

“You’re only fit to push a barrow in the market, Kemp” were the last words the headmaster said to me. As a result, rather than go to university to study biology I started work on the dustcarts and learnt a lot about maggots.

Actually, the dustcarts were a promotion. I started off scraping dead dogs off the road and filling potholes. Another job I had about this time was driving an old Super Major tractor cutting the grass on Farnborough Airfield. The tractor had a separate brake pedal for each rear wheel as a sort of cheap traction control. I used to amuse myself by driving through the morning traffic pretending to read a newspaper and steering with the brakes – it didn’t amuse the grown-ups. I have never been popular with grown-ups.

I did in fact pass my exams, so after a while I got a job as an engineering technician and soon realised that I really wanted to become a Design Engineer and after 3 years at night school I did.

I did spend some time at Manchester University studying a young lady zoologist with long red hair. She came to a New Year's Eve party at the flat I was sharing in swinging London - 3 days later she was still there. She is here now. Our 50th wedding anniversary fell on the Mallory weekend. We had first met at Crookham Junior School in 1958. Does that seem like a long time ago.?



Back in 1970 our wedding cost us £20 with a further £20 for the honeymoon. We had the reception at my parents’ house - a bit like the Royal family, but with fewer servants. An unusual feature was that the girl from the previous wedding had signed our marriage certificate by mistake. It is against the law to cross it out, so I ended the day with 2 wives. I keep meaning to look up the other one to see if she has a better pension than Barbara.

We bought a derelict Victorian cottage, but before we moved in, someone stole most of the wiring, the gas pipes and broke all the windows. A local glazier and the father of one of the vandals put in new windows for us but it was a cold winter. We had saucepans on the bed to catch the rainwater coming through the ceiling.



With no spare money and rampant inflation, we passed the 70s and 80s fixing the house, doing all the work ourselves and making babies, keeping goats, pigs, ducks and chickens and growing vegetables.



Meanwhile I carried on working in the aerospace industry, learning how to design things and trying to make up for my lack of a proper engineering apprenticeship.

Most of the next 25 years was spent in the artificial limb industry working on electric hands, artificial leg systems for first and third world patients and devices that enabled paraplegics to stand up and walk.



Combining psychology, biomechanics, engineering and computer control, was a wonderful challenge. Disabled people have to draw on reserves of independence, determination and humour that the rest of us may never need and it was great fun to work with them. One of our leg amputees was a sidecar racer and rather upset the spectators and marshals when he crashed at Mallory and his leg fell off.

Sometime in the late 80s we had a visit from the editor of Eureka magazine who wanted to do an article on powered artificial hands. He suggested I enter my new powered gripper design in their design competition, the Archimedes Awards – the engineering Oscars he called them. Then he invited us to the ceremony. We went and ... we won. Just like the Oscars except it was in Birmingham and I wasn't asked to make a speech.

I was presented with a statuette of a skinny bald man with a beard shaking his fists and presumably shouting "Eureka", or could it have been "the bloody engine 's blown up".

A redundancy and a few jobs later in 2009 I was 60, a grandfather and back adrift in the jobs market, so I went contracting and spent the next 10 years working on instruments for NASA and ESA space science satellites and on particle physics experiments – the brainy stuff was done by the others. After years of designing stuff at NHS prices it was an amazing contrast to work on some of the most expensive machines ever made. The space environment is incredibly harsh and quite different from that faced by any terrestrial machine. The costs are so high that projects are shared with other scientists and engineers from many countries with masses of data streamed back to earth and analysed for years by universities all over the world. What a shame such international co-operation does not extend to other things, like International peace or antibiotic research.

Not much call for my biomechanics knowledge in space until we find some aliens, but a couple of my colleagues had done aerodynamics and there's not much of that in space either. I worked on the James Webb Space Telescope which will be the replacement for Hubble and will look right back to the dawn of the universe, and Euclid, a space telescope that it is hoped will find out more about the nature of Dark Matter. We have now reached my retirement last year aged 70 - voluntary this time.

I have worked on the design of Inertial navigation systems for the Tornado and the original Ariane rockets, television broadcast equipment, escape and fire safety apparatus, artificial limbs,

rehabilitation engineering, space satellites, garden tractors, maritime engineering and other stuff but until the Falcon, never race cars.

As a child I wanted to be a racing driver and made soap box cars out of prams and shilling bags of offcuts from the local woodyard. Unlike Red Bull Soapbox contestants, I did at least work out the need for castor and Ackerman steering. In 1964 my uncle took me to see Jim Clark win the British Grand Prix at Brands Hatch. I became a junior member of the BARC and went to a couple of events they put on at Brands. Bruce McLaren, then driving for Cooper, gave us a circuit guide in a Thames minibus demonstrating how to drift it into Druids. He was probably about 20. He seemed like a god.

The following year we raced karts against Denny Hulme. I was quicker on the uphill bits. I also recall around this time a close race across a muddy field alongside John Welch later to become British Rallycross champion. I can't remember who won - we were on a cross country scout hike and just pleased to have beaten a large bull into third place.

It was many years before I got to indulge my interest in motorsport, first doing MCC Trials in a kit car with 10-year-old Andrew as navigator and then I discovered that the 750 Formula was still going. It had started the month I was born and I first heard about it as a teenager.

I bought the 1983 Darvi Mk6 from Richard Crossman. I thought I might be able to race for about 5 years before I was too old. That was 24 years ago. I started at the same age as Fangio retired. If I had started sooner....



I think the Mk 6 was the second best of Dick's designs after Peter Bove's P88 but my best results of 5th and 6th in the championship did not really do it justice. I did get one win from Pole at Snetterton in the first race with the control camshaft and as it was the first race of the year, I also lead the championship. This was a surprise for everyone, but it only lasted for 3 hours, as I was 4th in the second race and Dave Robson was 2nd in both races and led by 1 point by the end of the day. My championship lead never even got recorded. Still with a red flag incident, I made 3 starts from pole in one day and made a good start each time, so I was quite pleased with that. I have some other front row starts and podium finishes over the years. The only finish position between 1st and last

that I have never had in the formula is 2nd



With the Darvi chassis getting increasingly worn and bent I designed and built a new chassis for it and, with Dick's agreement, intended to sell it as a kit. Then the transverse engine rules were introduced and I couldn't resist the challenge of designing a completely new car. So, after a lot of reading and research I designed the Falcon as a racing car kit.



The Darvi and its new chassis were sold to some bloke who said he had "done a bit of karting" – Dave Hodkins former British Champion. He rebuilt the Darvi in its new chassis and went on to win the championship and I am delighted to hear that the original Mk6 chassis is now also being restored.

To date 7 Falcons have built and raced, with Mark Glover winning back-to-back championships with his



and some good results and class B championships for the others. Another is under construction and Andrew is building a further 2 kits at the moment.



I also designed the Merlin based on 1970s components to qualify for the Historic 750 series and there are 6 of those. 3 race as historics and 2 including ours are in the formula and one is still in-build.



I took what I think is an unusual approach in designing the Falcon in that I have given much more consideration to the driver as part of the system making sure that the ergonomics of the brakes and steering optimises feedback and control for the driver and that the basic handling characteristics and transitional behaviour of the car are stable and predictable. If the car is in any way awkward to drive then an amateur driver will not get the best out of it in only 15 minutes of practice.

In the spirit of the formula, I have also made the Falcons easy to modify and the cars are becoming more individual as their owners develop and modify them.



Now, my son Andrew and I share our Falcon and Merlin and my daughter Liz has had a few outings in the Merlin. I plan to keep racing until I can no longer limp through the medical or the money runs out. (Must check out that other wife's pension). Martin Kemp

