

## OUMF Student Rally Team

### Ypres Historic Rally 2018 - report

On a particularly pleasant sunny Sunday, on 17<sup>th</sup> June, the OUMF team set off for Belgium on what has become, for the past 7 years, an exciting annual pilgrimage to contest the notoriously tough Ypres Rally. From an observer's point of view, a trip like any other - but for OUMF, it was a culmination of an extraordinary effort through the previous couple of months.

Having suffered major damage in practice in Ypres in 2017, the car was repaired overnight on the roadside. This emergency work was so effective and to such a standard that the famous OUMF Riley 1.5 rally car was able to not only complete the whole rally, but finished in a stunning 22<sup>nd</sup> place Overall. However on its triumphant, and slightly bent, return to the UK, the whole car had to be stripped and painstakingly rebuilt on its year long road to fully-repaired recovery. While the body was comprehensively attended to, the full strip down also afforded the team the opportunity to undertake more long-planned mods and improvements too. While GDM Motorsport invisibly mended the beautiful alloy radiator, BTB Exhausts demonstrated their consummate skills too, by the tube bending on the strengthened rollcage. Other upgrades were made to the dashboard, the ultra light and compact Lifeline fire extinguisher system, the wiring (including a 'superb' SuperB lithium battery), Schroth Enduro harnesses, our faithful Tillett seat, the steering, and the suspension. In this last department the new dampers, specially developed for the car by Bilstein, and the SuperPro bushes, were to have an almost magical and dramatic effect on handling. The brakes were also upgraded with the generous help of motorsport leaders Performance Braking and THINK Automotive. The shell received a primer coat of Rustbuster 123 Epoxy Mastic, MPEX filler/stopper, then a final gleaming coat of Lesonal Birch Grey...before a frenetic 4 day build began on Monday 4th.

As dawn broke at 5am on Friday 8<sup>th</sup> June, Dom Norman and the engine rebuild team fitted the new Helix Autosport clutch, installed the engine and gearbox, filled both with Fuchs Titan race oils - and it fired up first time! While the unique Pilkington heated screen was being put in, Phillips Tyres were fitting a set of our favorite TOYO R888R tyres. A couple of unexpectedly complex issues then arose. The first, a bent steering rack, was relatively straightforward to solve, and again it was Phillips Tyres to the rescue as they realigned the car afterwards on their laser tracking rig. However, the cause of a recurring gearbox problem took much longer to pin point, and then - in the absence of any replacement gears being available - involved manually stoning down the cog wheels in the gearbox from 4pm, through the night until 6am. The team worked in shifts for over 13 hours straight! Fingers were crossed, the gearbox reassembled and refitted, sponsors stickers applied to the car - and the Riley just made scrutineering later that afternoon, prior to its pre-Ypres trial at the Abingdon CAR-nival Stages Rally. It went straight through scrutineering, and hardly missed a beat on the day long rally, finishing 58<sup>th</sup> overall out of 100 modern rally cars. So - from a bare shell to a stage worthy historic rally car in a week! What an amazing team effort, with all-nighters for many...just like real rallying! All issues arising from the rally were addressed in the next few days to ensure the Riley was as bulletproof as we could make it for the real test in Ypres the following weekend...

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On the 17<sup>th</sup> June the OUMF convoy headed to Belgium; the OUMF van piloted by Nikita and Ding towing the Riley, and some of the team in a BMW estate driven by James Martin, with Tolga Karabetca, Ben Scothern and Andy Doyle. The others - Bobby Bragg and Niall Geoghegan - followed in a Volvo, with co-driver Ahron Becquart at the wheel. However, even before reaching the A40 out of Oxford, the convoy faced a problem - a tyre on the trailer punctured! With magic Q20 sprayed on the wheel nuts, a coordinated, pit-lane-worthy wheel change was executed in the middle of the local Sainsbury's car park, followed by a quick tyre repair at ever helpful Phillips Tyres - and the course was once again set for Ypres.

Despite all efforts, the puncture delay meant that the scheduled ferry from Calais to Dunkirk was missed again this year! Luckily the delay of an hour was not critical to our plans, but the rest of the journey to Ypres was not nearly as exciting as the start! We reached Chris and Patricia Vershaeve's home in Hollebeke in the early evening, and it was wonderful to see our hosts again for OUMF's 7<sup>th</sup> year here. We all expressed our thanks to them for their hospitality in having us to stay for the whole week ahead, and, as they are avid gardeners, we presented them with a selection of De Witt horticultural tools. The first day concluded with a much-needed dinner in the peaceful central square of Ypres, next to the impressive Cloth Hall, all of which was as yet uncluttered with the rally service park and the crowds of eager spectators. Although it wouldn't remain so for long...

The next day the OUMF team set up their rally base - for the third year - in a corner of the garage of a local Alfa Romeo specialist, Kris Vanmoerbeke, who once again kindly provided us with space to prepare the Riley ahead of the rally. After unloading and setting things up, we took the Riley into Ypres to introduce the team to another one of our invaluable sponsors, Katrien Verstraete at Lemenu petrol station. She generously said she would provide the team with TOTAL fuel for the rally again this year, and we staged a team photo with her and the Riley on the forecourt.

Tuesday 19<sup>th</sup> was mainly spent ironing out the last of the Riley's problems at Kris's Alfa garage. In the process of testing driving the car in and around Ypres, it was suspected that the rear bump-stops on the newly-installed Bilstein dampers needed adjusting to allow for optimal damper travel, and this significantly improved the already excellent ride and handling. Another problem that was tricky to solve was that a fuse kept blowing the indicator circuit - but it took ages to find and cure the intermittent short-circuit. In the afternoon, the official Signing on for the event by the OUMF crew, by Ding and Ahron, was conducted at the Ypres Rally HQ near the main square, and we were fleetingly able to thank a very busy Clerk of the Course - Alain Penasse - for his kind help and that of Superstage vzw toward the OUMF team again this year. This was followed by a great barbeque with Chris and Patricia back at their house's house, during the course of the party they surprised us all with an envelope containing a very generous donation towards the rally entry fees - for which we were all extremely grateful!

During the day, Ding and Ahron spent Wednesday reconnoitering the many rally stages, while the rest of the team made ready for the Historic Shakedown in the evening. We reached the village of Boezinge early to secure a good spot for our temporary OUMF service area, and we set up close to the finishing ramp - a great spot - in the busy main street. The first three runs through the rally stage did not highlight any issues, and the car was performing well. Before the next run, Ding and Ahron reported an odd noise coming from the rear of the car. Being unable to pinpoint the source of the noise, the car was sent out once more. Whilst waiting back at the service area, we received a worrying phone call from Ahron; the Riley had retired from the shakedown after the noise suddenly grew louder. As the Riley still had drive, they nursed it - very slowly - the mile or so back to Kris's garage. Once assembled there, the team quickly established the source of noise to be the differential, but as it was getting late and dark, we decided to resume the repairs when the garage opened again in the morning.

First thing the following day, while Ding and Ahron continued reccy-ing the stages, the rear axle came off the car and was dismantled - revealing that the bolts holding the crown wheel to the otherwise bombproof 3J limited slip diff had worked loose, and the noise was the heads of the bolts starting to machine the soft aluminium casing. The reason for the bolts coming undone was not clear, but we were very relieved to find that there was no serious damage, and none at all to the 3J LSD itself. At this point four more OUMF members - Dom Norman, Jamie Higgins, Andy Parsons and Vlad Ardeleanu - arrived from the UK to help. The

rear axle was completely stripped, cleaned meticulously, and reassembled - with plenty of thread lock and careful attention to accurately torquing all bolts! Our spare axle provided any small parts needed, while Vlad - architect of the Riley's wiring - addressed all unresolved electrical problems on the car. The rear suspension of the car was put together again, and the Riley was functional again by early evening - in time for the team to relax watching the shakedown for the modern rally cars, and having an excellent dinner in Ypres.

Friday was the first day of the Special Stages. The day was mostly occupied moving our equipment from Kris's garage in the van, and setting up at the service park. There were well over 200 cars/teams on the rally so space was at a premium! In order that so many cars could do the first two stages - around 15km each - the rally began in the early evening and continued until late - well after dark. For the Riley, neither of the stages were promising to be easy, and indeed, in service after the first stage, a lack of grip at the rear was reported. Due to the cooler evening, a decision was made to increase the pressure in the rear TOYO R888R tyres by 3 psi. The Riley set off again for the second stage with the remains of daylight quickly disappearing. By the time the car came back it was already dark. Thankfully the car performed excellently, and after swiftly removing the spotlights the Riley was driven to Parc Fermé. The first rally day had been a success; the crew was performing without missing a beat during service times, and the Riley had already climbed to 28<sup>th</sup> place Overall...

Saturday consisted of eleven Special Stages, with five services in between them. The Riley performed brilliantly, with no big issues being found throughout the day. Watched by spectators and supporters, the team made a thorough check of each corner and every detail on the car each time it came into service - and at each one the air of excitement grew as Riley made its way further and further up the leader board as competitors crashed and burned.

To great rejoicing, the Riley managed to finish the Ypres historic rally 14<sup>th</sup> Overall - 8 places better than ever before - and it was so tricky that only 17 managed to finish at all. I still find it hard to believe that the oldest car on a rally, competing against cars up to 1993, over 150kms of notoriously rough, tough, narrow Special Stages - came in 14<sup>th</sup> Overall...leaving, for example, 2 Porsche 911's, 3 Golf Gti's, 5 Mk1/2 Escorts, 2 BMW M3's, plus Toyota Celicas, Opel Kadetts and Asconas - even a Lancis Stratos! - in its wake, or retired, or in the infamous ditches!

The car that only two weeks before had been a freshly painted shell had finished two stage rallies - one a 2 day international, in a different country! This culmination of a year's worth of work was a remarkable conclusion to one of the most famous European rallies. To an extent, it can be said that all of the hard work had been done back at the HQ in Oxford, and the dedicated effort of OUMF's team members had finally paid off on Belgian soil. You can share the teams exciting, high quality in-car footage captured on the HD2 Racelogic V-Box on the OUMF You Tube channel...

<https://www.youtube.com/user/OUMF2005>

This stunning achievement must rate as one of OUMF's finest performances and reflects so well on an exemplary team, inspiring led this year by James Martin (who starts his career at Crossthwaite & Gardiner). However, and as ever, we are all aware that without the aid of so many supporters like BMH, ARP and Kent Cams, and well-wishers across the motorsport engineering industry, this extraordinary adventure could not have happened. It has given such valuable practical experience, education and stimulation to a team whose young members are surely destined to find themselves at the top of the sport all too soon! Thank you all.

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