



# WE WILL NEVER DESERT YOU

PRESS KIT | NET SEPTEMBER 19, 2023

Rocket Lab USA, Inc.  
rocketlabusa.com



# LAUNCH INFORMATION



## LAUNCH SITE

Launch Complex 1 – Pad B  
Mahia, New Zealand.



## LAUNCH WINDOW

The launch window opens September 19, 2023 for two weeks, with the launch window opening earlier each day as the days progress through the two week window.

## DAILY LAUNCH OPPORTUNITY

DATE	UTC	NZT	EDT	PDT
Sept 19, 2023	06:30	18:30	02:30	23:30 *
Sept 20, 2023	06:00	18:00	02:00	23:00 *
Sept 21, 2023	05:45	17:45	01:45	22:45 *
Sept 22, 2023	05:30	17:30	01:30	22:30*
Sept 23, 2023	05:00	17:00	01:00	22:00*
Sept 24, 2023	04:45	17:45**	00:45	21:45*
Sept 25, 2023	04:15	17:15	00:15	21:15*
Sept 26, 2023	04:00	17:00	00:00	21:00*
Sept 27, 2023	03:45	16:45	23:45	20:45*
Sept 28, 2023	03:15	16:15	23:15	20:15*
Sept 29, 2023	03:00	16:00	23:00	20:00*
Sept 30, 2023	02:30	15:30	22:30	19:30*
Oct 01, 2023	02:15	15:15	22:15	19:15*
Oct 02, 2023	02:00	15:00	22:00	19:00*

\* = Day Prior | \*\* = Daylight Savings Begins



## ORBIT

# 635km

Circular Orbit



## SATELLITES

# 1



## INCLINATION

# 53

Degrees

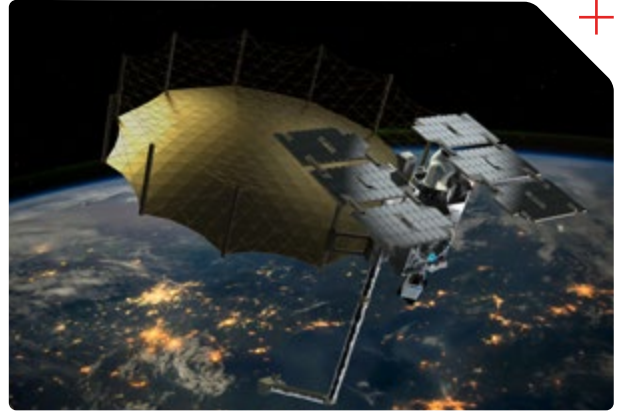


## CUSTOMER

# Capella Space

# MISSION OVERVIEW

About 'We Will Never Desert You'



Rocket Lab will launch Capella Space's third launch of 2023 and second launch of four dedicated missions to deploy its next-generation satellites in its synthetic aperture radar Earth-imaging constellation.

'We Will Never Desert You' is scheduled to launch from Rocket Lab Launch Complex 1 (LC-1) on the Mahia Peninsula for American space tech company Capella Space, a provider of commercial Synthetic Aperture Radar (SAR) imagery.

'We Will Never Desert You' will be Rocket Lab's third launch for Capella in 2023, and second launch in a multi-launch contract of four missions to deploy Capella's new Acadia satellites to low Earth orbit. As Capella's sole launch

provider in 2023 to build out the company's Earth-imaging constellation, earlier missions in 2023 for the company include 'We Love The Nightlife' launched from Launch Complex 1 in Mahia, New Zealand in August, 2023, and 'Stronger Together' launched from Rocket Lab Launch Complex 2 in Wallops, Virginia in March 2023. Each Capella Space mission will also be supported by a Rocket Lab-manufactured Motorized Lightband; separation systems for each satellite to attach to and deploy from Electron once launched to orbit.

'We Will Never Desert You' will deploy Capella Space's next-generation SAR Earth-imaging satellite called Acadia. Capella's satellites deliver the highest quality, high resolution SAR imagery commercially available with the ability to penetrate all weather conditions and capture clear imagery 24-7, day and night, anywhere on Earth. The next-generation Acadia satellites include several new features that will enable faster downlink speeds and even higher-quality images for fast, reliable insights that are easily accessible through Capella's fully-automated ordering and delivery platform.

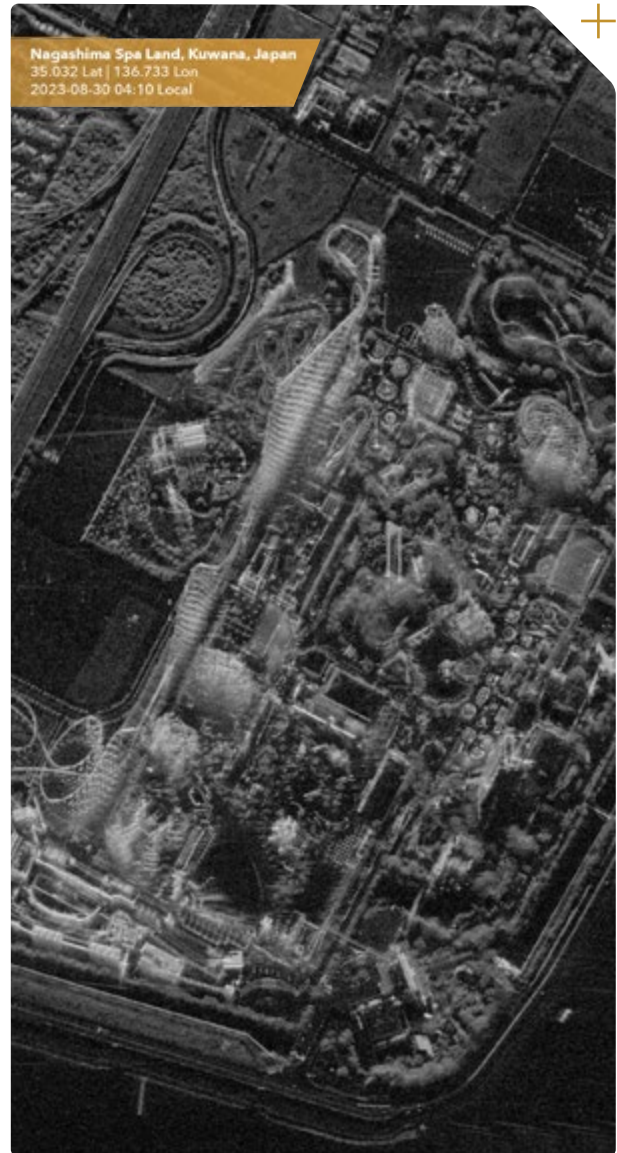




# CAPELLA SPACE OVERVIEW



Leaders in Synthetic Aperture Radar



Capella's advanced radar technology penetrates all weather conditions – clouds, fog, smoke, rain – and captures clear imagery day and night, providing unparalleled insight into what is happening anywhere on the globe at any given moment.



Capella's strength lies in agile aerospace — the rapid design, deployment, testing and iteration of the industry's most sophisticated SAR satellites. With each new generation of satellites, customers benefit from faster delivery speeds and assured access to high-quality imagery where and when it's needed most.

Capella is the only commercial SAR provider that deploys its satellites in a variety of orbits, enabling rapid and frequent revisit over critically important areas of interest. This enables persistent imaging, even in regions where Earth observation data is limited.

# LAUNCH SITE OVERVIEW

**Rocket Lab Launch Complex-1**  
Mahia, New Zealand



'We Will Never Desert You' will lift off from Launch Complex 1 Pad B on New Zealand's Mahia Peninsula and will be Rocket Lab's 40th Electron launch.

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.



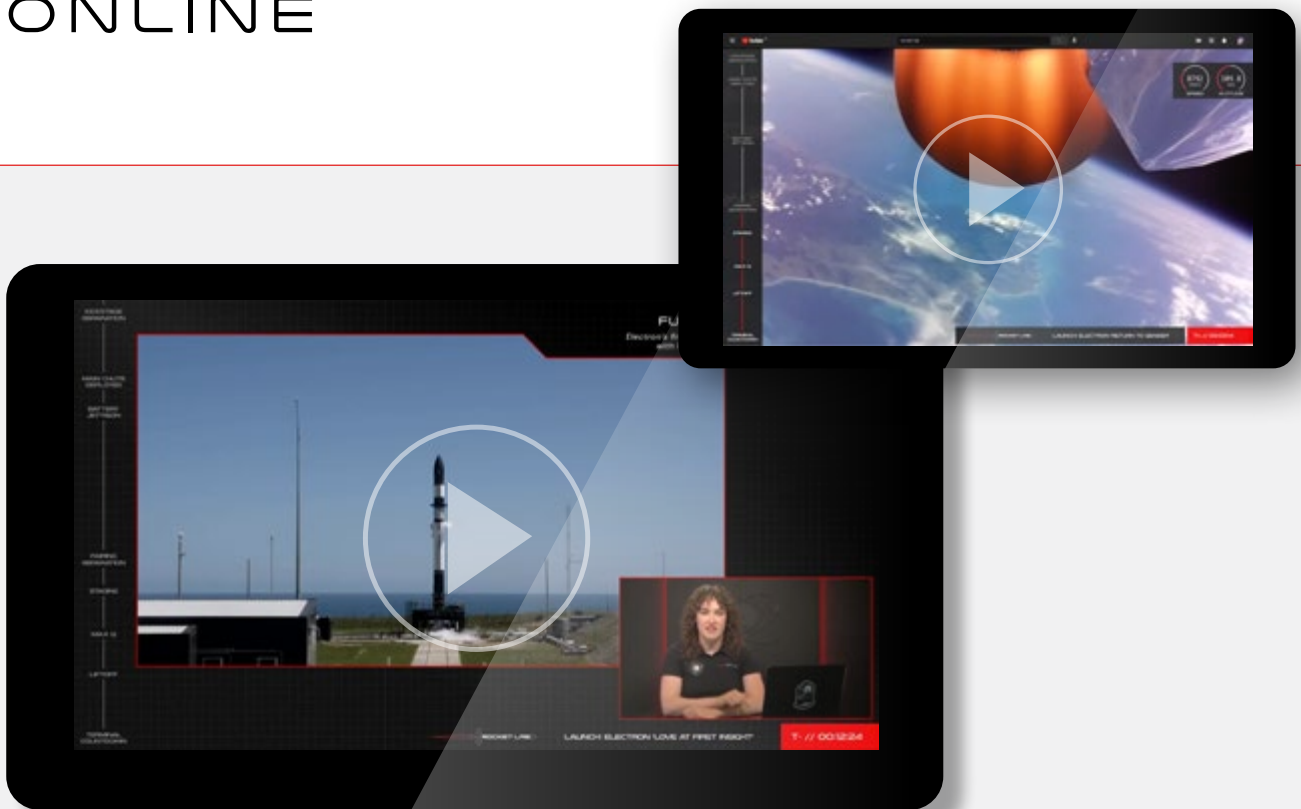
Located within Launch Complex 1 are Rocket Lab's private range control facilities, two 100K satellite cleanrooms, a launch vehicle assembly facility which can process multiple Electrons at once, and administrative offices.

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:

[rocketlabusa.com/  
live-stream](https://rocketlabusa.com/live-stream)

## LAUNCH FOOTAGE & IMAGES

Images and footage of "We Love The Nightlife" launch will be available shortly after a successful mission at:

[www.flickr.com/photos/rocketlab](https://www.flickr.com/photos/rocketlab)

## UPDATES

For information on launch day visit:

[rocketlabusa.com/next-mission](https://rocketlabusa.com/next-mission)

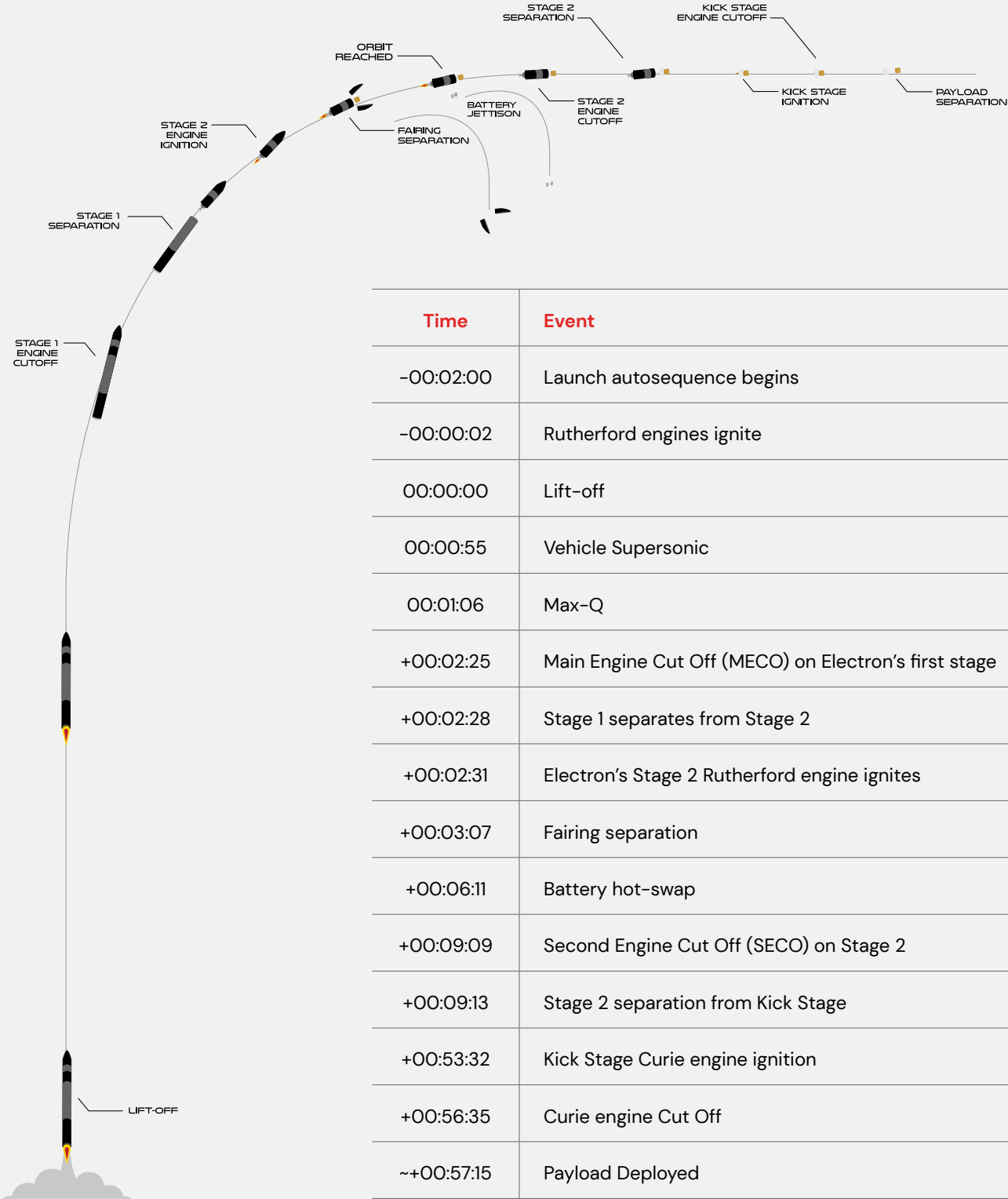
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# TIMELINE OF LAUNCH EVENTS



# 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

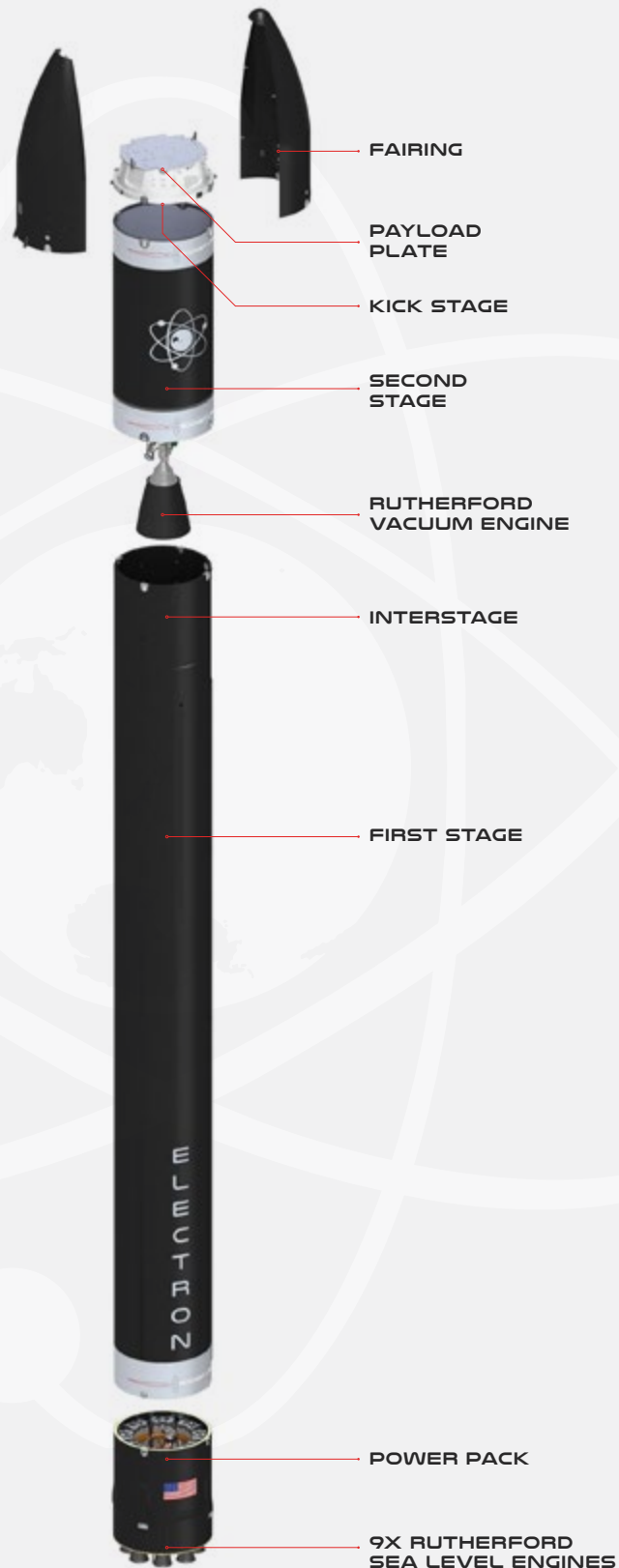
9x Rutherford Sea Level Engines

### THRUST

5600 LBF Sea Level (Per Engine)


### ISP


311 Sec







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