



WE WILL NEVER DESERT YOU

PRESS KIT | NET SEPTEMBER 19, 2023

Rocket Lab USA, Inc.
rocketlabusa.com





SATELLITES

1

INCLINATION

53

MISSION OVERVIEW

About 'We Will Never Desert You'

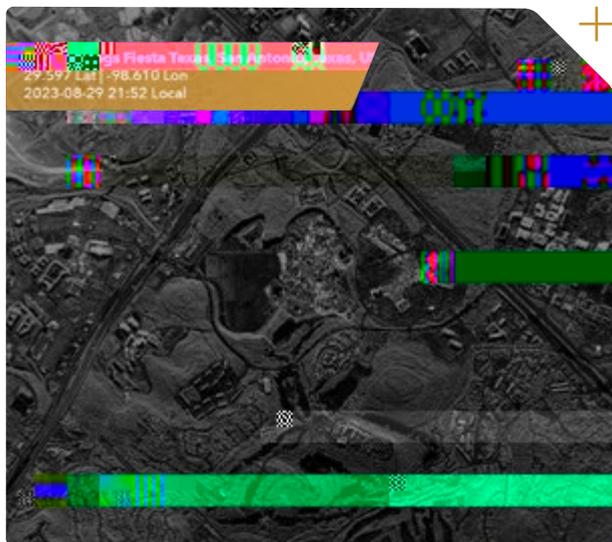


'We Will Never Desert You' is scheduled to launch from Rocket Lab Launch Complex 1 (LC-1) on the Mahia Peninsula for American space tech company Capella Space, a provider of commercial Synthetic Aperture Radar (SAR) imagery.

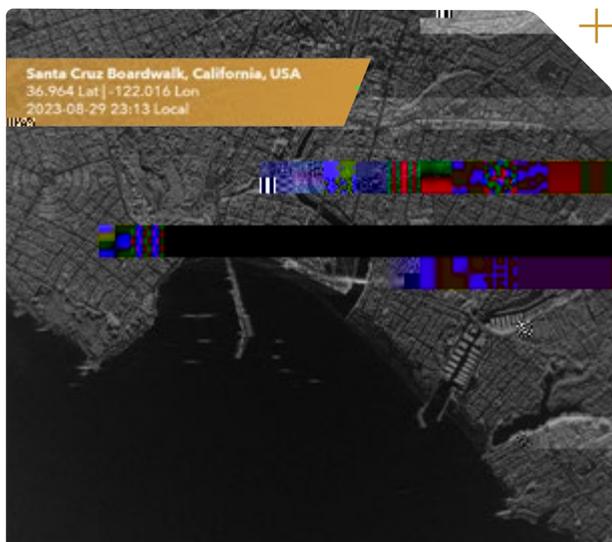
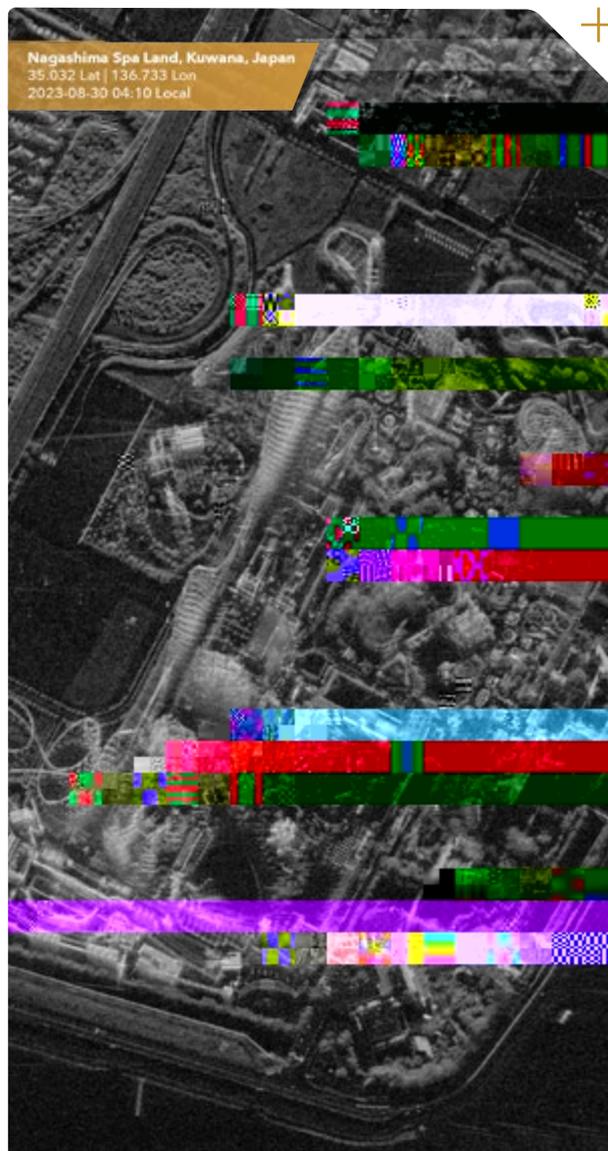
'We Will Never Desert You' will be Rocket Lab's third launch for Capella in 2023, and second launch in a multi-launch contract of four missions to deploy Capella's new Acadia satellites to low Earth orbit. As Capella's sole launch

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.



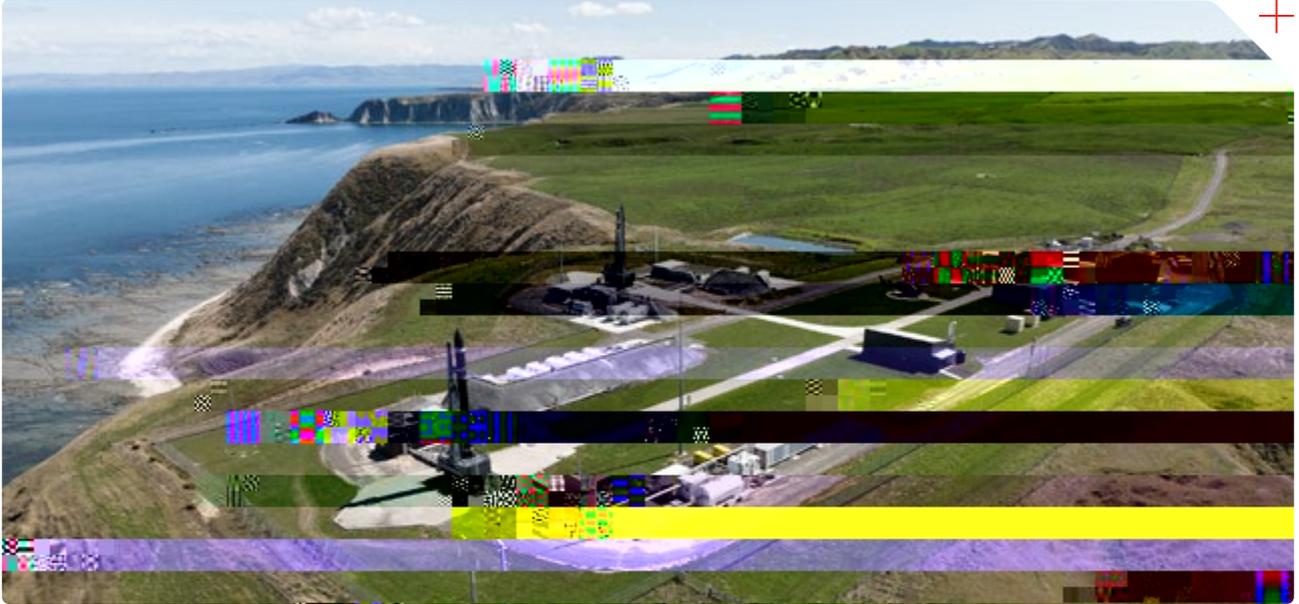
Capella's strength lies in agile aerospace — the rapid design, deployment, testing and iteration of the industry's most sophisticated SAR satellites. With each

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.

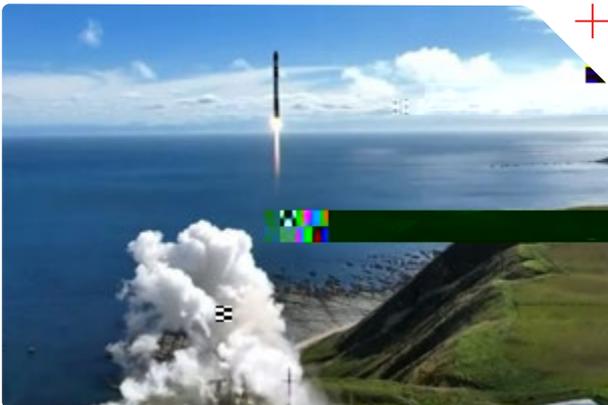
LAUNCH SITE OVERVIEW

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

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, launch opportunities.

VIEWING A LAUNCH ONLINE



LIVE STREAM

The live stream is viewable at:

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



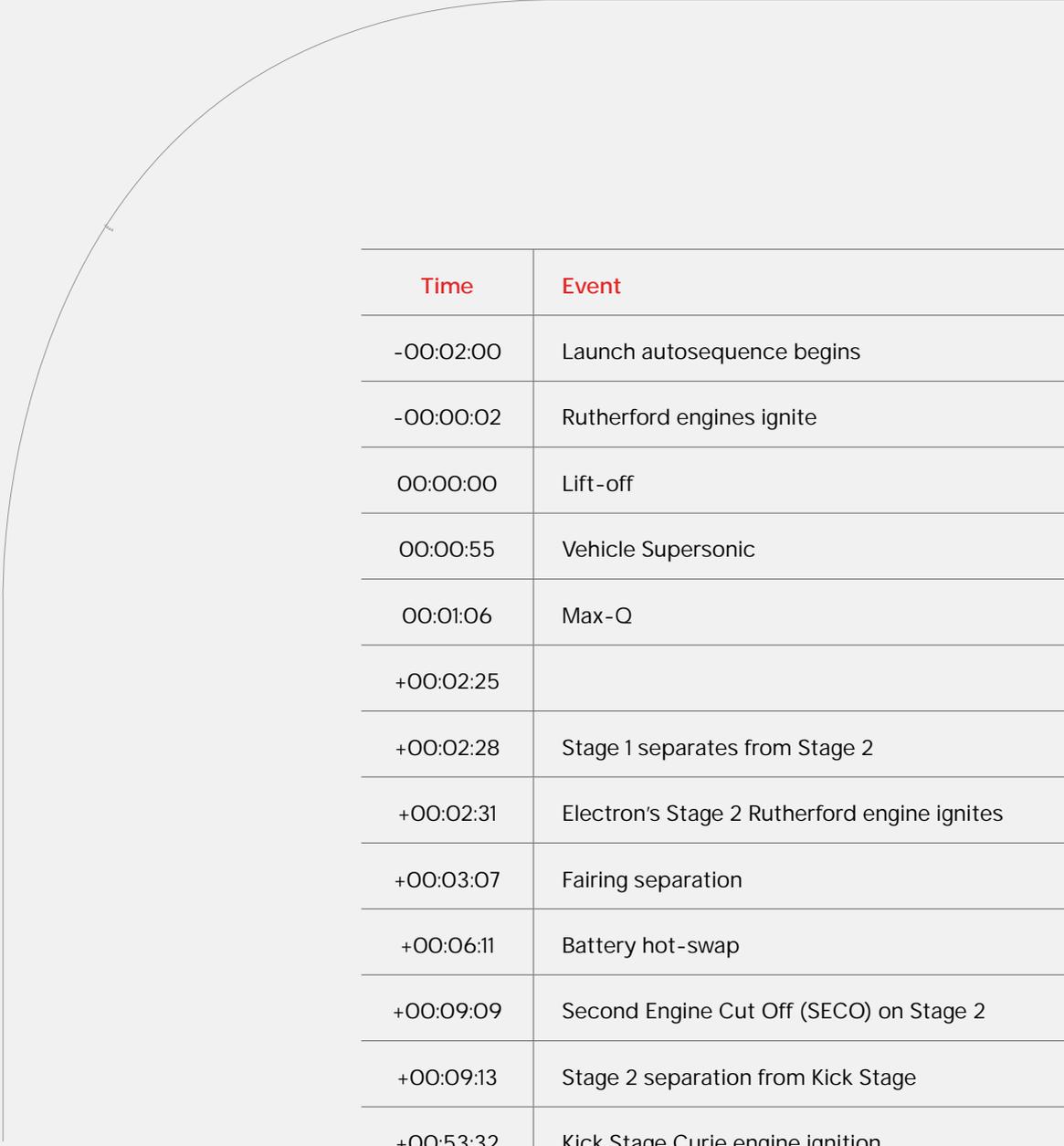
UPDATES

For information on launch day visit:

rocketlabusa.com/next-mission

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Time	Event
-00:02:00	Launch autosequence begins
-00:00:02	Rutherford engines ignite
00:00:00	Lift-off
00:00:55	Vehicle Supersonic
00:01:06	Max-Q
+00:02:25	
+00:02:28	Stage 1 separates from Stage 2
+00:02:31	Electron's Stage 2 Rutherford engine ignites
+00:03:07	Fairing separation
+00:06:11	Battery hot-swap
+00:09:09	Second Engine Cut Off (SECO) on Stage 2
+00:09:13	Stage 2 separation from Kick Stage
+00:53:32	Kick Stage Curie engine ignition
+00:56:35	Curie engine Cut Off
~+00:57:15	Payload Deployed

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

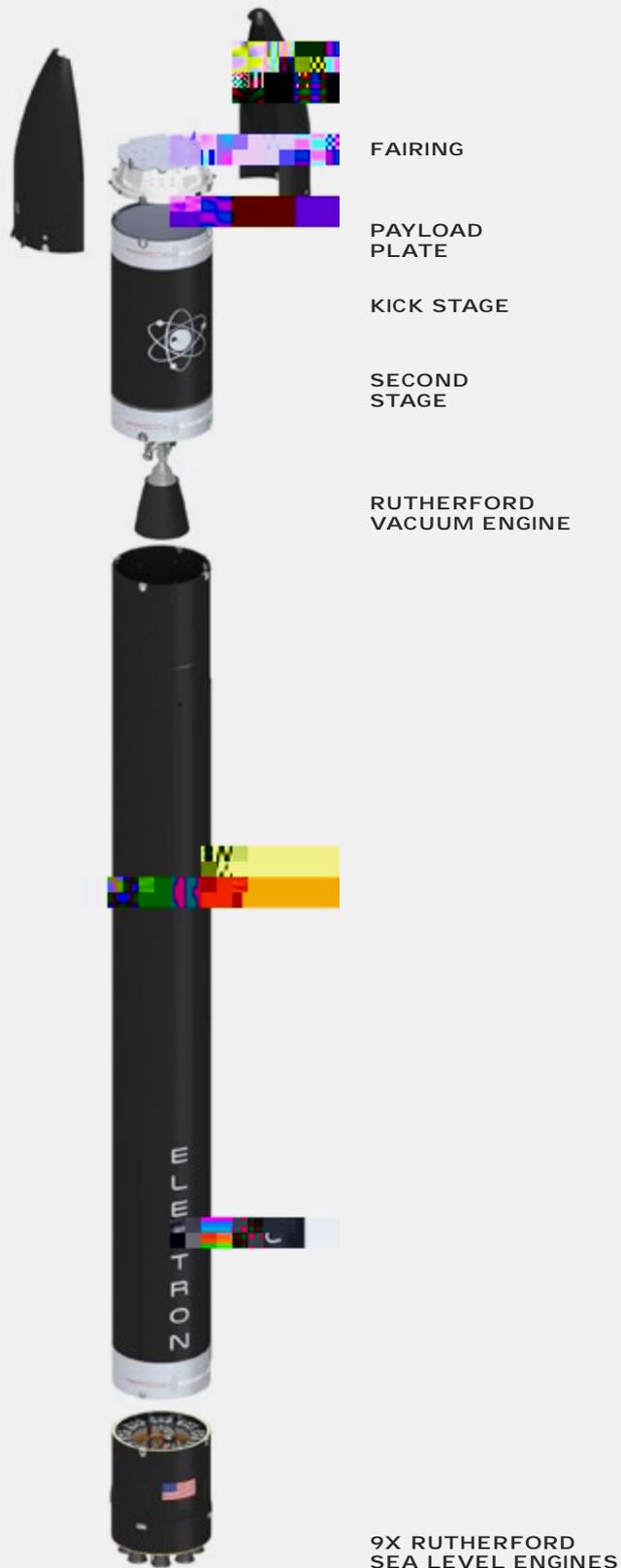
9x Rutherford Sea Level Engines

THRUST

5600 LBF Sea Level (Per Engine)

ISP

311 Sec



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