



It's been a while since we've had a challenger for the DORF, so we thought we'd wake him up with something special. Hello, is that Rod Birley...?

Words: Luke Photos: Gazza

Rod Birley and his Escort Cosworth are no strangers to *Performance Ford*. The Birley/Escort partnership has featured several times over the years in these hallowed pages, the last time being the July '09 issue when we paid tribute to the tenth anniversary of this famous car/driver combo.

Rod's Escort, which is constantly being fettled and fine-tuned in order to stay ahead of the competition, is now sporting a number of upgrades since its last feature, and while the mods seem relatively small at first glance, they amount to a noticeable boost in performance. No mean feat in a car that's already got the

best part of a decade's worth of research and development behind it.

One of the main improvements in the last 12 months has been to the engine, work that was carried out while the YB was having its annual winter rebuild at Harvey Gibbs.

"The most significant change is to the turbo," explains Rod. "We've swapped the Garrett T4 for a new AIR roller bearing turbo, which is slightly larger and has a separate wastegate. Basically, it's a lot more efficient than the old Garrett, so while it has allowed for a bit more power, it's the improved driveability out of the corners that's most important."

To complement the new turbo, Harvey has

also made some modifications to the fuel rail and plenum, and these have all combined to increase power from around 540bhp to something in the region of 580bhp. Armed with a revitalised YB, you would be forgiven for thinking that Rod might have run away with the championship this year although, as it turns out, the Brands Hatch-based racer has not exactly had it his own way so far in 2010.

A brand-new fuel union failed during one race, which caused a rather dramatic underbonnet fire. Then, during another race, the pipe that runs to the top of the wastegate came loose. This caused the engine to run on unlimited boost, almost 5bar, and with so many

Think you can beat the RS?

In the same way that our old monthly *Beat the ST* feature gave you the chance to put your car up against the clock, we're throwing down the gauntlet to anyone who thinks they can show the RS and the DORF a clean pair of heels around the new track at Lydden Hill. The challenge is simple – strap on a crash helmet and give it your best shot around the tight and twisty one-mile circuit. To make it fair, we're running two classes; one for road registered cars with tax and MoT and one for track or race cars. The challenge is open to all Fords – everything from lightweight XR2s to full-blown Cosworths, so everyone is welcome to have a go. Feeling confident? Then drop us a line at pford@unity-media.com with your name, contact details and a brief description of your car and we'll do the rest. Good luck. You'll need it...

The Circuit

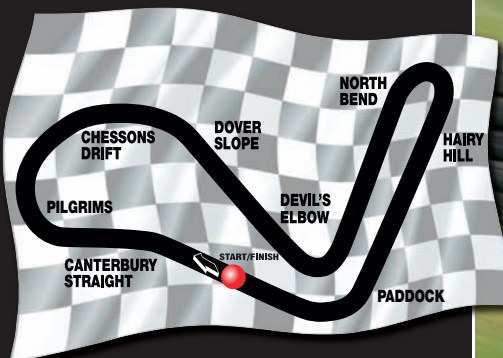
If you haven't been to Lydden Hill before then you've missed out on one of the most exciting circuits that the UK has to offer. Best known for its RallyCross events (the venue is now owned by Rallycross legend Pat Doran and family), and panoramic views of the action for spectators, Lydden is a relatively small track, but it's one that will demand all your attention in order to set a good lap.

Similar in layout to Brands Hatch Indy, albeit in mirror image and scaled down a couple of sizes, you'll have your work cut out from the very first corner. From a flying lap in a reasonably fast road car, you'll be touching three-figure speeds on the Canterbury Straight before having to deal with a kink to the left and a sudden drop in gradient which will really unsettle the chassis for the turn into Pilgrims. Through here the car will naturally want to understeer but the trick is to hold the racing line and carry as much speed as you can through the exit of Pilgrims as it opens into Chessons Drift and on to the short but fast downhill back straight called Dover Slope.

If your car is especially powerful then keep an eye out for the next turn, Devil's Elbow, because if you're really going for it then the temptation will be to out-brake yourself into this punishing left-hander. If that happens then you're in a spot of bother, not just for the lack of run-off space, but for the fact that you need to carry as much momentum as possible through the corner in order to get a decent

run up the steep hill to North Bend. This is a real power-sapping section so if you've got big bhp then now is the time to use it.

North Bend itself is a classic hairpin and like Druids at Brands Hatch, it will reward drivers who use a late turn-in to maximise exit speed on to Hairy Hill. If you make it this far then now's the time to take the brave pills because the last corner, Paddock Bend, is one that really separates the men from the boys. Lydden experts will advise using as much of the track as possible on the left before stamping hard on the brakes and chucking it into the apex, but if you're a newcomer to the circuit don't expect to be fully committed through Paddock on your first lap. This is a real roller coaster of a corner, and while there's a decent sized gravel trap to save your bacon should you get it wrong, this is the part of the circuit that's most likely to ruin your lap at Lydden, along with any chance of beating the RS!



components under so much strain it was inevitable that something had to give.

"An injector split, and while it was only a small amount of fuel that escaped, it caused yet another fire," said Rod.

Since then, the Harvey Gibb YB has been running beautifully and it has allowed Rod to concentrate on a few more important tweaks elsewhere on the Escort. The wheels, for instance, have been enlarged from 17" to 18", a change that, again, may seem insignificant, but which has edged out a few extra vital tenths of a second per lap.

"The wheels were made from scratch by Mike Barnby of Barnby Engineering," reveals Rod.

"People don't realise how much stress wheels come under, especially on race cars and track where cornering forces and kerbs can cause real problems over time. The old 17s were definitely showing signs of wear and tear, and the new 18s are not only 50% stronger, but are designed for optimum cooling as well. It also means we can use newer Dunlop tyres (the 17" slicks were designed for the old Rover 220 Tomcat racers) which are more consistent and transfer heat more evenly across the face of the rubber."

So, with more power and grip than ever, plus a fresher interior after Rod realised that the dash and wiring loom were also in need of a

tidy up, it wasn't so much the DORF's lap time that was under threat at Lydden Hill, but the one set by current chart-topper and fellow EsCos racer, Malcolm Wise.

Wise recorded his 44.90-second flyer back in the Sept '09 issue, and while his Escort is arguably less developed than Mr Birley's, it has roughly the same power and weight, plus a similar drivetrain and tyres. For Rod to go quicker around the short Lydden Lap wasn't going to be easy, especially as on the day of the photoshoot the hot weather was threatening to sap vital horsepower from that finely-honed race engine. Rod remained confident nonetheless and as we downloaded

DORF: 49.89sec

Escort Cosworth: 43.39sec

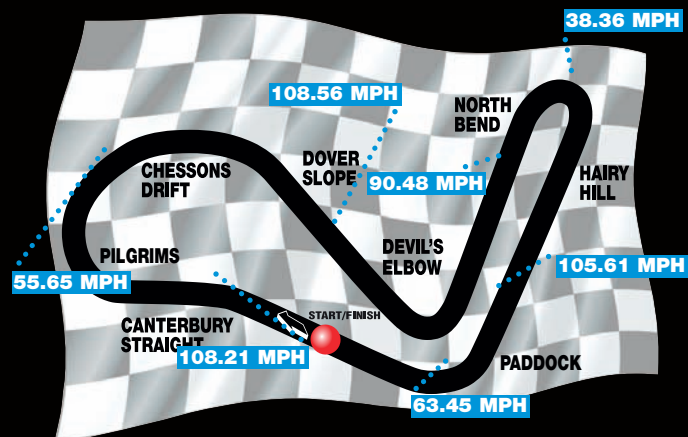
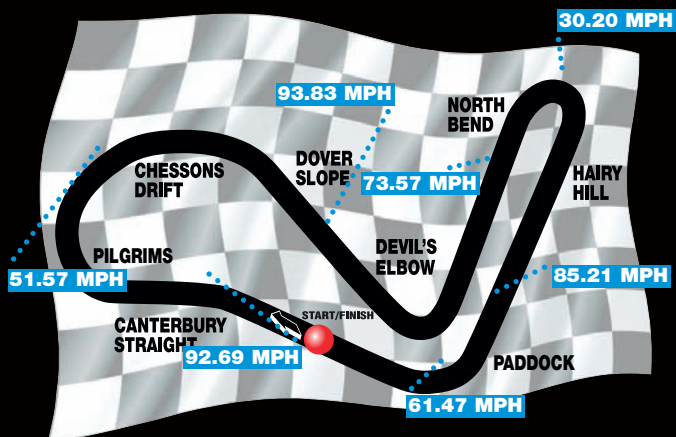


Table of truth

KEY: Road Car Track Car Dry Wet

Name	Car	Issue	Power	Config	Fastest lap	Info
Rod Birley	Escort Cosworth	09/10	580bhp	4WD	43.39sec	
Malcolm Wise	Escort Cosworth	09/09	560bhp	4WD	44.90sec	
Jeremy P	Escort Cosworth	06/10	500bhp est	4WD	47.01sec	
Julian Godfrey	RS200	01/10	675bhp	4WD	47.50sec	
Nick Bowers	Fiesta ST	02/10	150bhp	FWD	49.85sec	
DORF II	Mk2 Focus RS	07/09	301bhp, 325lb ft	FWD	49.89sec	
Ian Hucklebridge	Mk3 Escort	10/09	260bhp ets	RWD	50.00sec	
Alan Shepherd	Mk1 Focus RS	05/10	296bhp	FWD	52.40sec	
DORF II	Mk1 Focus RS	07/09	270bhp est	FWD	53.03sec	
Martyn Batstone	Fiesta RS1800	08/09	230-240bhp est	FWD	53.69sec	
Kevin Byrne	Focus ST	12/09	317bhp, 426.7lb ft	FWD	54.70sec	
Brian Dallison	Mondeo TDCi	11/09	150bhp	FWD	57.80sec	



Mr Birley takes the top spot at Lydden

the data from our Racelogic timing gear, it was clear that we had a new leader on the Table of Truth. With a lap time of 43.39-seconds, he'd managed to take 1.51 seconds off Malcolm's time, and if we look at the split times around Lydden, it becomes easier to understand how. As he rounds Paddock for the start of his flying lap Rod is actually trailing slightly, but by the end of Canterbury straight, the black Escort is almost 5mph faster before it hits the brakes for Pilgrims. Again, Rod is slightly slower mid-corner, 55.65-seconds compared to 57.12, but he gets a better exit and is 5mph faster once again along Dover slope before diving into Devil's Elbow for the short sprint up the hill. Again, Rod is faster, topping 90.48mph against Malcolm's 85.58mph before standing on the brakes for the hairpin, and carrying more speed into the sharp right-hander. This extra speed is vital for the drop down Hairy Hill and Rod hits 105.61mph to Malcolm's 98.77 before negotiating Paddock once again and crossing the finishing line.

A new lap record for *Beat the RS* and a new challenge for anyone out there in reader land who thinks that they can go faster. Are you up for it? Then drop us a line at the usual address... ■

FORD FACTS ENGINE

Harvey Gibb race spec 2.0-litre Cosworth, A1R roller bearing turbo, long studded 200 block, nicosil liners, Cosworth pistons, standard rods, knife-edged, big bore head, Harvey Gibb inlet manifold, eight grey injectors, Weber P8 ECU, 580bhp, 510lb ft of torque

TRANSMISSION

AS Doughty Engineering six-speed straight-cut gearbox, X-Trac diffs and driveshafts, 4WD

BRAKES

AP Racing four-pots, 330mm discs front, 315mm discs rear

SUSPENSION

Quantum remote reservoir dampers

EXTERIOR

Ford Motorsport shell, Group A roll-cage, Group A rear beam, Ford Motorsport magnesium arms, rose-jointed, carbon bonnet, front wings, doors and rear hatch, power steering, heated front screen, plastic windows, carbon doorcards, 1160kg

WHEELS & TYRES

10x18inch Barnby Engineering alloys and Dunlop slicks

THANKS & CONTACT

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