### eNews from GAD: issue 37, Autumn 2019

In this edition of eNews we take a closer look at the goals of the Analysis Function and the key role that actuaries play in it, some experiences of GAD staff and future expectations.

Also in this edition, to celebrate GAD's centenary, eNews is running a series of 'deep dives' into key areas in which our actuaries have contributed to public life over the last 100 years. This article, the third in our 4-part series, discusses GAD's role providing insurance advice to UK government — an important and growing addition to GAD's actuarial offering.

### Vacancy: Operations Officer

Do you have excellent communication skills and a real passion for providing quality customer service?

Are you a solid administrator who is well-organised, methodical and has an eye for detail?

Would you like to work in a high profile organisation, working with some of the world's leading experts in air accident investigation?

If so, this is an exciting opportunity to join the Air Accidents Investigation Branch (AAIB) as an Operations Officer, and we'd love to hear from you.

You can read the full role profile and apply for this position on <u>Civil Service Jobs</u>. The deadline for applications is 21 October.

Read more about working at the AAIB.

## <u>Investigatory Powers Commissioner</u> <u>appointed: Sir Brian Leveson</u>

The Prime Minister has approved Sir Brian Leveson's appointment for a three-year term. Sir Brian will succeed Sir Adrian Fulford (Lord Justice Fulford), who will take up a new post as Vice-President of the Court of Appeal (Criminal Division).

#### **Biographical Notes**

Sir Brian Leveson was called to the Bar by Middle Temple in 1970, appointed Queen's Counsel in 1986, and was a Recorder and a Deputy High Court Judge. He was appointed a Judge of the High Court, Queen's Bench Division, in 2000, and served as a Presiding Judge of the Northern Circuit. In 2005 he was appointed to the new position of Deputy Senior Presiding Judge and in 2006, following his appointment as a Lord Justice of Appeal, he became Senior Presiding Judge for England and Wales. In 2009, he was appointed Chairman of the Sentencing Council.

In July 2011, he was appointed by the Prime Minister as chairman of the public inquiry investigating the culture, practices and ethics of the press and its relationship with the public, the police and politicians: his report was published in November 2012.

Earlier this year, Sir Brian retired as President of the Queen's Bench Division and Head of Criminal Justice.

He is an honorary fellow of Merton College, Oxford, is the Chancellor of Liverpool John Moores University and has received an honorary LL.D. from the University of Liverpool.

# UK to take a big 'STEP' to fusion electricity

Secretary of State for Business, Energy and Industrial Strategy, Rt Hon Andrea Leadsom MP, announced the funding package during a visit to the UK Atomic Energy Authority's Culham Science Centre HQ in Oxfordshire — the UK's world-leading fusion research laboratory.

Fusion offers a virtually limitless source of cleaner electricity by copying the processes that power the Sun — the collision of hydrogen atoms to release large amounts of energy. Researchers around the globe are now developing fusion reactors that can turn this into a commercial technology to help satisfy the world's ever-increasing demand for energy.

STEP will be an innovative plan for a commercially-viable fusion power station — offering the realistic prospect of constructing a powerplant by 2040. The investment will allow engineers and scientists to produce a conceptual design for the reactor (known as a 'tokamak') that will generate fusion energy and convert it into electricity. UKAEA and partners from industry and academia will pool their expertise to complete the design by 2024.

The STEP programme will create 300 jobs directly, with even more in the UK

fusion supply chain. In addition, the spin-outs from the design work are expected to be enormous — both in terms of synergies with other fusion powerplant design activities (such as Europe's 'DEMO' prototype power station) and other hi-tech industries.

STEP builds on UKAEA's expertise in developing so-called 'spherical tokamaks' — compact and efficient fusion devices that could offer an economical route to commercial fusion power. The new MAST Upgrade spherical tokamak experiment is due to start operations at Culham early in 2020. Its work will play a key role in the STEP design.

Andrea Leadsom, Secretary of State for Business, Energy and Industrial Strategy, said: "This is a bold and ambitious investment in the energy technology of the future. Nuclear fusion has the potential to be an unlimited clean, safe and carbon-free energy source and we want the first commercially viable machine to be in the U.K.

"This long-term investment will build on the UK's scientific leadership, driving advancements in materials science, plasma physics and robotics to support new hi-tech jobs and exports."

Professor Ian Chapman, CEO of the UK Atomic Energy Authority, added: "The UK has a proud heritage of pioneering developments in fusion research. This announcement demonstrates the UK government's commitment to translating that R&D leadership into a working fusion reactor. We are excited to work with our partners to take the next step towards a fusion-powered future."

#### Ends

For more information please contact Nick Holloway, UKAEA Media Manager, on 01235 466232 or nick.holloway@ukaea.uk.

# RAF pilot seconded to Virgin Orbit space programme

The partnership between the RAF and Virgin Orbit was unveiled at the Air and Space Power conference in July. Following a tough selection process, Air Vice-Marshal Simon 'Rocky' Rochelle and Virgin Orbit CEO Dan Hart have announced that Flight Lieutenant Mathew 'Stanny' Stannard had been selected.

Flt Lt. Stannard is currently a Typhoon pilot with one of the RAF's test and evaluation squadrons and is expected to join the pioneering Virgin Orbit programme next year, pending final US and UK regulatory approvals.

The secondment is expected to last three years and will see Flt Lt Stannard join the fleet of expert 'test pilots' trialling Boeing 747-400 aircraft from

which cutting-edge satellites will be launched.

Flt Lt Stannard will return to the RAF with considerable skills and expertise gained from the secondment which will improve the UK's understanding of the military uses of small satellites.

Defence Minister Annie-Marie Trevelyan said:

The UK and the US already have an incredibly close defence relationship and now we're working together to forge new frontiers in space.

This exciting partnership will see Virgin Orbit benefit from the skills and expertise of our personnel while propelling the RAF's space ambitions to new heights.

Air Vice-Marshal Rochelle, the RAF Air Capability Chief of Staff, said:

It's great news that the RAF can now confirm the secondment of Flight Lieutenant Stannard to the Virgin Orbit team. This move comes through our close collaboration and formal partnership with Virgin Orbit within Team ARTEMIS.

Having one of our Test Pilots working at the heart of such a cutting-edge programme is a significant step in the RAF's space journey. It also reinforces the close relationship we have with industry and with the US, we expect this to further enable UK satellite launch capabilities.

Flight Lieutenant Stannard said:

I've flown Tornado and Typhoon fighter jets in the RAF but being involved in Virgin Orbit's space programme is a truly unique opportunity.

This programme is pushing the boundaries of our understanding of space so it's a real privilege to be part of it and I'm looking forward to bringing the skills and knowledge I gain back to the RAF.

Virgin Orbit have recently commenced their first launch campaign, developing a new small satellite launch vehicle called LauncherOne which is to be released from a modified Boeing 747-400 named Cosmic Girl.

Virgin Orbit CEO Dan Hart said:

As an American Company with British ownership and a company guided by Sir Richard Branson, a truly legendary British entrepreneur, it is perhaps within our DNA to help the United Kingdom and the United States collaborate in space.

As part of Team ARTEMIS, we've been working with the RAF and the U.S. Air Force to demonstrate the utility of small satellites and responsive, resilient space launch and operations. We are thrilled to welcome Flight Lt. Matthew Stannard to our team of hugely talented pilots where I know his presence will move us further, faster and to new heights.

Virgin Orbit aircraft and launch vehicle.

The announcement was made in California aboard the iconic RMS Queen Mary ship—a fitting venue given the ship's history as Winston Churchill's floating headquarters in World War 2 and a symbol of the US/UK special relationship.

The Royal Air Force's Red Arrows display team flew over the ship as part of the event, which is one of the last on their North American tour over the last three months.

In July, the MOD outlined an ambitious space programme, committing £30m to fast-track the launch of a small satellite demonstrator within a year. The small satellite demonstrator, also known as Programme ARTEMIS, is being delivered by a new transatlantic team of UK and US defence personnel and industry partners including Virgin Orbit.

The MOD also announced the UK as the first formal partner in the US-led Operation Olympic Defender — a multinational military effort formed to strengthen deterrence against hostile actors in space, enhance resilience and preserve the safety of spaceflight.