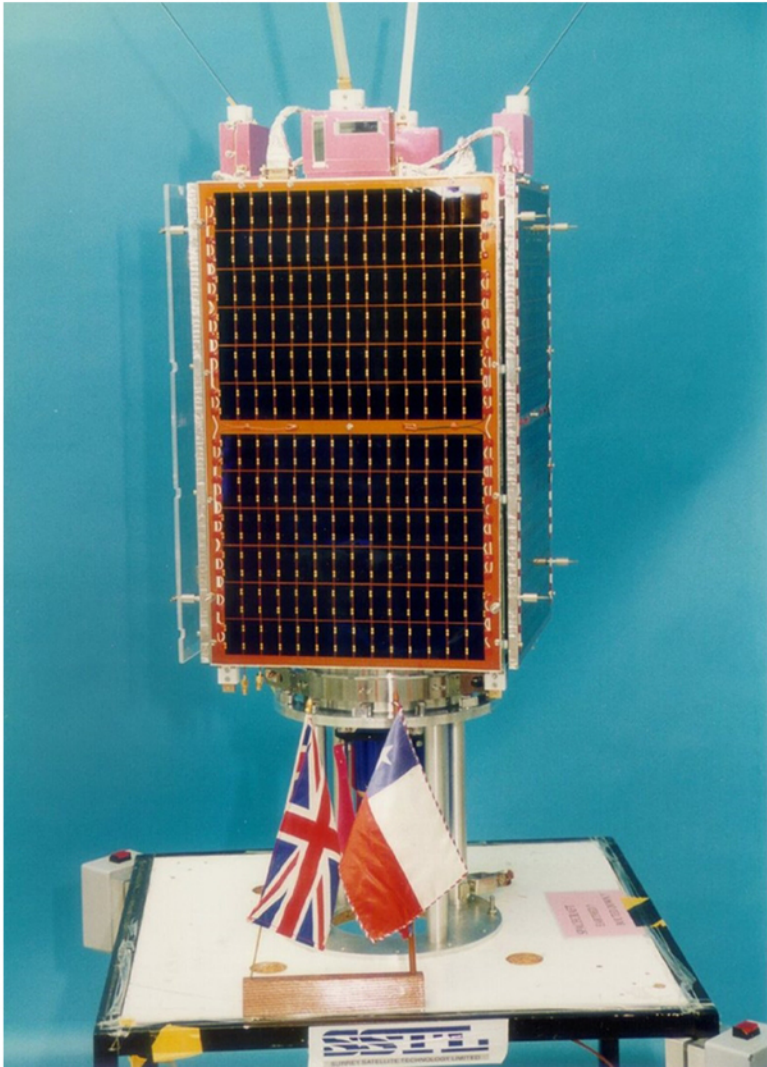




FASat-Bravo, Chile's first successful satellite ...

FASat-Bravo, which is no longer operational, was the second Chilean satellite in space, built under a technology transfer program between the Chilean Air Force (FACH) and the British company Surrey Satellite Technology Ltd (SSTL). The FASat (Fuerza Aerea Satellite) program included the training of Chilean engineers in SSTL and operating the Mission Control Station (ECM-Santiago) in Chile.

After the unfortunate outcome of the Chilean microsatellite FASat-Alfa, a commission was formed and the British company SSTL accepted its responsibility for the failure. Thus, FASat-Bravo was built as a replacement for the failed FASat-Alfa, paying special attention to the separation mechanism. It was launched as a secondary charge aboard a Zenit-2 rocket, it took place on July 10, 1998 from the Baikonur Cosmodrome (in Kazakhstan), and after 2 years and 11 months of operation the battery failed, making it unusable and converted in space junk.

Educational Experiment (EdEx) ...

This experiment, which in itself was not a separate physical load, had as its primary objective to involve schools throughout Chile in communicating with the FASat-Bravo satellite. The educational experiment would use the DTE transfer experiment to, through digital processing with the DSP, produce telemetry that can be received by low-cost terrestrial receivers and a personal computer.

Likewise, the DSP was capable of producing digitized voice that could be received by simple receivers.

The benefit for the students' curriculum was that they should develop at least the following activities:

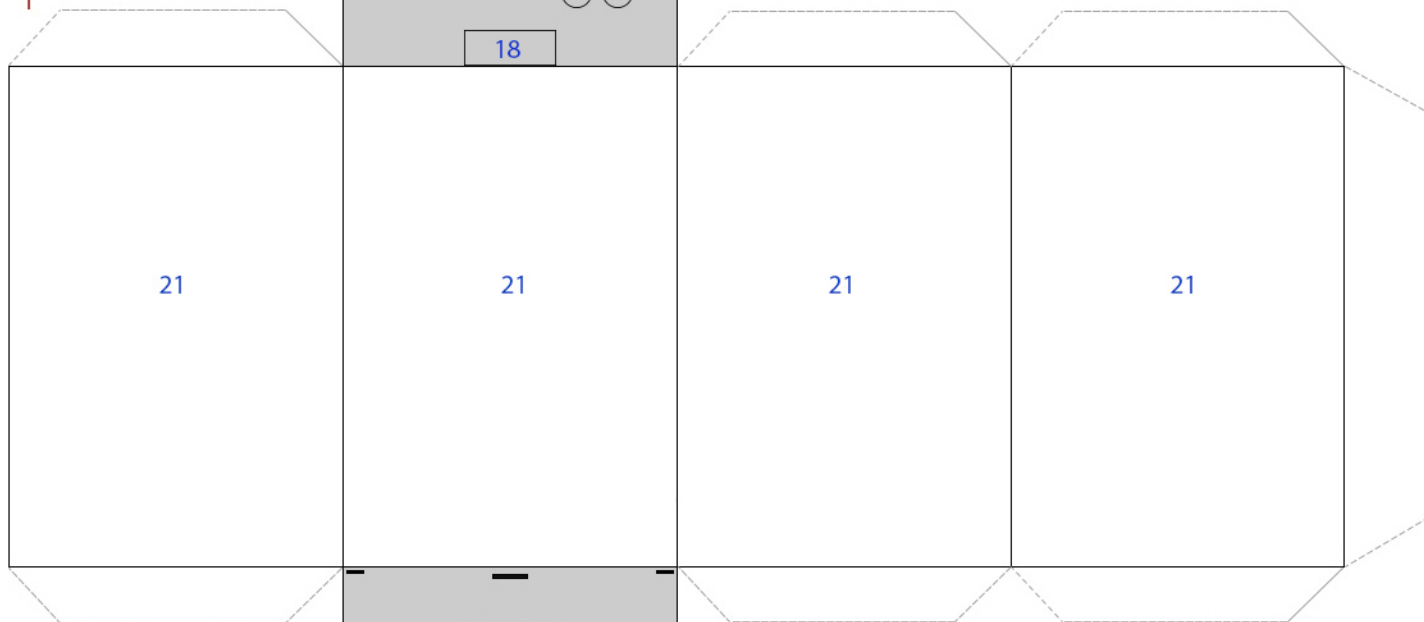
- ☒ Tracking of the FASat-Bravo satellite, with the subsequent basic study of orbital mechanics.
- ☒ Communication study with the satellite.
- ☒ Analysis of the telemetry of the FASat-Bravo satellite, especially that related to electrical and thermodynamic parameters.

Fasat-Bravo

14 ●
Glue to cardstock

15 ●
Glue to two layers
of cardstock

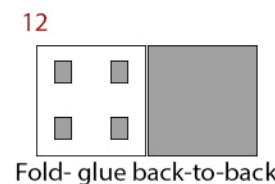
1



5 
Color back Black



9  Poke hole on the
black dot

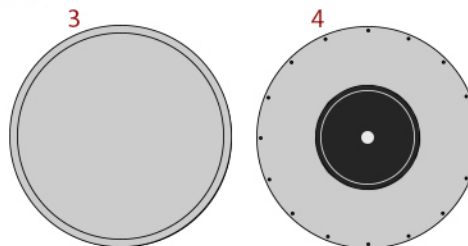


Fold- glue back-to-back

16 ● ● ●
● ● ●
Glue to two layers
of cardstock

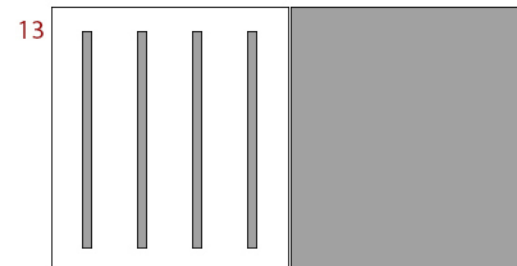


Poke hole on the
black dot



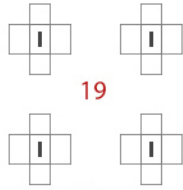
Glue back-to-back, then poke hole
on the white dot

Cut a wood skewer or similar material
around 2mm diameter the same length as
the line above colored light grey or silver.

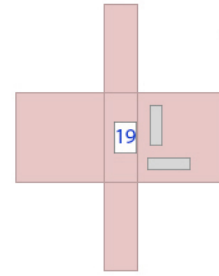
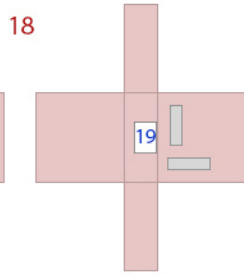
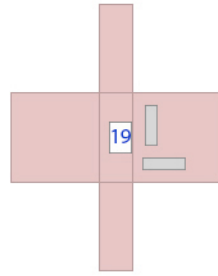
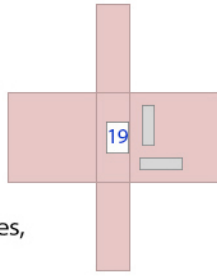


Fold- glue back-to-back

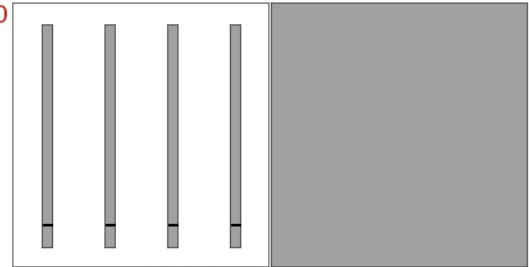
Fasat-Bravo



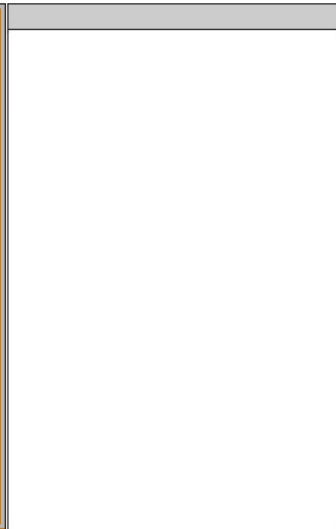
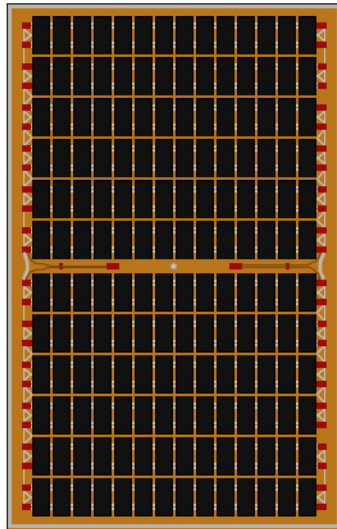
Cut out the thick black lines,
then fold to a box



20



Fold-glue back-to-back



21

Fold- glue each solar
panel back-to-back

