pumps and even steering racks. The chassis, like that of so many other British single-seaters, is made for Palliser by Art Motors, and the smart and distinctive glass-fibre body, with its downward-curving nose and ducted air intake, is the work of Stevens Moulding Developments.

The Formula B works development car has had a couple of successful club outings in Dibley's hands in this country recently, and last weekend it was busy in an FB event at Sebring. It looks very smart in orange with black nose fins and rear wings, which it was wearing at the time of my test following a race at Lydden Hill, when Hugh won and equalled the outright circuit record. Palliser have been working closely with BRM with their Formula Ford cars, which have been having a lot of success this year in the hands of Peter Lamplough, Bob Evans and Vern Schuppan, and it therefore comes as no surprise that the works B car is fitted with a BRM-built Ford twin-cam unit, interestingly using Dell'Orto carburettors rather than the customary Webers. This engine shows a solid 174 bhp on the brake and, though I was asked to observe a rev-limit of 8100 rpm during my trial, it can be taken quite a bit higher.

The gearbox now fitted is the FT200, the compact five-speeder that Hewland developed for the current Formula 2; a lot of Formula B-type twin-cam cars use the less sophisticated Hewland Mk 8, but with the sort of outputs now being gained from these engines

Magnesium front upright and redundant pick-up point from earlier short top wishbone.



the Mk 8 is apparently a bit marginal. Tyres when I drove the car were Dunlop 342s, 4.50/11.60 fronts on 9 ins rims and 5.50/13.60 rears on 12 ins rims.

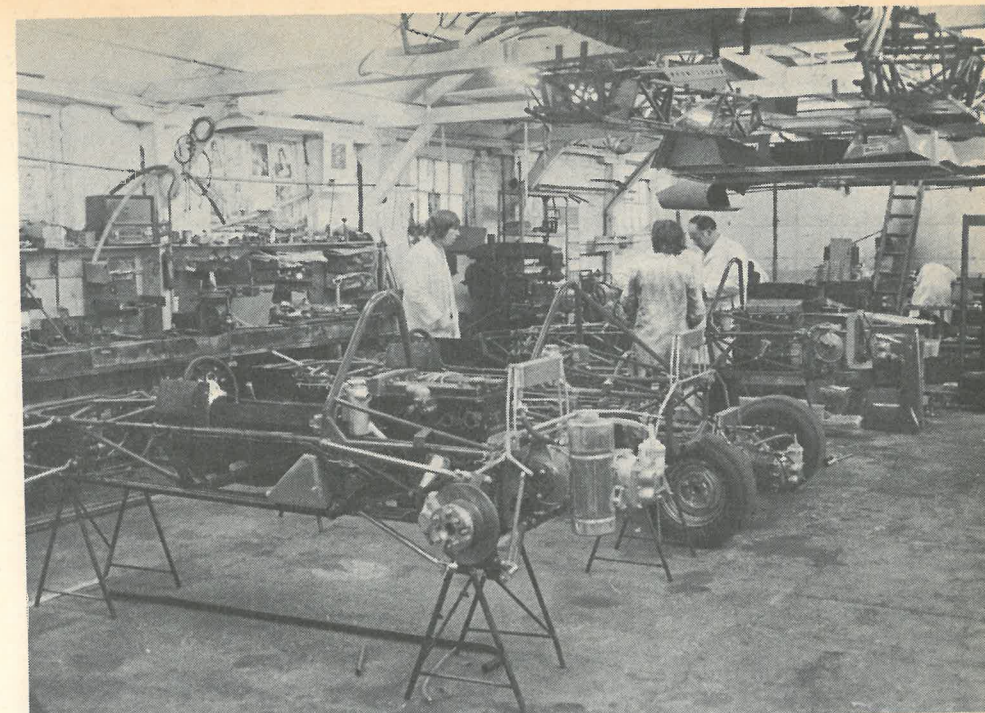
The venue for my trial was Snetterton, on a cold, blustery day that threatened rain. Usually the first problem when testing an unfamiliar racing car is getting into it, but experience selling single-seaters to well-fed Americans has resulted in the Palliser having an unusually roomy cockpit, which incidentally already complies with the international 1971 minimum cockpit size rules, and my 5 ft 10 ins needed quite a bit of padding to be comfortable.

I was expecting the car to feel very powerful with 174 bhp to propel about 9 cwt, but in fact the impression was more of smooth torque, with lots of urge from 5000 rpm, while the engine would pull happily from much lower revolutions. Deceptively, however, the power was very much there, although without optimum gearing for Snetterton's Norwich Straight and with its big wings and wide tyres the car would rush up to the required rev limit of 8100 in fifth by about halfway along that long straight and not want to go much faster. This was only my second sampling of the FT200 box, and it really is a delightful artifact: provided that the revs are right the little lever goes snick-snick from gear to gear in a most satisfying way. Coming out of the hairpin in second the power really told, with the rev-counter needle whisking round the dial in each gear so that one was comfortably in fifth well before braking and dropping to fourth for the Esses.

This is a double corner which certainly sorts out the men from the boys: the men would naturally manage to take the whole sequence under power, but I must admit to allowing myself a definite confidence lift coming out of the left-hand half to get the car into the right-hand sweep for the second part. Then, still accelerating, comes the long, never-ending sweep of Coram, the right-hand curve that leads down to Russell. This is not a nice corner in an understeering car, for you can get too far to the left where the bumps are, have to wind on more lock, and get into trouble, but at my level anyway the Palliser was very well-behaved and kept its nose tucked reassuringly into the apex of the corner. I found at first that I was understeering heavily at the hairpin and losing a lot of time, but only because I wasn't being decisive enough early enough in the corner, so that when I tried to boot it the car still understeered. When I got the knack of getting the power on early enough in the corner it was possible to come accelerating out under power with the whole car beautifully balanced. On faster, more open corners like Riches (the right-hander after the start, taken in fourth) the Palliser could be taken in deep, turned towards the apex and booted, and again there was that fine feeling of balance between power and roadholding.

Under braking, too, the Palliser was very impressive. I found on every lap, approaching the hairpin at maximum revs in fifth and then running out of courage and hitting the brakes before the 200 yds marker, that I had braked far too early; the rapidity with which the car slowed down was helped, of course, by the musical sequence down the gearbox from fifth to second just as fast as the hand can move the lever. One of the most satisfying corners was Sear, where one arrives still accelerating hard in fourth from Riches, gives the brakes a very brief dab when one is almost in the corner and simultaneously drops into third, and then powers out round the flat-out left-hand kink that follows through fourth and into fifth gear. The overall effect was that the car was very forgiving and unvociferous, and certainly seemed easy to drive: the 174 bhp was never an embarrassment, but was always usable.

On an earlier occasion at Silverstone, when the photographs for this article were taken but I didn't get a chance to drive the car, Vern Schuppan offered me a few laps in his Formula Ford Palliser, which he has been racing with distinction this season under the D. J. Bond Racing banner. Very similar to



Activity in the North Street works with a Formula B under construction nearest the camera.

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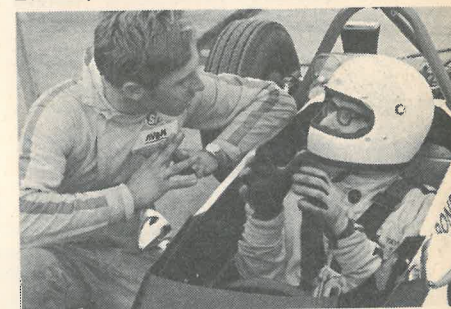
the B in basic layout, this naturally used FF's mandatory 5½ ins rims shod with the currently fashionable Avon crossply tyres, and had one of BRM's Formula Ford units.

In fact lapping Silverstone on one's own is probably not really the way to test a Formula Ford: it ought to be in frantic traffic going four abreast and five deep, touching wheels and nudging nosecones. I was very glad I wasn't in that situation, however, and was able to appreciate that the FF Palliser had the same solid, all-of-a-piece feel that I was later to find in its bigger sister. To go really quickly, a Formula Ford needs to be chucked into a corner and held in a sort of squashy slide: this is a technique which needs practice to perfect, and incidentally must require a lot of skill if it's to be done in the neat, unflurried way that one or two drivers at the very top of this formula exhibit, often in very tight situations.

It had been over a year since I had last driven a Formula Ford, and they seem to have more power than they used to: certainly the BRM motor seemed to pull very strongly. The sturdy, neat construction of the Palliser and the high standard of finish must make it a good bet for the Formula Ford driver embarking on a season on a tight

budget, and the competitiveness of this chassis has been adequately demonstrated in Formula Ford racing this season.

Palliser are currently advertising their Formula Atlantic car minus engine but as a complete rolling chassis with FT200 gearbox for £2075, while it is also available in F3 and F2 forms. The Formula Ford, complete with BRM-tuned engine and ready to go, is £1510. Next year's Atlantic car will be virtually identical to the current car apart from improved seat and pedal adjustment, and the adoption of sheet metal plating to the chassis tubes to increase rigidity even further. Palliser Racing Design are at 65 North Street, London, SW4. Tel: 01-622 0752/0755.



Taylor in the FF (below) and discussing it with regular driver Vern Schuppan (above right).

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Power unit is a 174 bhp BRM-built Ford twin-cam.

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