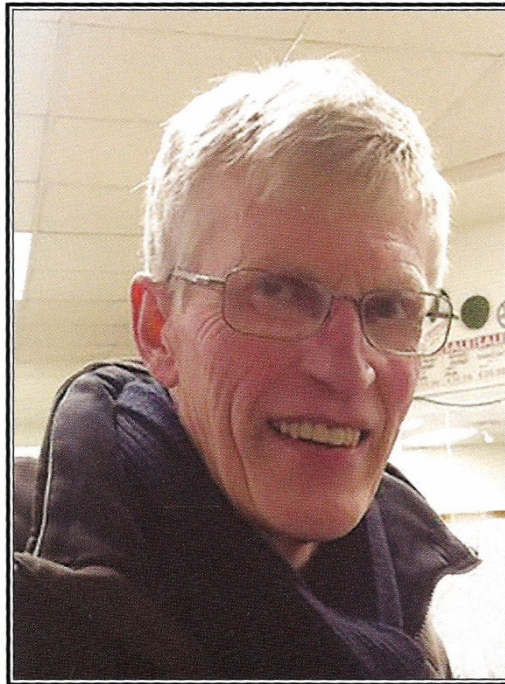


GRAHAM CRICK'S DG.ENG BUGLE



GRAHAM CRICK 1947-2018

You will all be aware that Graham died earlier this year and we are grateful to his wife Pat for providing Ted with the words that were used at his funeral in June. This is an extract from the reading.

Graham was born in Manchester in 1947 – son to Jean and Peter and brother to Robert and later Penny. Graham's family describe how his early life was pretty unconventional. Post war, austerity, Britain was a tough time for many, but his parents' diverse and theatrical background made for a lively and unusual childhood.

They started with a small hotel near Manchester before moving to manage a pub in the Covent Garden and Soho area of London when Graham was 10. Finally, a couple of years later they moved again to a "little country pub" in Oxted, Surrey.

Graham's skill for practical problem solving became evident at an early age when amongst other things, he operated and maintained the ancient projection equipment in the struggling and leaky, local independent

village cinema. His talent for maths took him successfully through Technical College to a Mechanical Engineering Apprenticeship with the then Ministry of Aviation and Technology, who sent him to study at Brunel University. There, as leader of the student Engineering Society, Graham did what he could to broaden the horizons of his peers by inviting a wide range of outside speakers to campus, including Edward de Bono and Tariq Ali. He also organised for them to be at Avonmouth to see the triumphant return of Brunel's SS Great Britain to Bristol in July 1970.

After graduation Graham returned to Bristol when he was seconded by the Ministry to Rolls Royce Engineering where he worked on both engines and aircraft, including the development of Concorde.

As a result, he was lucky enough to join an inaugural return trip in the supersonic passenger jet to Newfoundland and back in a single day. Graham very much enjoyed his working life with aircraft over many years.

In Bristol, Graham met Pat at the Arts Centre and they married in 1975 and a few years later the couple were blessed with the arrival of Tom and then Eleanor.

Meanwhile, during the late 70's Graham and his colleagues were working on the Pegasus project. Then, in the early 1980's, Graham was promoted within the Ministry of Defence, as it now was, and posted to a job in London.

Following the promotion, Pat and Graham moved the family to Reading influenced by a family connection with Caversham. Pat's mother had been evacuated here in the 1940's, due to the war time bombing of Southampton, to have her first child – Pat's big sister Valerie. Despite the Ministry posting Graham back to Bristol at a later date, they decided to settle in Reading and had two more children, Jonny and later Martin in 1991.

Graham's retirement from the Ministry of Defence was precipitated by the cancellation of the Nimrod project, a decision now much regretted by many at the highest levels. Graham's colleagues joke that the procurement and installation of the flight simulator for training this aircraft's pilot, which was Graham's responsibility, was the only completed work on that project. However, this was a swift and painful end to his career.

Graham then turned his considerable creative and problem-solving skills to working as a volunteer in the Bicycle Kitchen in Reading. There, according to his colleague and friend Adrian, he not only made the loo flush but also developed some amazing gadgets which Adrian found very useful in training courses.

Always at the centre of Graham's life was his family and his whole focus was directed to their wellbeing, sharing many happy times.

Ted received many condolence/reminiscent messages from Graham's former working colleagues, recounting over 30 years of friendship. Here are a couple of them:

First from David Colbourne.

I first met Graham when I was transferred from the NGTE at Pyestock to the Engines Directorate in St Giles Court in 1987. I took on the role of ADEng(3) – Assistant Director Engines (3) – and had two section leaders working for me, one on Military engine demonstrators and Graham on Civil engine demonstrators and the RTM322 (helicopter engine) development.

The demonstrator programmes were a DG (Eng) initiative which revolutionised the way Rolls-Royce improved their gas-turbine engines or developed new engines. The idea was that we had several projects with Rolls-Royce Derby (Graham's section was partly funded by the DTI, as they funded the civil demonstrators) to design, build and test various components of their engines (e.g. the fan, the combustion system, the turbines) incorporating the results of the latest research from RR, NGTE, Universities etc to achieve improvements in performance, life or cost. These projects were very cost-effective, and much cheaper than building and testing a complete engine. Graham (he had quite a small team of two other engineers) managed all these projects, which involved regular liaison with the engineers at Derby, and more formal quarterly review meetings in Derby. This approach (which was not initially received with 100% enthusiasm by Rolls-Royce!) quickly proved its worth, in as much as, by the mid 90's, the Technical Director at Rolls-Royce was claiming that by using demonstrators, they would reduce the development time for new (civil) engines from the traditional 7 years (or more) to 24 months (or less)!

The RTM322 was an Anglo-French project, so that involved liaison with the French MoD in Paris and visits to the Turbomeca Company in Pau (SW France at the foot of the Pyrenees) as well as Rolls-Royce in Leavesden. The result of that project was also extremely effective, in that the RTM322 powers the Merlin Mk1 (AEW) helicopters, the Merlin Mk2 (transport) helicopter and the British Army's Apache attack helicopter.

Graham's knowledge, calm manner – and ever present good humour and optimism – greatly

enhanced his effectiveness in managing these projects.

He made significant contributions to MoD throughout his career, and I really enjoyed working with him, and later occasionally meeting with him for a chat as we moved on to different projects at St Giles and Abbey Wood.

I realise that I actually worked with Graham for a relatively short period of our MoD careers, but I have very fond memories of those 3 / 4 years together (both the business side and also the more relaxed social side as we travelled round together)

Paul Gallagher writes: I worked with Graham on the Nimrod MRA4 project between 2006 and 2010. He was a senior member of the Team, and was the management board member for the delivery of synthetic training systems for Nimrod, up at the base of 120 Sqn and 206 Sqn at RAF Kinloss on the Moray Firth, near to Inverness. My role in those days was in a more junior capacity, working in the programme team collecting information on progress against project milestones and it was through this that I got to know Graham, as delivery of the Training system was a major part of the Project.

I used to talk to Graham a lot. I can see him now, sitting at his desk in the Corner of the office in Walnut Oc in Abbey Wood. My memories of Graham are that he was an extremely articulate gentleman, polite, refined, extremely knowledgeable and very inventive. He was also very approachable. For such a senior position, he would enjoy taking time to explain complex scenarios in an understandable way. But the thing that I remember about him, is that he always had a smile on his face, no matter what was going on, and this gave me a great deal of reassurance as a junior member of the team.

From a work perspective, Graham delivered a significant achievement to the Nimrod Project when he implemented the ASTA (Aircrew Synthetic Training Aid). It's difficult to imagine what this might look like if you have never seen one before, but from the outside, the ASTA Building was a huge Metal and Glass

structure sited in the heart of the Kinloss camp, with its own car park and security system. Inside were 4 huge white 'pods' – 30 feet in the air and supported underneath by hydraulic jacks. Inside the pods, it looked just like the inside of a Nimrod aircraft cockpit. The Pods were capable of generating many realistic flight scenarios. On one occasion, Graham arranged for me to sit inside one. With a tap on the keyboard, we were on the runway at Kinloss. With another tap, we were taking off in heavy snow. Whilst I sat at the back of the pod in an observing capacity, it was amazing how the pod responded to the pilot's instructions. When the aircraft simulation was climbing, the hydraulic jacks tilted the pod backward, and when we banked, the pod tilted to one side. My experience that day has left an indelible memory with me that I shall not forget. Little of his achievements are listed on the Internet because of their sensitive nature, but I did find some information at the link below.

<https://www.flightglobal.com/news/articles/picture-bae39s-first-production-nimrod-mra4-gets-raf-333038/>

I remember Graham's last day in the office before his retirement. He worked late that evening, and even though I had left the Nimrod team by then, I remember how he sent emails describing his plans for the future now that retirement was beckoning. Graham was liked by everyone in the office; he never had a bad word to say about anyone and conversely no-one ever said a bad word about him. I shall remember his smiling face as he walked quickly into the office on a Monday morning, having travelled to Bristol by train, and then cycling the final mile on an ancient old pushbike, bike clips still in place.

Finally, just in case any of you pass that way and would like to call in for a few moments of quietness in memory of Graham, his ashes have been laid to rest in the lovely quiet South Oxfordshire cemetery at Kidmore End just a few miles north of Reading off the A4074 to Wallingford.

*Words put together by Malcolm, edited by Ted. DG.Eng Bugle
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