

Symphonie



The Symphonie satellites (2 satellites orbited) were the first communications satellites built by France and Germany (and the first to use three-axis stabilization in geostationary orbit with abipropellant propulsion system) to provide geostationary orbit injection and station-keeping during their operational lifetime. After the launch of the second flight model, they comprised the first complete telecommunications satellite system (including an on-orbit spare and a dedicated ground control segment).

Symphonie was the forerunner for numerous telecommunications services. Its prohibition on commercial use may have paradoxically induced a larger program for experimentation of space telecommunications than ever before both in the number of participating countries and diversity of field applications.

Symphonie's ten years of service have been credited with developing the maturity and reliability of space technology, at a time when telecommunications operators were thinking in terms of cables and ground microwave links. After Intelsat (a pioneer in intercontinental telephony), Symphonie led to the development of regional systems with a number of applications (including tele-distribution, tele-education and reliable radio-electrical access) for use in isolated areas with no ground infrastructure and low population density. The Symphonie program was also a training program; it trained engineers, operators and satellite users, who acquired their expertise through the program and distributed it on the European and international level.

Firsts

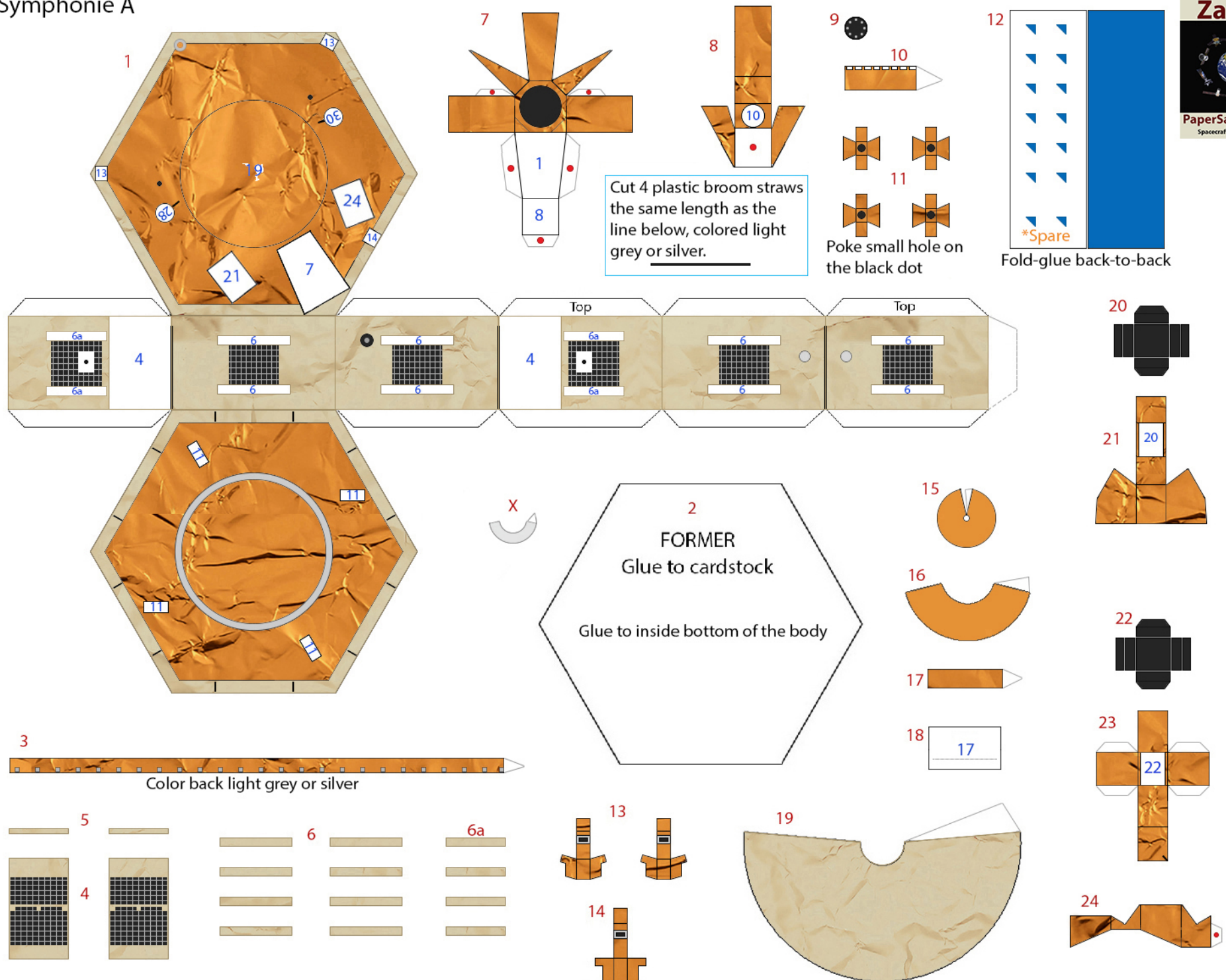
Symphonie was the:

- ☒ First three-axis stabilized communications satellite in geostationary orbit with a bipropellant rocket propulsion system (to ensure geostationary orbit injection and orbit control during its entire lifespan).
- ☒ First European communications satellite system.

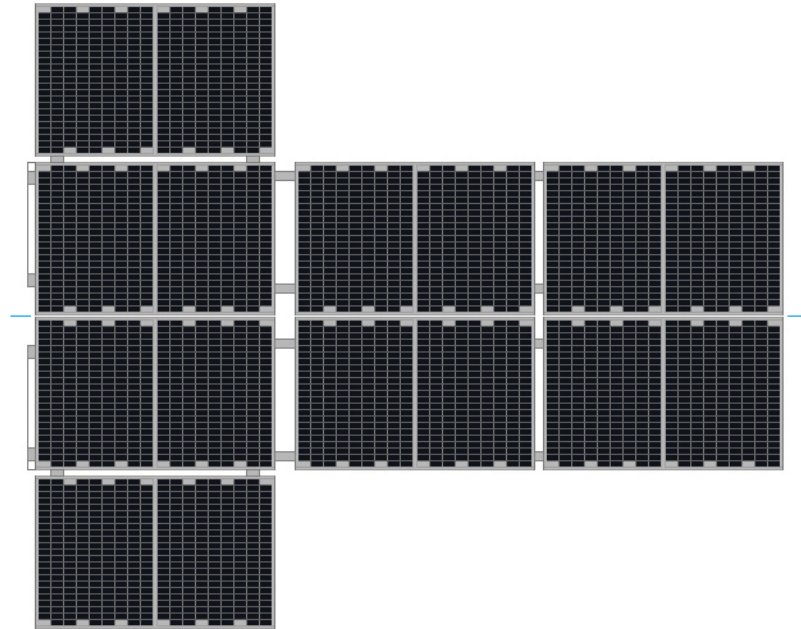
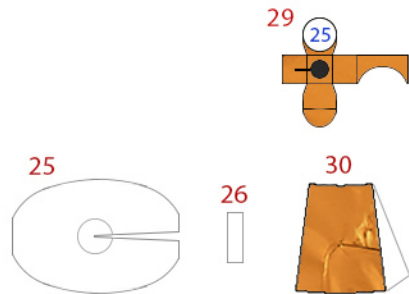
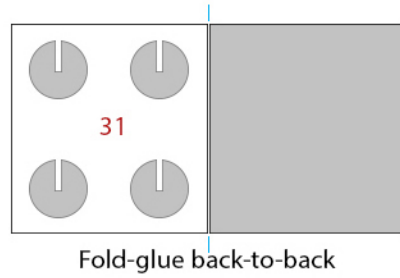
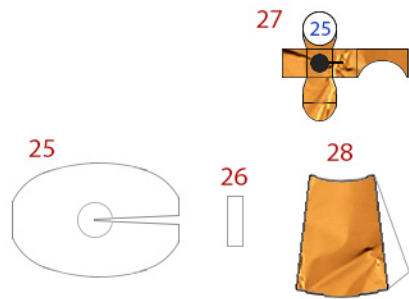
Satellites

- ☒ Symphonie A (aka Symphonie 1, COSPAR 1974-101A), launched 19 December 1974 at 2:39 UT from Kennedy Space Center (Cape Canaveral) LC-17B aboard Delta-2914 rocket to geostationary orbit. Mass of satellite 400 kg, 230 kg in orbit. Planned lifetime was 5 years. Decommissioned August 12, 1983 (moved to graveyard orbit). Mission duration: 8 1/2 years.
- ☒ Symphonie B (aka Symphonie 2, COSPAR 1975-077A), launched 27 August 1975 at 1:42 UT from Kennedy Space Center (Cape Canaveral) LC-17A aboard Delta-2914 rocket to geostationary orbit. Mass of satellite 400 kg, 230 kg in orbit. Planned lifetime was 5 years. Decommissioned December 19, 1984 (moved to graveyard orbit). Mission duration: 9 years.

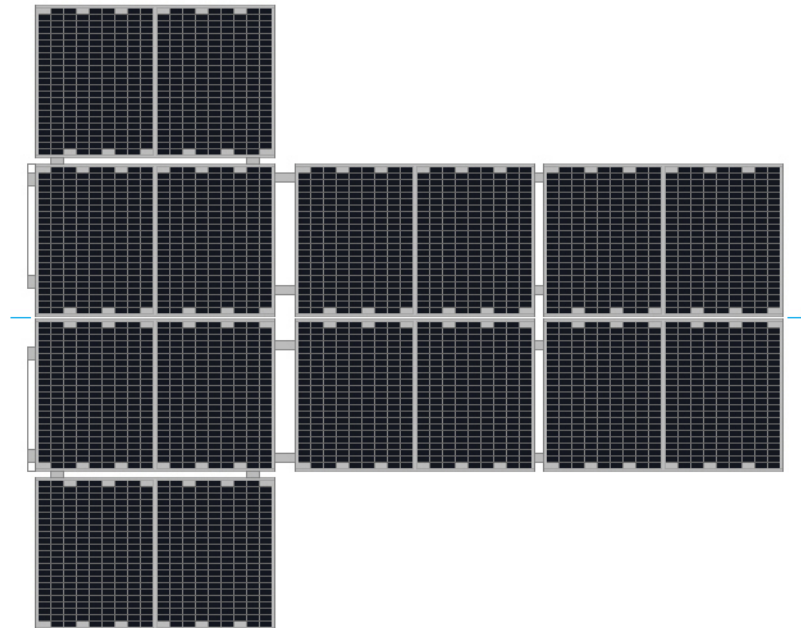
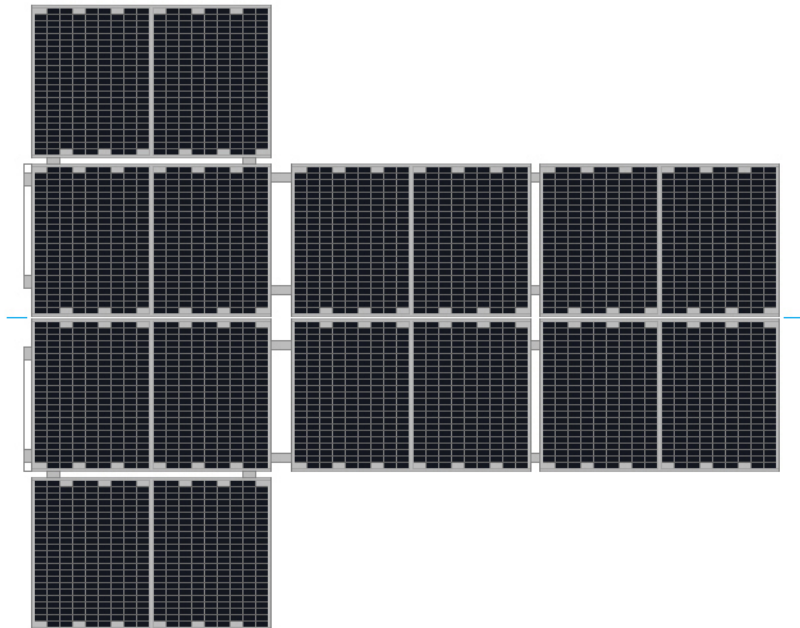
Symphonie A



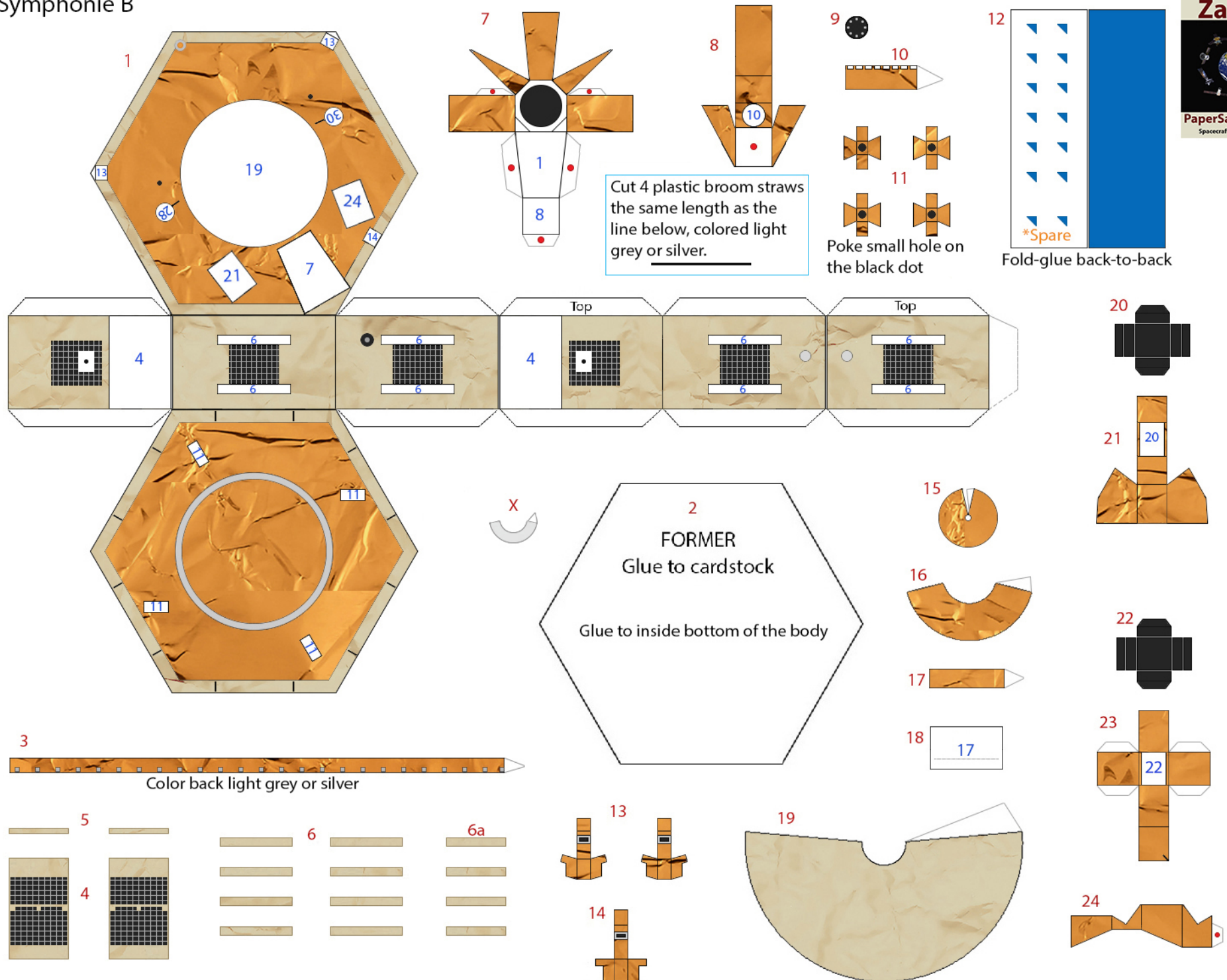
Symphonie A



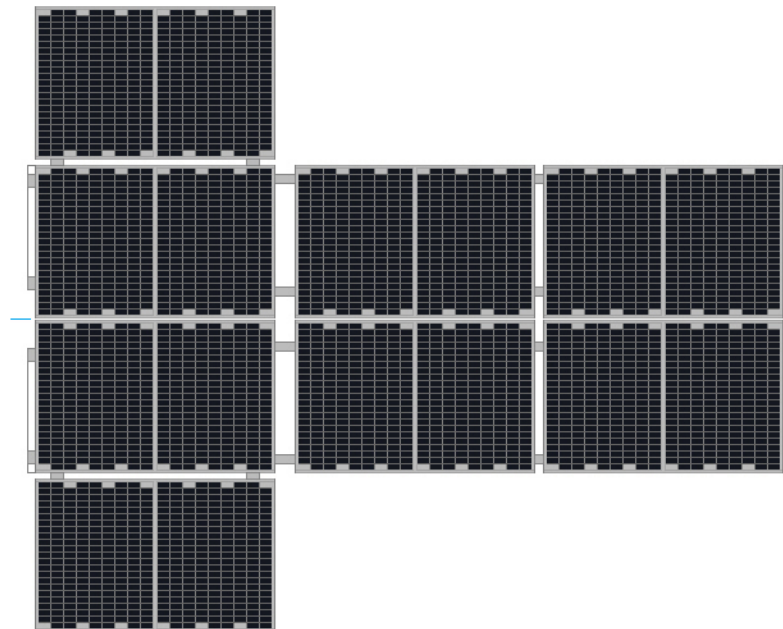
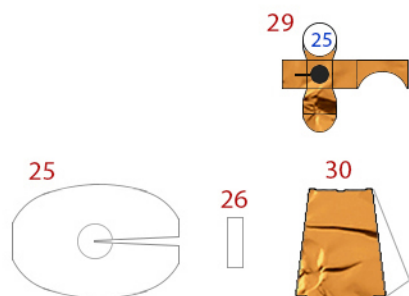
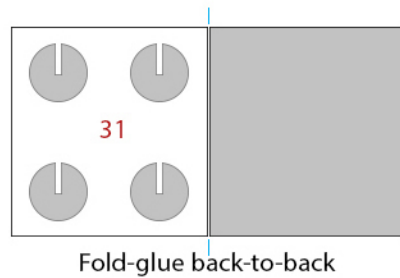
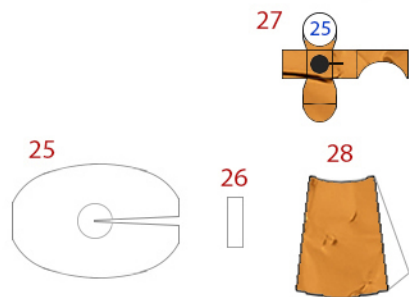
32 Fold-glue each solar panel back-to-back at the blue lines.



Symphonie B



Symphonie B



32 Fold-glue each solar panel back-to-back at the blue lines.

