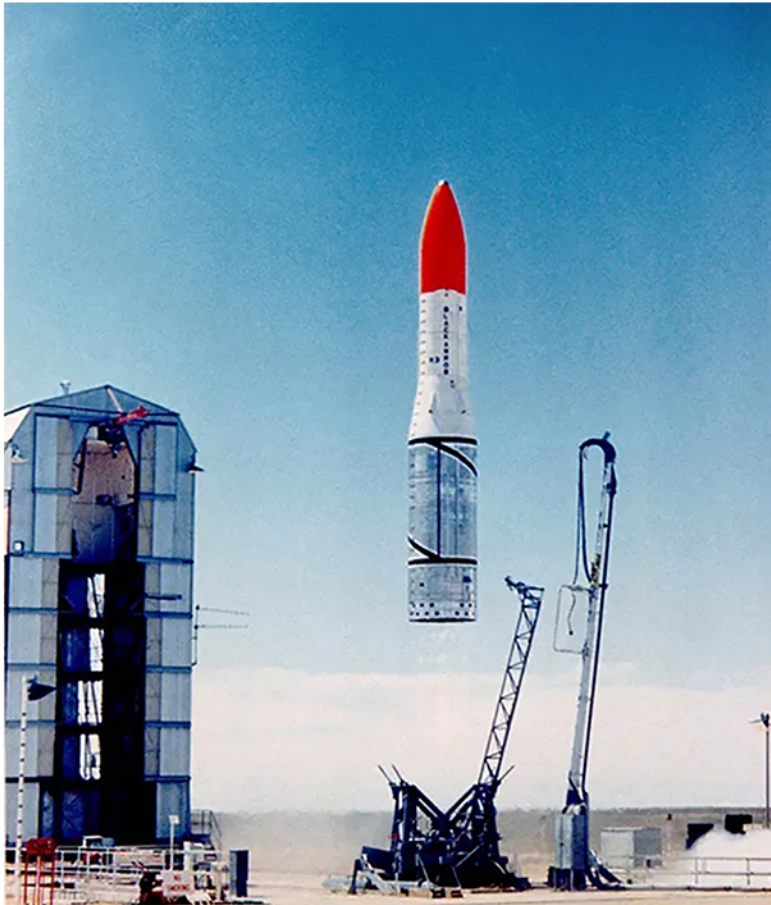


Black Arrow Launcher



The Black Arrow was Great Britain's first indigenously-developed rocket launcher. On 28 October 1971, it successfully put one satellite, the Prospero, into orbit, making Great Britain the sixth country to orbit a satellite (after the Soviet Union, the United States, France, Japan and China).

While the launch of Black Arrow R3 with the Prospero satellite aboard would be Britain's first successful satellite launch, it also marked the end of the country's ambitions to be a major player in the space industry.

Prospero was not the United Kingdom's first satellite. That honor fell to Ariel 1, a US-built spacecraft that was launched on an American Thor-Delta rocket in April 1962, making Britain the third country to operate a satellite in Earth orbit.

It was unofficially nicknamed the "Lipstick Rocket", as the fairing, which was painted bright red for visibility, made the rocket resemble a tube of lipstick.

The Black Arrow was a three stage satellite launcher able to place a 300 pound (136 kg) satellite into a 135 mile altitude Low Earth Orbit. The first and second stages used liquid propellants and the third stage used a solid motor.

A total of 5 Black Arrow rockets were created in the UK throughout the time the Black Arrow programme was active:

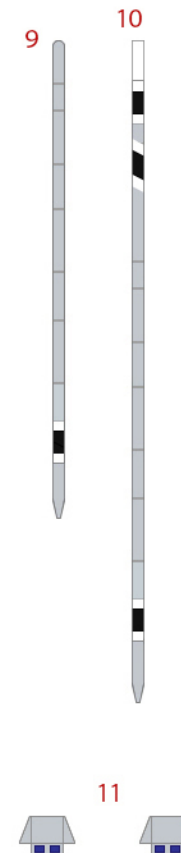
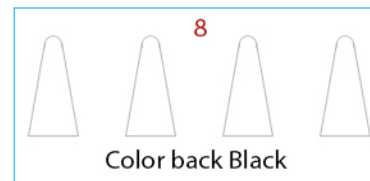
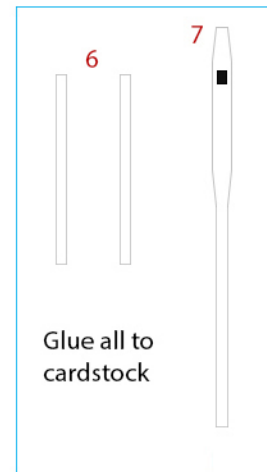
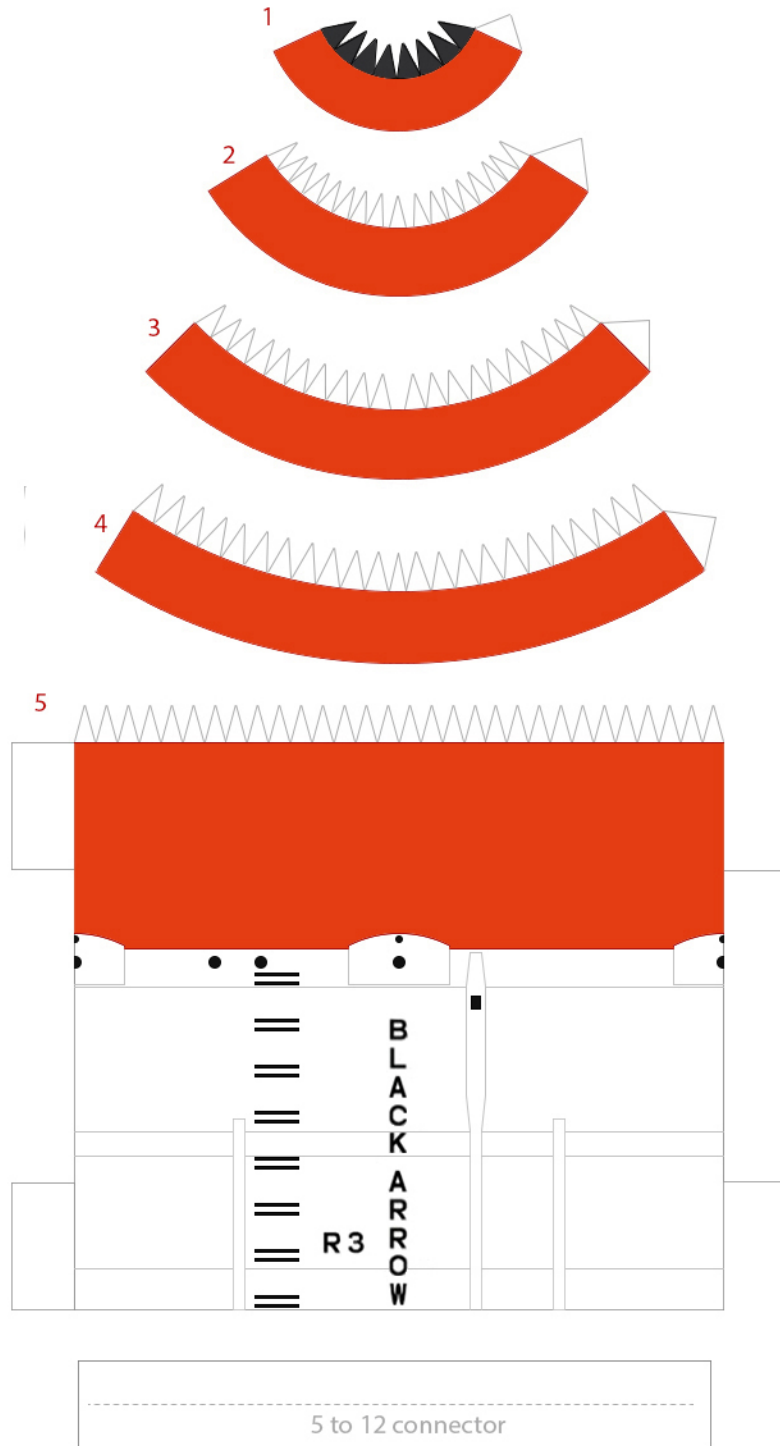
1. Suborbital test launch of the first and second stages without payload on 28th June 1969
2. Suborbital test launch of the first and second stages with dummy payload of 4th March 1970
3. Orbital test launch on 2nd September 1970, though the second stage was unable to withstand the pressure of launch, therefore, the rocket failed to enter into Earth's orbit and the payload was lost
4. The rocket successfully reached orbital launch and placed the Prospero satellites into space (which is still in orbit) on the 28th of October 1971
5. The 5th rocket was never launched due to the cancellation of the programme and is currently being exhibited at the Science Museum in London

Black Arrow Specs

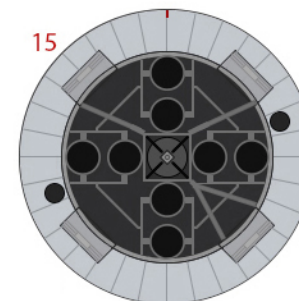
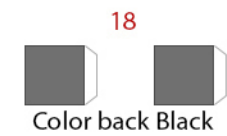
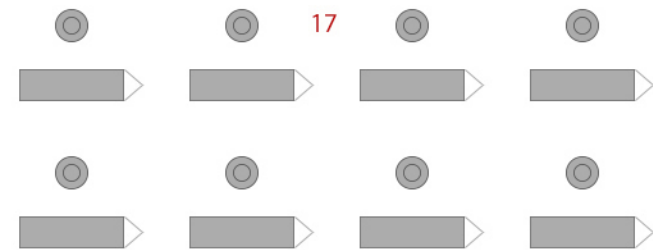
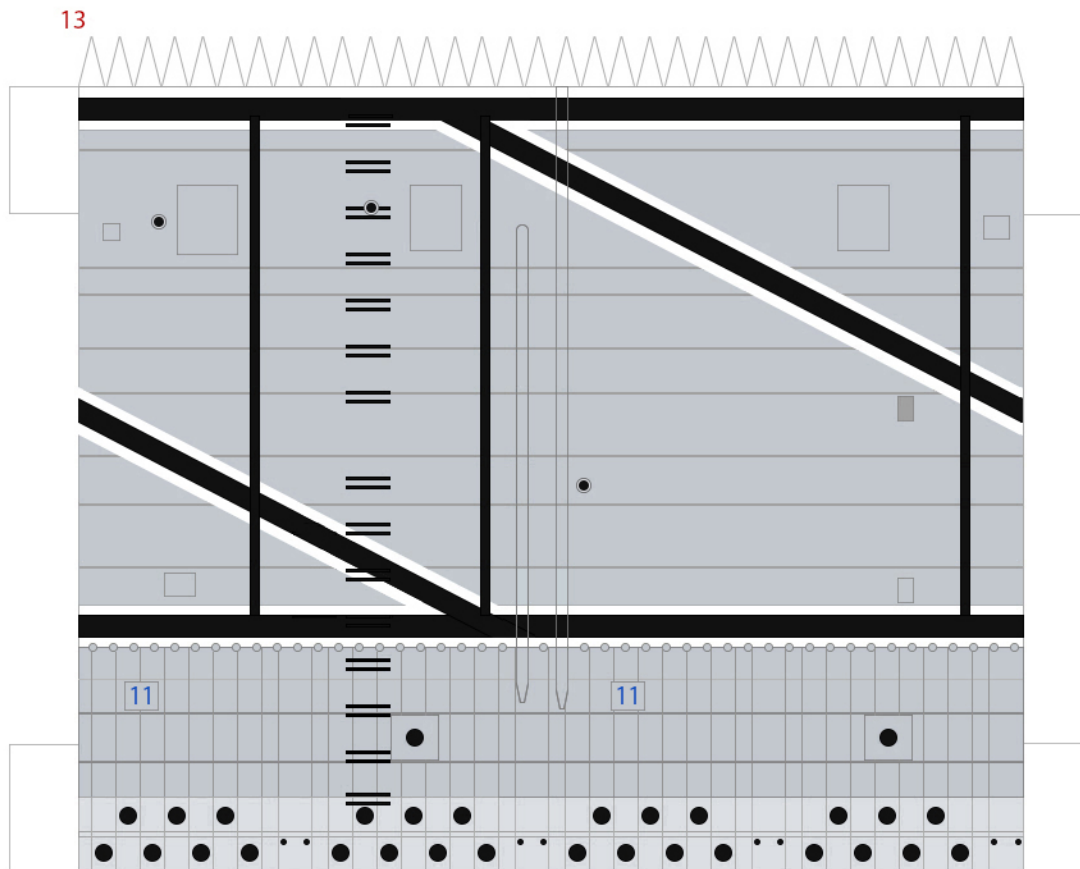
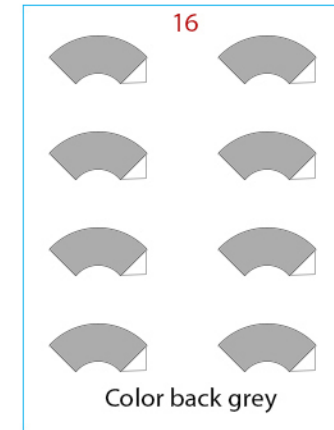
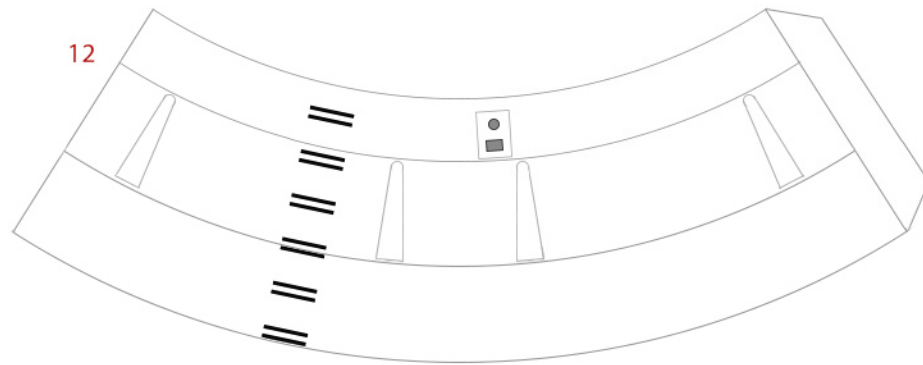
Height	13 metres (43 ft)
Diameter	2 metres (6 ft 7 in)
Mass	18,130 kilograms (39,970 lb)
Stages	3



Black Arrow Launcher



Black Arrow Launcher



Glue to cardstock

