

Ariane 6 (A62) - Maiden Flight



The inaugural flight of ESA's new Ariane 6 launcher in summer 2024 will mark the beginning of a new era of autonomous European access to space. Lifting off from a modern launch complex at Europe's Spaceport in Kourou, French Guiana, it will carry with it not only a variety of spacecraft, but also Europe's renewed ambitions in space on the world stage. Switzerland is among the 13 ESA Member States participating in the Ariane 6 programme. Designed with the heritage of reliability and an enhanced flexibility of launching satellites into many different orbits, Ariane 6 has a key technological advantage over other launchers.

Ariane 6 is Europe's new heavy lift launch vehicle replacing its extremely successful predecessor, Ariane 5. Modular and agile, Ariane 6 has a restartable upper stage allowing it to launch multiple missions on different orbits on a single flight.

Ariane 6 will launch a wide range of space missions and comes in two versions, depending on the power needed for each flight. Ariane 62 has two solid rocket boosters, while Ariane 64 will have four. Ariane 6's first flight will have two boosters and show off the rocket's restartable upper stage.

With the ability to restart its upper stage up to four times, and its innovative auxiliary propulsion unit, Ariane 6 is especially suited to launch multiple payload missions, including orbiting satellite constellations. The same innovation also allows Ariane 6 to deorbit its upper stage after the mission has ended, to minimise space debris.

Europe's new heavy-lift rocket, Ariane 6, has successfully launched on its maiden flight. Liftoff occurred one hour into a four-hour launch window on Tuesday, July 9, 2024. It flew with a shorter fairing for its maiden flight, bringing the rocket's height to 56 m. The rocket's diameter is 5.4 m, not including the solid boosters, and its overall mass at liftoff was 540 tonnes.

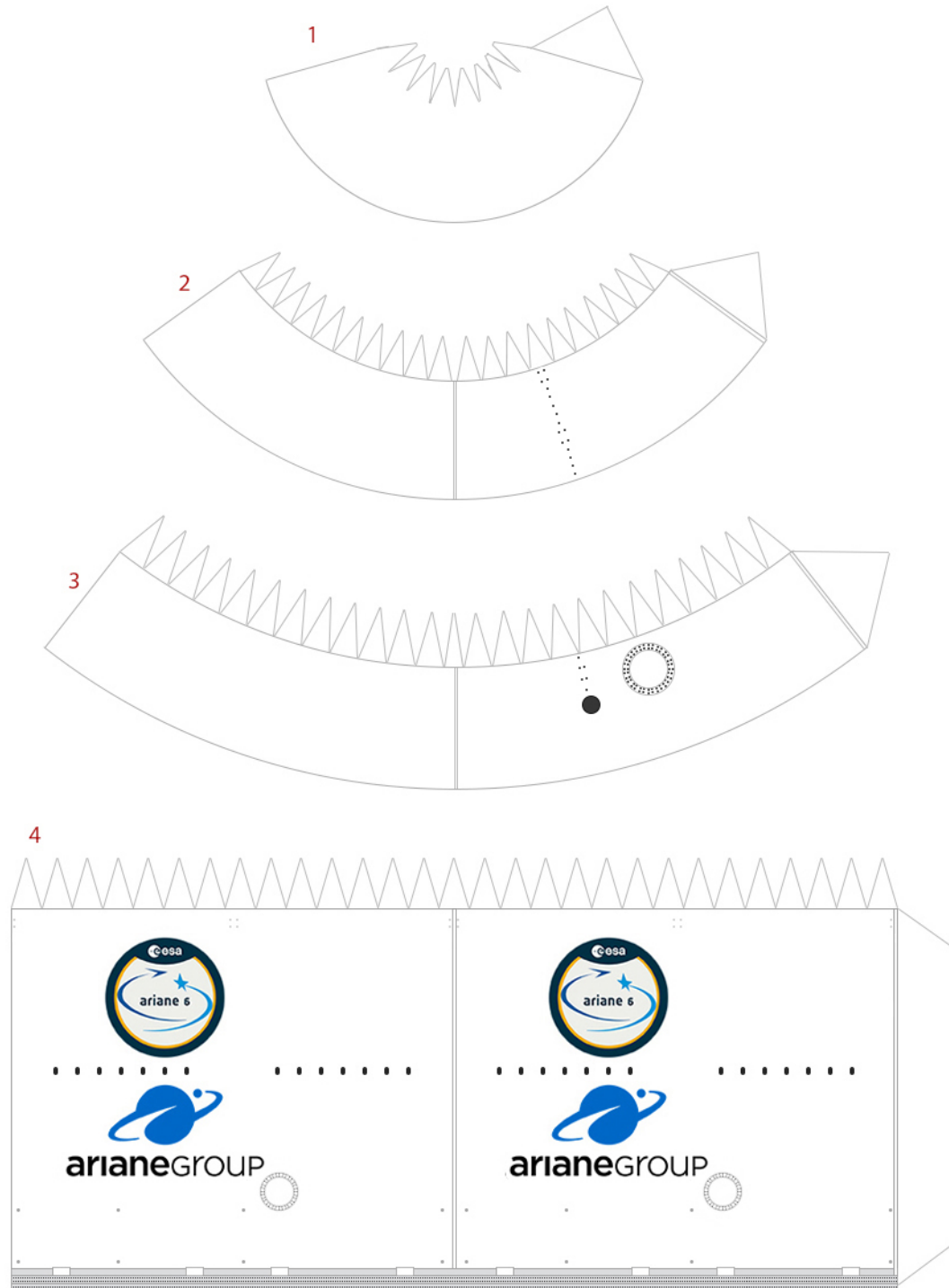
The Ariane 6 carried nine cubesats to orbit today. All of them were successfully deployed 370 miles (600 kilometers) above Earth about 65 minutes after liftoff as planned.

The rocket was also supposed to deploy two experimental reentry capsules about two hours and 40 minutes into the flight.

That didn't happen, however; the Ariane 6's upper stage did not complete a burn designed to set up that final deployment. This was due to a failure with the auxiliary power unit (APU).

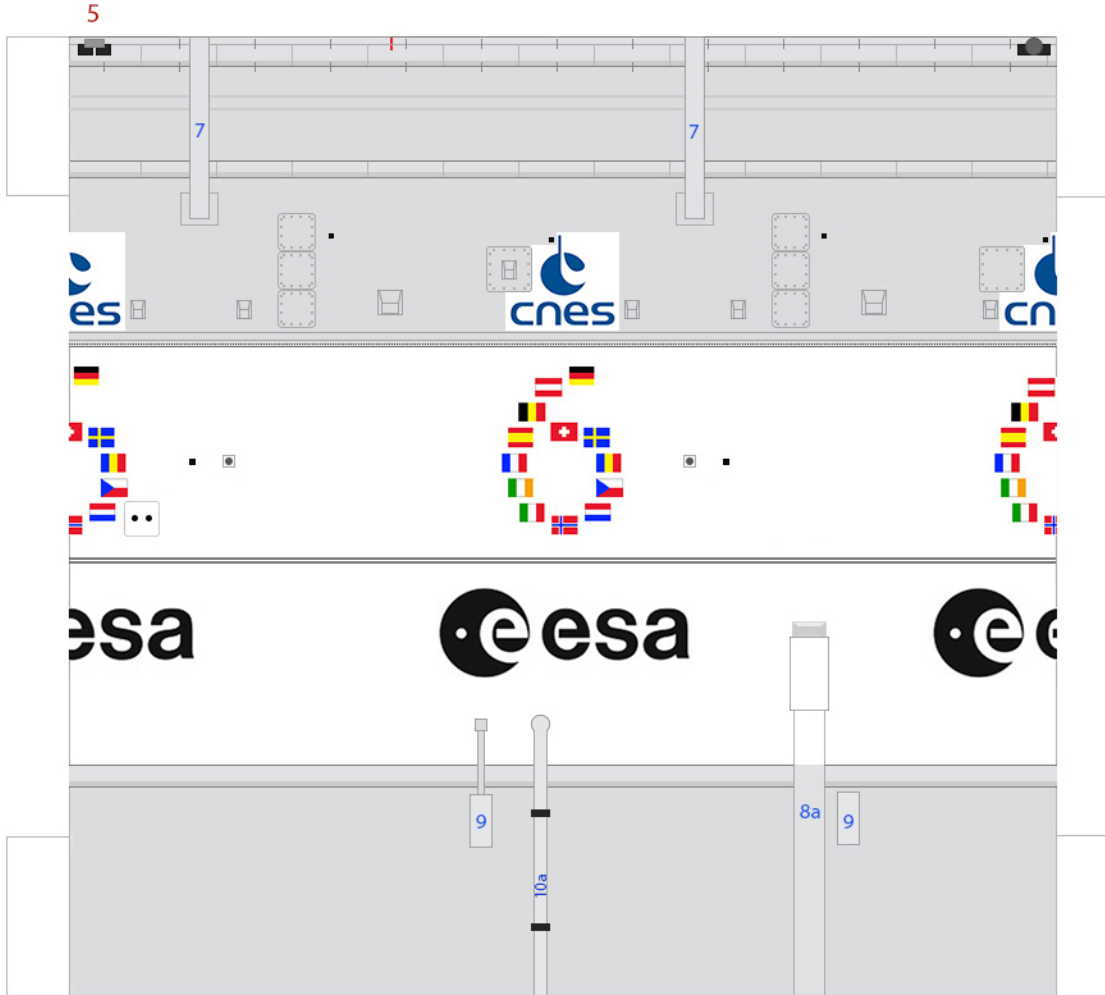
But this anomaly, which occurred during the mission's "tech demo" phase, shouldn't overshadow the overall success of the flight.

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4 to 5 connector



5 to 6 connector

Former
Glue to cardstock

7



9



8a



8b



10a

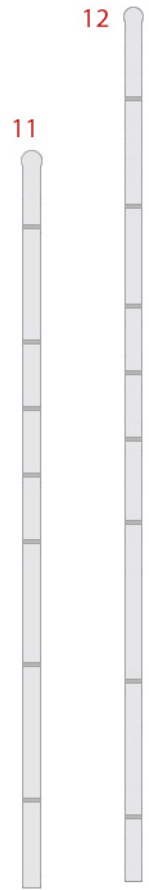


10b

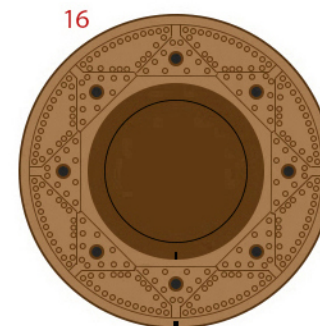
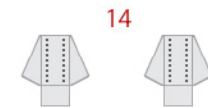
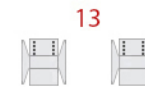
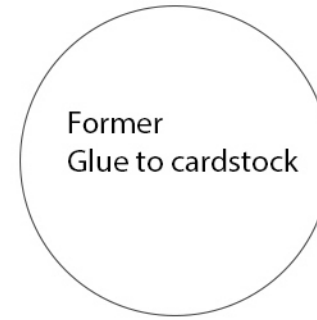
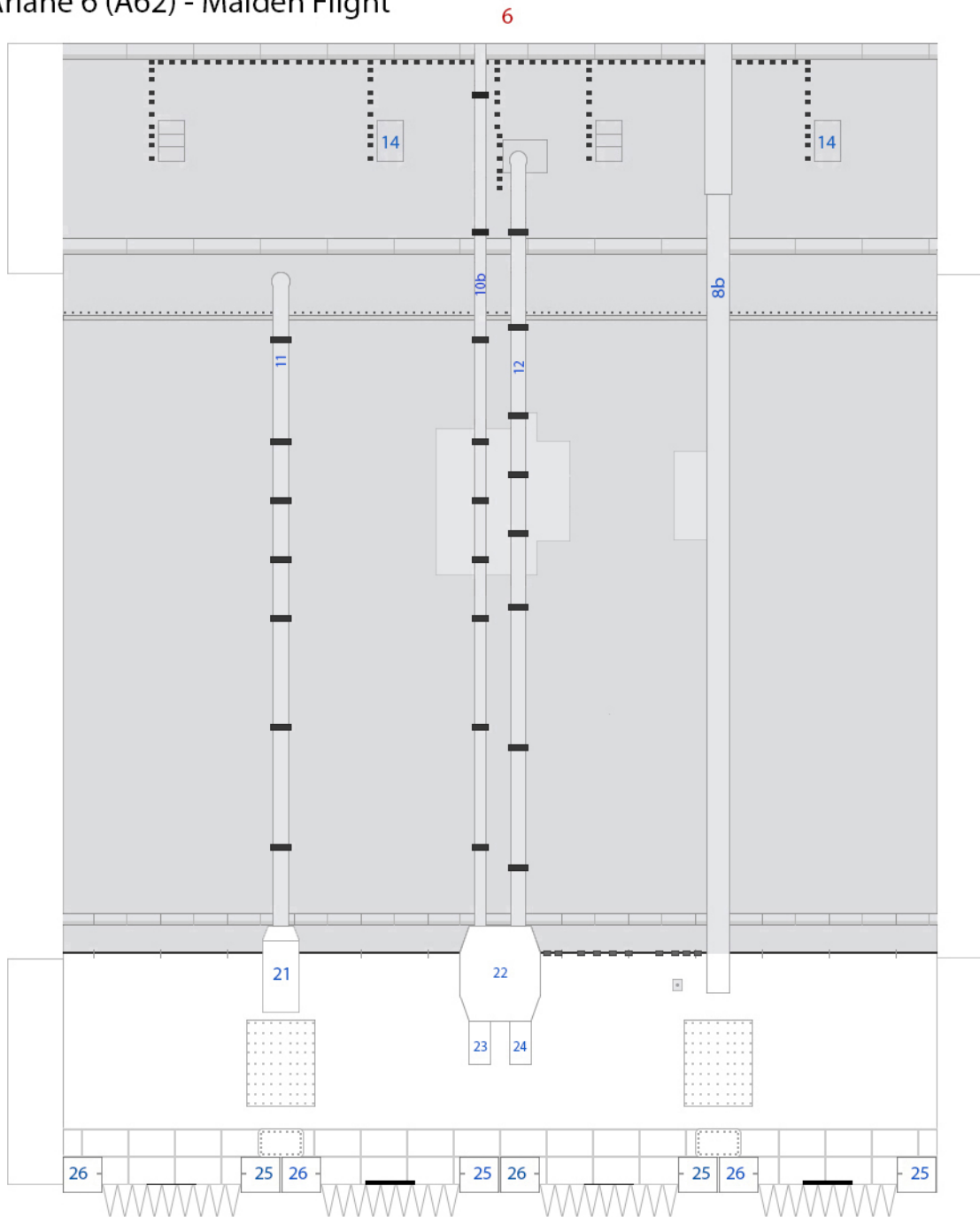


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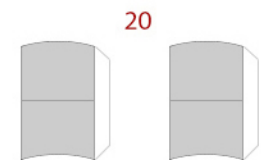
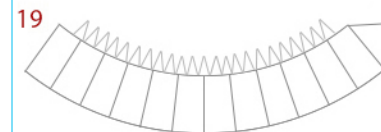
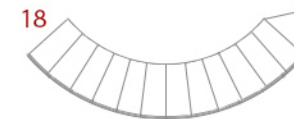
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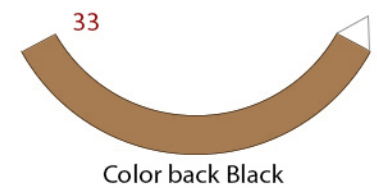
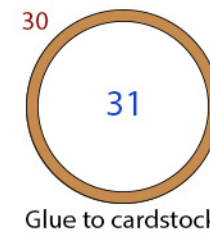
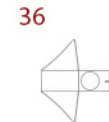
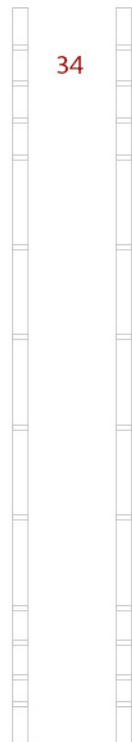
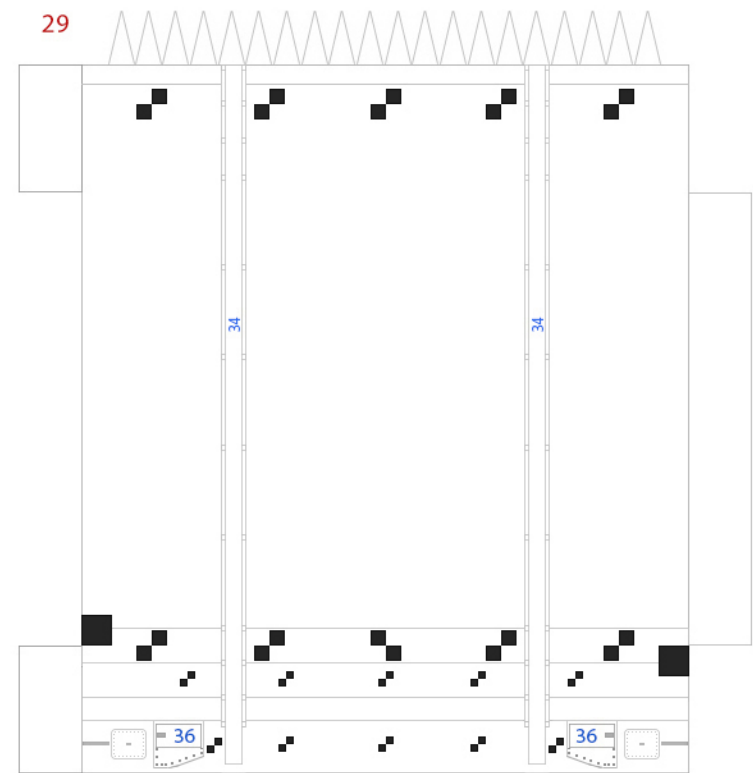
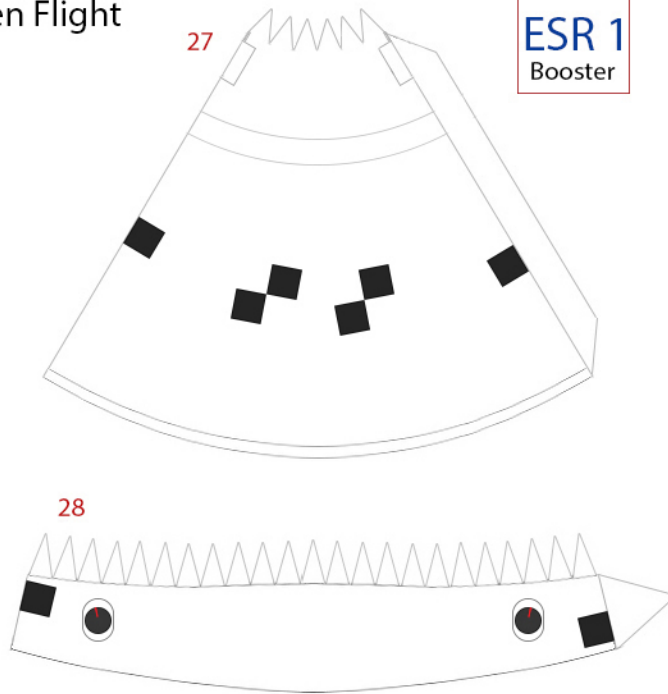
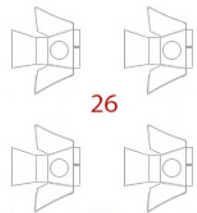
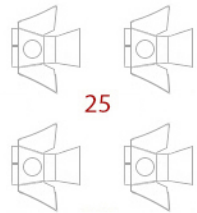
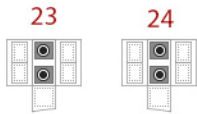
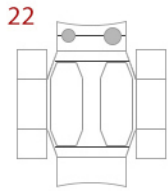
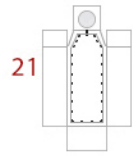
Glue to cardstock



Color back Black

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ESR 1
Booster



Ariane 6 (A62) - Maiden Flight

ESR 2
Booster

