

Black Arrow returns to the UK

THE focus of the UK space community will be on Midlothian today as the nation's first and only rocket to successfully place a satellite into orbit will be unveiled after a 10,000-mile journey home.

Half a century after its launch, the Black Arrow projectile will be exhibited in a storage facility in Penicuik following a successful effort by Edinburgh space company Skyrora to transport the rocket from the Australian outback to the UK. It will now be used for educational outreach.

Key industry figures are set to attend today's unveiling, with addresses from Mike Taylor, Markets and International Programme Director at the UK Space Agency, as well as Air Vice-Marshal Simon Rochelle of the Royal Air Force and leading Black Arrow expert at the London Science Museum, Doug Millard.

Developed and tested on the Isle of Wight, the Black Arrow programme completed four rockets between 1969 and 1971, with the third flight marking the first and only successful UK-led orbital launch.

It launched from Woomera in the Australian outback, but the six-metre-long first and largest stage crashed to earth near to where it was eventually put on display at William Creek – exposed to the harsh elements and even vandalised.

Daniel Smith, Director at Skyrora, which successfully completed its inaugural sub-orbital test launch north of the border last year, said: "Today we finally get to give Black Arrow the long-awaited welcome home it deserves.

“We hope it will be a fitting tribute to what we believe to be the most important artefact linked to the UK’s space history.

“It has been some journey – we wouldn’t have been able to do it without the support of the William Creek Progress Association and the Australian Government, so we’re extremely grateful to both.

“With the UK government’s aim to make us a launch nation again, it seemed like the perfect time to bring Black Arrow back. We hope it’s a reminder not only to our own team, but to everyone that’s part of the new commercial space race of what’s been accomplished before.

“We really hope the rocket will help to inspire current and future generations of scientists and engineers.”

The transportation process involved Black Arrow being shipped across land and sea – making the journey from the Australian desert to Edinburgh via Adelaide.

Daniel Smith added: “We were particularly excited about Black Arrow’s homecoming because of the parallels with Skyrora’s future orbital launch vehicle, which both use the same propellant combination.

“We firmly believe that in order to achieve success in an industry that is fraught with technical challenges, you must learn from what’s worked before – consequently, a lot of our systems are based on Skylark and Black Arrow technology, mixed with modern day innovation.”

In July last year, the UK Space Agency announced £2.5million funding for a proposed vertical launch spaceport in Sutherland.

Skyrora’s next planned rocket launches, Skylark Micro and SkyHy, will allow its team to gain more valuable launch experience, with the latter capable of reaching the edge of

space, a feat never accomplished by a private company launching from the UK before.

Skyrora's rapidly expanding team aims to capture its share of the fast-growing small satellite launch market and has already created two separate prototype engines, one of which is set for testing at Cornwall Airport Newquay.

It is developing launch vehicle technology that builds on previous British rocket programmes with the aim of reducing the cost of launches thanks to proven technology and advanced engineering methods.

The firm draws on Britain's launch heritage and aims to build a robust supply chain while creating new employment opportunities to inspire the next generation of talent.