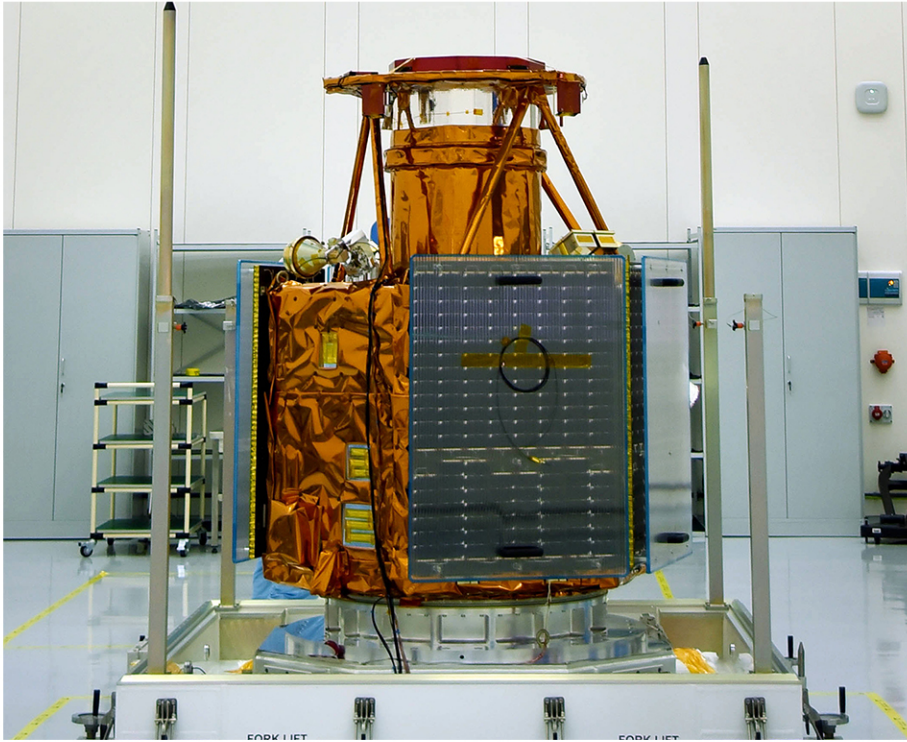


KhalifaSat (DubaiSat-3)



The most sophisticated satellite built by the UAE was successfully launched from an island off the southern tip of Japan in a new landmark for the country's space programme.

KhalifaSat, the first satellite designed, tested and manufactured entirely by Emirati engineers in the MBRSC (Mohammed bin Rashid Space Centre), in Dubai.

The launch was hailed by the UAE's leaders as an "unprecedented Emirati achievement".

Its role will be to beam high-quality images to the ground station in the emirate. The pictures will help governments and private companies across the globe with climate changes, disaster relief, urban planning, and more.

The satellite shell is just under two metres in height and less than 1.5 metres in diameter.

The total mass of the spacecraft is estimated to be around 330 kg. The most sensitive component in the satellite is its Camera System (KHCS). This will be covered with a Carbon Fibre Reinforced Polymer (CFRP) sun shield to protect it against harmful radiation.

KhalifaSat contains an advanced positioning technique that allows the capture of a large number of 3D images at once with greater accuracy and quick response.

Highlights...

KhalifaSat is MBRSC's third and most technologically advanced satellite.

KhalifaSat is named after the UAE President, His Highness Sheikh Khalifa Bin Zayed Al Nahyan.

KhalifaSat is the first satellite to be 100% accomplished by Emirati engineers.

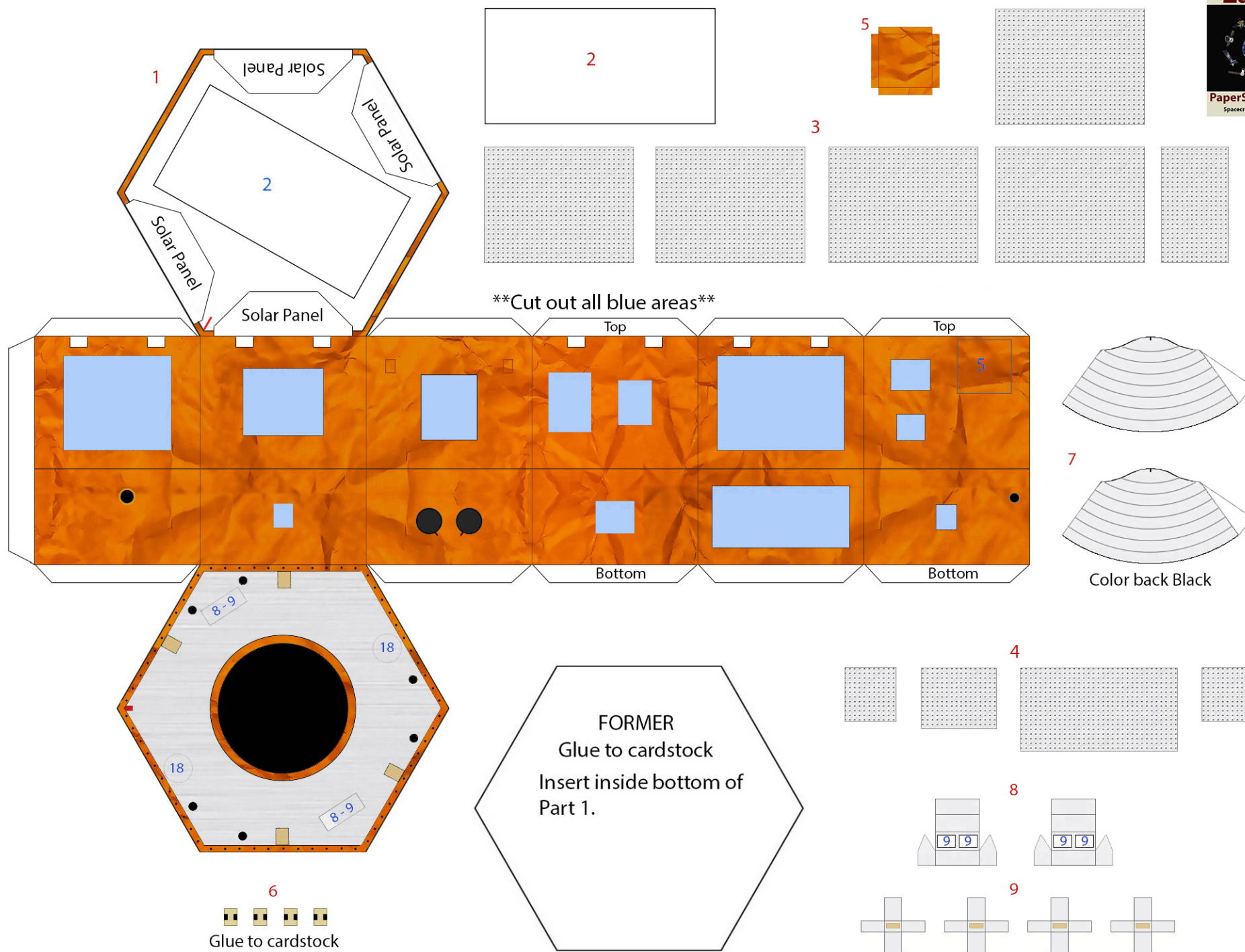
KhalifaSat is the first satellite to be manufactured in the UAE.

KhalifaSat is one of the smallest satellites in the world capable of providing sub-metre images.

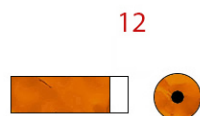
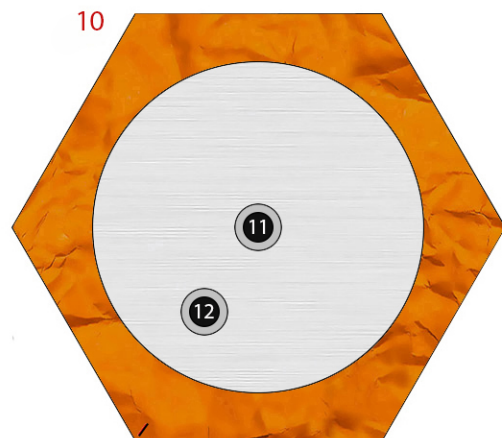
The UAE's most technologically advanced imaging satellite.

The satellite was launched on October 29, 2018 on board an H-IIA launch vehicle in Japan.

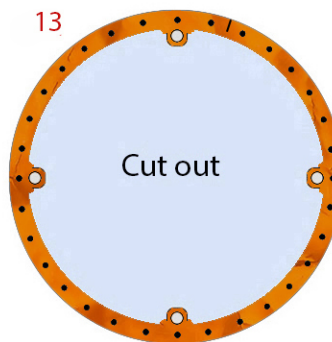
KhalifaSat (DubaiSat-3)



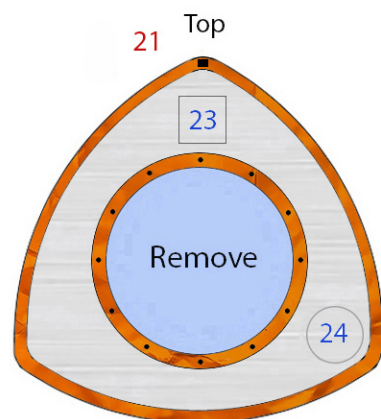
KhalifaSat (DubaiSat-3)



Need plastic broom
straw cut at 5mm long,
colored grey.



Color back side dark orange



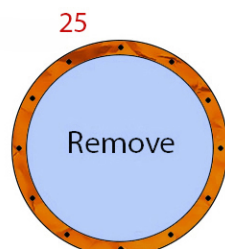
Glue to cardstock, remove
light blue area.



Glue to two layers
of cardstock
Color edges Black



Glue to two layers
of cardstock
Need plastic broom
straw cut at 5mm long,
colored grey.

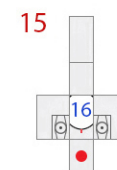


Glue to cardstock
Color edges dark orange



Glue these to cardstock

RIGHT

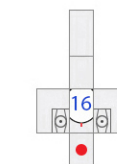


16
Glue
back-to-back



Color back the
same color

LEFT



Glue
back-to-back



Color back the
same color

KhalifaSat (DubaiSat-3)

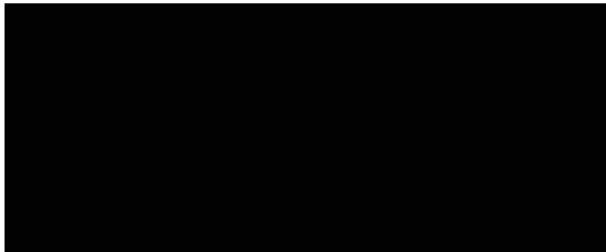
28



29



30



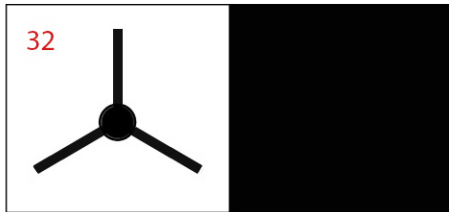
Roll with color INSIDE

31



Roll with color INSIDE

32



Fold-glue in half, back-to-back for strength and color on both sides.

Glue solar panel here

Glue solar panel here

Glue to Satellite

Glue to Satellite

33

Glue solar panel here

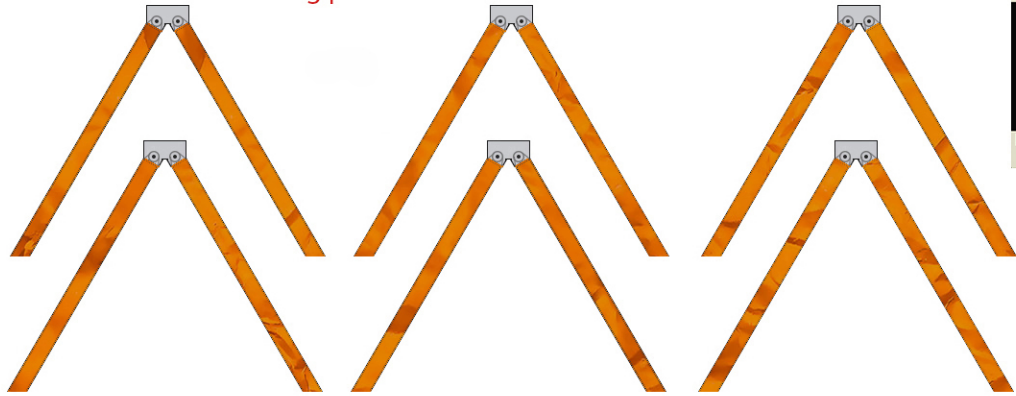
Glue solar panel here

Glue to Satellite

Glue to Satellite



34



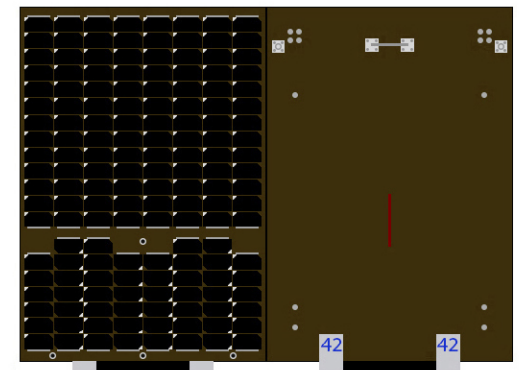
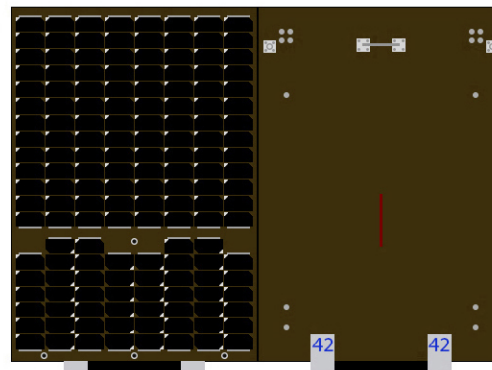
Glue each pair of struts back-to-back, should have 3 pair of struts.

For more realistic look, use round tooth pics, color them Dark Orange. Cut them to the entire length including to the top of the hinge.

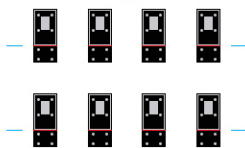
Glue top of the tooth pics to the hinges below, angle the legs using one of the struts as a glue pattern. Glue the other hinges to the back side.



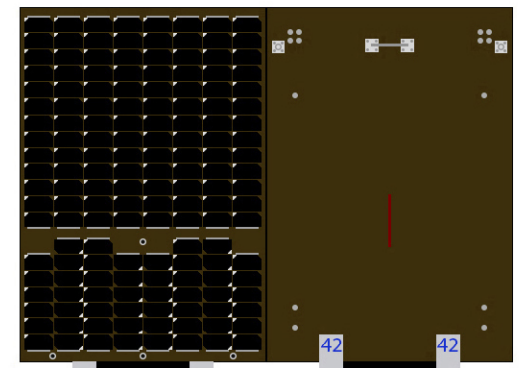
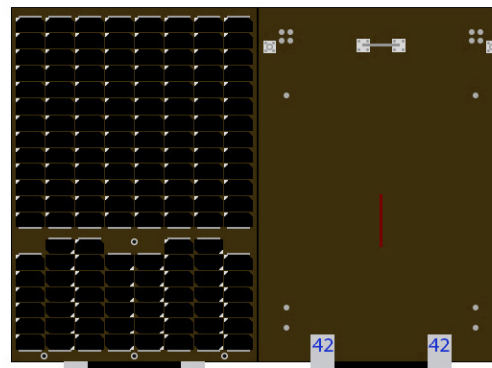
35



36



Hinges, score and valley fold at the blue lines.



Zach's



PaperSat Designs
Spacecraft Paper Models