

I CAN'T BELIEVE IT'S NOT OPTICAL PRESS KIT AUGUST 2020



LAUNCHING ON ELECTRON VEHICLE
FOURTEEN: 'I CAN'T BELIEVE IT'S NOT OPTICAL'





ROCKET LAB PRESS KIT 'I CAN'T BELIEVE IT'S NOT OPTICAL' 2020

LAUNCH INFORMATION

LAUNCH WINDOW

27 AUG - 9 SEPTEMBER
NZT / UTC

LAUNCH SITE

LAUNCH COMPLEX 1, PAD A
MAHIA PENINSULA, NZ

Daily launch opportunity

NZT : 15:05– 19:05

UTC: 03:05 – 07:05

PT: 20:05 – 00:05 (25/26 August)

ET: 23:05 – 03:05 (25/26 August)

Watch the live launch webcast:
www.rocketlabusa.com/live-stream.

For information on launch day visit
www.rocketlabusa.com/next-mission/

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● ROCKET LAB'S MISSION
PATCH FOR 'I CAN'T BELIEVE
IT'S NOT OPTICAL'



● CAPELLA SPACE'S MISSION
PATCH FOR 'I CAN'T BELIEVE
IT'S NOT OPTICAL'



● FAIRING FOR THE 'I CAN'T BELIEVE IT'S NOT
OPTICAL' MISSION | August 2020

MISSION OVERVIEW

'I Can't Believe It's Not Optical' is a dedicated mission for Capella Space, an information services company providing Earth observation data on demand.

Capella's payload, 'Sequoia', is a single 100 kg class microsatellite which will be the first publicly available satellite in the company's commercial Synthetic Aperture Radar (SAR) constellation. By positioning the satellite to a 45-degree inclination, Capella Space will maximize coverage over important areas such as the Middle East, Korea, Japan, Europe, South East Asia, Africa, and the U.S.

The mission name is a nod to Capella's SAR technology that provides high quality images of the Earth day or night, and in any weather conditions. Capella's space-based radar can detect sub-0.5 meter changes on the surface of the Earth, providing insights and data that can be used for security, agricultural and infrastructure monitoring, as well as disaster response and recovery.

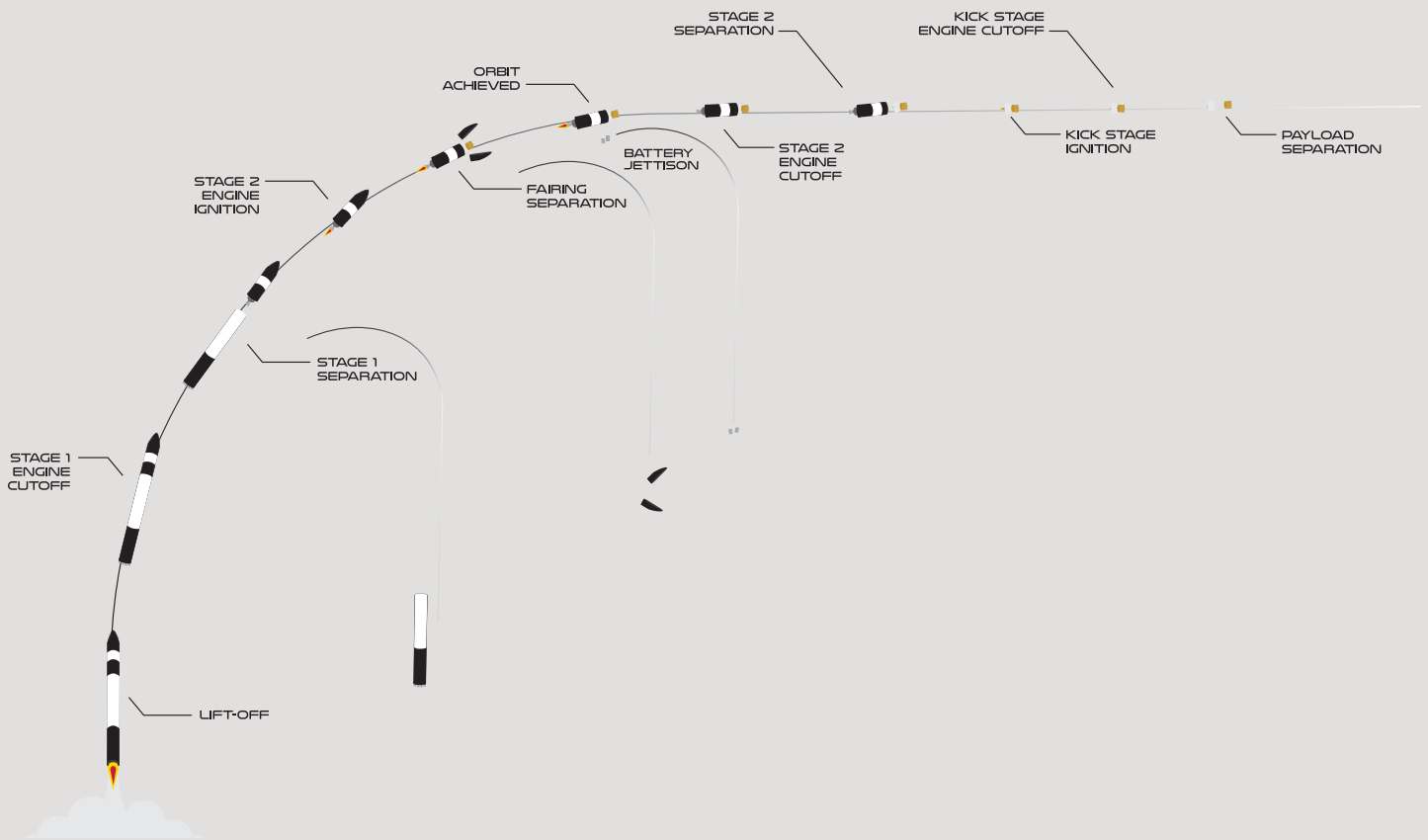
TARGET ORBIT INFORMATION



TIMELINE OF EVENTS

	EVENT
	-06:00:00 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 The Launch Director conducts a go/no-go poll of launch operators to confirm Electron is ready for launch
	-00:02:00 Launch autosequence begins
	-00:00:02 Rutherford engines ignite
	00:00:00 Lift-off
	+00:02:36 Main Engine Cut Off (MECO) on Electron's first stage
	+00:02:39 Stage 1 separation
	+00:02:43 Electron's Stage 2 Rutherford engine ignites
	+00:03:16 Fairing separation
	+00:06:28 Battery hot-swap
	+00:08:52 Electron reaches orbit
	+00:09:01 Stage 2 separation from Kick Stage
	+00:52:52 The Curie engine on the Kick Stage ignites
	+00:55:18 Curie engine cuts off
	~+00:60:00 Payloads deployed

HOURS:MINUTES:SECONDS FROM LIFT-OFF





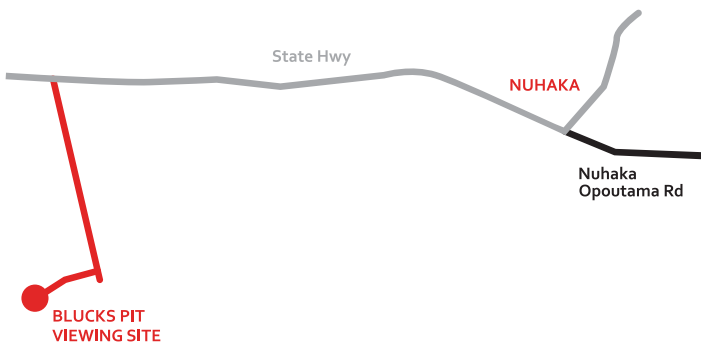
ROCKET LAB PRESS KIT

'I CAN'T BELIEVE IT'S NOT OPTICAL' 2020

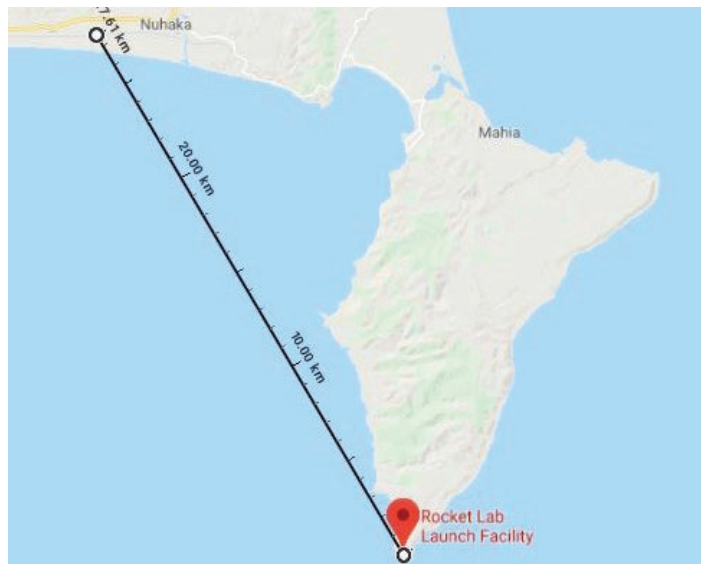
VIEWING A LAUNCH

VIEWING IN PERSON

Wairoa District Council has allocated a rocket launch viewing area for the public near Nuhaka, accessible via Blucks Pit Road. Visit www.visitwairoa.co.nz/welcome-to-wairoa/space-coast-new-zealand/ for more information. Scrubs and postponements are likely during launch windows, so visitors to the Blucks Pit viewing site should anticipate multiple postponements, sometimes across several days.



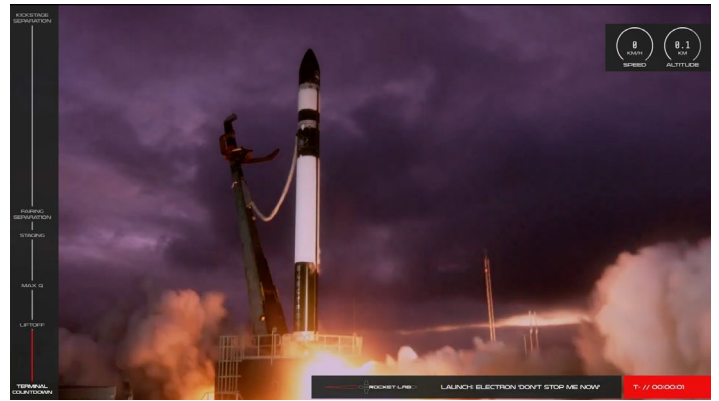
● LC-1 LAUNCH VIEWING AREA | Blucks Pit Road, near Nuhaka



● LAUNCH VIEWING AREAS DISTANCE FROM ROCKET LAB LC-1

LIVESTREAM

The best way to view a launch is via Rocket Lab's live video webcast. This offers the best views of launch and includes helpful commentary about the launch process. A livestream will be made available approximately 15 - 20 minutes prior to a launch attempt. Rocket Lab will post links to the webcast when live via Facebook and Twitter. The livestream is viewable at www.rocketlabusa.com/live-stream and Rocket Lab's YouTube channel.



● ROCKET LAB'S LIVESTREAM OF 'DON'T STOP ME NOW' MISSION | June, 2020

LAUNCH FOOTAGE AND IMAGES

Images and video footage of the 'I Can't Believe It's Not Optical' launch will be available shortly after a successful mission at www.rocketlabusa.com/news/updates/link-to-rocket-lab-imagery-and-video

SOCIAL MEDIA

For real time updates on the launch follow the Rocket Lab Twitter page @RocketLab

f @RocketLabUSA t @RocketLab

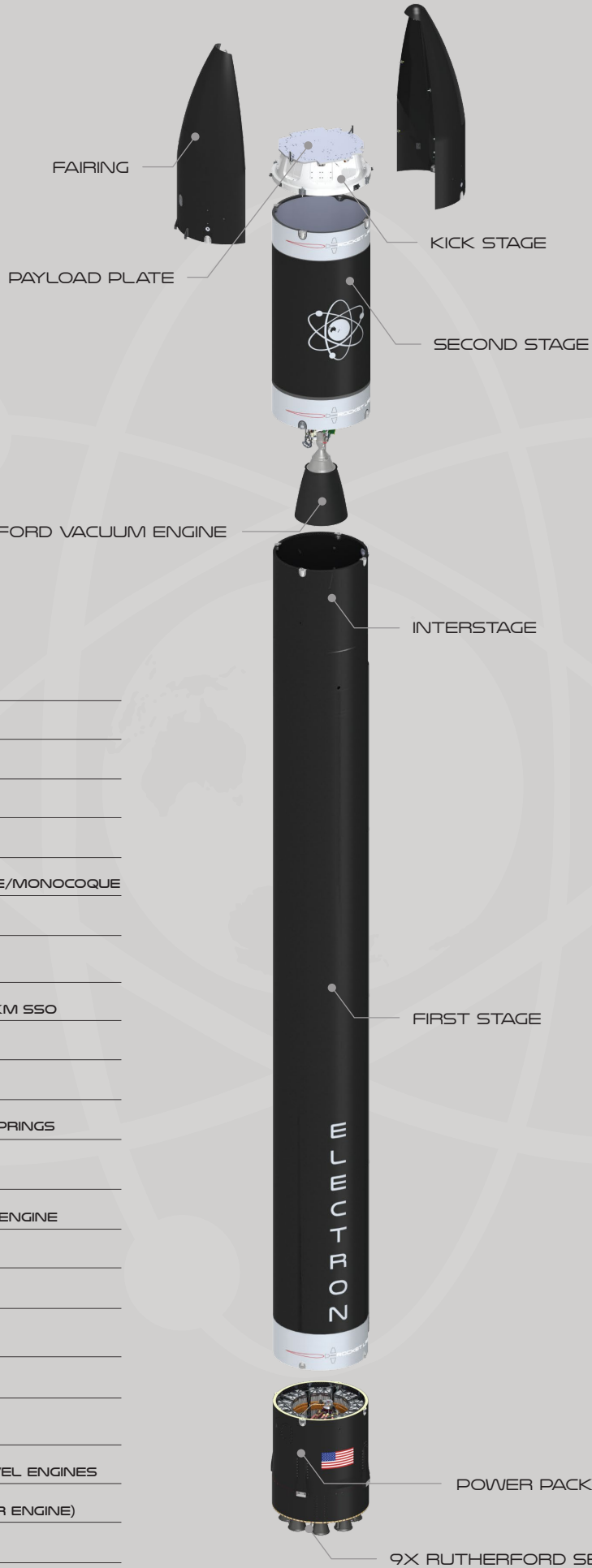
CONTACTS

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ELECTRON



OVERALL

LENGTH	18M
DIAMETER (MAX)	1.2M
STAGES	2 + KICK STAGE
VEHICLE MASS (LIFTOFF)	13,000KG
MATERIAL/STRUCTURE	CARBON FIBER COMPOSITE/MONOCOQUE
PROPELLANT	LOX/KEROSENE

PAYLOAD

NOMINAL PAYLOAD	200KG / 220LBM TO 500KM SSO
PAYLOAD DIAMETER	1.08M
PAYLOAD HEIGHT	1.91M
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
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STAGE 1


PROPULSION	9X RUTHERFORD SEA LEVEL ENGINES
THRUST	5600 LBF SEA LEVEL (PER ENGINE)
ISP	311 SEC




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