Name: Dave Hodkin

Age: 55 (in 2020)

Profession: Computer Solutions Architect

Location: Radcliffe, Manchester

Current 750 Formula Car: HRD Mk2

I've been interested in motor sport for as long as I can remember. My father raced long circuit karts (using the 200cc Villiers 9e invalid carriage engine of all things). When my little sister was born, Mum stayed at home and I was deputised (aged 3) to accompany Dad on race days. Early memories include watching him win the very first long circuit kart meeting at Cadwell Park (out of a field of about 240 with 60 making the grid for the "A" Final).



Dad then got involved with Keith and Dud Moseley and their Motus karts (and later Clubmans and Sports 2000 cars). One evening a week we would go over to their house and work on the cars. As a small child I was regularly inserted head first into the footwell or other awkward space to hang on to something with a spanner whilst it was tightened from the outside. At the same time my vocabulary was expanded, because when someone drops half an engine on your Dad he doesn't necessarily remember that an attentive child is listening carefully. This resulted in a number of conversations in the car on the way home along the lines of Q:"What does **** mean?" A:"Don't tell your Mum I said that!"

At some point around this time I was introduced to Rod Hill, who was related to Dud by marriage. This would turn out to be quite handy approximately 35 years later...

After University, I decided that I owed it to myself to at least have a go at karting, to see if I was any good. One excellent piece of advice my Dad gave me was "figure out what class you can afford to

do, then drop to the next cheaper class and do it properly". Following this advice I started in 100 Britain, which was then the most affordable (and therefore popular) class. My first kart race was August Bank Holiday 1988 (a total disaster consisting of 2 retirements and one non-start in the heats and retiring from the final). Fortunately things got better, and 18 months or so later I qualified for Super One (the national championship series for short circuit karts).



I can't begin to tell you the intensity of the competition at Super One level, the closest I can get is a couple of examples

- I have a lap chart from one Super One final where I did 11 straight laps with a total variance of 0.15s. I was 2 lengths behind the person in front and couldn't close the gap, and the person behind me was in a similar position
- 35 of us were within 0.7s of each other at one track. To give you a scale, that's the same as 35 of us in the same second at Brands Indy

First year in Super One resulted in 13th overall, attracting the attention of a British manufacturer (Kartsport) and for the next 3 years I had support from the factory, the most important part being having the chassis designer (Mike Mulhearn) as my race engineer. The following year I was 10th overall, but there had been an explosion in engine technology during those two years and it was becoming obvious that I couldn't keep up financially.

About this time my little sister became briefly useful. At a party she was hosting, my attention was drawn to a well-built blonde in a black cocktail dress. Chatting to Gilly, I discovered than in addition to her obvious charm and charms she was also an accomplished mechanic, having helped her father service their cars since she was little. Even I can recognise a gift from the gods when it's put in front of me, so we started dating, were married just over 2 years later and Gilly has been an integral part of racing (as well as my life) ever since.

Whilst I had been racing 100 Britain, a new cheaper class with a control engine had become the most popular class (100 TKM) and I switched to that for financial reasons. We developed a kart based on their Junior (11-16 year old) chassis that had absolutely psychic turn-in (even by karting standards). The price you paid was rear-end instability, but if you could hang on to it the kart was a missile. Gilly continued to be easily the best looking chief mechanic in the paddock, and I won the 1992 Super

One championship for 100 TKM. This led to my greatest claim to fame in motorsport, as at the end of year prize giving I was joined on the podium by the winner of the Junior (11-16 year old) championship – Jenson Button.



One final year racing Super One resulted in 6th Overall, regulation changes blunting the pace of the homologated chassis, and then the first of my many retirements.

After a couple of years of being bored, Gilly and I decided we would buy a kart to do some club racing and share the kart between us. I did four meetings at the start of the year while Gilly got up to speed testing, and then she had her first meeting. I didn't get to drive again for the next 2 years, and spent the time as her chief mechanic as she turned herself into a pretty good club racer. Then retirement number 2.

I decided to have a new challenge, so I built a kit car (a Lancia Stratos Replica with a 3 litre Alfa V6 in the back), acquiring some new skills on the way. However, just when I had completed it child No1 inconveniently arrived and a 2-seater sports car was not that useful anymore, so it had to go.



After the standard period of stunned confusion after your first child, I decided to dabble in karting again, this time in the Rotax Max class. A couple of years playing at club level resulted in a club championship at Glan-y-gors in north Wales, still with Gilly as chief mechanic as we drafted my mum in for child management. Then child No2 arrived (don't worry, we've figured out what was causing it now) and retirement number 3.

I often think that when you've retired from racing you are not cured, you are only in remission. Needless to say, I fell off the wagon again, and this time decided to "act my age", stop karting...and race cars instead. I had always fancied a go in single seaters, so after a test run at Bruntingthorpe in one of Alan Harding's old cars I decided to give Formula Vee a go. I bought a second-hand AHS Challenger and embarked on my first season of car racing in 2009, aged 44, learning the tracks as I went along as all my karting was short circuit not long circuit. I also reconnected with Rod Hill whenever the Vees and 750 Formula were at the same meeting.



6th overall in the championship in my first year and best novice was very satisfying, but I had a typical "second season" with a new AHS Dominator filled annoying problems such as a faulty fuel pump that worked perfectly when cold but lost pressure when warm. I led at Cadwell until the fuel pump started failing, but 10th overall in the championship and a big accident at the last round (caught on camera on the 750MC race coverage) was disappointing.

In the meantime, Rod had been extolling the virtues of 750 Formula and I started to see that it would be much more suited to my interests. The Vees were very tightly controlled in chassis, suspension and aero (all of which are of interest to me) meaning that the main areas of development were engine tuning and damping which were cost items for me as I don't have engine tuning facilities (or frankly the skills). I had also realised that the cost of running a Vee at the top level was beyond my budget, mostly due to the costs associated with the highly tuned engines.

So the Dominator was rebuilt and sold, and I looked around for a suitable second-hand 750 Formula car. We quickly decided that the best available was Martin Kemp's Darvi Mk6 which was hiding under a tarpaulin round the back of his house whilst he developed the Racekits Falcon. I confess I probably "under sold" my previous experience in order to persuade him to sell the car, as he was in two minds whether to release it at the time. Martin kindly threw in the un-bracketed development

chassis he had been working on prior to the Falcon and we set about a complete strip down and rebuild.

Once we had torn the car down it was obvious that the Mk6 chassis was suffering from the effects of age and hard use, and we would be better off completing the Racekits chassis and rebuilding the car around that. At the same time we changed the inlet manifold and carburettor, moved from distributor to MegaJolt engine management system, re-positioned the rack to give us Ackerman steering angles, and resolved a significant problem in the front pullrod geometry which was causing the car to "fall-over" onto the bumpstop on the outside front wheel. The HRD Mk1 was born, combining the development work we had done, (H)odkin, the (R)acekits chassis and a whole heap of parts from the (D)arvi.

All this meant that I missed the first three rounds of 2012 so my 750 Formula debut was at Cadwell Park for round 4. The car's shakedown, and my first run in a 750 formula car, was the day before. It did not go well and I spent most of the day and all evening making repairs! For qualifying, Gilly (whose role has slowly moved from chief mechanic to "Jiminy Cricket") leant into the cockpit and said "you've only done 6 laps in total, so take it easy and just get 3 laps in". She then paused, looked at me and said "you're not listening, are you". Nope.

So, a debut pole position (helped enormously by lots of oil being dropped after about 3 laps of practise), and a debut race win (helped enormously by all the fast people being caught out by the oil in practise). I then picked up a string of pole positions and one more win, ending up 3rd overall in the championship, class B champion, and best newcomer. Which was nice.

Despite these results, it was obvious that I wasn't the fastest during the races, so winter 2012 was spent upgrading the brakes, rear wing, wheels and exhaust. 5 poles and 5 wins at the start of the year, followed by conservative development and driving afterwards secured the 750 Formula championship in 2013.



Although the car was clearly competitive, I can't get motivated to climb the same mountain a second time, so retirement 4 followed.

After looking at other formulae, including RGB, Bikesport and Clubmans, I realised that there was nothing out there that was simultaneously interesting, competitive and affordable (having no interest at all in converted road cars).

So I decided to embrace the 750 Formula concept fully, become a driver/engineer rather than just a driver, and design and build my own car from scratch. The HRD Mk1 was a good car, and having driven it I knew what was good about it and what its weaknesses were. So, with Dad's support and active encouragement, I set out to build a no-compromises new car taking the things I knew worked (for example track, wheelbase, layout) and changing the things we thought could be improved (weight distribution, aero, suspension and pullrod geometry). This was a big exercise in developing new skills as we had never made a body buck, mould or part before and never designed or built a chassis or suspension system. It did help that Dad is a time served draftsman and chartered mechanical engineer and I'm not bad at the complex geometry calculations, being a mathematician by degree.

About 5 years into this 1 year project (never ask me to project manage anything) the HRD Mk2 emerged, the HRD now standing for Hodkin Race Developments. Thanks to Rod Hill and Graham Templeman for advice, support and "encouragement" and to their respective wives for putting up with endless phonecalls. Rod also very kindly did some of the complex machining that was beyond our capabilities and would otherwise have had to be bought in.

First (attempted) meeting was Cadwell Park in 2019, but in testing the rear body made a successful bid for freedom (apparently the flight was quite graceful according to witnesses) and I broke the front Woblink, so it was a non-start. Further testing demonstrated an alarming amount of aero understeer. Band aid patches were put in place for all of these and the car debuted at Oulton Park in 2019, just to qualify the car as a 2019 car in case Motorsport UK attempted anything stupid with the regulations (they have recent form for this). An engine sensor malfunction and an emergency fitting of a distributor (thanks to Paul Morris for this) meant a chronic misfire but 3 laps were duly completed to qualify the car.



Photo by Jon Elsey

2020 was obviously affected by Covid, and a prior commitment meant that I could not do the Silverstone round. Although we had 2 competitive second places at Mallory, it was obvious we still had a problem with understeer. More development work followed, resulting in wins at the final Snetterton rounds. It is enormously satisfying to win a race in a car you have designed, built, developed and driven yourself, and the 750 Formula is one of the very few places where this is possible and affordable. Now we have a working mobile test bed to play with all kinds of ideas!