APRILIA AT SHELSLEY - NORMAN WILSON

I wish it was clear as to what induces man to attempt ridiculous things: swimming the channel, ballooning, climbing mountains or spending a whole winter preparing a motor car in order to satisfy a lifetime's secret ambition, which, when achieved, from start to finish takes but a bare 55 seconds to fulfil. There must be a sound reason and eventually there is no doubt that I shall have to consult a headshrinker. For since the time when Raymond Mays visited Shelsley Walsh with his succession of ERAs, to the more recent times when David Hepworth and Sir Nicholas Williamson raised the sport to new horizons, the very name of Shelsley has had more than a mere fascination for me: it has been a fetish, a very goal so far from the common grasp that long, long ago I decided to add it to my list of secret ambitions: another pipe dream possibly never to materialise. So, for the past five years, since the time when the Lancia Aprilia ELP 970 rubbed off its leopard's spots for the innards of a cheetah, Shelsley Walsh has been my ultimate. ELP has never been a circuit car nor was it ever intended to be, although I do like to make weight on those rare, annual meetings when the Club joins others and allows us to let down our hair and enjoy a real blind, (without upsetting other road users), on the Club Circuit. Then, when rain upsets that fraternity, as it did at Silverstone the other year, and ELP saw the chequered flag, it did go to prove that we were on the right lines!

One of the problems of speed hill-climbs is that the entry list is usually over-subscribed and precedence given to home members. This pointed to my joining the Midland Automobile Club, which, incidentally, saves one pound sterling if one's RAC membership is taken jointly with the MAC. It appears that in the dim past, there was some kind of founder-comradeship between these two clubs - the MAC opened its doors in 1901 following the RAC's inauguration in about 1897. Thus, Shelsley Walsh hill-climb has been the mainstay of the MAC since the last days of Queen Victoria and so is competitive motoring steeped in antiquity: it is this classic background, perhaps, which promotes me to hanker after becoming one of its worshippers.

So we were all set to scramble off from Sheringham on the North Norfolk coast to the Welsh border when it was found that the central bank of cylinders 2 and 3 were playing up, in that excessive quantities of burned oil appeared from the near-side exhaust system at high pressure. So a couple of evenings before leaving we were drawing pistons, to find the compression rings shapeless. There was barely time to fit new rings and reassemble enough to make it roadworthy, before it was time to leave. After some hitches on the way, when at times we honestly thought we would have to turn back and abandon the attempt, we reached this fabulous venue to find G.N. Spiders, Gnats and Wasps all over the place, with Bugattis, Bentleys (the right sort), Aston Martins ancient and modern, Straker-Squire, Schneider, Riley-Ulster, Lagondas, and many other famous names of yesteryear, rubbing noses with Brabhams, McLarens, Lotuses, Formulas I, II, III and IV Grand Prix cars, some with very-1972 looks about them. Then came the ERAs, a really ripe bunch of pre-war nostalgia, in impeccable order, giving out oozings of delightful smelling alcoholic "dope", which, musing with traditional Castrol "R", set the scene for the proverbial "t".

The track was moist, wet under the trees, especially at the esses, as most drivers had good reason to discover. I got signed on early and was in the first "batch" to make the climb. May it be to my everlasting discredit that I have always managed to avoid "walking the hill" beforehand, for this was my first time up - I thoroughly enjoyed walking it afterwards. So there I was in ELP, at the grid, with red light glowing, chocks under the rear wheels: a sudden change to green which is the signal for the driver to make his move. Giving the throttle all I dared, thinking as always of the thin pinion spline, similar outlet spline at the rear of the gearbox, ditto on the propeller shaft, all of which are extremely suspect to shearing on these cars, and more than doubly so when used with urges other than those originally intended by Vincenzo when designing in the early thirties. However, it was to feel the standard 165 x 400 tyres give a merciful spin on the still damp grid, thus relieving these driving weaknesses of some initial stress. Up to only 4,000 r.p.m. in the weak 1st gear and a snatch into second gear with no further worries from the transmission department, and through the first corner with insufficient speed to have to retard any. Into sight of the "Kennels" comer, which, I was to find, demanded respect and a little easing off in this dampness. Still in 2nd and screaming up to 6,300 r.p.m., with a whip into 3rd, the main gear for the run, apart from a burst of second through the esses. Up the longish approach to the esses, with ample time to sort things out mentally, the engine responding beautifully in 3rd, to reach slightly over 5,000 (65 m.p.h.) before dropping the anchors - which seemed like all hell let loose, with the very high banks of this section looming rapidly and feeling perilously near disaster, as it must be to succeed - for this style of driving is so much divorced from road use. When 0.01 of a second can make all the difference between success and otherwise, there is no time to make a normal gearchange, especially in view of the fact that the right foot is very firmly engaged on the brake pedal. With the gear in 3rd, there is an apprehensive, subconscious feeling that at any moment, with an iota of extra pedal pressure the rear end will come round, and while all this is going on, a physical and mental procedure, one has to do a heel and toe job on brake and accelerator in order to change ratios, and it must be done at the precise moment in time, without losing that so precious split fraction. Suddenly, as always, without knowing it, the car is in 2nd: it is rather like coarse shooting, try as I might, I can honestly say that I cannot ever remember actually pulling the trigger.

.

Whoops! And there we were, in the middle of the esses with foot flat down in 2nd, but very soon to lift off as this ratio quickly found the wet conditions here to create a very critical situation between adhesion and complete loss of connexion between tyre and road. At this point I vividly saw in my mind's eye those historical pictures of Raymond Mays and company "going through the esses" but full of Formula I drift, action of which ELP is incapable owing to the insufficient power. Thus to slide causes a fatal loss of time and effort and this is what happened. On reaching the second bend, where lay an uncomfortable mixture of mosses, slime and general pollution, these elements took control until an opposite lock with foot hard down again pulled the car out of an unusual occurrence for an Aprilia, a full, rear-end break-away. But with the wonderful suspension geometry giving full control in these circumstances, plus the assistance of Konis, we were serenely watching the tachometer climbing to its 6,300 r.p.m. (54 m.p.h.) in second, a quick change to third to sit it out up the increasingly acute climb to the finishing line. Owing to the alteration to my plans on the second corner at the esses, the finishing

revolutions read but 4,850 (62V-1 m.p.h.) which fairly well agreed with the speedometer reading at the time. So, on my first trip up, gave me the best time, 55 seconds. Peter Hull, the V.S.C.C. handicapper, was delighted, for he had given me exactly 55.00 seconds! Oddly enough, I had worked out speeds from the very same cars which had climbed Prescott, against my times at Prescott, and had decided that if I made 55 seconds I would be satisfied. Owing to various asides, the other three climbs were slower. We have two practice runs and two official runs. The second practice run recorded 56.91.1 had hoped here to get a clear comparison of the effect of using the BRM wheels, reducing my gear ratios by approximately 16%, using these 13in x 6.50 tyres. But it was the luck of the devil to find that at the "Kennels" water gushed out of the radiator, owing to a loosely fitting cap, swamping the distributor to such a point that the engine completely died for quite 50 yards. So complete was the loss of firing that I assumed the worst, imagining that the lead had left the ignition coil. The picture, taken at the Kennels, was evidently obtained fractionally before radiator water stopped the works. But, behold, to my intense joy, life from the engine once again burst forth and up we went. So with a time of 56.91 it was difficult to estimate what had been lost. Then it really rained.

Waiting at the top of the hill for the complete batch to arrive before convoying back to the pits, someone called out for us to witness an amazing sight: in the distance was a Lagonda Rapier ascending backwards! He had spun on the second "S" (where I had had my moments) and owing to the narrow final stretch, could not turn, so he did the last 200 yards in reverse. At the bottom, the G.P. cars were removing their dead-smooth slicks, substituting decent, legal tyres. Others hustled in with huge loads of wet-weather tyres on car-roofs and the ELP pit laughed and laughed. I can honestly say that the Aprilia virtually is as fast in the wet as in the dry - also I am always happier, which could make a difference: it seems so very controllable, we become so much as one: there seems to issue forth from somewhere inside a friendly feeling saying "We are brothers, you and I. .." So, I was still using the BRM wheels, which Bill Boddy in the August edition of "Motor Sport" saw fit to call my "Beach Buggy-size back tyres" and the intrepid reporter at Silverstone saw them as "Roller-skate wheels", which makes me think that on the whole they are not too popular. Quite frankly, all I am concerned about is to obtain some other gear ratio, and who knows, I may find a track on which they make all the difference, for I have more than one size in these adaptions. Well, whatever you may wish to call them, in the first official climb I made 56.31, and this in drenching rain. Immediate results are posted up at the finish as well as at the start and I found Denis Jenkinson steaming about the Aprilia, after having taken 58.77 seconds in the ex-Mille Miglia 41/2 litre Lagonda. "The blank-blank saloon .. . , I had one - didn't go like that. . . etc." Then with visions of the next climb, a considerable rivalry developed: Jenks, to his credit, did make a 55.54, to win his own handicap event. Some other comparative times and machines could be looked at at this stage. Looking through the very accurate result list I find that Robinson in a 1935 Alvis supercharged, 61.33; Maitland's 1938 Frazer Nash 1822cc, 55.63; Knowles' 1937 Bentley 4226cc, 55.38; and Johnty Williamson in his 1923 Delage 10,500cc, made 55.83 and 60.85 respectively (damp and wet.) Perhaps a further guide to competitive opposition at this yearly event, the following would at least be interesting, especially to those half dozen or so Aprilia owners, who have now contacted me with

express interest of "having a go". Quote from the autumn, 1972 Bulletin of the Vintage Sports-Car Club, page 10: "Class 2, Pre-1941 Sports Cars, 1101 to 1500cc ..... Norman Wilson, who can choose from 10 Lancia Aprilias which he keeps at his home at Sheringham in Norfolk, did well to win the handicap award in his smokey saloon with 55.77 seconds, his time contrasting interestingly with 62.80 secs for Bird's 1936 Meadows 'Nash; 59.36 secs For Stirling's Nurburg; 57.72 secs for Elwell-Smith's vintage Aston Martin; and 59.91 secs for Gay's 1933 Aston Martin." From these figures it will be seen that ELP held her head high, although we must accept that there were results which knocked it into a cocked hat (see times at end of article).

In standard form the Aprilia is very highly geared and with the standard saloon crown wheel and pinion, 10 x 41 in cogs using standard wheels, with 165 x 400 mm. tyres, these give 6ft. lOin per revolution, which works out at approximately 18.75 M.P.H. per thousand revolutions in top gear. Rather than fit the drophead differential, with 9x41 teeth and lose 10% in all gears speedwise, I have been able to acquire a selection of racing wheels from BRMs at Bourne and so obtain a few variations in gear ratios. As to how we fitted five-stud wheels onto the Aprilia 4-stud hubs is better left to the imagination, particularly with the RAC scrutineers breathing heavily down our necks at each event, bless their hearts. Furthermore, to have burned our boats behind us by fitting 9x41 drive, bringing the maximum speed of the standard Aprilia down from 81 to 73 m.p.h. would have precluded those vastly exciting moments in history, when ELP finds herself on the open road, back-wind, downhill, with the speedometer kissing 6,000 r.p.m. in top gear, sometimes, dare I say it, with a worried modern "GT" having a go, which usually ends up with the driver watching the Aprilia's rear getting smaller and smaller. But these are the empty roads of England's second largest county, far from the madding rat-race of the South.

But back to Shelsley: the system we carried out at this event was to drive from Sheringham using the standard wheels, then do the first practice on the 165 x 400s. A change was made for the second practice onto the BRM wheels, 13in x 6.50m, which were left on through to the first official run in the afternoon. Then the last change back to the standard wheels was undertaken for the second official run and thus had the correct wheels on for our return to Norfolk. The interesting point about this wheel and tyre question is that whereas the front 165 x 400s are kept on all the time, and are radial Michelin "X" tyres, the racing BRM tyres are Dunlop cross-ply, and most people know what the law is regarding this set-up. At all meetings I ask the RAC scrutineers what the situation is and they have nothing against this arrangement!

Whilst on the subject of wheels and gear ratios, maximum effort and so forth, it could be interesting to some owners and a warning to others that peak engine revolutions of the standard Aprilia engine is rated at 4,300, which gives 37 m.p.h. in 2nd, 56 in 3rd and 81 in top It is certainly best not to approach this figure in 1st gear, owing to its frailty and more important due to the fact that there are no more to be had, unless some kind soul makes a few sets (and I have good hopes of this before long). If the engine is in reasonable condition, it is best not to exceed the above figures in the gears. The fact that ELP answers to a 50% increase on these figures (in all gears except top, which would

then exceed 120!) is due to a number of factors. When the engine was prepared by the writer at Heath End, under Harry's supervision, the moving bits were taken to Jack Brabham's tuning-shop and properly balanced The so-called racing pistons were installed and various modifications carried out then and since. Only recently, for example, a flywheel was lightened by 33%: this necessitated the making up of a mock crankshaft, to accept the flywheel and clutch assembly for balancing. All such things bring about major complications, for in the first place the mock crankshaft had to be balanced in its own right before it could be used to balance the clutch and flywheel, which had been skimmed. It is an impressive piece of engineering, measuring 2 feet x 2.5 inches solid steel, cylindrical in shape with an end-plate to take the Aprilia flywheel as does the actual crankshaft. It is clear that the crankshaft proper cannot be rebalanced, owing to it being offset - even if it were possible to use reciprocating weights it would still be suspect owing to its shape, whereas the mock crankshaft must be right, being an exact cylinder with no obtrusions. Should budding contestants wish to borrow this crankshaft jig, arrangements can be made for its use. The point I am attempting to make is that unless a very considerable amount of thought, hard work and care has been expended on this engine it is extremely unwise to exceed the recommended engine speed of 4,300 r.p.m. It is indeed very rare that I extend any other Aprilia beyond this point. Let us accept that ELP is a very special case.

Added to the above, there is the question of longevity. As I see it, this motor car, meaning the Aprilia in general, will continue to serve in many guises, particularly as an every-day-bread-and-butter-run-of-the-mill vehicle, for the next fifty years at least, competing on equal terms with the modern tinware on our increasingly inadequate roads. The legal limit looks like staying at 70 m.p.h. for ever, and if any change is made it will be down rather than up, even on our much-boosted motor roads. So, apart from those who use the road illegally (quote: "Tearing up all-comers who look amazed to see these odd-looking Italian cars overtaking all other motorists . . ."), the Aprilia will fill the modem bill and should continue to do so well into the coming century .(Good Heavens! Ed.)

As far as I am concerned, I keep ELP now solely for serious competition work and will continue to extract the most from it. As an Aprilia, I feel, for the moment, it is unique, in that it stands out as a very special special, having had a Silverstone win and now a classical hill-climb win. I have my suspicions, and, indeed, sincerely hope that the coming season of 1973, will see two other Aprilias entering the competition field. Members will be pleased to know that Louis Lorenzini, who won the Concours d'Elegance at the 1972 AGM meeting with his Aprilia, and who, the previous day at Silverstone, won his class with the very rapid Chevron, under Lancia Club colours, is now preparing a special Aprilia for open competition. Also, Graham Baker is to achieve another of my secret ambitions by entering at the 50th Anniversary of the Prescott Hill-climb, with a perfectly standard Aprilia. As Louis and myself also hope to perform that day, it is expected that there will be some Lancia supporters on the scene. To have three Aprilias on the hill should be quite something. Graham, who is now the Club's Aprilia correspondent, has previously ascended Prescott in both his Renault 8 and Peugeot 403, so at least he knows the way. He is also preparing an Aprilia "quickie" for Prescott, but this is a futuristic project. There are now three other members with similar intent, who,

for the present, shall be nameless: two of them hail from Norfolk so it could be contagious. Further contenders are welcome to join the consortium and I have no hesitation in saying that we are prepared to give every assistance possible right down to all the back-room secrets.

It is not generally accepted that the Aprilia is suitable as a track car but I have very vivid memories of the works Aprilias competing at Donnington Park in 1938 - my Father had just dispensed with his Lambda (ex Solly Joel) and my Father-in-Law-to-be had just purchased Aprilia EGP599 as the standby car used in his veterinary practice, so I could have biased in favour of these cars even then. John Maltby once showed me a 1938 Belgian periodical dealing with the Le Mans 24-Hour event of that year, in which was a picture of the three works Aprilias, which had just won their team prize by averaging over 60 m.p.h. for the twenty-four hours. I have documentary evidence of the Aprilias which, pre-war, were the winners of many international events of various categories.

There is not the slightest doubt that if the know-how and development, even if only of pre-war vintage, were available, our prepared Aprilias could rise to very great heights in the competition field. I now find that every time we set about working out the next stage of development we always arrive at the question of a suitable camshaft. If development is to take place then this means that some sponsorship will have to be forthcoming. Up to the moment the cost has been reasonable, and very rewarding, taking the ELP has now been doubly successful, but more advanced work on its present capabilities would tend to be beyond our reach. One must accept that it is quite something to coach a car approaching 40 year's old to perform at least as well as it did when leaving the factory in Turin: it is then a very long haul to encourage it to exceed this excellent original performance (and ELP gives a considerably better account of itself than it did in the mid-thirties). When it now comes to bettering this "improved" form, or winning formula performance, then one has to think in terms of sponsorship from the higher realms of know-how departments. This is something for the future and who knows, well-known as ELP has become during the past five years, there is hope that this fine example of Italian motor car engineering will prove to gain even more recognition in the open sporting field of the future.



Norman Wilson and ELP 970 on Shelsley Walsh.

Published in the LMC Journal Spring 1973