# A celebration of life James Ronald Briggs

9th October 1930 - 17th November 2020

11.00-11.30 am, 4th December 2020, Cam Valley Crematorium

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# **The Tribute**

## **Russell Briggs**

#### Introduction

Thank you all for coming today. If it wasn't for Covid we would be looking at an attendance in excess of 100 which for a man of 90 is remarkable in itself.

Unfortunately, a formal wake will not be possible at this time but we will, when this epidemic is over, hold a proper wake to remember James Briggs.

#### James Ronald Briggs was a remarkable man!

Born 9<sup>th</sup> October 1930 in Croydon to James Lenard Briggs who was a builder's clerk at the time and Blanch Emily Briggs nee Kuhn.

In 1937 his little sister Audrey was born & they would remain close throughout their lives.

In 1941, Following a few moves around London the family moved to Burton Farm, Aldington, Kent. I believe this was a small farm that his Father started to work. Dad entered and passed a scholarship examination to Ashford Grammar school.

On leaving in December 1945, the headmaster wrote

He has good ability and works with intelligence and enthusiasm. He is vigorous and self-reliant and is a boy of excellent character and cheerful temperament.

He entered and passed the entrance exam for Royal Navy Artificer apprenticeship – a highly skilled training program working on electronic, electrical and electromechanical systems & devices.

The family moved to Crowshole farm, Chaney, Kent. Another, but larger working farm.

In 1946, he entered the Royal Navy and after preliminary training was drafted to the Artificer training establishment at Torpoint, near Plymouth. He was discharged from the Navy in 1947 and returned to Crowshole farm to help work the land but also continued his studies via a correspondence course at Wolsey Hall, Oxford.

In June 1948, he entered and passed the entrance exam to London University in English, Mathematics, French, Mechanical and Electrical Engineering.

In October 1948, he started work as a junior draughtsman with G H Buckle & partners, consulting engineers and also started a night school degree course at Northampton Polytechnic.

In April 1949 however he was called up for National Service. Where he was trained in obtaining & issuing aircraft & motor spares. He also entered and passed the Navy Higher Educational Certificate.

In 1951 dad was discharged from the Navy, recommenced his employment with GHB & Partners along with his part time degree course at Northampton.

He Married his first wife, Paisley and set up home in various abodes around London.

During the 5-year degree evening course and whist working during the day, Dad also entered and passed other exams including GSE A levels in Pure & applied Maths, Physics & Chemistry and Engineering Drawing.

In 1956 he passed the Bachelor of science part 1, 1st class honours

In 1958 he passed the Bachelor of science part 2, 1st class honours.

The marriage to Paisley didn't last & they were divorced

He met Vera Webb at a dance in 1960 & they married 3 years later

In 1962 he joined McAslan and Partners in Belfast

He continued to study and became a chartered engineer and passed entrance exams to become a member of prestigious institutions in both the mechanical and electrical disciplines of building services.

In October 1962 Russell was born.

In January 1966 Lionel was born.

In 1967 We moved to Harpenden in Hertfordshire & Dad set up the London office of McAslan and Partners.

I'll now ask Mike Humphries, a long time work colleague to talk more on his professional career.

#### Mike Humphries

In 1968 he left McAslan and Partners & set up James R Briggs Associates consulting Engineers with offices in London.

He was respected within the industry and was a named contributor to a number of technical papers such as the electrical regulations and CIBSE guides. He was a pioneer of multi-disciplinary engineering believing that engineers should not be "mechanical", "electrical" or "plumbing" but capable of understanding and integrating all the things needed to make a modern building work.

The practice grew to employing over 100 with offices in London, Oxford and Cambridge.

He was a highly respected fellow of the Institution of Mechanical Engineers (FIMechE), Institution of Electrical Engineer (FIEE) and Chartered Institution of Building Services Engineers (FCIBSE). He sat on many institutional research and standards committees and was a pioneer of the Building Services Research and Information Association, now a major independent research organisation in Garston.

# James Briggs - a Truly Modern and Very Good Engineer

Those who knew James socially may not have been aware of his activities as a Consulting Engineer and his involvement in some of the UK's most prestigious projects of the 70's and 80's. I've described two of the most notable later in this note. His attention to detail, including extensive planning in all aspects of his business activities were extraordinary. Many businesses have workaholic bosses who run a tight ship. James was that but also an innovator who, ahead of most, embraced the PC age basing the technical activities of his company around calculation and the proper analysis of data. James was not interested in guesswork or "rule of thumb" methods of design. He believed modern buildings needed modern design solutions, in a world of mega-expensive main-frame computers he identified that the PC was the tool of the future.

There were several problems with a plan to introduce computer aided design to a medium sized business in the late 70's and early 80's; few knew how to write code, the necessary programmes or apps didn't exist, PC's were phenomenally expensive and there were no interfaces such as windows to connect the various components together and allow user access for data input.

None of this proved to be a hurdle for James, he taught himself Basic (old school computer language), wrote the programmes, found the money, bought a Wang desktop PC and designed the data input sheets to allow users to input the data. In 1973 a Wang 2200 cost around \$7,000, an eyewatering sum at the time. (For those of a techie bent the memory could be expanded in 4kb increments up to 32kb!!)



Wang 2200 from around 1978

By today's standards the production of output data was slow. We would press the go button and leave the PC to work overnight and to churn out its results via a continuous paper printer. Nonetheless it was massively faster than doing calculations long hand (which would take weeks) and enabled James' design teams to easily assess options in a way that was previously uneconomic.

PC tools did not stop at engineering software. James developed project costing and timesheet tools using VisiCalc and Lotus1-2-3 that enabled engineers to record time and for managers to assess project performance (and most importantly profitability) with a narrative about design activity. In today's world of Microsoft office such a tool seems workaday in the early 80's it was ground breaking massively improving profitability.

## **Projects**

A reputation of being able to analyse complex buildings quickly gave James an edge in working on prestigious design competitions, enabling the inclusion of hard technical information in proposals rather than projections based on rules of thumb. The "techie" approach was popular with academic institutions leading to a whole raft of projects in Oxford and Cambridge Colleges and a close relationship with the Cambridge School of Architecture with engineers from James R Briggs and Associates (JRBA) acting as visiting lecturers and holding workshops in integrated design.

### **The Burrell Collection**

In early 70's James worked with Cambridge Professor and Architect Barry Gasson on a competition for a new museum in Glasgow to display a collection of art and artifacts donated to the City by Sir William Burrell. The building was completed in 1983 forming a central part of the activities when Glasgow was European City of Culture in 1990. Despite displaying fragile and priceless works the building is filled with light it created an Architectural stir acting as a model for what a modern museum should be.



The main gallery looking out onto the picnic lawns

The museum is a major UK Award and Scottish Gold Medal winning building that within 30 years of its construction was awarded Grade A (equivalent of Grade 1 listed status in England). This stunning building is regarded as the finest example of 70's architecture in the UK. The Architect, Sir Barry Gasson was an academic and only built this one major building for which he was knighted. James always considered he should also have been knighted too because without his innovative technical input the project would have been uninhabitable due to the extensive glazed walls and roof.



The entrance hall and Warwick vase

William Burrell was a prodigious collector of both art and interesting elements of buildings including doors, windows and stained glass saved from sites intended for demolition. The collection is so large that only a fraction can be displayed at any particular time, so in addition to the close controlled display spaces the building houses hidden storage spaces, also closely controlled so that fragile works can be taken from storage into display in rotation without being damaged.

The building is presently being given a £27m face lift including some work to the M&E plant designed by James. Most of the plant was procured in 1980/81 and was still running prior to the refurbishment meaning 40 years of continuous operation – a pretty good scheme by any standards!

# The Sackler Gallery - Royal Academy of Arts

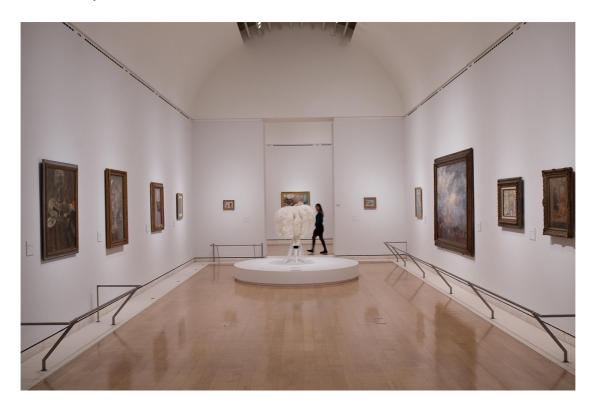
In 1985 supported by the philanthropist Sackler family the RA wanted to create a set of galleries that would have the highest quality environmental controls that would enable the display of visiting exhibitions from any museum or collection in the world. Sir Norman Foster was appointed as Architect with JRBA who were to design the environmental systems to meet the exacting brief. Because it was intended that the gallery would be for visiting collections, in addition to exacting standards of temperature and humidity control, the air movement in the room was to be controlled such that there was even air velocity (at design conditions) across the face of the picture hanging zone. The objective was to prevent any variation in temperature or humidity that might cause differential shrinkage of frames or the works themselves. Prior to JRBA's appointment a number of the UK's major M&E consultants were asked to critique the brief with a general view that it couldn't be done.



The entrance area and sculpture gallery Michelangelo's Tondo to the right

When the design commenced Foster and Partners imposed further constraints on the gallery design with a requirement that to maximise the display walls air distribution should be confined to narrow strips at the top and bottom of the space. A further seemingly impossible requirement was that the air distribution should not need adjustment when the design conditions changed. The eventual design utilised a special "swirl diffuser" manufactured from a solid block of plastic into which was machined a labyrinth of airways terminating at a series of small rectangular openings. The geometry of the labyrinth was such that when the air passing through it reached a specific velocity, the air started to spin. At the exit from the block, each spinning jet of air was passed across a thin wedge that directed each jet up, down or horizontally in sequence. Air spinning from the outlet induced a slow air movement up the wall creating even air velocity upwards across the hanging space, thus meeting the brief. A completely novel idea at the time although it has been copied since.

The design was however a high-risk strategy, the RA could not afford a full-size mock up and if it didn't work, once installed, there was nothing to adjust. Everyone was getting cold feet about the whether it was worth the risk. Limited tests said it should work but James had studied the numbers and the modelling and was convinced the RA and Foster after some persuasion gave the go-ahead. The scheme worked perfectly it was independently tested by the Bartlett and met the brief exactly.



Sackler display gallery, the supply outlets are located at the base of the vaulted ceiling. Air is extracted at the skirting.

The gallery was opened by the Queen and practice team was given one place in the line up to shake the royal hand. Generously James gave the spot to John Pengilly the engineer who had overseen the project on site.

In addition to the ground breaking air-con the galleries included the heaviest glass cantilever hydraulic lift ever installed in Europe. This much copied lift has semi-circular doors and was hand built by OTIS in Liverpool. It has a single ram and car is designed to in addition to transporting people to carry very heavy stone and metal statues to the sculpture shelf.

The electrical design involved the lighting of a Michelangelo and working with Foster and George Sexton of New York, set a new standard for glare free gallery lighting.

Sackler was the last major project undertaken by James prior to retirement. If you Google the project there are reams of articles by Architects describing the beauty of the scheme and its architectural brilliance. I've never seen any article about the capabilities of the plant that met a world class display brief, which, after all, was the whole point of the project.

## **Finally**

If you get the chance, do have a look at the two projects online; or better still pay a visit them once we get to the new normal.

There is a compliment that engineers use about each other when the capability of colleagues and co-professionals. Generally, it is used along the lines of "I remember so and so, he was a good engineer". A "good engineer" whilst understated is high praise indeed. If I were to comment on the capabilities of James Briggs, I would say he was a <u>very good engineer</u>, possibly the most competent engineer I ever met.

#### **Lionel Briggs**

It is true to say Dad was a relentless workaholic. He left before we were up in the morning and got back around 10pm, way after our bedtimes.

Saturday's he would spend all day in his study, working.

Sundays however we did often go out to lunch at the Glen Eagle Hotel in Harpenden. Prior to lunch we would sit in the lounge bar & they would have an aperitif. Cinzano & lemonade with peanuts & gherkin nibbles – 70's chic!

In '79 he separated from Vera & moved to Kent. We didn't see much of him at that time.

In '84 he was reconciled with Vera & they bought a new home together at Cinder Hall in Saffron Walden and lived there for 18 years.

In '91 he retired, well sort of. He would continue to undertake projects including appearing as an expert witness in trials.

By 1998 Vera's health had deteriorated and Dad became her carer.

In 2001, After a 10-year search he found his ideal retirement home in Foxreach, Stocking Green. And he set about with various extensions & improvements.

Sadly Vera died in 2004, before the improvement works had been completed.

But he had another 16 years of retirement which were no less busy, and he very much enjoyed living at Foxreach.

He met Joan a few years later and they spent an enjoyable 10 years together, traveling, doing lunch and generally enjoying retirement.

He was the local neighbourhood watch coordinator and would set up a stall at various village fetes to offer advice and hand out information.

He also edited and published the Radwinter Times, a comprehensive monthly publication advising local news & information.

Until the very end he continued to involve himself in village affairs.

#### **Travel**

Travel was a passion for Dad, and he had many trips aboard. The last being just last February where at the age of 89 with poor mobility he organised a solo road trip to Northern Spain to stay in a few Parador hotels.

His email said -

I am going to Northern Spain:

Leaving Sunday 09 Feb

Returning Saturday 22 Feb

I will not be taking out 'holiday' insurance so if I die please get me cremated in Spain and bring the ashes back here to join your mum under the willow tree.

Unfortunately, the trip coincided with the peak of storm Ciara with warnings not to travel unless absolutely necessary. The ferry to Santander was inevitably cancelled but he still drove to Portsmouth on the hope he could at least get a ferry to France, which he did the next day. A 12-hour drive followed to Santander along Frances motorways which have frequent tolls. Being in a right-hand drive car he was on the wrong side to pay so would have to get out walk around the car to hand over the money. — with poor mobility this took some time to the irritation of the people

following. After a stop over in Santander he continued with a 6 hour drive to northern Spain to continue his trip.

## **Money**

Dad was very meticulous with money, recording where every penny was spent. He has kept his diary's going back to 1960 where he recorded each transaction which was then translated to account books. He would often recount the time in 1978 where he failed to account for 5p.

Whilst I was at university, he gave me a monthly allowance & tried to instil a similar ethic by requesting I account for every penny I spent. My accounts indicated a large, continuing expenditure on stationary & books which he never questioned but of course he knew the truth!

#### Charitable

Dad supported many charities, most notable being Saffron Sight, The Royal British Legion and The Gurkhas where in 1999 he funded the building of a complete house in Nepal.

He worked with the Institute of Engineering Technology benevolent fund where he helped many members with a wide range of problems.

# **Boating**

Being from a Navy background he enjoyed being on the water and owned

In the 70's a Snapdragon 26ft Stoop yacht

In the 80's a Shetland 13ft power boat

On his retirement in '91 he bought Hi-Banks a 36ft 12 tonne Grand Banks motor cruiser and completed many voyages.

He of coursed passed the Royal yachting association helmsman course and remained a lifetime member.

## **Patriarch**

He was the Patriarch of the family & without him it's unlikely we would have seen as much of each other as we have done. Every year he would organise a gathering, often organising special venues, including professional entertainment & paying for travel & lodgings.

Memorable events include

His 75<sup>th</sup> at the great hall in Audley End.

His 80th at Chilford Hall

His 85<sup>th</sup> a costume party at the former maltings in Saffron Walden.

For his 90<sup>th</sup> he was planning a 200 plus attendance banquet for him and Dianne Rutherford, as well as a separate family event. Despite his deteriorating condition, if it wasn't for Covid, these events would have gone ahead.

#### Stubborn

He was a very stubborn man, insisting on doing things his way.

Towards the end he did get Doddery on his feet – but he would still go up his stair lift standing up like an admiral! Recently, when his mobility had really deteriorated, I was working up in his loft to suddenly see his head appear through the hatch and I had to down tools & refuse to work until he had gone back down.

When it got to the stage he had to use a zimer frame it would still not stop him carrying out his favourite pastime – going out for Lunch. It was a sight to behold him exiting the steps of the farmhouse inn. He would raise the frame almost above his head to then let gravity tip him over straddling 2 steps. Ending up at 90° he would then shuffle down the steps.

### **Considered**

He was thoughtful and considered. He would talk slowly, each word analysed before being said. Many of us here have experienced being corrected by him. The long pause, the slow intake of breath followed by the devastating destruction of your argument.

James Ronald Briggs was truly a remarkable man!

May He Rest In Peace

James Ronald Briggs was a remarkable man!