Robin Day – very brief to current CV - 21/02/2021

- Born - Kampala 1952 (my father a civil engineer and part of the Owen Falls dam project in Uganda).
- Grew up in Kenya / schooled at St Marys Boys School – Nairobi.
- I studied Mechanical Engineering – MEng (Hons) degree (Aston University) – UK.
- Returned to Kenya following on from those studies in 1974 and then working for Benbros as the Assistant Works Manager at the main (Nairobi) office / workshops there (that company was later absorbed into Cooper Motors).
- My preferred career calling (racing car design) took me back to the UK in 1976.
- Joined McLaren F1 team in 1977 as a design engineer & race team member for 5 years, followed by a period at Brabham (F1 world championship winning team 1983) and from 1987 at March with F1 & IndyCar racing (USA based IndyCar racing series). Following a >16 years career at the top of motorsport I moved on from that sport / career in 1994.
- Following on from that 16 years career in F1 I joined the Camera Tracking Company (UK) responsible for design of the tracked camera system for Olympics (1996 Atlanta (USA) and later in 2000 Sydney (Australia)). Tracked cameras typically move with the runners providing that running / action point of view for the last 100 Metres. Variants of my original remote controlled design have been used in coverage of televised athletics ever since that remote controlled camera system design innovation first appeared.
- I was "head hunted" into Page Aerospace in 1998 to head up designs for Boeing / Lockheed Martin JSF project as my experience in Human Machine Interface (HMI – remote control) was highly specialised and later developments applied in the "Joystick / Rudder Bar" systems on the F35 fighter. Later I became responsible for all designs from that place for aircraft lighting using LED technology including Airbus A380 & Boeing 777 / 787 as well as a number of systems that are brand specific to other commercial airlines.
- In 2006 I set up the company known then as EcoLED Lighting which specialised energy saving LED lighting - first project solar powered camp border security lighting for UNICEF - Darfur (Sudan) and supplied lighting products as used in the Olympic Village for 2012 Games in London.
- EcoLED Lighting was sold out to a competitor (LED Evolution which is part of the UK based IMO Group) in 2012 where I was contractually obliged also to remain as CTO.

Most recent / current,

- I resigned from that company (LED Evolution) by mutual agreement and formed TitanTech (branded as FortiTwo Energy (42E)) in 2015 with a range of specialist / niche market LED lighting designs targeted at the growing market in the UK / EU for "real" energy saving / durable lighting products. FortiTwo Energy specialised on sales of "real" energy saving lights to UK schools where the cost of upgrading is covered by the energy saving on a lease to own agreement. 2800 schools refitted in the UK from 2016 to date by 42E where actual energy savings paid for the materials & installation.

- A call from the UK Department of Trade in respect to a specific request by the government of Oman introduced me to Lithium Ferro Phosphate (LiFeP04) battery storage technology applied to designs in solar street lighting products to be utilised in Oman & Djibouti street lighting projects / tenders where non-explosive batteries specifically to resist the potential to create IED's from those batteries.

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- The use of that Lithium Ion (Li-Ion as LiFeP04 & NMC battery chemistries) battery technology then the catalyst for creation of a separate company specialising in energy systems involving solar & battery storage / grid supply replacement feed in 2019 as an offshoot / extension to the lighting business and so operational under the name of EBetri Ltd (UK).

- EBetri as a brand name was targeted at creating a viable business model with the specific aim of bring that state of art energy storage technology to Kenya as that country an ideal location for a manufacture & logistics base of operation specifically suited to our business model.

- Efforts then focused on researching that technology and battery design to ensure ground based performance matched to that technology as applied in space (satellites etc.) with realistic useable lifetimes of 20 - 25 years, compliance to all specific international performance, quality and handling standards and seeking developments investment.

- During 2019 / 2020 I worked closely with Williams Advanced Engineering Electric Vehicle team (WAE, an offshoot of the Formula 1 team) many of whom I had competed against in my earlier career but now specialise in electric vehicle (EV) technology and design for numerous automobile, motorcycle and bicycle manufacturers. This EV technology development is directly applicable to fixed energy storage as the basis of the range of EBetri battery designs as state of art designs currently focused on electric vehicles.

- Following then an association with Warwick University in the early months of 2020 has been established when “fixed” & “mobile” storage designs (*described later) are a point of focus for R&D projects funded by the UK government to contribute to aid in carbon footprint reduction in storage of renewable energy. Warwick University the beneficiary of UK Government of £60 million capital investment in the Energy Research Accelerator (ERA) programme and now recognised as one of the leading technology centres for renewably generated energy storage globally.

- Research has taken me beyond the use of new (1st life) battery cells and into positive commercial investigations associated to the use of upcycled cells described as 2nd life from EV battery packs. The viability to use 2nd life cells then to store renewable generated energy but in an affordable / low cost format ideally suited to developing world applications is a certainty for the future.

- 2020 and confinement resulting from the lockdown situation placed on the UK by the Covid-19 pandemic then allowed the design cycle to be completed based on the accumulated knowledge by association with WAE and Warwick University.

  The final design then based on leading edge technologies employed in current EV batteries designs where electronic intelligence is employed to create “fixed” & “mobile” storage designs specifically suited to storage of renewable energy. There are a number of unique features in the intelligence package that are covered by strict intellectual property protection at this time – circumventure and non-disclosure agreement documentation is available and signatures are required.

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* “Fixed” storage describes systems where battery packs are statically located in buildings of many types whereas “Mobile” storage describes batteries as providing power in moving storage more commonly understood as powering vehicles.

Initially development focused on “fixed” storage for numerous applications (homes, retail outlets, chilled / frozen food storage, light commercial manufacturing spaces and on up to rural mini / micro grid storage / supply) and later, by complete chance, it was noted that our “fixed” design could be used in certain common “mobile” applications across the developing world.

This “Mobile” development has taken us almost full circle now and back to EV designs but for use in what is commonly used for transportation in Kenya and known as a “Boda Boda” and 2 as well as 3 wheeled variants where recharged batteries can be exchanged as you would refuel a vehicle however the energy actually supplied by the sun.