





LAUNCH WINDOW

MARCH  
**14<sup>TH</sup>**  
MONDAY

TO

MARCH  
**15<sup>TH</sup>**  
TUESDAY

9:22am PDT / 16:22 UTC

LAUNCH SITE

**PAD LP-3B**  
Pacific Spaceport Complex  
KODIAK, ALASKA

TARGET ORBIT

**97.5°**  
INCLINATION

**525<sub>KM</sub>**  
ALTITUDE

PAYLOAD

This mission includes a payload for NearSpace Launch, the S4 CROSSOVER, and Portland State Aerospace Society's OreSat0.



## MISSION OVERVIEW

Astra's objective is to successfully launch and deploy spacecraft for Spaceflight's customers, including Portland State Aerospace Society and NearSpace Launch, to Sun Synchronous orbit, 525 km.

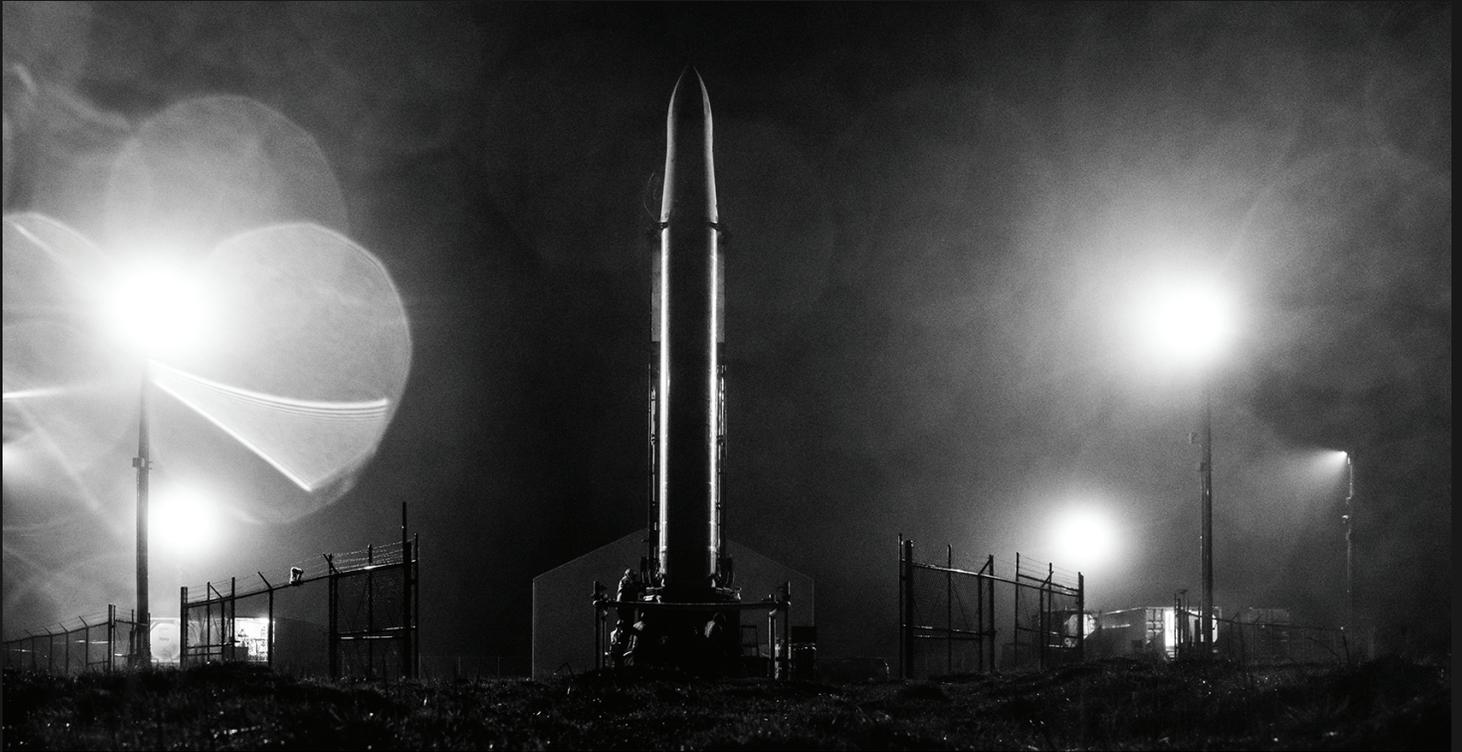
### **NearSpace Launch's S4 CROSSOVER**

S4 CROSSOVER is a technology demonstration mission to obtain flight heritage testing for a prototype payload host platform. It will test supporting future payloads, including a Globalstar transmitter and an Iridium transceiver, as well space environmental instruments to characterize the radiation and plasma densities to which the payloads will be exposed. S4 CROSSOVER is self powered and operates independently of the Astra second stage to which it is permanently attached. Transmission from the S4 CROSSOVER will begin after second stage engine cutoff, activated by relays on the launch vehicle, and will operate until demise, which is expected to occur within a few weeks after launch.

### **Portland State Aerospace Society's OreSat0**

Re-manifested from SXRS-6 / Transporter-3, OreSat0 is a fully open source CubeSat satellite system built from scratch by students at Portland State University. Slated to be Oregon's first satellite, the 1U CubeSat provides flight heritage for the modular, expandable, open source, and education-friendly OreSat bus. OreSat0 paves the way for OreSat, a NASA CSLI program 2U CubeSat with a global climate science and STEM outreach mission. This second CubeSat will help refine global climate models by measuring the global distribution of high altitude cirrus clouds.

FOR MORE INFORMATION,  
[ASTRA.COM/NEWSROOM](https://astra.com/newsroom)



### MISSION TIMELINE



- +8m 50s ..... Payload Deployment
- +8m 40s ..... Second Engine Cut-Off
  
- +3m 15s ..... Upper Stage Ignition
- +3m 10s ..... Stage Separation
- +3m 05s ..... Fairing Separation
- +3m 00s ..... Main Engine Cut-Off
  
- +1m 10s ..... Max-Q
  
- +6s ..... Begin Pitch Over
- +0s ..... Lift-off



**ABOUT LAUNCH VEHICLE 0009 / ROCKET 3.3**

Astra offers one of the lowest cost-per-launch dedicated orbital launch service of any operational launch provider in the world.

Rocket 3.3 is an expendable, vertically-launched two stage LOX/kerosene rocket, designed to fit inside a standard shipping container and built to dramatically lower the cost of access to space.

Eschewing labor-intensive processes such as carbon composite layups, Astra has focused on proven and cost-efficient metallic structures. Rocket 3.3 consists of a first stage powered by five first stage electric-pump-fed engines and an upper stage propelled by a single pressure-fed upper stage engine.

OVERALL LENGTH

**43 FT**



DIAMETER

**52 IN**

**FIRST STAGE**

ENGINE QTY

**5**

THRUST PER ENGINE

**6,500 LBF SL**

TOTAL THRUST

**32,500 LBF SL**

PROPELLANT

**LOX / Kerosene**

**SECOND STAGE**

ENGINE QTY

**1**

THRUST PER ENGINE

**740 LBF VACUUM**

TOTAL THRUST

**740 LBF VACUUM**

PROPELLANT

**LOX / Kerosene**

**ABOUT ASTRA**

Astra's mission is to improve life on Earth from space by creating a healthier and more connected planet. Astra's first flight to space was within 4 years of its inception, making it the fastest company to reach space.

VISIT [WWW.ASTRA.COM](http://WWW.ASTRA.COM)  
TO LEARN MORE

**MEDIA CONTACT**

[kati@astra.com](mailto:kati@astra.com)

KATI DAHM

**INVESTOR CONTACT**

[dane@astra.com](mailto:dane@astra.com)

DANE LEWIS

**SAFE HARBOR STATEMENT**

Certain statements made in this press release are "forward-looking statements". Forward-looking statements may be identified by the use of words such as "anticipate", "believe", "expect", "estimate", "plan", "outlook", and "project" and other similar expressions that predict or indicate future events or trends or that are not statements of historical matters. These forward-looking statements reflect the current analysis of existing information and are subject to various risks and uncertainties, including Astra's failure to meet the projected launch targets. As a result, caution must be exercised in relying on forward-looking statements. Due to known and unknown risks, actual results may differ materially from Astra's expectations or projections and while Astra expects to meet this launch window a number of factors could impact our ability to successfully complete the launch described in this press release, including governmental or other restrictions that may be placed on travel in response to the increased COVID-19 transmission rates; delays that would result if critical members of our launch team were to be infected with the COVID-19 virus; setbacks we may face as we continue to test our rocket's launch capability, governmental orders and decisions over which we have no control and those risks and uncertainties discussed from time to time in our filings with the Securities and Exchange Commission.

When we use the phrase "commercial orbital launch," we mean a launch conducted under a FAA Commercial Launch License.

