

## Improved-Orion Sounding Rocket



The Improved Orion is a single stage, unguided, fin stabilized rocket system which uses a surplus Army rocket motor having a dual phase propellant. Three fins provide forces for rolling up the vehicle in flight for stability.

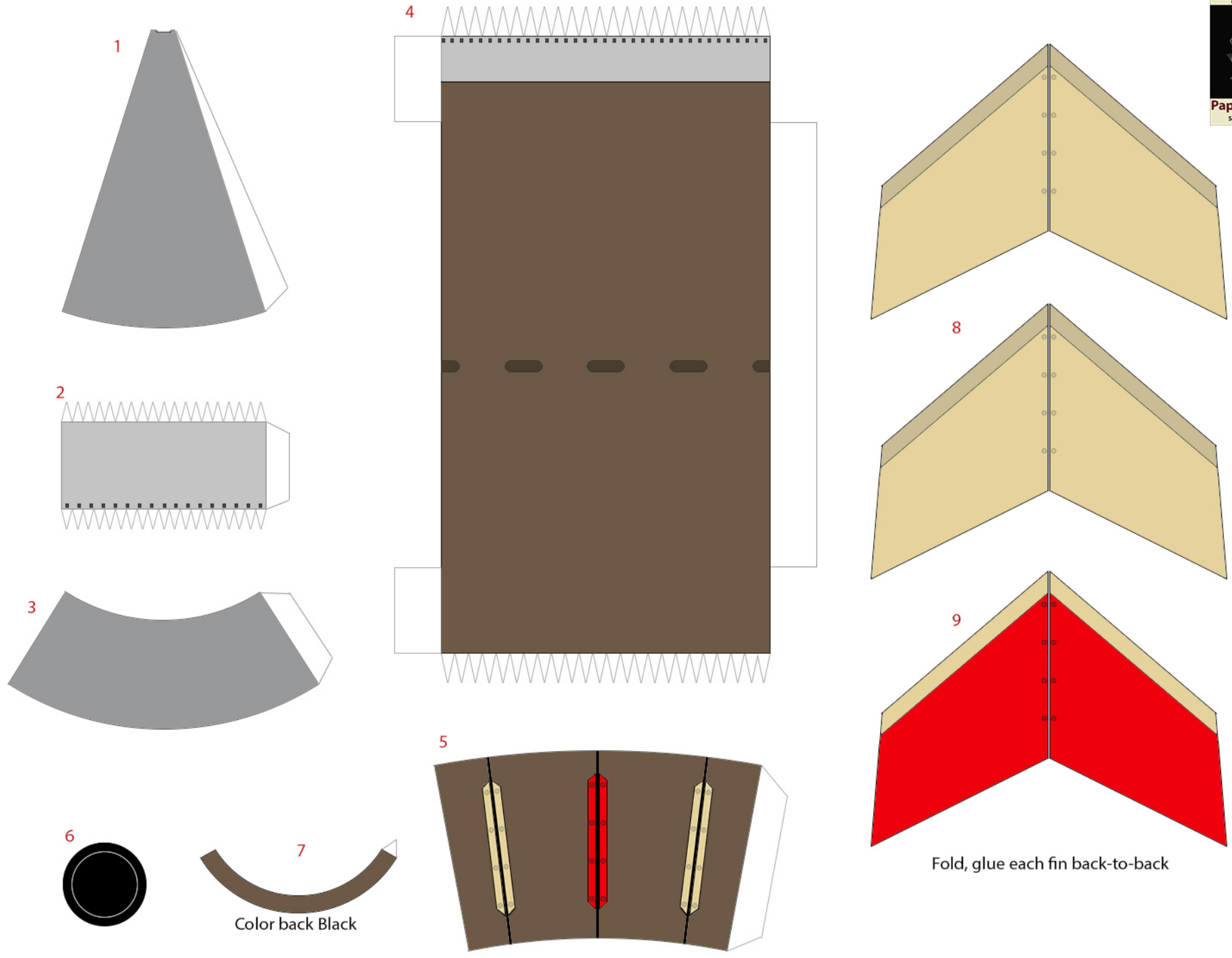
The Improved Orion is 14 inches in diameter and 110 inches long. The Improved Orion fins are nominally can provide four revolutions per second spin rate at burnout. The rocket carries an 85 pound payload to 88 kilometers and a 150 pound pay- load to 71 kilometers when launched from sea level at an 85 degree launch angle.

The standard payload for the Improved Orion has a diameter of 14 inches and utilizes many nose cone shapes. The normal payload length varies from 72 to 100 inches although this is not the maximum size. Payload diameters as small as 4.5 inches are flown on the Orion and performance characteristics are most favorable for 85 to 150 pound payloads.

Standard hardware includes a separable clamshell nose cone and an Orion standard ignition system. Separation systems can be provided to separate the payload from the motor during ascent.



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1/10 Scale

## Instructions

Keep all seams aligned

Match the color of the fins to the colored lines at the bottom (Part 5).

Parts 6 and 7 are glued at the bottom of 5

