

Original Falstaff



Falstaff was a British sounding rocket used during the 1970s. It used the largest solid booster ever built in the United Kingdom, the Royal Ordnance Stonechat. This motor (Stonechat Mk2) was 5.3 m (17 ft) long and 92 cm (36 in) in diameter and weighed 5090 kg with 4340 kg of propellant. It delivered an average thrust of 240 kN during 37 seconds.

The Falstaff was launched eight times between 1969 and 1979 at Woomera, Australia, seven of which were the Mk 2 variant. There was one failure, on 23 April 1978. All the launches were from the Woomera Test Range in Australia, 500 kilometres (310 mi) north-west of Adelaide.

There are two versions of the Falstaff sounding rocket; the Original Falstaff and the Operational Falstaff.

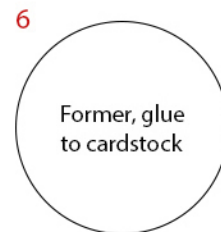
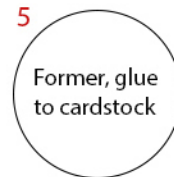
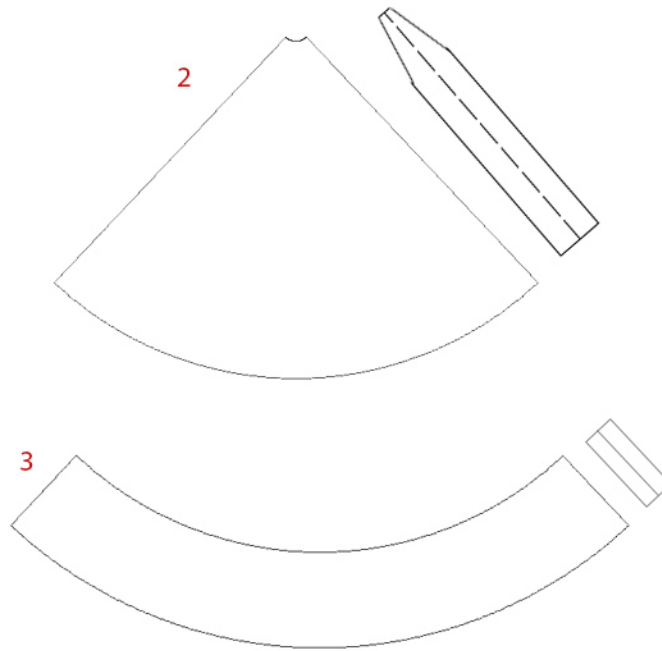
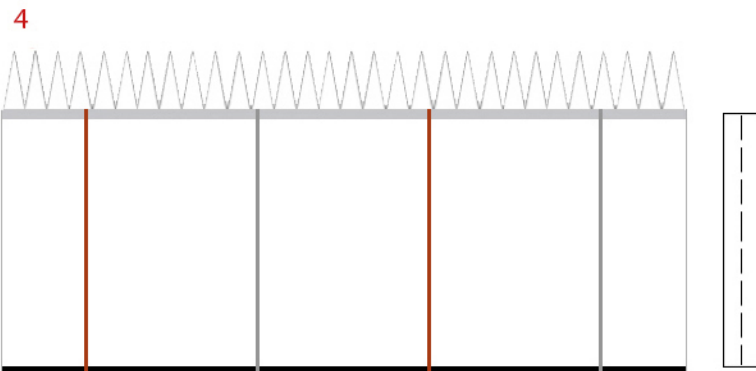
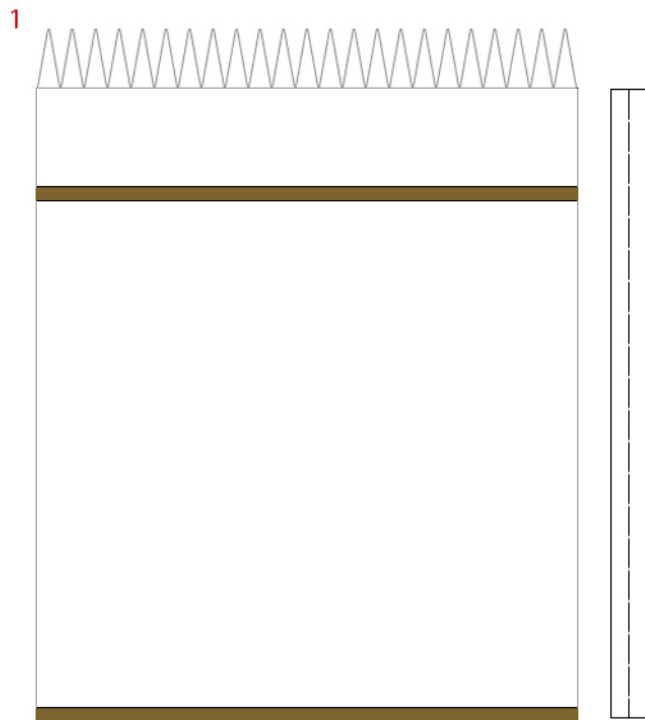
The model you're building - Original Falstaff.

Stonechat I, with 4,030 kg of plastic propellant, delivered a total impulse of 8.34 MNs in 32.3 seconds. Only one unit was flight tested as a booster for the original Falstaff vehicle. This vehicle comprised a Stonechat I motor, fitted with the four-fin assembly designed to stabilise the Hyperion HRV (4.42 m span), and a payload section with a simple concrete ballasted (1 ton) conical nosecone. Weighing about 7 tons, the vehicle was flown in October 1969 from Woomera. The first Falstaff flight proved to be successful in all respects. It was eventually designated as 'F00' in order to show its relationship to the later programme.

The Hyperion was intended to consist of a 'Short Burn' Stonechat 1st stage, with either a Rook or Raven 2nd stage and a potential Cuckoo 3rd stage. The 'Short Burn' Stonechat differed from the Stonechat 1 in its use of a faster burning propellant (17.7 s) and a slightly larger nozzle. Design studies for the Hyperion were completed when the RAE's hypersonic free flight program was cancelled in 1970.

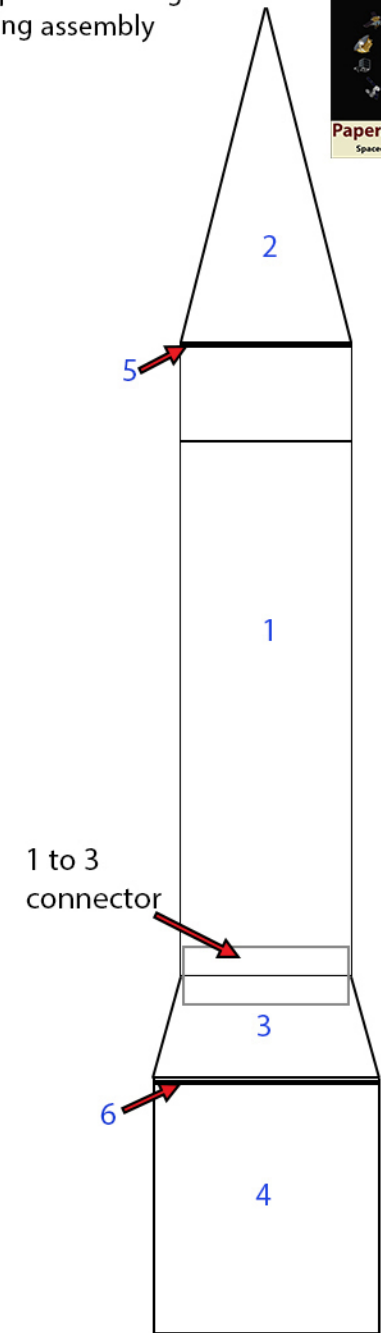


Original Falstaff 1/30 Scale Paper Model



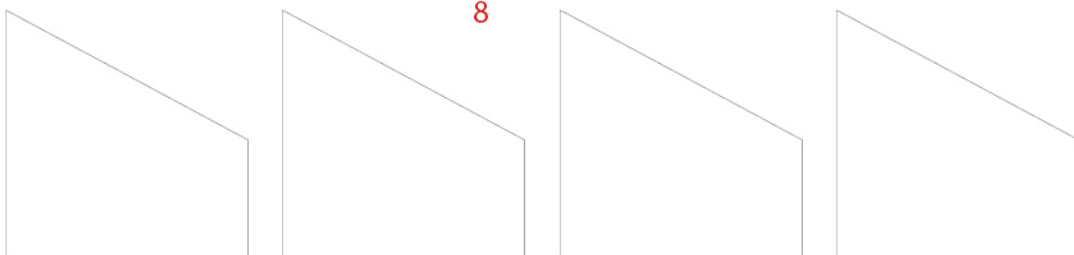
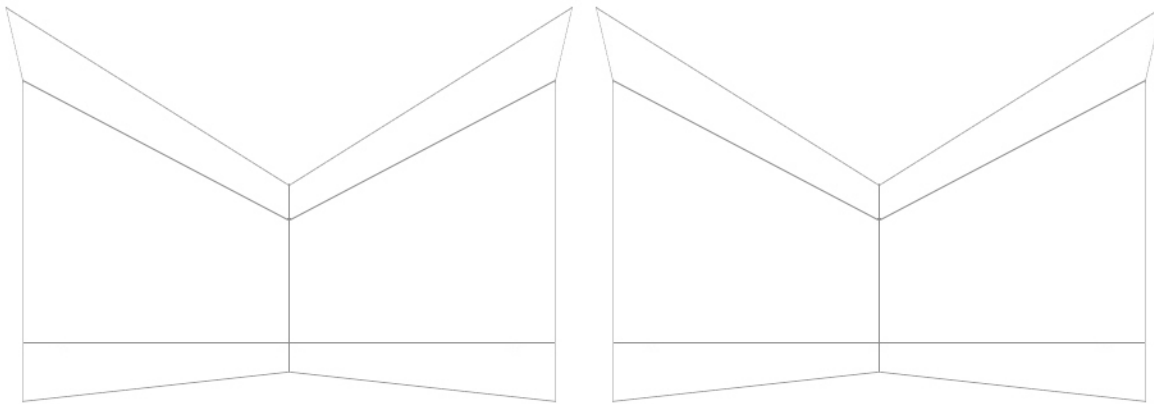
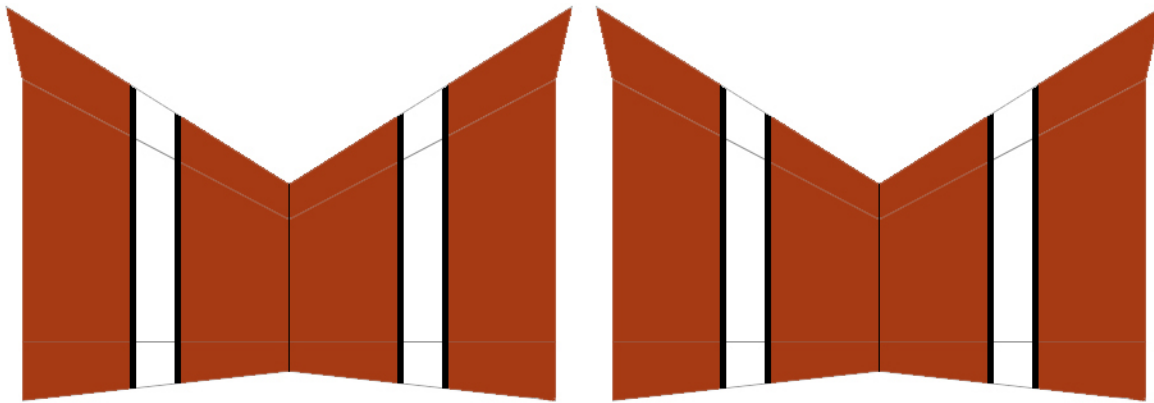
Glue the formers inside parts 1 and 4 as shown on the right.

Keep all seems aligned during assembly



Original Falstaff

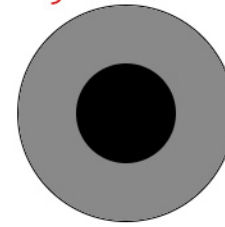
7 Score-fold at the middle line and glue together.



Formers, glue to two layers of cardstock

Glue to center backside of the fins before folding the fins together.
Long edge of the formers should be even with the long edge of the fins

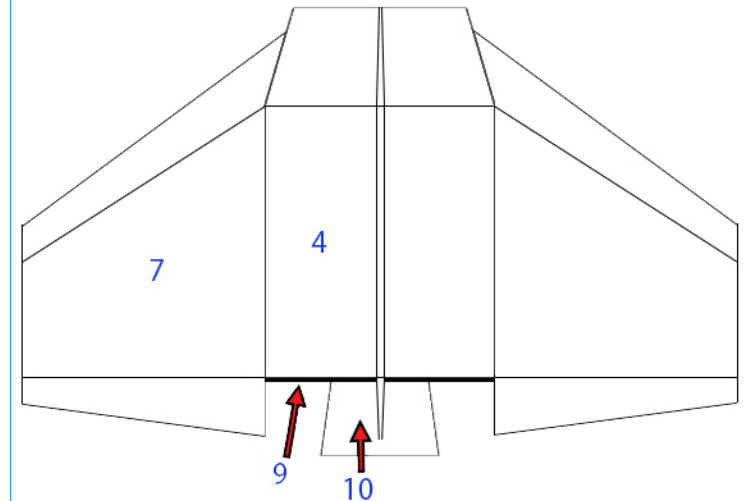
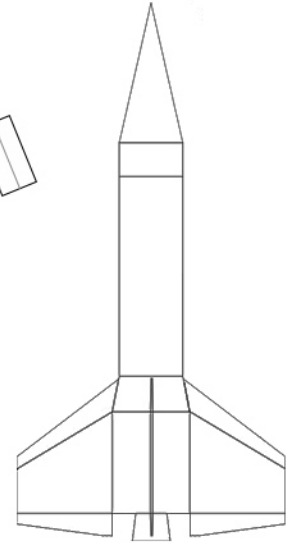
9



10



Color back light grey or silver



Glue the fins (parts 7) into the 4 lines on part 4.

Red fins are glued on the red lines.

Glue 10 to the black circle on part 9, then glue this to the bottom of the tocket

