## First British Rocket to Reach Orbit Returns Home

THE UK's only rocket to successfully place a satellite into orbit is to be unveiled in Scotland after a 10,000-mile journey back home.

Almost 50 years since its launch, the Black Arrow rocket will be displayed in Penicuik, Midlothian later this month after space company Skyrora transported the rocket from the Australian outback to the UK.

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 — before the programme was cancelled, giving the vehicle 'cult' status among the space community.

The Black Arrow rocket had been on display near to its landing site in the South Australian outback — damaged by the extreme weather conditions and vandalism — before Skyrora brought the vehicle, that famously launched the Prospero satellite, back to the UK.

The company has commissioned a plaque to be placed where Black Arrow had lain for more than forty-eight years.

Daniel Smith, Director at Skyrora, said: "This is quite feasibly the most important artefact linked to the UK's space history.

"While our engineers have been working on our own launches,

our STEM ambassadors have been arranging all of this in the background.

"We wouldn't have been able to do it without the support of the William Creek Progress Association and the Australian Department of Defence, so we're extremely grateful to both.

"We'll be unveiling it in Penicuik later this month, not far from our headquarters and workshop in Edinburgh.

"With the UK government's aiming 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."

Dr Graham Turnock, CEO of the UK Space Agency, said: "Black Arrow is testament to Britain's longstanding heritage in the space sector which continues to thrive today.

"The Government's Spaceflight Programme includes a series of education and outreach activities which I hope will play a major role in inspiring the next generation of space scientists, engineers and entrepreneurs."

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 "Transporting the rocket from William Creek to Penicuik presented the team with obvious logistical challenges and it's a testament to everyone involved that the process was completed so smoothly.

"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.

"With three more test launches planned this year, it's a very exciting time for Skyrora and Black Arrow's unveiling in Midlothian only serves to strengthen UK's position as a space nation."

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

Skyrora successfully completed its inaugural sub-orbital test launch north of the border last year.

The company's next rockets, Skylark Micro and SkyHy, will allow their 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.