RAISE AND SHINE

NET DECEMBER 5 2025

ELECTRON

Press Kit

rocketlabcorp.com

ROCKETLAB

LAUNCH INFORMATION

MISSION

Rocket Lab will launch a dedicated mission for the Japan Aerospace Exploration Agency (JAXA).

LAUNCH SITE

Launch Complex 1 – Pad B
Mahia, New Zealand.

LAUNCH WINDOW

The launch window opens from December 5, 2025 for two weeks. Back up opportunities are available throughout December should the launch date change for any reason.

Time Zone	Window Open
UTC	December 5, 03:00
NZDT	December 5, 4:00 PM
JST	December 5, 12:00 PM
PT	December 4, 7:00 PM
ET	December 4, 10:00 PM

ORBIT

540 km
Circular Earth Orbit

SATELLITE

1
RAISE-4

INCLINATION

97.5
Degrees

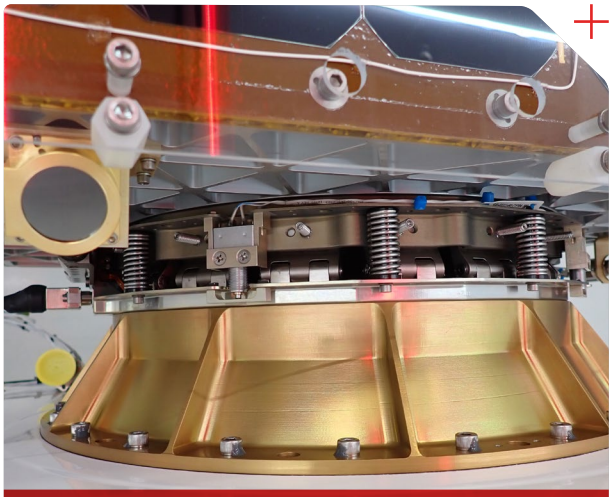
CUSTOMER

JAXA

MISSION OVERVIEW

About ‘RAISE and Shine’

‘RAISE and Shine’ is scheduled to launch from Rocket Lab Launch Complex 1 for the Japan Aerospace Exploration Agency (JAXA) – Rocket Lab’s first dedicated Electron launch directly contracted with the Japanese space agency.

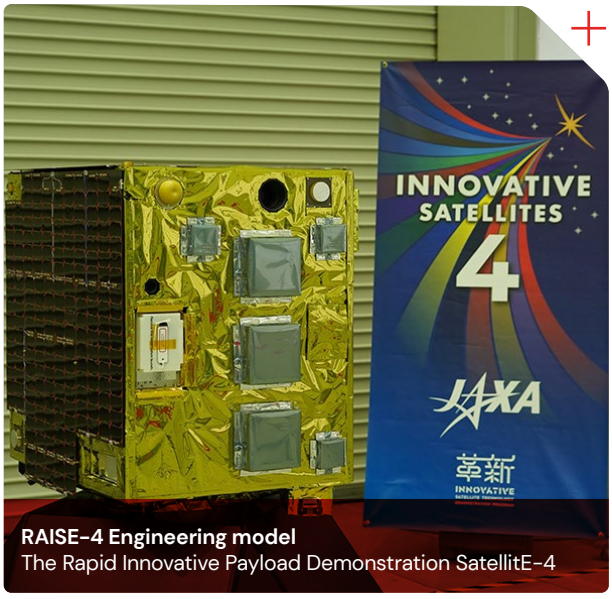


Rocket Lab’s Motorized Lightband (MLB)
Payload from a previous mission attached to the MLB, ready for launch.

Launch Complex 1
Mahia, New Zealand, where ‘RAISE and Shine’ will launch from.

Rocket Lab will deploy JAXA’s single RApid Innovative satellite, called SatellitE-4 (RAISE-4). The spacecraft will demonstrate eight technologies developed by private companies, universities, and research institutions throughout Japan.

‘RAISE and Shine’ will be the first of two dedicated launches for JAXA on Electron, with the second launch scheduled to take place from Q1 2026 as a rideshare mission manifested by JAXA. Each mission will utilize a Rocket Lab Motorized Lightband; a separation system for the satellite to attach to and deploy from Electron once in space.



RAISE-4 Engineering model
The Rapid Innovative Payload Demonstration SatellitE-4

LAUNCHING FOR JAPAN

Rocket Lab has established itself as a launch leader for the Japanese space industry.

With over 20 dedicated missions booked to fly on Rocket Lab's Electron launch vehicle through to 2028, the partnership between Rocket Lab and Japanese satellite operators continues to strengthen, enabling the deployment of innovative new satellite constellations and advancing Japan's leadership in space exploration and technology.

Among the missions scheduled are constellation deployment launches for satellite operators iQPS and Synspective, both of which are pioneering advancements in synthetic aperture radar (SAR) technology for high-resolution Earth imaging.

These missions will play a vital role in disaster management, urban planning, and environmental monitoring, showcasing Japan's commitment to leveraging space-based solutions for societal benefit.

Rocket Lab's track record of delivering 100% mission success for Japanese customers underscores its reliability and expertise. Other successful missions for Japanese satellite operators include the "On Closer Inspection" mission on February 2024 for Astroscale-Japan for the first phase of its orbital debris removal program; and the "Running Out Of Fingers" mission launched in 2019 for Tokyo-based company ALE.

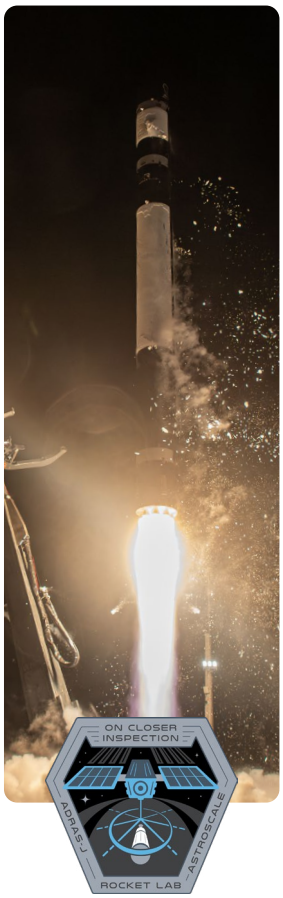
By providing responsive and reliable tailored launch services, Rocket Lab is proud to support Japan's vision for a sustainable and innovative future in space.

ALE
'Running Out Of Fingers '

LAUNCHED:
6 DEC 2019

Astroscale Japan Inc
'On Closer Inspection'

LAUNCHED:
19 FEB 2024

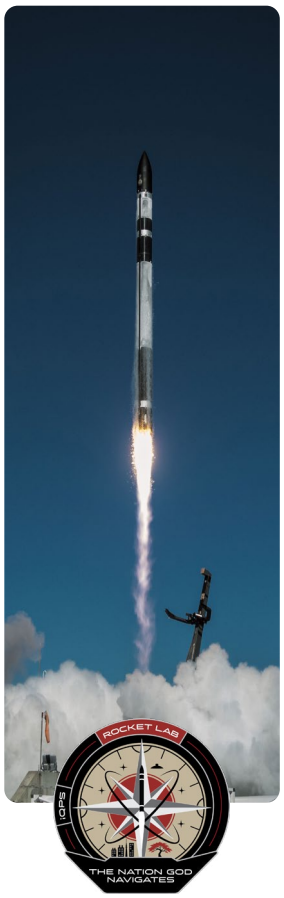


Synspective
'The Owl New World'

LAUNCHED:
14 OCT 2025

iQPS
'The Nation God Navigates'

LAUNCHED:
5 NOV 2025



MISSION PATCH ANATOMY

'RAISE and Shine'

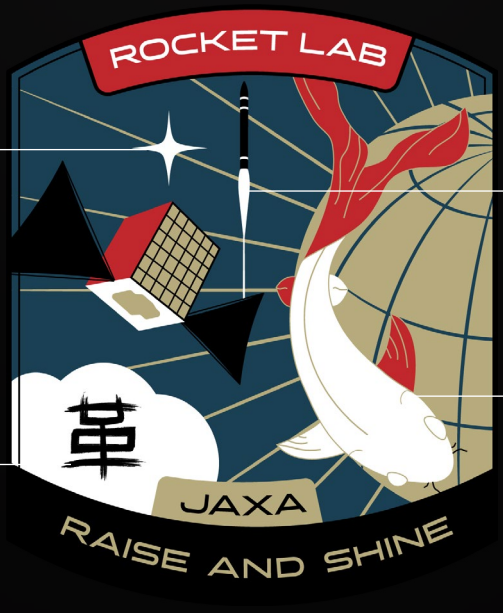
JAXA's 'RAISE and Shine' mission name is symbolic in nature, drawing inspiration from the imagery of two koi fish swimming in a circle, a representation of unity and harmony. This concept is further reflected in the mission patch design, which incorporates several meaningful elements.

RAISE-4 Satellite

Represented as a single star on the patch, symbolizing the single JAXA satellite deployed during this mission.

Japanese kanji for "change"

Highlighting the transformative nature of the mission and its role in advancing aerospace innovation.

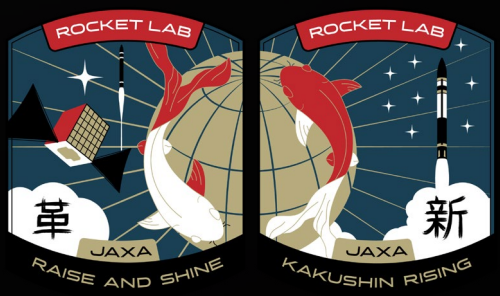


The Electron rocket, which will launch this mission.

Koi fish

Representing one half of harmony, the koi fish embodies balance and perseverance, central themes of the mission's vision.

Rocket Lab will launch a second mission for JAXA's Innovative Satellite Technology Demonstration Program in 2026 called "Kakushin Rising".



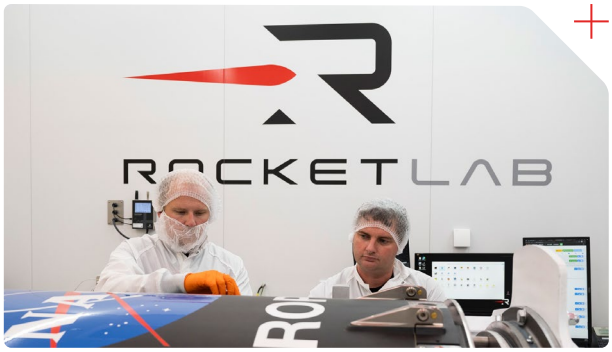
Mission merchandise can be found on the Rocket Lab merchandise store after launch day.
rocketlabcorp.com/shop

LAUNCH SITE OVERVIEW

Rocket Lab Launch Complex-1
Mahia, New Zealand

> ‘RAISE and Shine’ will lift off from Launch Complex 1 on New Zealand’s Mahia Peninsula.

An FAA-licensed spaceport, Launch Complex 1 can provide up to 120 launch opportunities every year. From the site it is possible to reach orbital inclinations from sun-synchronous through to 30 degrees, enabling a wide spectrum of inclinations to service the majority of the satellite industry’s missions to low Earth orbit.



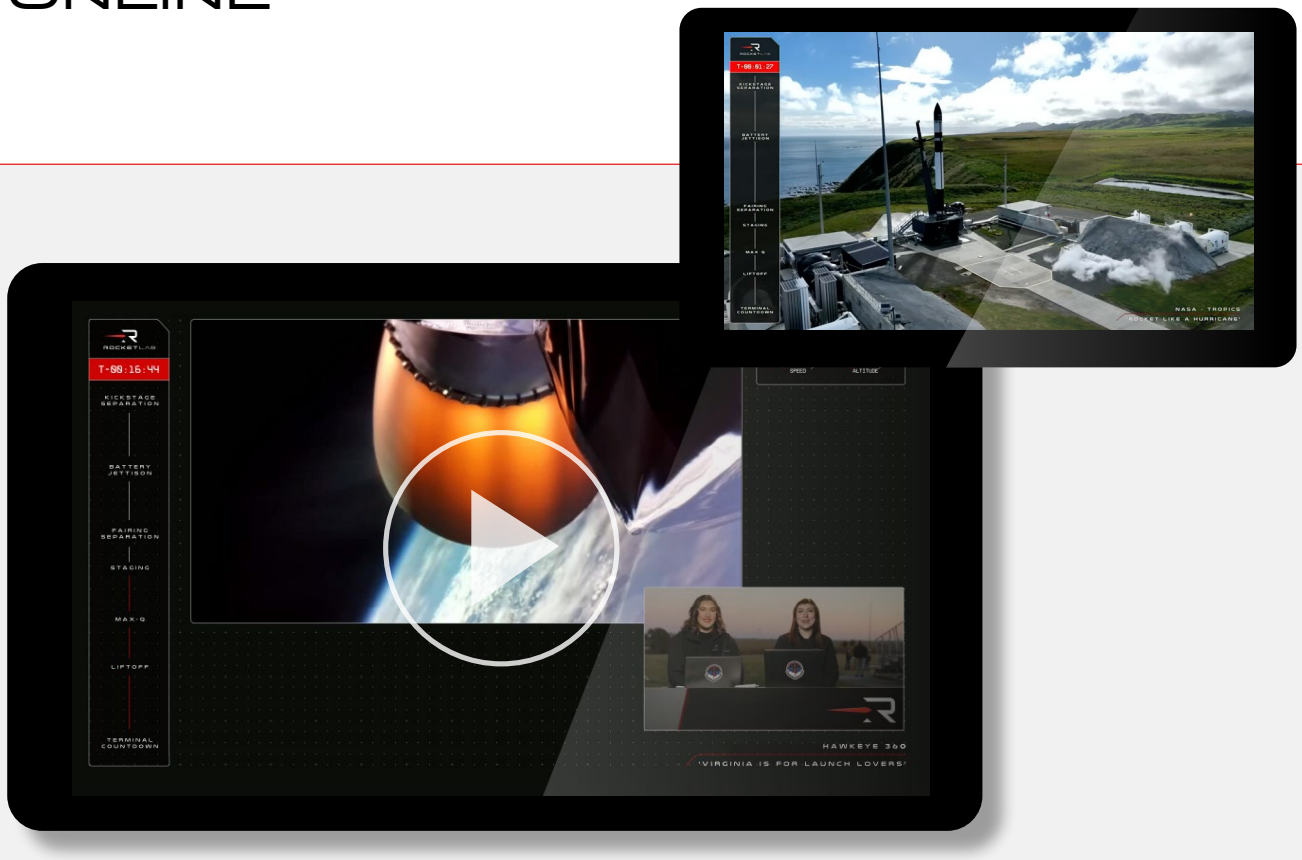
Located within Launch Complex 1 are Rocket Lab’s private range control facilities, two 100K satellite cleanrooms, a launch vehicle assembly facility which can process multiple Electrons at once, and administrative offices.

Operating a private orbital launch site alongside its own range and mission control centres allows Rocket Lab to reduce the overhead costs per mission, resulting in a cost-effective launch service for satellite operators.

In addition to Launch Complex 1, Rocket Lab operates an additional launch site, Launch Complex 2, at the Mid-Atlantic Regional Spaceport within NASA’s Wallops Flight Facility on Virginia’s Eastern Shore. Launch Complex 2 can support up to 12 missions per year.

By operating two launch complexes in two hemispheres, Rocket Lab provides customers with flexible, responsive launch opportunities.

VIEWING A LAUNCH ONLINE



LIVE STREAM

The live stream is viewable at:

rocketlabcorp.com/live-stream

LAUNCH FOOTAGE & IMAGES

Images and footage of 'RAISE and Shine' launch will be available shortly after a successful mission at:

www.flickr.com/photos/rocketlab

UPDATES

For information on launch day visit:

rocketlabcorp.com/next-mission

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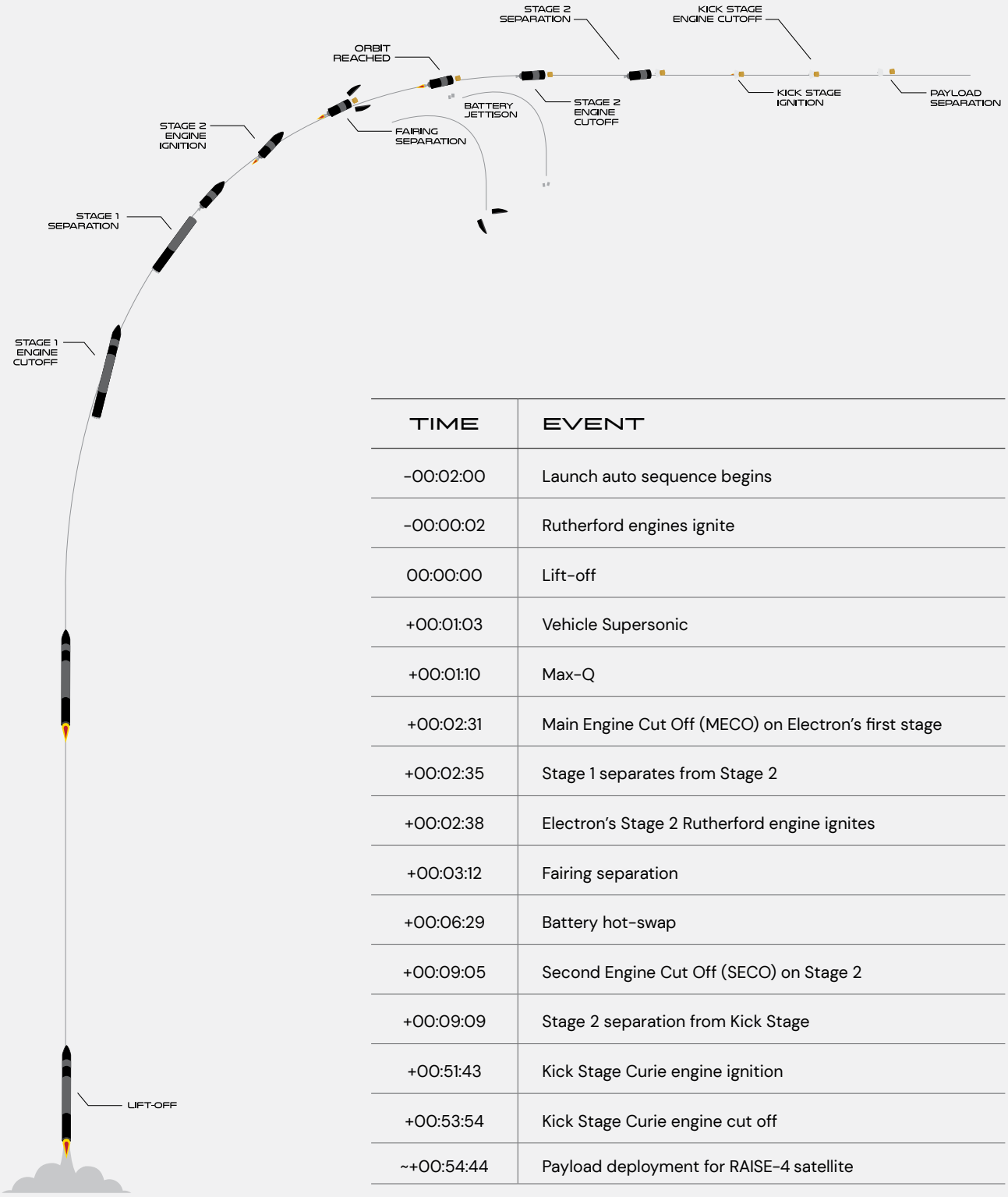
TIMELINE OF LAUNCH EVENTS



TIME	EVENT
-00:02:00	Launch auto sequence begins
-00:00:02	Rutherford engines ignite
00:00:00	Lift-off
+00:01:03	Vehicle Supersonic
+00:01:10	Max-Q
+00:02:31	Main Engine Cut Off (MECO) on Electron's first stage
+00:02:35	Stage 1 separates from Stage 2
+00:02:38	Electron's Stage 2 Rutherford engine ignites
+00:03:12	Fairing separation
+00:06:29	Battery hot-swap
+00:09:05	Second Engine Cut Off (SECO) on Stage 2
+00:09:09	Stage 2 separation from Kick Stage
+00:51:43	Kick Stage Curie engine ignition
+00:53:54	Kick Stage Curie engine cut off
~+00:54:44	Payload deployment for RAISE-4 satellite

ELECTRON LAUNCH VEHICLE

OVERALL

LENGTH
18m

DIAMETER (MAX)
1.2m

STAGES
2 + Kick Stage

VEHICLE MASS (LIFT-OFF)
13,000kg

MATERIAL/STRUCTURE
Carbon Fiber Composite/Monocoque

PROPELLANT
LOX/Kerosene

PAYLOAD

NOMINAL PAYLOAD
320kg / 440lbm To 500km

FAIRING DIAMETER
1.2m

FAIRING HEIGHT
2.5m

FAIRING SEP SYSTEM
Pneumatic Unlocking, Springs

STAGE 2

PROPULSION
1x Rutherford Vacuum Engine

THRUST
5800 LBF Vacuum

ISP
343 Sec

INTERSTAGE

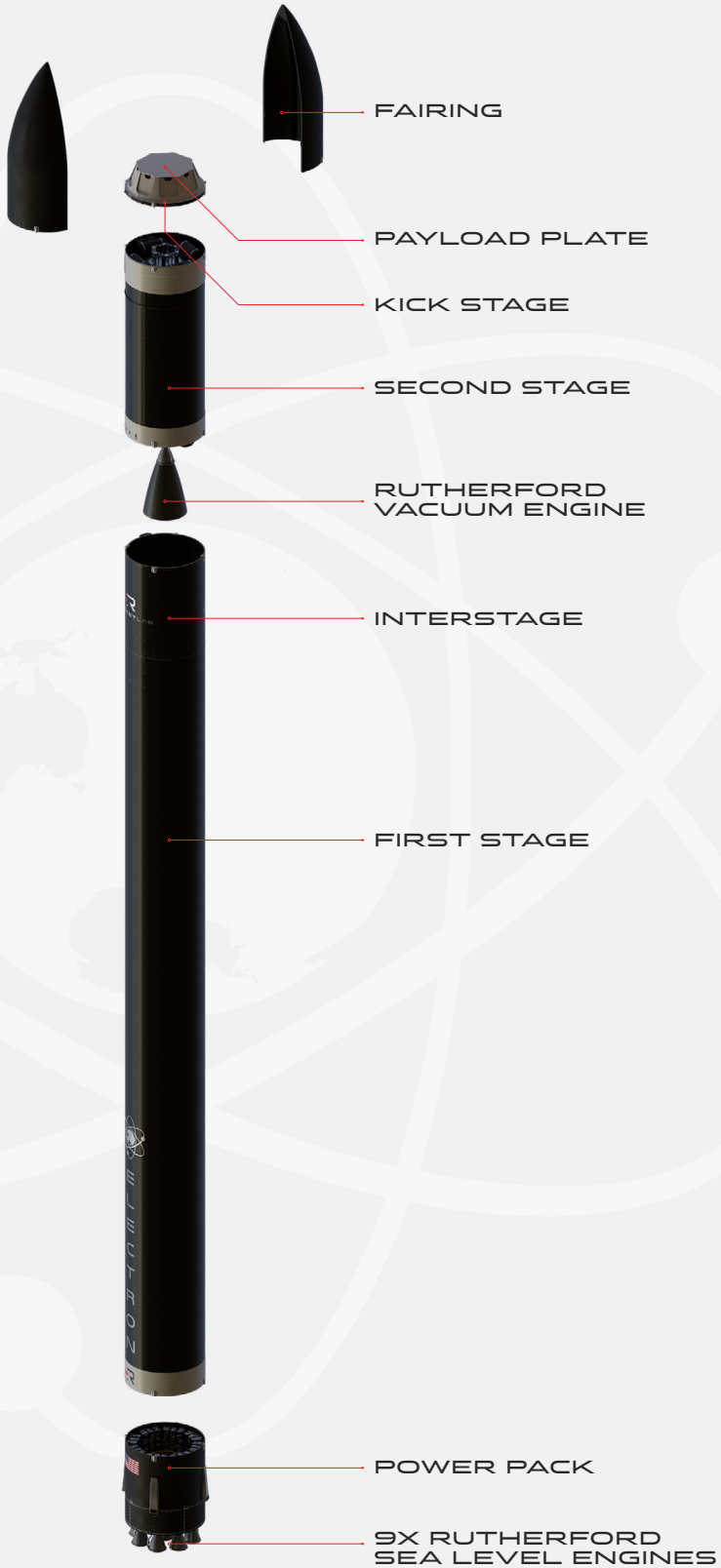
SEPARATION SYSTEM
Pneumatic Pusher

STAGE 1

PROPULSION
9x Rutherford Sea Level Engines

THRUST
5600 LBF Sea Level (Per Engine)

ISP
311 Sec



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