

WorldView 4



WorldView-4, previously known as GeoEye-2, is a third generation commercial Earth observation satellite launched on 11 November 2016. The spacecraft is operated by DigitalGlobe. With a maximum resolution of 31 cm (12 in), WorldView-4 provides similar imagery as WorldView-3, the highest resolution commercially available at the time of its launch.

The first public image from WorldView-4 was taken on 26 November 2016 and released on 2 December.

WorldView-4 was launched on 11 November 2016 from Vandenberg Air Force Base Space Launch Complex 3E aboard an Atlas V rocket. The rocket launched in the 401 configuration with serial number AV-062, and was provided and administered by United Launch Alliance. This is the same rocket that had been scheduled to launch the InSight Mars lander, which was delayed until 2018. The rocket had been erected at the Vandenberg launch pad on 16 December 2015 for the InSight mission; after the WorldView-4 mission took the place of InSight, the rocket was allowed to remain vertical at the pad protected by its mobile service tower. The WorldView-4 payload was fixed atop the rocket during the second week of September 2016. Originally scheduled for launch on 29 June 2016, the flight was rescheduled to 15 September and then to 16 September. During countdown on 16 September, the launch was scrubbed due to a liquid hydrogen leak in the ground support equipment resulting in an ice ball forming on an umbilical cable. The launch was rescheduled for 18 September to allow for the replacement of a fill-and-drain valve, determined to be the cause of the leak.

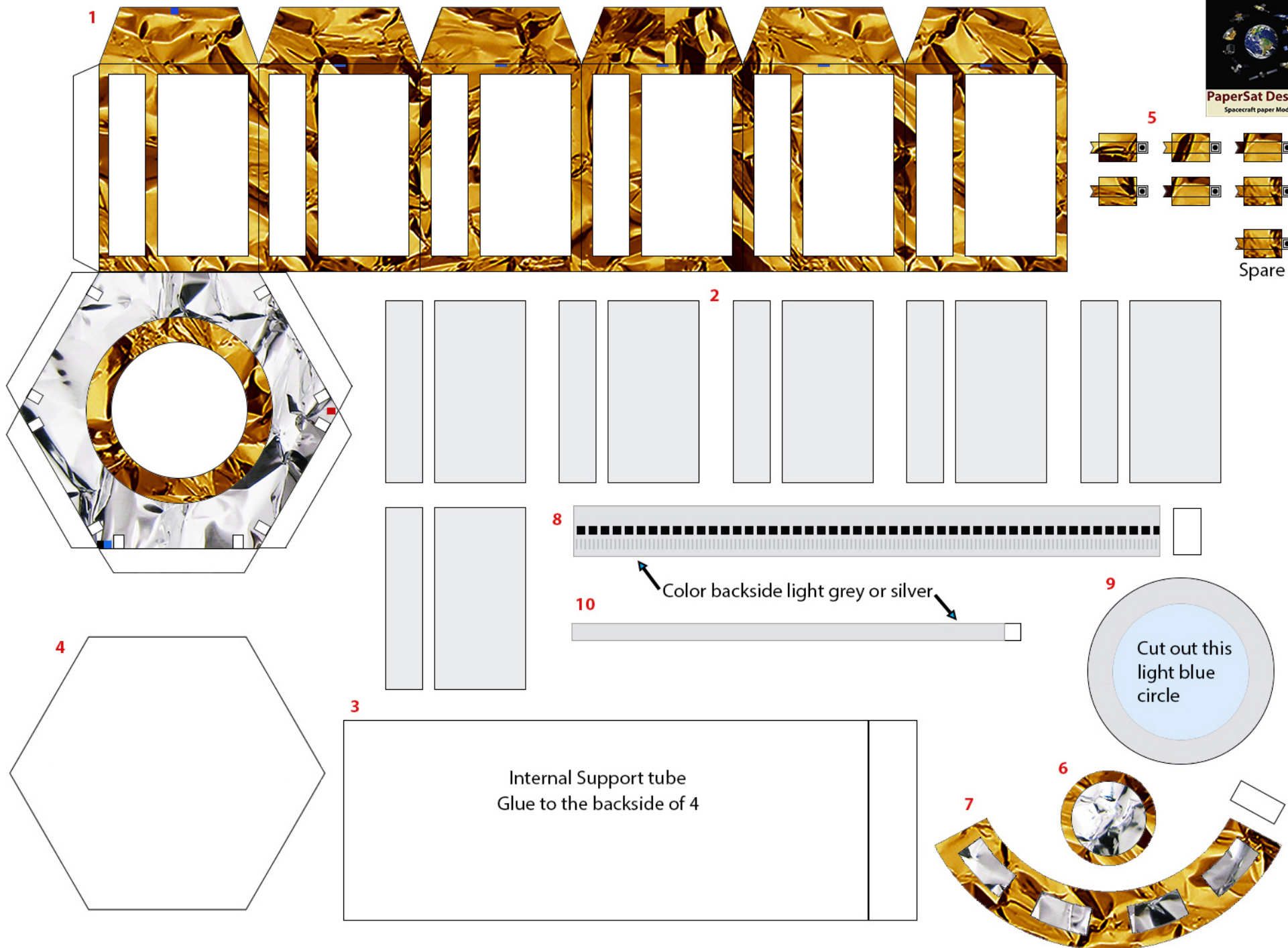
The Canyon Fire, a wildfire that burned over 5,157 hectares (12,742 acres) on the southern section of Vandenberg, resulted in a further launch delay so that the base could "concentrate [their] resources on the situation at hand." As a result of scheduling availability on the Western Range, the flight was rescheduled for 26 September. Continued efforts in fighting the Canyon Fire caused an indeterminate delay of the launch to no earlier than October 2016. Four additional fires of varying sizes broke out between 22 and 27 September; while all were contained by the end of the 27th, base commander John Moss stated that until all facilities and instrumentation could be surveyed, no preliminary launch date could be determined.

Repairs were made to the base's infrastructure affected by the wildfire, including power and communications, and the launch date was reset to 6 November. The date was later pushed back to 11 November as ULA worked to fix "minor Atlas V booster issues" found during preparations.

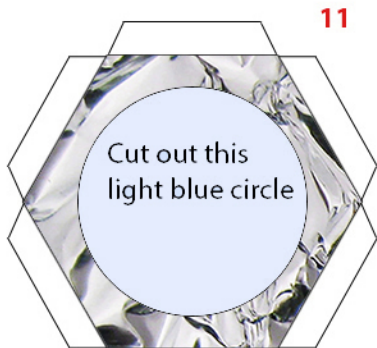
The spacecraft's telescope is called the GeoEye Imaging System-2, also known as SpaceView 110, which was designed and built by ITT Corporation (later ITT Exelis and Harris). [18] The telescope mirror is 1.1 m (3.6 ft) in diameter. It provides panchromatic images at a highest resolution of 31 centimeters per pixel (12 in/px) between 450 and 800 nanometers, and multispectral images at 124 centimeters per pixel (49 in/px) in red, green, blue and near-infrared channels (655-690 nm, 510-580 nm, 450-510 nm and 780-920 nm, respectively).

Dimensions 7.9 × 5.3 m (26 × 17 ft)



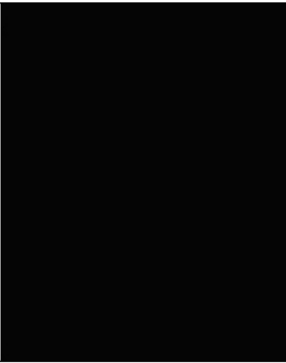


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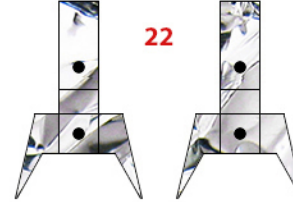


11

23 Fold-glue back-to-back



Poke small holes on the black dots



22

Wrap snugly around a plastic broom straw for a moving hatch.



20

Roll with color OUTSIDE



21



Roll with color INSIDE



18



19



Color backside
BLACK



17

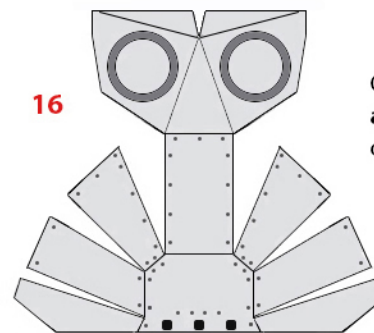
Glue the **rectangle area only** to two layers of thick cardstock.



24

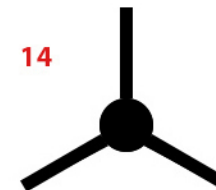


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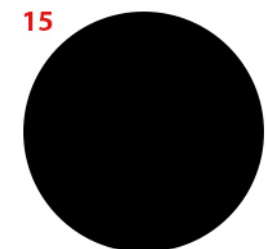
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14

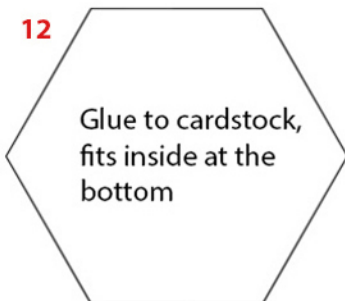


Glue to cardstock, color backside and edges Black.

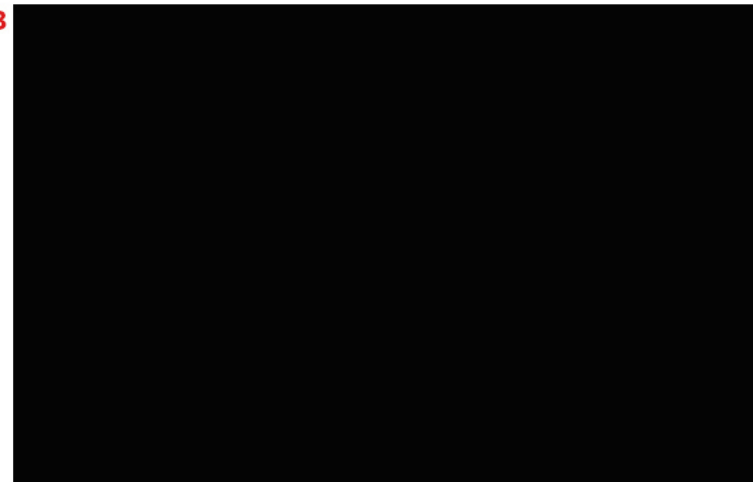
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12



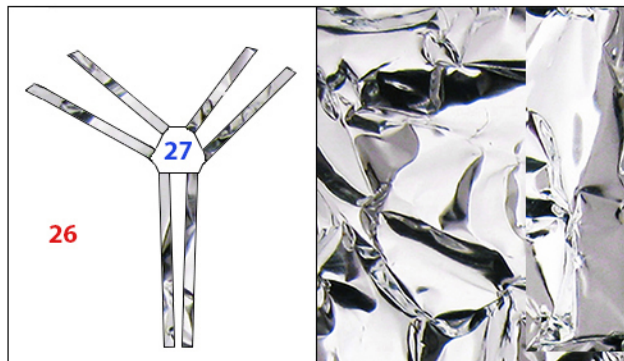
13



Roll with color INSIDE

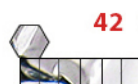
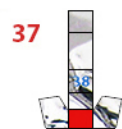
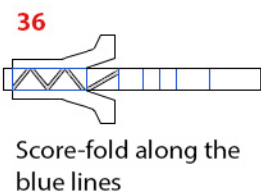
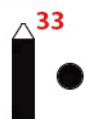
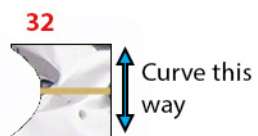


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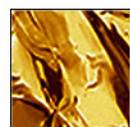


- 27** Glue to of cardstock
- 28** Roll to a drum, glue to backside of 26
- 29** Glue to two layers of cardstock

- 31** **30** Score-valley fold on the blue line only. Glue 31 on the black line.

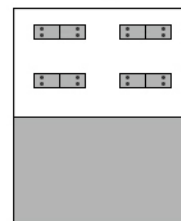


Glue 43 to thick cardstock, then glue to backside of the square for graphics on both sides. Cut out, glue one end to the Blue line on 44.



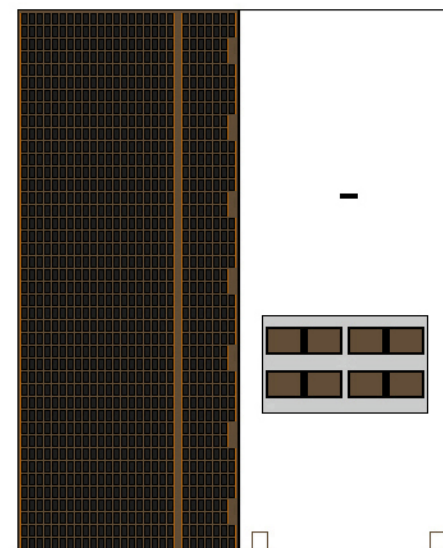
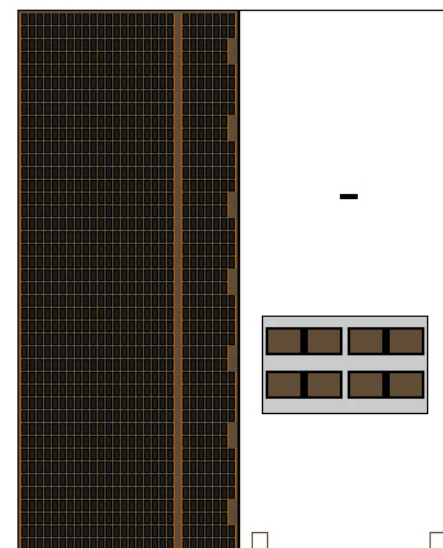
Glue 46 to thick cardstock, then glue to backside of the square for graphics on both sides.

Hinges



Fold back-to-back

Solar Panels



Zach's

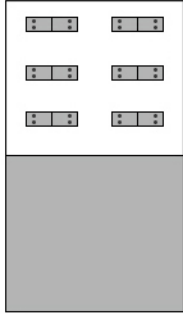


Spacecraft paper Models

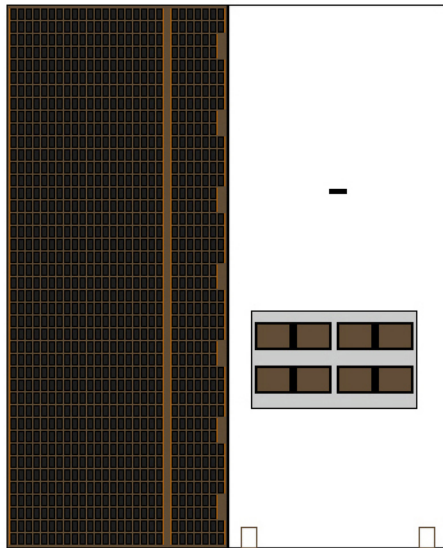
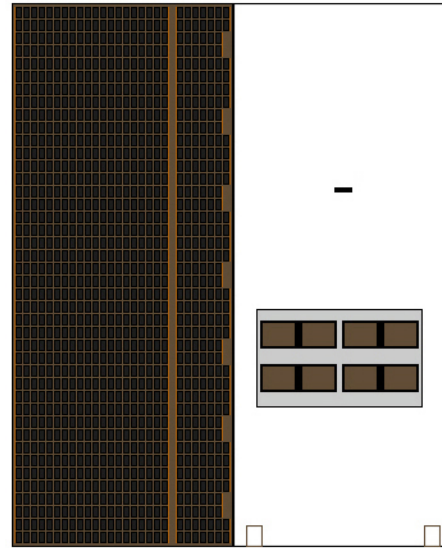
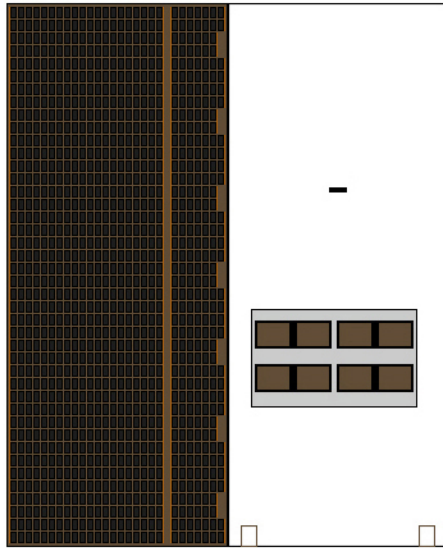
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Solar Panels

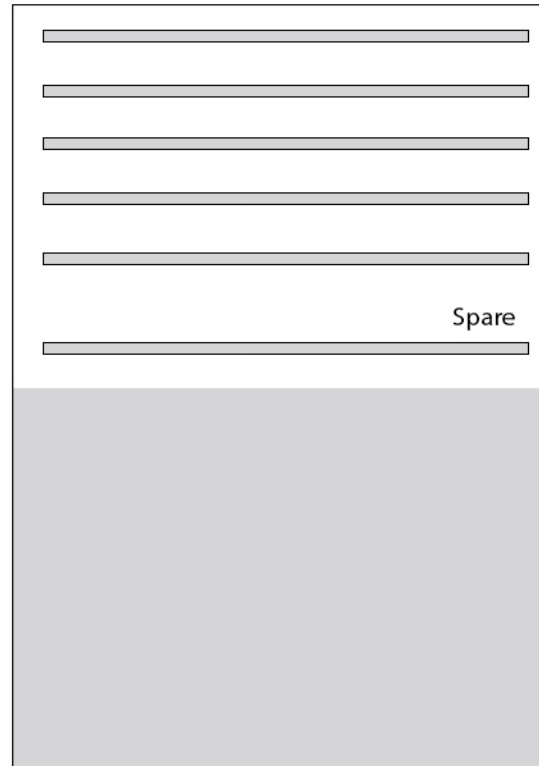
Hinges



Fold back-to-back



Struts



Fold in half and
glue back-to-back.