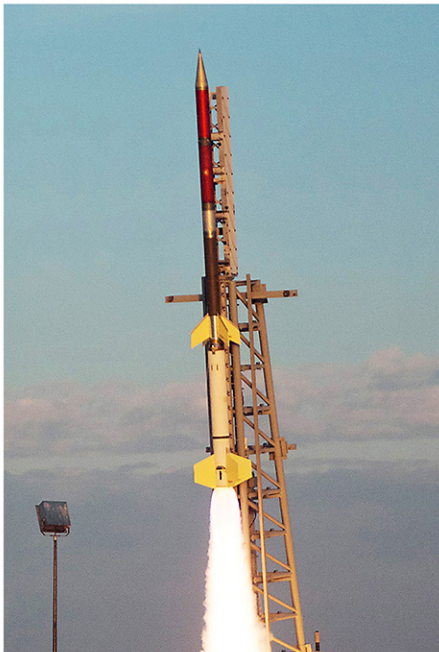


Terrier Improved Orion Sounding Rocket



Two stage vehicle consisting of 1 x Terrier + 1 x Improved Orion (Payload)

The Terrier-Orion rocket system was a two stage spin stabilized rocket system which utilized a Terrier MK 12 Mod 1 for the first stage and an Improved Orion motor for the second stage.

The Orion motor utilized a clamp-released/load-bearing tail can to interface with the Terrier motor. The Terrier Orion system is designed to be rail launched, and can be supported at most fixed and mobile launch sites.

Payload configurations supported by this vehicle included 36 cm and bulbous 44 cm diameters. Payload weights ranging from 90 to 360 kg (20 to 800 pounds) could achieve altitudes of approximately 80 Kilometers to 200 kilometers (50 to 120 miles).

Available support systems include the standard 36 cm Ignition Recovery Module Assembly (IRMA), ACS systems, and nose cones of various configurations. The complete cadre of 44 cm diameter support systems was available for use with the bulbous payloads. These included fixed and deployable nose cones; fine, course, rate control, and magnetic ACS systems; separation and despin systems; and forward and aft recovery systems.

The fins are normally configured so that the rocket will have a stabilizing spin rate of approximately four cycles per second.

This spin stabilized rocket configuration is most often used by the Goddard Space Flight Center, who operate out of the Wallops Flight Facility for sounding rocket operations.

Status: Active.

Gross mass: 1,315 kg (2,899 lb).

Height: 12.80 m (41.90 ft).

Diameter: 0.46 m (1.50 ft).



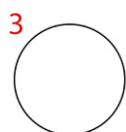
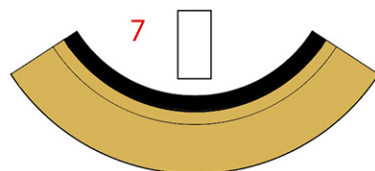
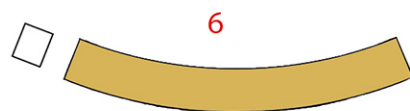
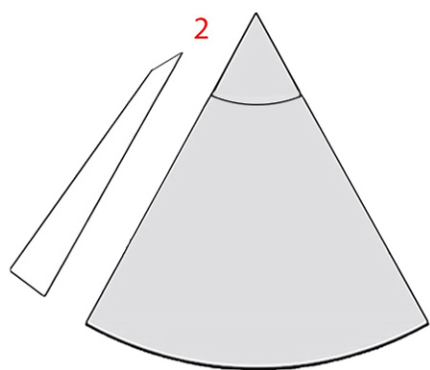
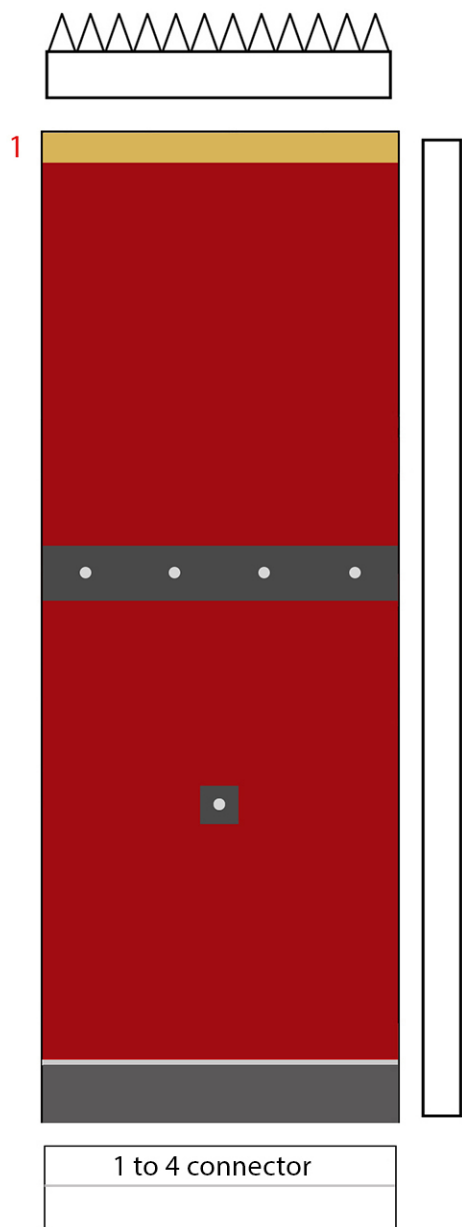
2016

Terrier Improved Orion Sounding Rocket

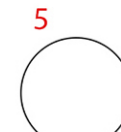
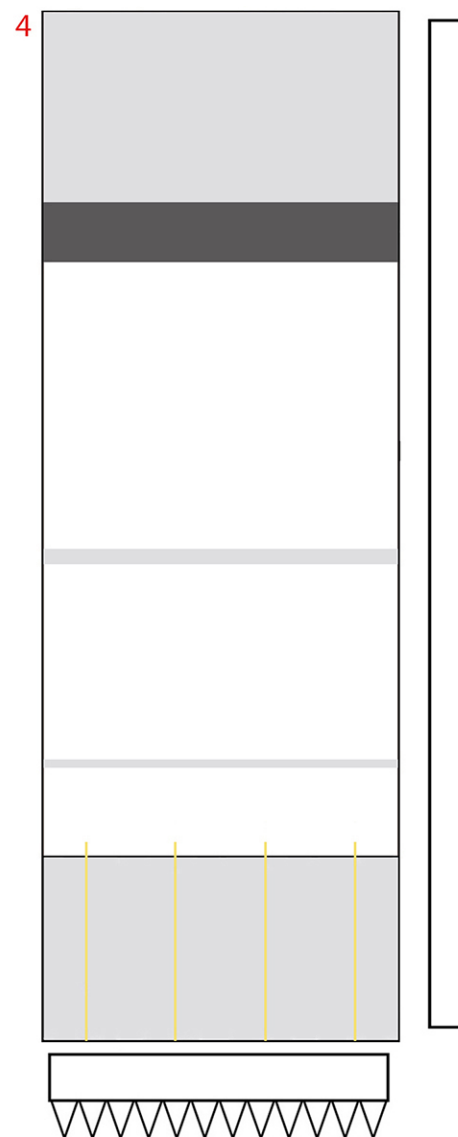
You can build this Orion payload configuration or the one on the next page or build both.



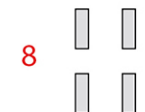
2016



Glue to cardstock



Glue to cardstock



Glue backside of 8 to backside of the grey square.



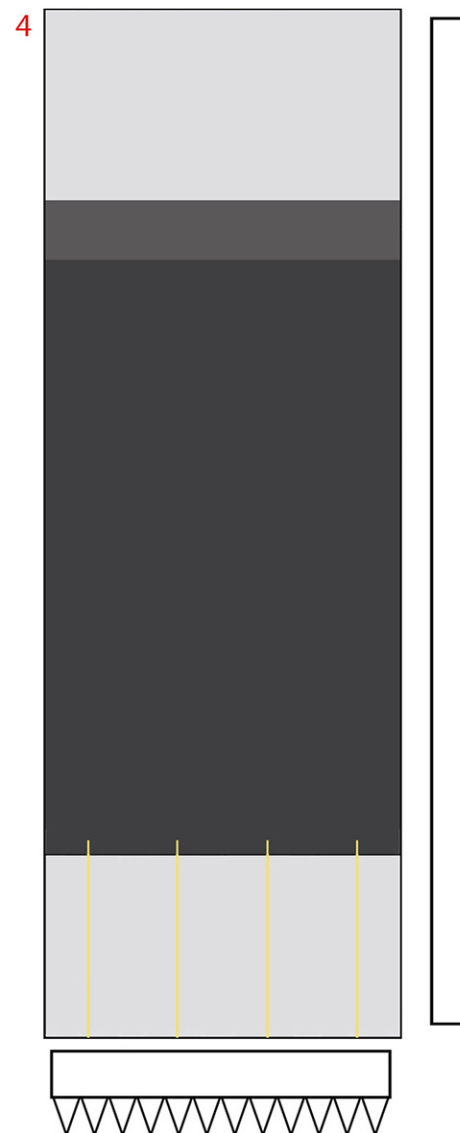
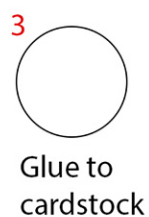
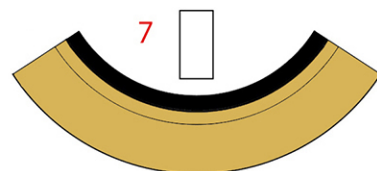
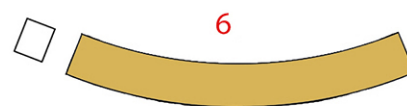
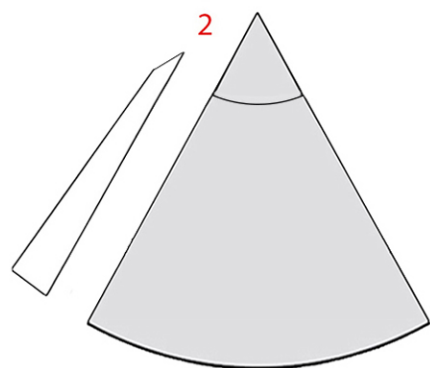
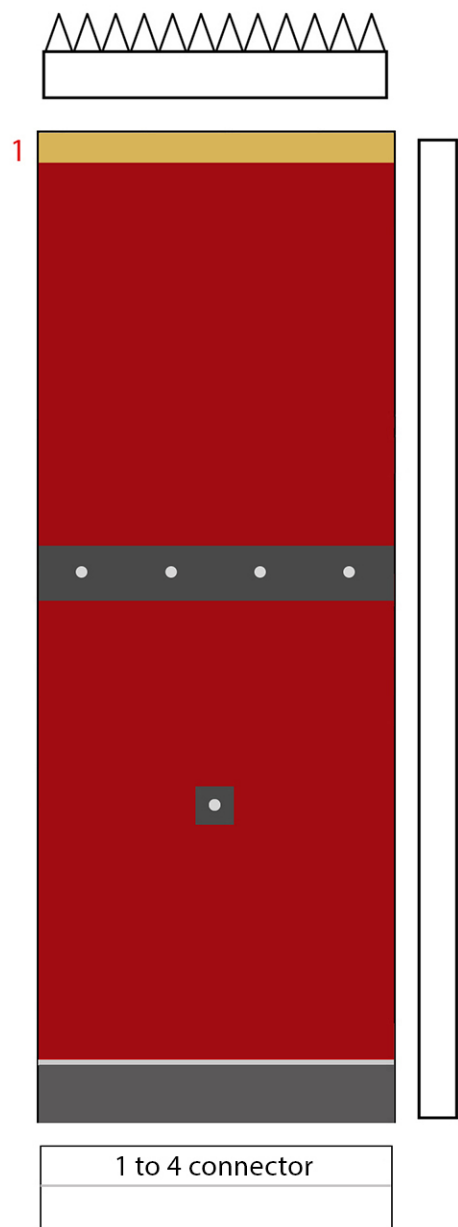
Glue to cardstock

Terrier Improved Orion Sounding Rocket

You can build this Orion payload configuration or the one on the next page or build both.



2016

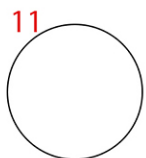


Glue backside of 8 to backside of the grey square.

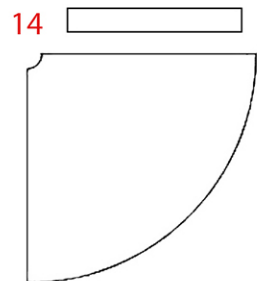
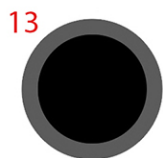


Glue to cardstock

Terrier Improved Orion Sounding Rocket



Glue to cardstock for strength



Remove the BLACK CIRCLE from 13.
Color backside of 14 Black.
Roll 14 to a cone, glue to the BACKSIDE of 13 for an embedded nozzle

