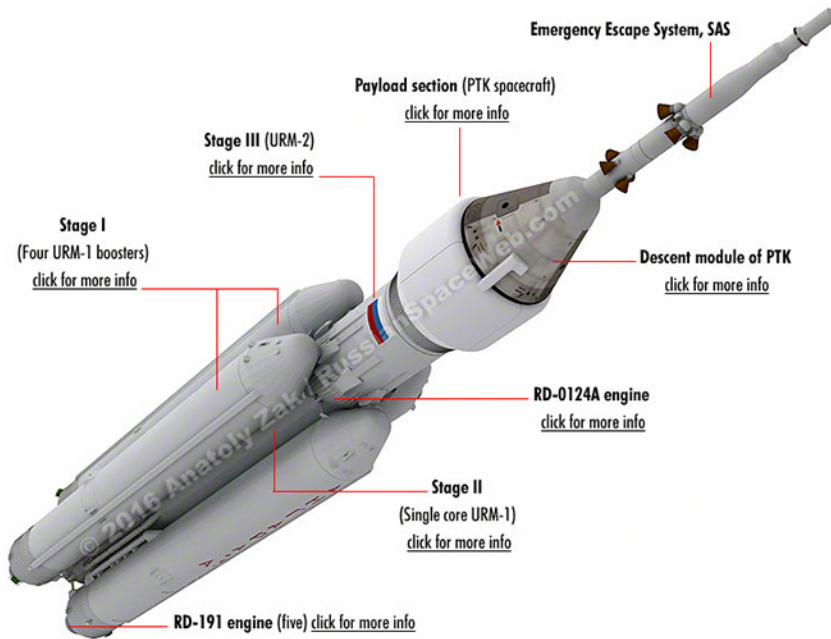


Angara A5P (crew)



Design of the Angara A5P as of 2016

Note

The Angara A5P is still in the development stage, model may need to be updated when pics of the real thing becomes available.

When the Angara family of rockets was originally proposed in the 1990s, it was advertised purely as a launcher of unmanned military and commercial satellites, which, at the time, relied on Proton vehicles. However, as the project finally started moving forward in the second half of 2000s, its scope widened to include possible manned missions as well.

After entertaining the ideas of launching a 12-13-ton three-seat piloted spacecraft on the Angara-3-based rocket (alternatively known as A3M, 3P or 3.2), engineers switched to the more powerful Angara-5 version around the summer of 2007.

In 2008, GKNPTs Khrunichev, the Moscow-based developer of the Angara family, unveiled a scale model of a three-stage, 712-ton booster designated Angara-5P, where "P" stood for "piloted" or "manned." Somewhat surprisingly, the company said at the time that the vehicle would be based at the near-polar circle launch site in Plesetsk, which had never hosted manned missions. Moreover, the paperwork also claimed that rocket could carry piloted and cargo ships to escape Earth orbit on their way to deep space.

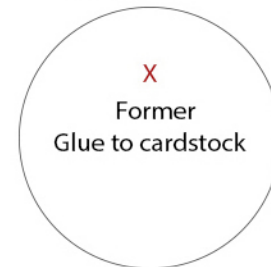
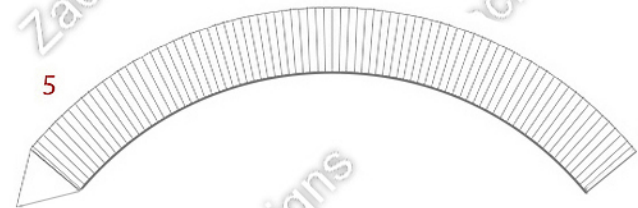
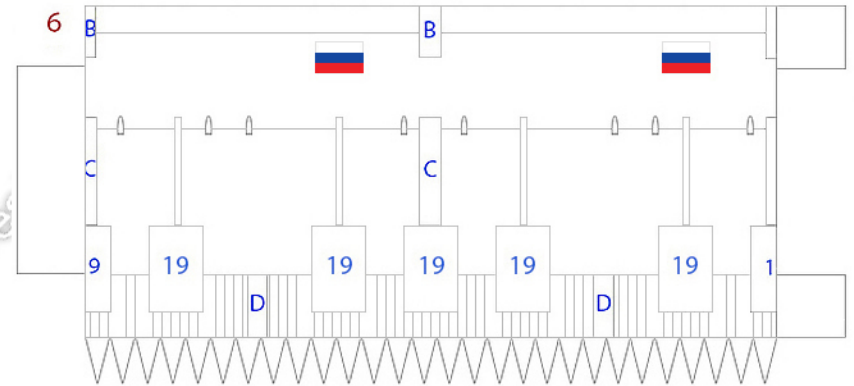
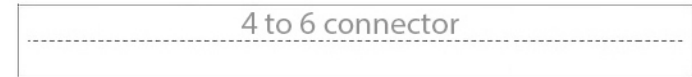
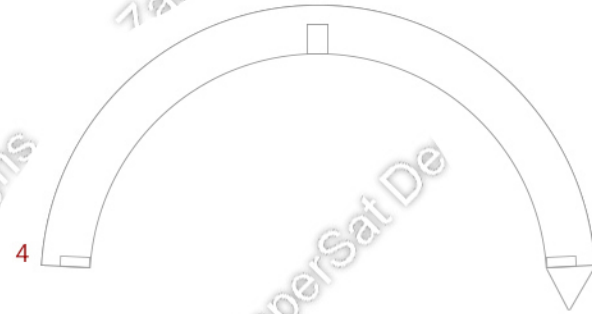
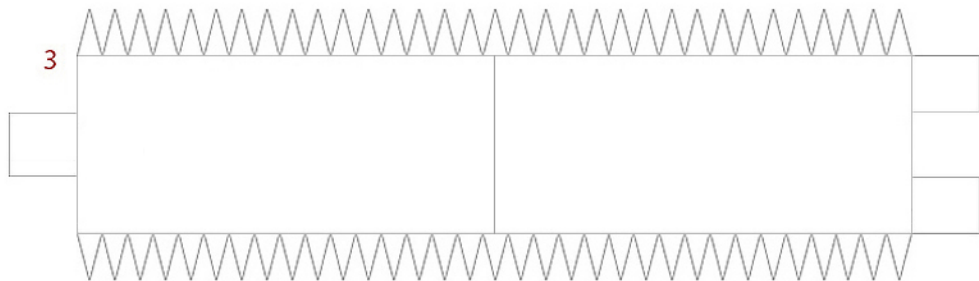
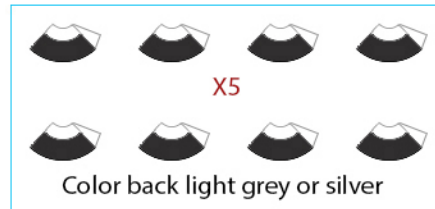
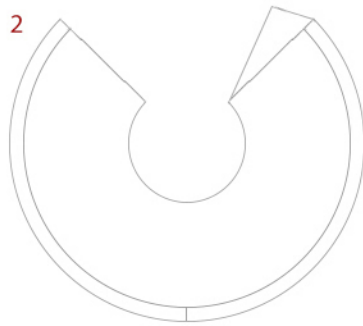
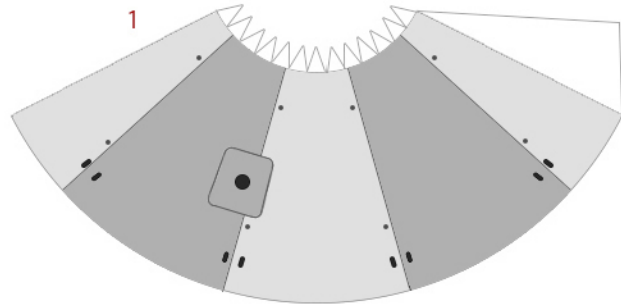
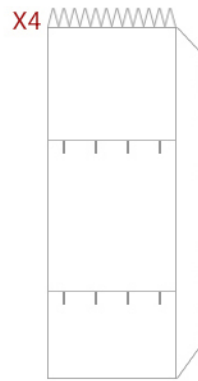
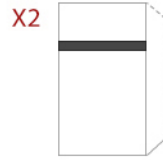
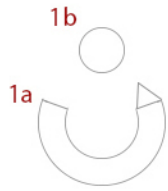
The Angara's role as a carrier of manned spacecraft finally become official, after funding woes had killed the development of the competing Rus-M rocket in 2011. By that time, the Russian government had already launched the construction of a new cosmodrome in the Russian Far East and the Angara-5 rocket was promised a launch pad there.

On Dec. 26, 2015, Roskosmos awarded a contract to GKNPTs Khrunichev to develop the Angara-A5P (Angara-5P) rocket within the Amur project. The 32,398,611,000-ruble (\$425.6 million) contract covered work over the next 10 years, until Nov. 25, 2025.

According to the contract, the production documentation for the launch vehicle would be developed by the end of 2018. It included blueprints for the full-scale electric and fueling prototype of the rocket known as NZh. The prototype was scheduled to be delivered to the launch site for tests in January 2021, followed by the first launch of the flight-worthy Angara-5P from its future launch pad in Vostochny beginning in the third or fourth quarter of 2021.

The first rocket would be followed by two additional flight-worthy rockets scheduled for launch in the third or fourth quarters of 2022 and 2023, respectively. The contract would be concluded in 2024 and 2025 with the preparation of technical documentation for serial production of the rocket.

Angara A5P (crew)

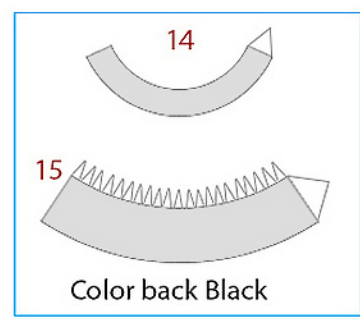
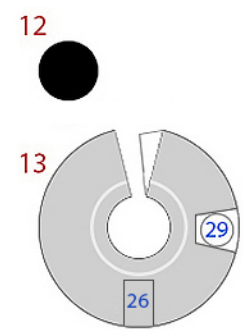
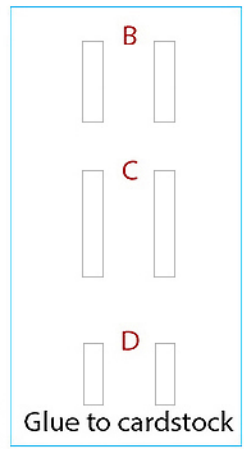
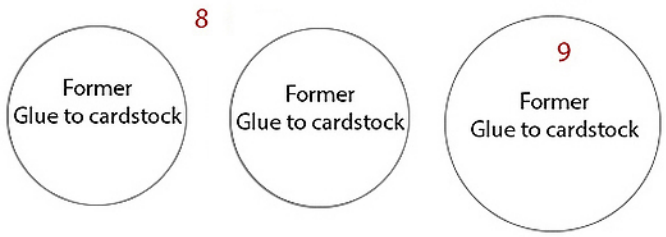
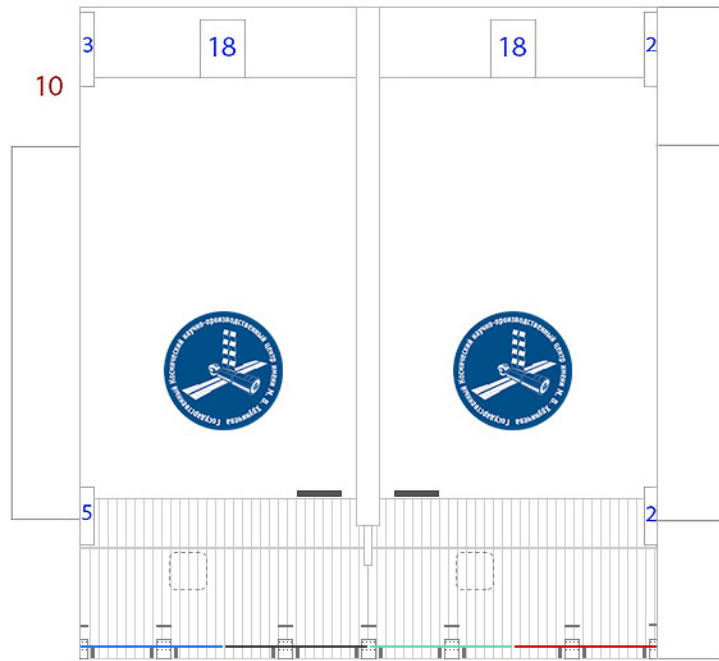
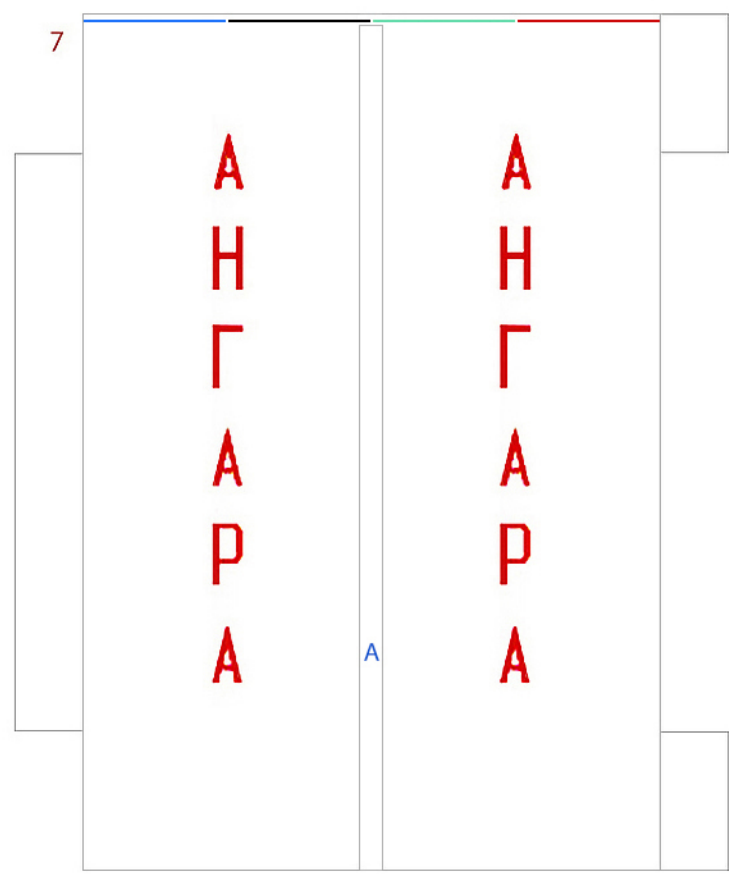


Angara A5P (crew)



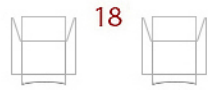
5 to 7 connector

7 to 10 connector

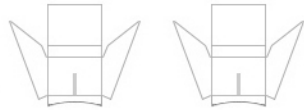


Angara A5P (crew)

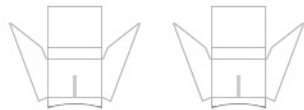
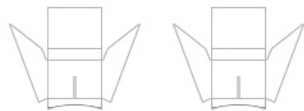
Parts 11, 16 and 17 were deleted for this model



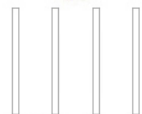
18



19



20

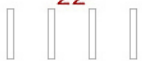


Glue to cardstock

21



22



Glue to cardstock

A

Glue to cardstock

Optional Detail Parts

Glue on the matching graphics on part 6



*spares



23

24



24



26

27



27



28



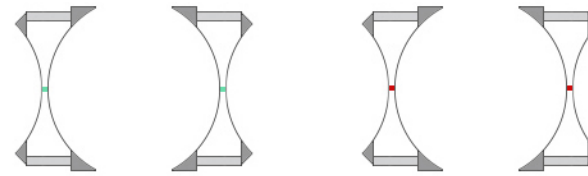
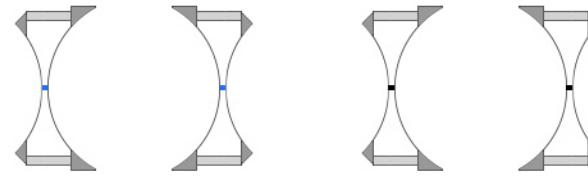
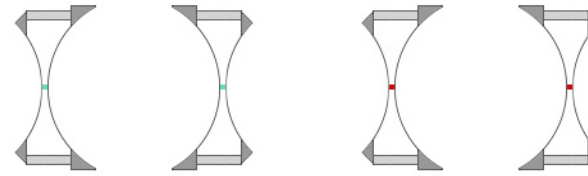
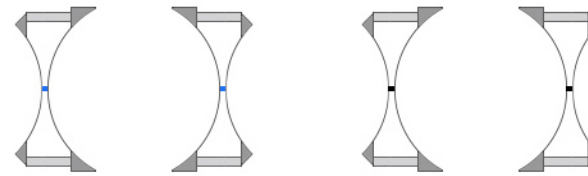
29



25

24

Booster Brackets



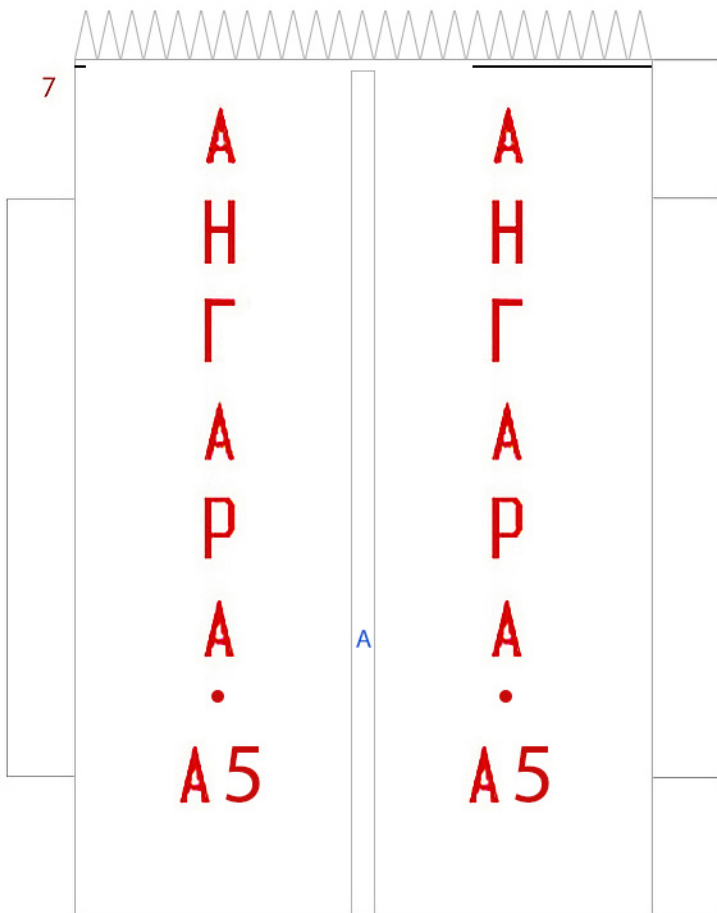
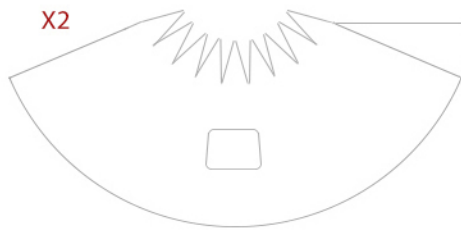
Glue all to cardstock, cut out and glue each pair back-to-back

Zach's

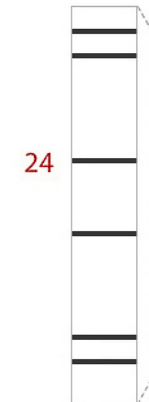
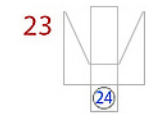
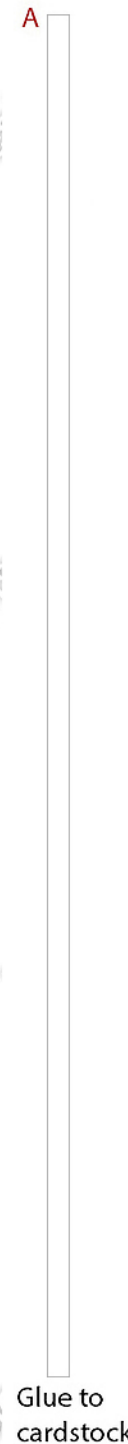
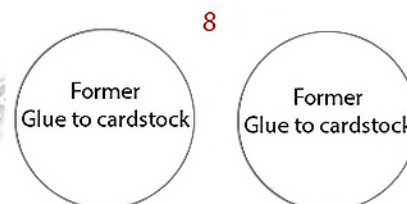
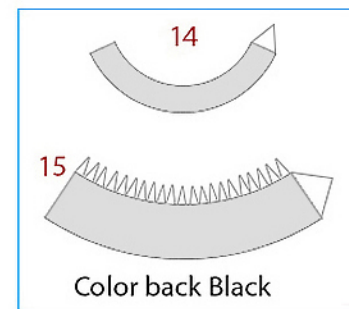
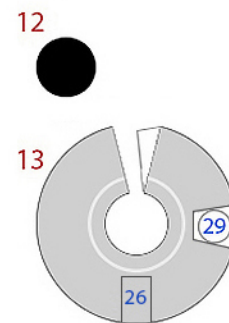
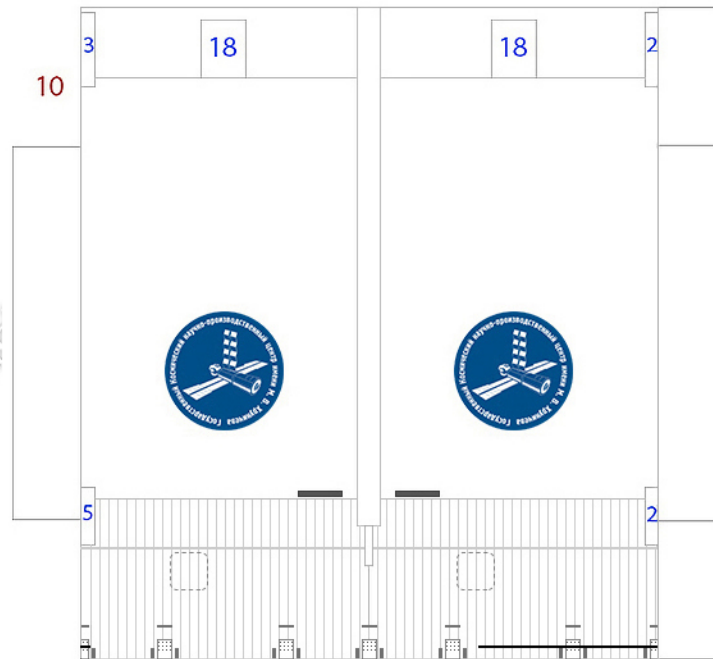


PaperSat Designs
Spacecraft Paper Models

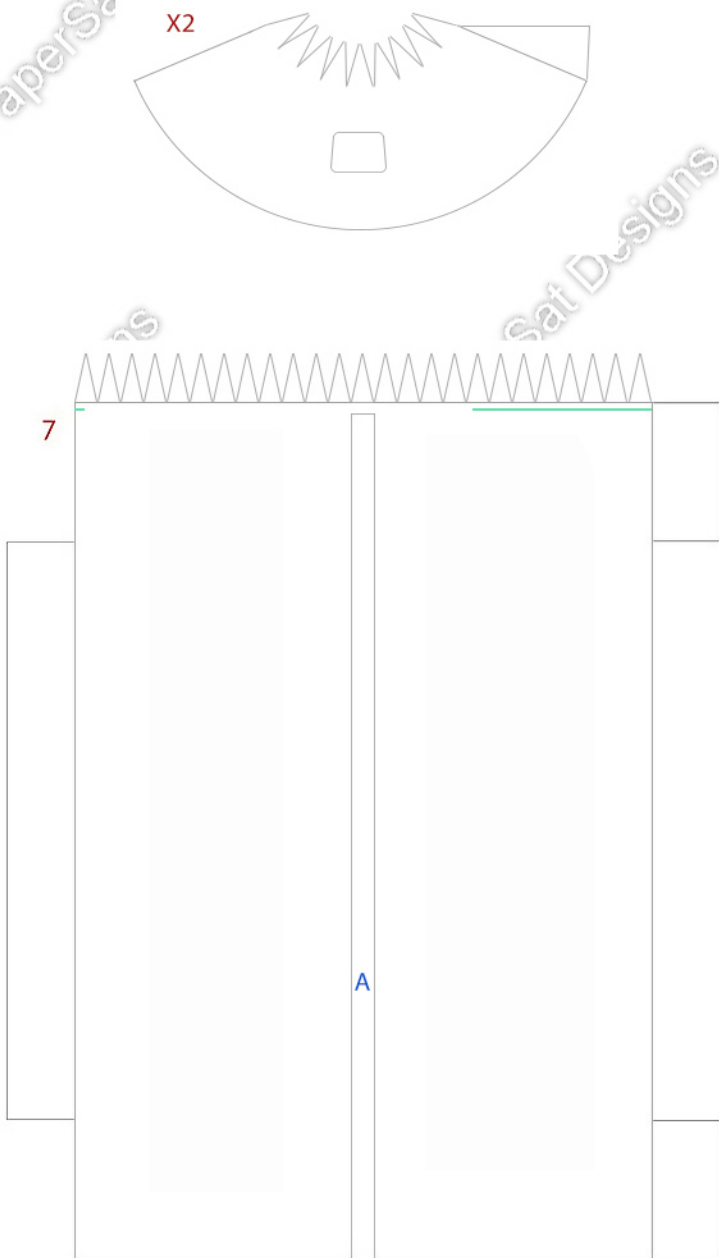
Angara A5P (crew)



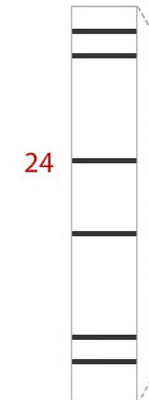
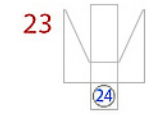
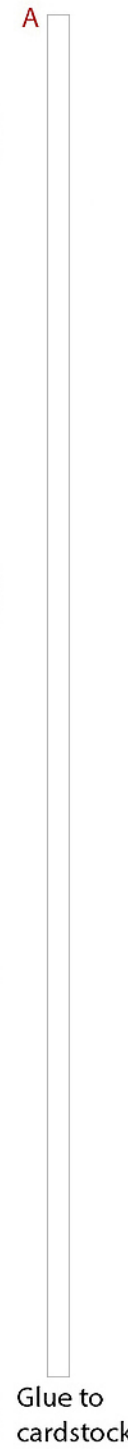
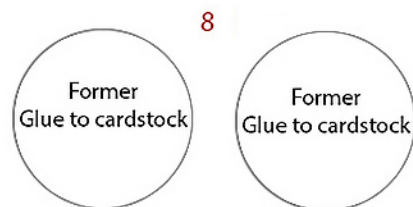
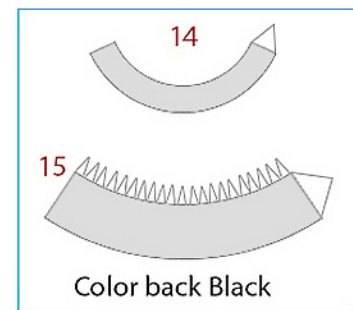
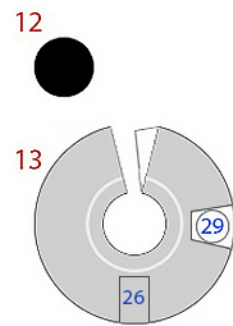
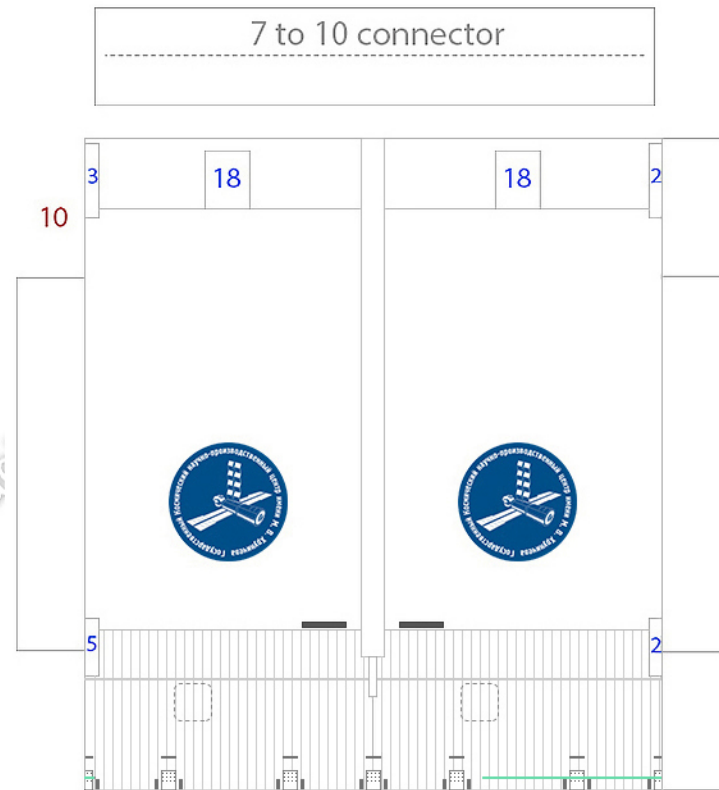
Boosters



Angara A5P (crew)

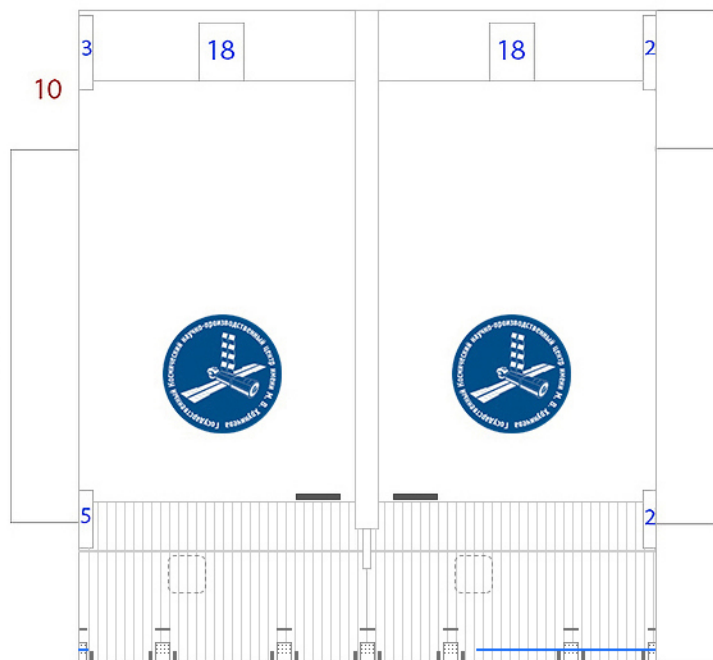
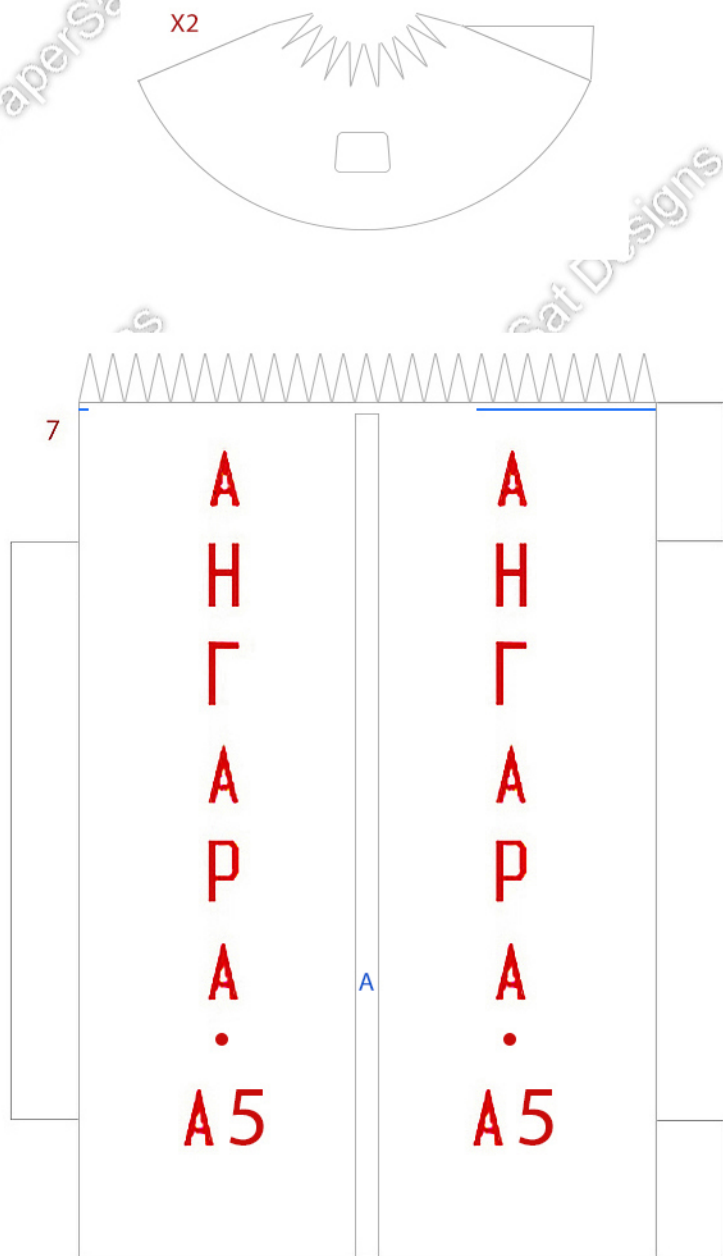


Boosters



Angara A5

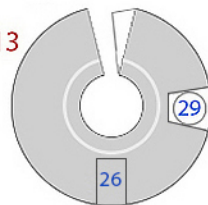
Boosters



12



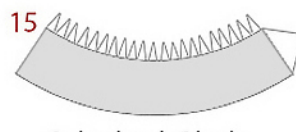
13



14



15



Color back Black

8



18



A



Glue to cardstock



23



24



25



26



27



28



29



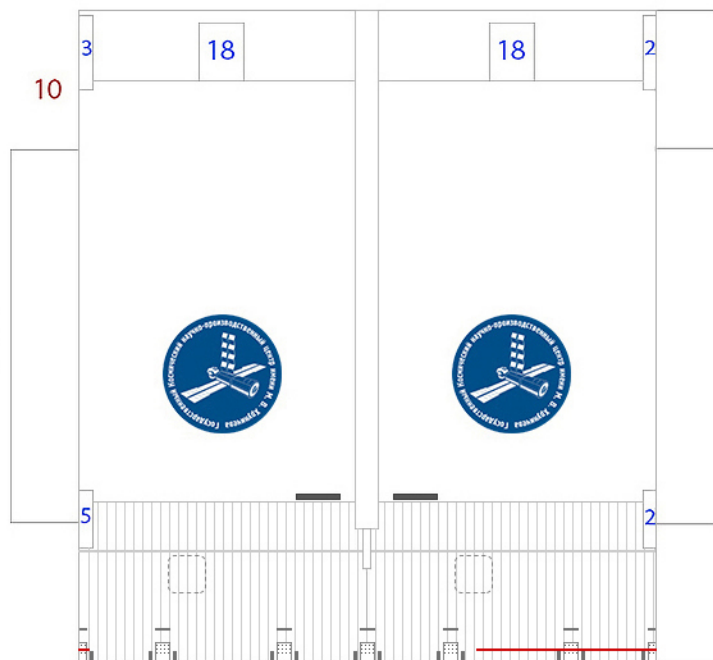
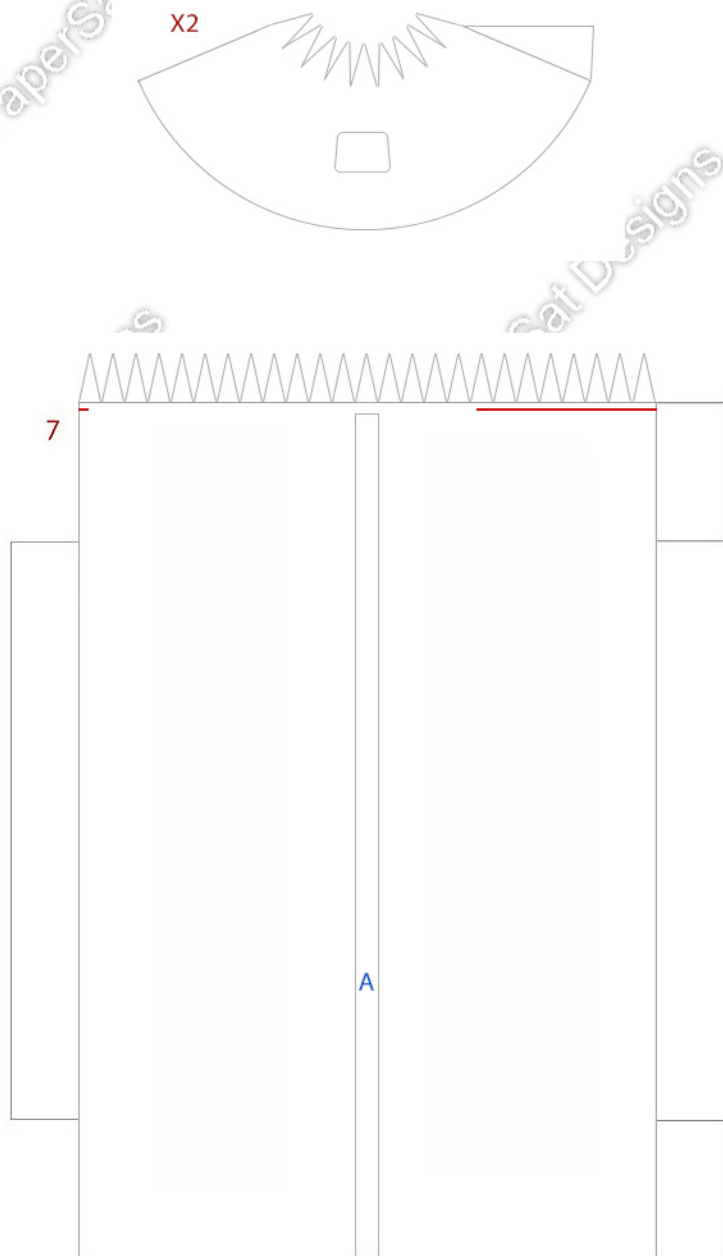
Angara A5P (crew)

Boosters

Zach's



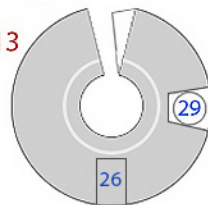
PaperSat Designs
Spacecraft Paper Models



12



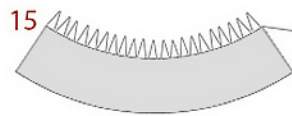
13



14



15



Color back Black

8

Former
Glue to cardstock

Former
Glue to cardstock

18



A

Glue to
cardstock

23



24



25



26



27



28



29

