

## Dave Robson Driver Profile

Dave's involvement in racing goes back 45 years when he started racing in 750 Formula. After a number of years of changing and modify this old chassis, he built his own car (SDAR/83) which he took to 2 championship successes. Modification and development have been constant in Dave's cars and this continues with his current car (SDAR/17) which has yet to prove itself.

**Name:** Dave Robson

**Current 750 Formula Car:** SDAR/17

### Condensed History

I have no family history in motor sport and at the age of 27 realised that excessive speed on public roads was not a sensible activity. I discovered the 750 Motor Club and started to attend the Tunbridge Wells Centre meetings and then the London Special Builders gatherings. At one meeting Mike Peck asked if I would like to help at the Birkett Race and that was to be my first race meeting.



I realised that the racers were just ordinary chaps like me and that racing was available to all; I needed to get racing.

Subsequently, I acquired the Viking LV17 chassis from Mike Bott which is the orange car in the Birkett picture .

The chassis required many parts to prepare it for racing. This included an engine that I purchased from Pete Birch and a beam axle that I fabricated utilizing the Hillman Imp stub axles.

My first race was at Longridge in Lancashire in 1976. I actually won the first Heat and then crashed on the first corner in the final. This started many years of racing adventures and mishaps. Mudguards were forever falling off and even the rear axle became detached along the start-finish straight at Brands Hatch, exciting stuff! Between 1976 and 1981 the Viking chassis and bodywork were continually modified. The front axle always remained a beam



configuration (including one with a 'wing' cross section and internal steering rack). Broken Reliant engines and gearboxes were ever present! I was running in mid-field at this time and enjoying engineering development within a very limited budget.

In 1982 I decided that modifying someone else's chassis had its limitations so I started with the design of my own car. The SDAR/83 was born and initially it had temporary aluminum bodywork fitted.



When it was presented to the scrutineers at Silverstone they were not impressed. Why is the driver positioned in the middle of the car? Why is the chassis member either side of the driver (and not outside of the passenger space)? Eventually it was accepted that the current rules did not preclude these features but the rules were changed to stop others from doing the same.

Minor modifications and Reliant engine repairs continued until I had an accident at Silverstone in 1986. I collided with a back marker at Maggots and hit

wheel to wheel. My car went over the top of his car and landed upside down at about 90 mph. I was OK with just a broken wrist but the car bodywork and some suspension components didn't survive. Luckily the roll over bar did its job.



The rest of 1986 was spent rebuilding the car and creating new bodywork. I went for a one-piece body made in GRP. This has some advantages but other disadvantages. At least I had the opportunity to get the body shape that I had originally had planned for the car.



For a number of years I ran the car in this configuration with limited success. I got up to 11<sup>th</sup> in the championship in 1992 and went for the next big modification in 2000. I'd discovered carbon fibre and



was desperate to try it so I modified the existing mould and did a wet lay-up carbon body, this time in three parts to aid component access.

I was starting to get the hang of this racing lark and by 2007 I'd got a second place result and was running 6<sup>th</sup> in the championship. My first race win came at Cadwell Park in 2008. It had been a long time in the coming! This started a run of good results and the lap record for Silverstone. Fortunately 2009 continued

with some good results including the Snetterton lap record, a number of pole positions, 5 race wins and finally clinching the 2009 championship at race 1 at Mallory. My elation was short lived when, starting the second race from pole position, first gear stripped and I got hit in the rear, bending the axle and other rear suspension parts. Fortunately no one was hurt.

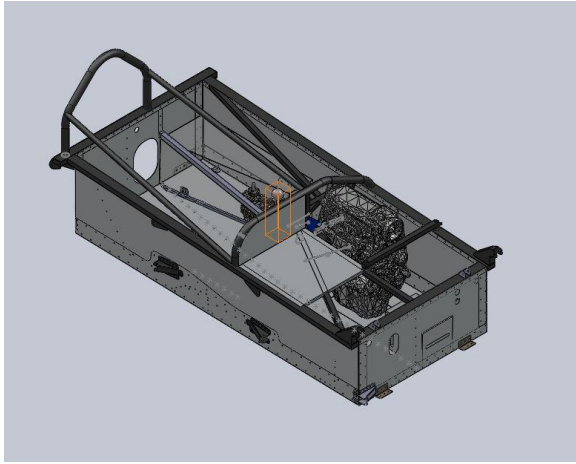
Years 2010 and 2011 had mixed results with some fastest laps, pole position and race wins mixed in with various engine maladies and component failures and driver errors. 5<sup>th</sup> & 6<sup>th</sup> in the championship were achieved in those years.



2012 was my lucky year. I won the championship with just one race win to my name. I did get a number of second places but, fortunately for me, those with quicker pace did not manage such a consistent season and my steady series of results gave me the prize.



I was 3<sup>rd</sup> in the championship in 2013 but slipped down the rankings in subsequent years. I'm sure I can think of many excuses but I won't.....



I decided it was time to build another car before I was too old so I started on the design and fabrication of SDAR/17. I wanted to design a semi-monocoque so I set about teaching myself Computer Aided Design (CAD) so I could draw out the car and then get bits laser cut. This was very satisfying , and sometimes frustrating, but it did the job. It is not the quickest way to make a one-off car but it does generate good dimensional accuracy. The process took about 2 years and the completed car then needed another year of development to get it to work reliably. The development was more to do with the inlet manifold,

engine and gearbox than chassis so I'm pleased with the CAD side of things. I did make a 'cock-up' with the suspension design that resulted in front upright failure during the first race. No serious damage resulted other than to my pride as an engineer.

I've yet to try the car properly in anger now I have the initial gremlins behind me (hopefully). A run on a rolling road showed reasonable power and reliability so fingers crossed for its next outing.



It has been a long absorbing journey from the simple cars of the early days to the complexity (and expense) of the modern beasts. I thank all who have helped and supported me throughout especially Frank Brown for his expertise in machining. Between us we have mainly built and maintained the cars without 'buying in' help and that gives great satisfaction.

Dave Robson July 2020

## Highlights:

- Proponent of the beam axle for front suspension design
- 'Ruffled feathers' when designed car with central driving position and driver 'safety cell structure'.
- Introduced Megajolt programmable ignition system.....in 2007
- Early user of in-car video camera (first in 750?) .....Go Pro Hero in 2008
- Early user of Data Logging (first in 750?).....Astratec system in 1998
- Early user of carbon fibre body panels (first in 750?).....first body in 2000
- Modified A Series gearboxes to replace fragile Reliant box
- Laser cut aluminium monocoque
- 3D printed, non-structural components
- 3D printed patterns for casting
- 3D scanned models introduced into CAD drawings