

HEROS 3 Sounding Rocket



HEROS (Hybrid Experimental ROcket Stuttgart)

This hybrid student rocket set a new altitude record for European student and amateur rocketry and a world altitude record for hybrid rockets built by students - 32,300m (106,000 ft) - on November 8th, 2016.

The 7.5m (22.5 feet) long rocket was using Nitrous Oxide (N_2O) and a Paraffin-based fuel to produce 10,000N of thrust. The dry mass of the rocket was only 75 kg thanks to a carbon fibre structure for the most part.

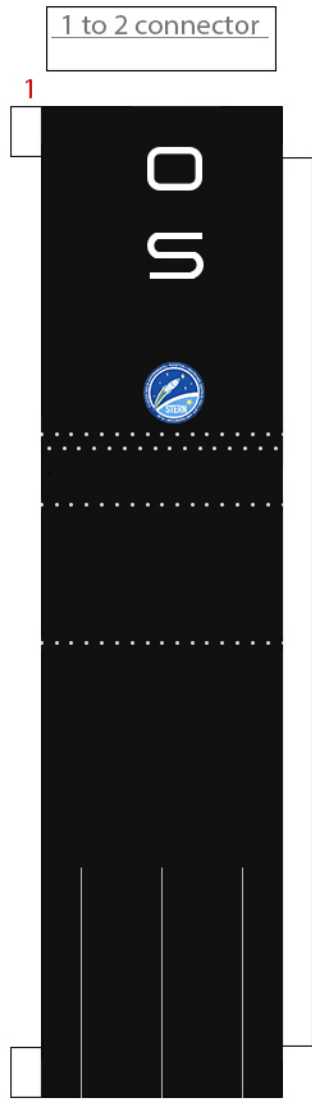
HEROS 3 was launched under perfect weather and visibility conditions, reaching a maximum velocity of 720 m/s or Mach 2.3. It performed a soft landing with two parachutes and can be reused.

Flight data and engine performance data can be viewed below. The flight data shows excellent stability of the rocket. Engine performance data proves very high efficiency and stable combustion as in the ground tests.

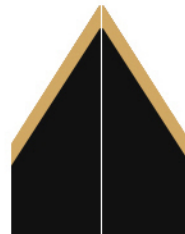
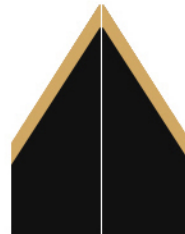
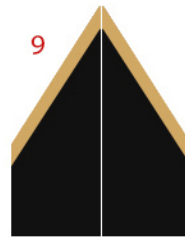
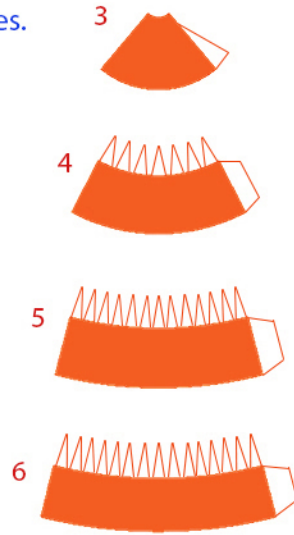


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Print on 65 lb cardstock for easier rolling the long tubes.



Color back side the same color



1/21 Scale Paper Model

Align all seams during assembly.

Glue the fins on the white lines at the lower part of the body.

Parts 7 and 8... roll 8 to a shallow cone, glue over the black circle on 7. Glue onto the bottom of the rocket.

