



IT'S A LITTLE CHILE UP HERE

LAUNCH INFORMATION



LAUNCH WINDOW

12-day launch window opening from 29 July 2021



DAILY LAUNCH OPPORTUNITY

The launch timing for this mission is the same for each day of the launch window.

Time Zone	Window Open	Window Close
NZT	18:00	20:00
UTC	06:00	08:00
EDT	02:00	04:00
PDT	23:00	01:00

The launch window extends for 12 days.



LAUNCH SITE

Launch Complex 1, Mahia, New Zealand



LIVE STREAM

Watch the live launch webcast:

rocketlabusa.com/live-stream



ORBIT

600km



SATELLITES

1



INCLINATION

37

Degrees



CUSTOMER

USSF

Dedicated mission for U.S. Space Force

MISSION OVERVIEW

ABOUT 'IT'S A LITTLE CHILE UP HERE'

ELECTRON WILL LAUNCH A RESEARCH AND DEVELOPMENT SATELLITE TO LOW EARTH ORBIT FROM LAUNCH COMPLEX 1 IN NEW ZEALAND FOR THE UNITED STATES SPACE FORCE



LAUNCH COMPLEX 1
MAHIA, NEW ZEALAND



Electron will deploy an Air Force Research Laboratory-sponsored demonstration satellite called Monolith. The satellite will explore and demonstrate the use of a deployable sensor, where the sensor's mass is a substantial fraction of the total mass of the spacecraft, changing the spacecraft's dynamic properties and testing ability to maintain spacecraft attitude control. Analysis from the use of a deployable sensor aims to enable the use of smaller satellite buses when building future deployable sensors such as weather satellites, thereby reducing the cost, complexity, and development timelines. The satellite will also provide a platform to test future space protection capabilities.

The mission was procured by the Department of Defense (DoD) Space Test Program (STP) and the Rocket Systems Launch Program (RSLP), both based at Kirtland Air Force Base, New Mexico; in partnership with the Defense Innovation Unit (DIU) as part of the Rapid Agile Launch Initiative (RALI). The mission is being managed by the Launch Enterprise's Small Launch and Targets Division, which is part of the USSF's launch organization of choice.

The mission has been named 'It's a Little Chile Up Here' in a nod to the beloved green chile of New Mexico where the Space Test Program is based.

The mission follows on from a previous Rocket Lab launch under the same agreement, the STP-27RD mission launched by Electron in May 2019. That mission, named "That's a Funny Looking Cactus" saw Electron deploy three research and development satellites for the Space Test Program.

Electron's first stage will not be recovered on this mission.

'IT'S A LITTLE CHILE UP HERE'
WILL BE ROCKET LAB'S:

4TH
launch for
the year

21ST
Electron launch
overall



VIEWING A LAUNCH ONLINE



LIVE STREAM LINKS

The livestream is viewable at:

rocketlabusa.com/live-stream

Webcast will be live approx. T-20 minutes

LAUNCH FOOTAGE & IMAGES

Images and footage of the 'It's a Little Chile Up Here' launch will be available shortly after a successful mission at:

www.rocketlabusa.com/about-us/updates/link-to-rocket-lab-imagery-and-video

UPDATES

For information on launch day visit:

rocketlabusa.com/next-mission

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VIEWING A LAUNCH IN PERSON

Location

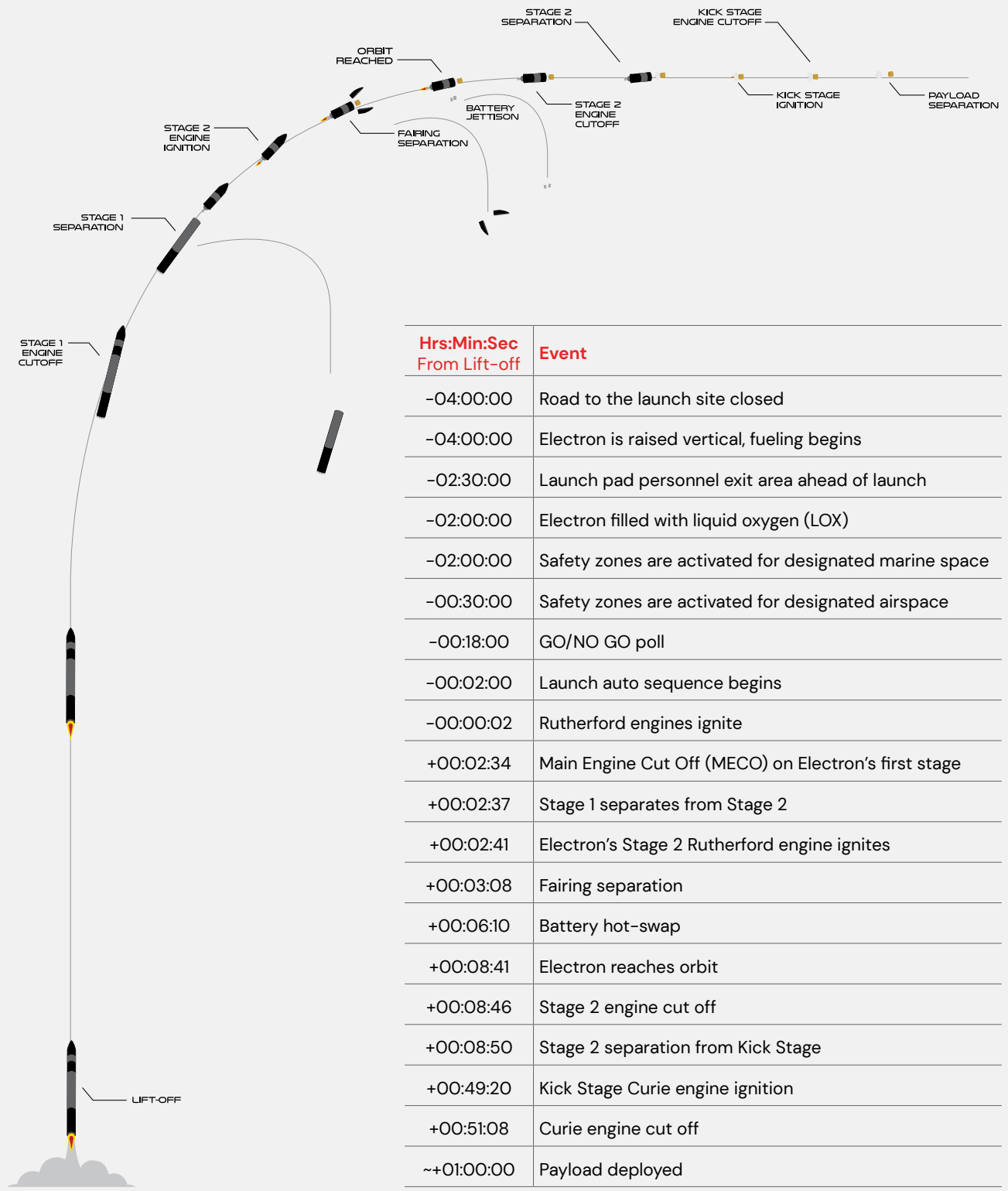
Wairoa District Council has allocated a rocket launch viewing area for the public near Nuhaka, accessible via Blucks Pit Road. Scrubs and postponements are likely during launch windows, so visitors to the Blucks Pit viewing site should anticipate multiple postponements, sometimes across several days.

More information visit

www.visitwairoa.co.nz/welcome-to-wairoa/space-coast-new-zealand



TIMELINE OF LAUNCH EVENTS



Hrs:Min:Sec From Lift-off	Event
-04:00:00	Road to the launch site closed
-04:00:00	Electron is raised vertical, fueling begins
-02:30:00	Launch pad personnel exit area ahead of launch
-02:00:00	Electron filled with liquid oxygen (LOX)
-02:00:00	Safety zones are activated for designated marine space
-00:30:00	Safety zones are activated for designated airspace
-00:18:00	GO/NO GO poll
-00:02:00	Launch auto sequence begins
-00:00:02	Rutherford engines ignite
+00:02:34	Main Engine Cut Off (MECO) on Electron's first stage
+00:02:37	Stage 1 separates from Stage 2
+00:02:41	Electron's Stage 2 Rutherford engine ignites
+00:03:08	Fairing separation
+00:06:10	Battery hot-swap
+00:08:41	Electron reaches orbit
+00:08:46	Stage 2 engine cut off
+00:08:50	Stage 2 separation from Kick Stage
+00:49:20	Kick Stage Curie engine ignition
+00:51:08	Curie engine cut off
~+01:00:00	Payload deployed

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

200kg / 440lbm To 500km SSO

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

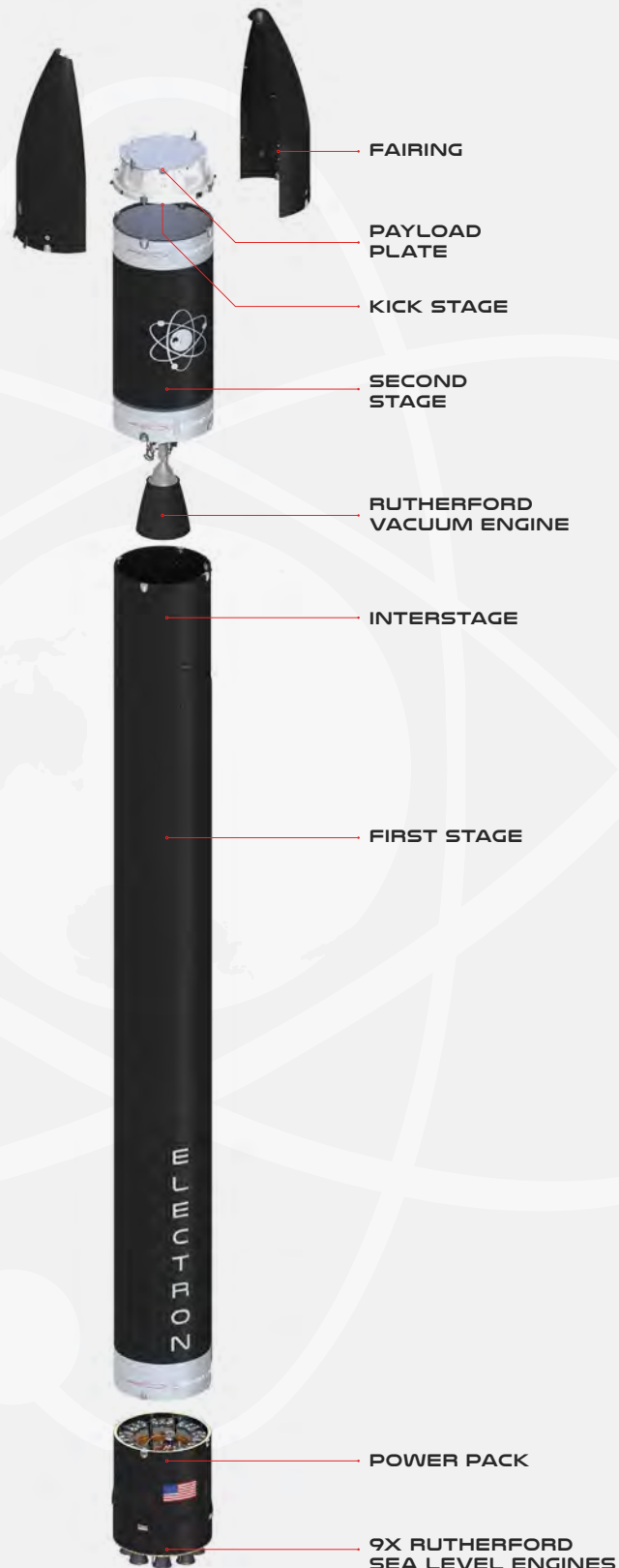
9x Rutherford Sea Level Engines

THRUST

5600 LBF Sea Level (Per Engine)

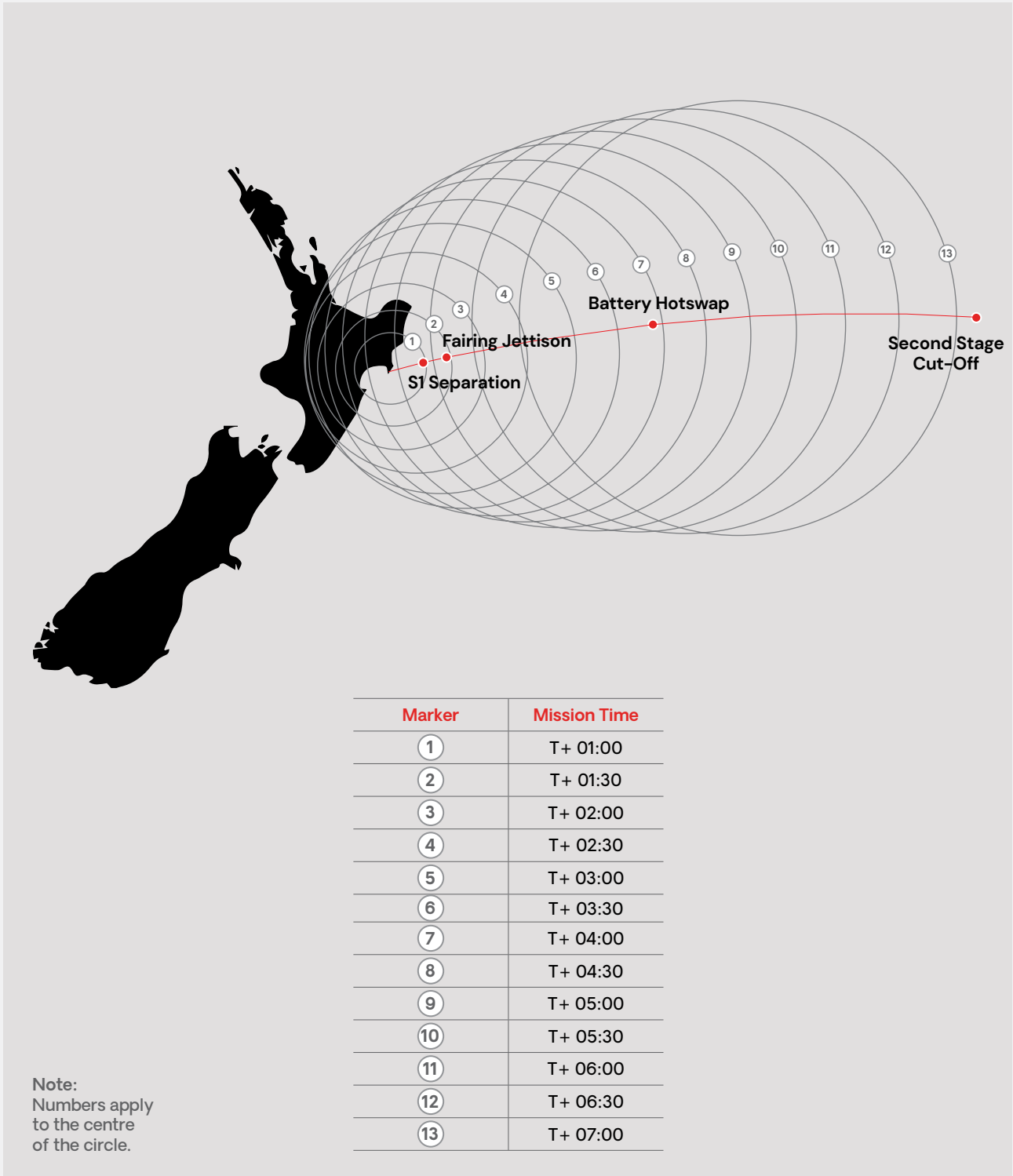
ISP

311 Sec





LAUNCH VISIBILITY MAP

WHEN AND WHERE TO SPOT THE LAUNCH





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 [@rocketlab](https://twitter.com/rocketlab)

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