



FOUR OF A KIND

PRESS KIT | NET 27 JANUARY 2024

Rocket Lab USA, Inc.
rocketlabusa.com



LAUNCH INFORMATION



LAUNCH SITE

Launch Complex 1 – Pad B
Mahia, New Zealand.



DAILY LAUNCH WINDOW OPENS

Rocket Lab is targeting no earlier than January 27, 2024 UTC with a 45 minute daily launch window.

Time Zone	Window Open
NZDT	19:15 – 20:00, Jan. 27 2024
UTC	06:15 – 07:00, Jan. 27 2024
ET	01:15 – 02:00, Jan. 27 2024
PT	22:15 – 23:00, Jan. 26 2024

Back up opportunities are available throughout January should the launch date need to be updated for any reason.



RECOVERY MISSION

Electron Stage 1 will be recovered by marine vessel after splashdown.



ORBIT

530 km

Circular Orbit



SATELLITES

4

L.E.M.U.R. Satellites



INCLINATION

97

Degrees



CUSTOMERS

Spire Global

NorthStar Earth & Space Inc

MISSION OVERVIEW

About 'Four Of A Kind'

Rocket Lab will launch four Space Situational Awareness (SSA) satellites for Spire Global, Inc's customer NorthStar.



The 'Four Of A Kind' mission is scheduled to launch from Pad B at Launch Complex 1 in Mahia, New Zealand, and will carry four satellites for Spire Global on behalf of its Space Services customer NorthStar.

NorthStar's block of four satellites, built and operated by Spire, will be the first to simultaneously monitor near-Earth orbits from space, delivering a radically enhanced level of Space Situational Awareness (SSA) services to the global satellite community, with timely and precise information for space object detection, tracking, orbit determination, collision avoidance, navigation, and proximity alerts.

As a recovery mission, Rocket Lab will be attempting to splash down and retrieve Electron's first stage. After launch and stage separation, Electron's first stage will return to Earth under a parachute in preparation for splashdown several hundred kilometers down range from Launch Complex 1. Rocket Lab's recovery vessel will then extract the stage from the water for transport back to Rocket Lab's production complex for assessment. Rocket Lab is not flying any pre-flown engines on this mission.



LAUNCH SITE OVERVIEW

Rocket Lab Launch Complex-1
Mahia, New Zealand



'Four Of A Kind' will lift off from Launch Complex 1, Pad B 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.

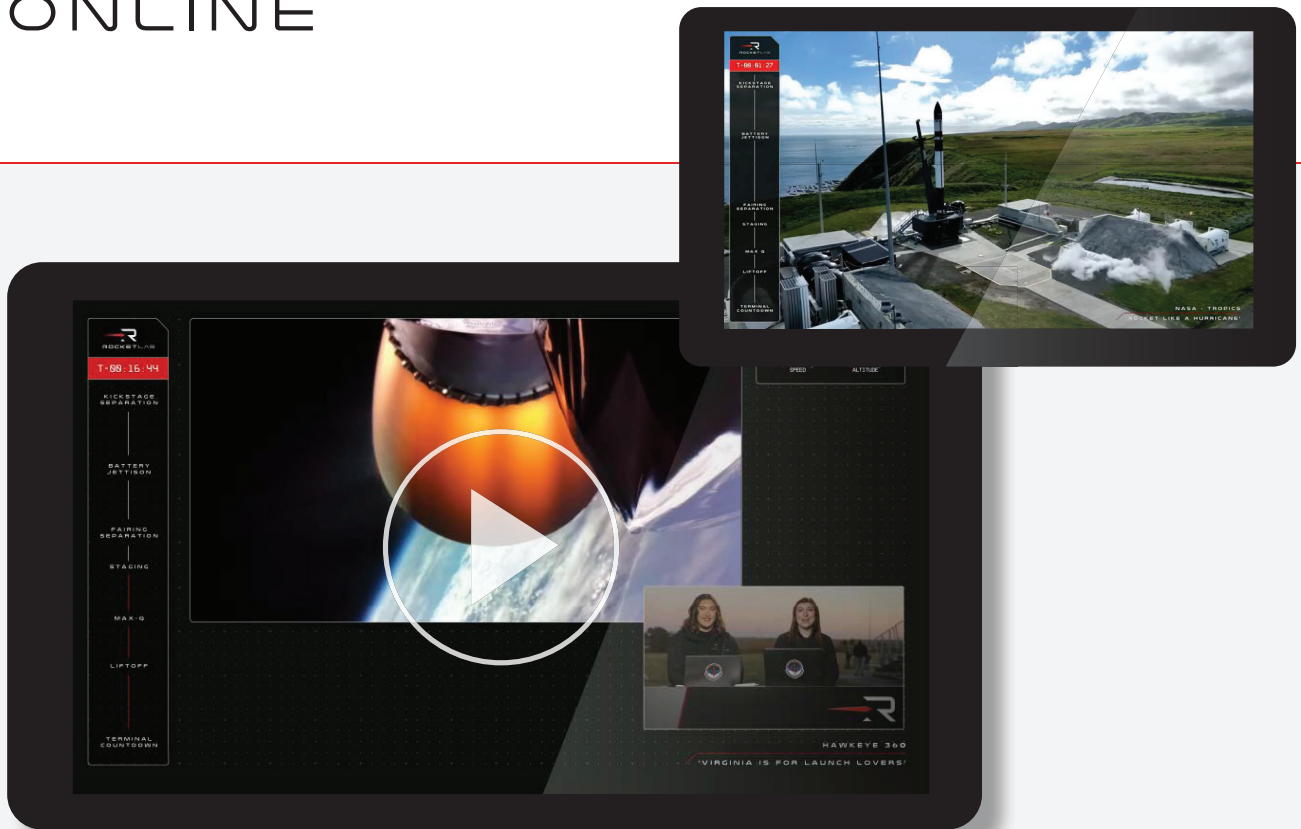
Operating a private orbital launch site alongside its own range and mission control centres allows Rocket Lab to reduce the overhead costs per mission, resulting in a cost-effective launch service for satellite operators.

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:

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

LAUNCH FOOTAGE & IMAGES

Images and footage of "Four Of A Kind" launch will be available shortly after a successful mission at:

www.flickr.com/photos/rocketlab

UPDATES

For information on launch day visit:

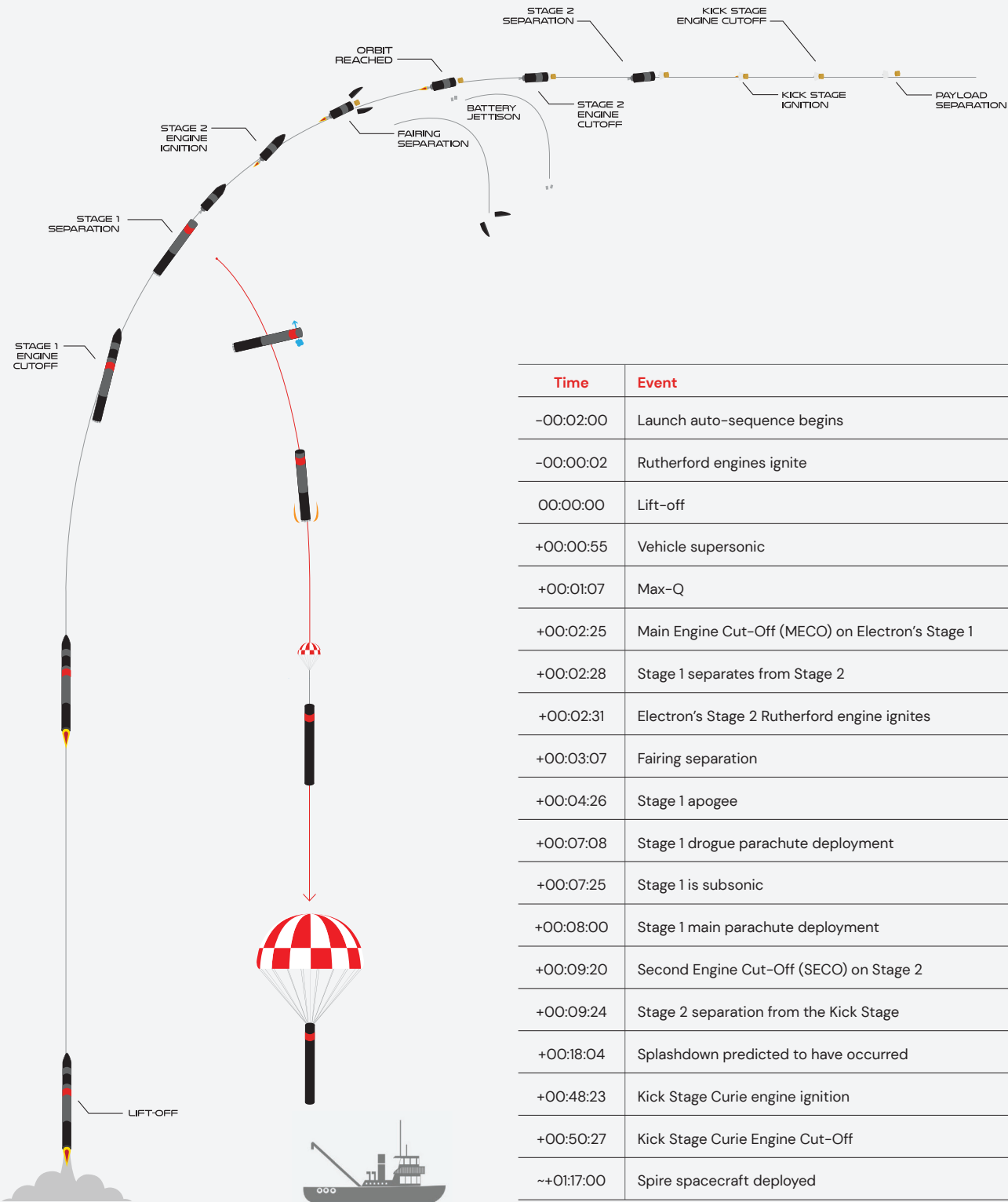
rocketlabusa.com/next-mission

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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

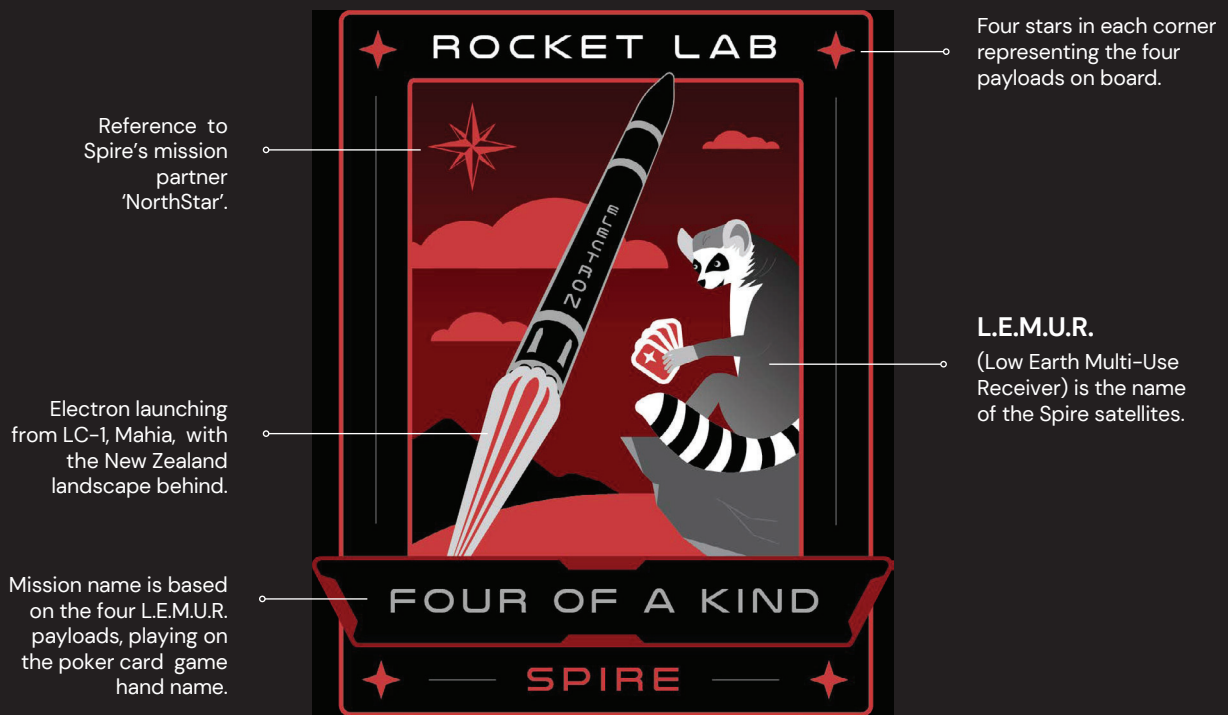
311 Sec



MISSION PATCH ANATOMY

'Four Of A Kind'

This patch was designed using a playing card theme. The mission name is a play on the Poker hand name; 'Four Of A Kind', representing the four L.E.M.U.R. payloads on board.




Mission merchandise can be found on the Rocket Lab Store after launch day.

rocketlabusa.com/shop



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