



VIRGINIA IS FOR LAUNCH LOVERS

PRESS KIT | 13 DECEMBER EST

Rocket Lab USA, Inc.
rocketlabusa.com



LAUNCH INFORMATION



LAUNCH SITE

Launch Complex 2
Wallops Island
Virginia, USA.



LAUNCH WINDOW

Rocket Lab is targeting
no earlier than Dec 13 EST.

We have back up launch opportunities through December 20 should we need to stand down for any reason.



DAILY LAUNCH OPPORTUNITY

Time Zone	Window Open
EST	18:00 - 20:00
PST	15:00 - 17:00
UTC	23:00 - 01:00
NZDT	12:00 - 14:00



ORBIT

550km

Circular Orbit



SATELLITES

3



INCLINATION

40.5

Degrees



CUSTOMER

HawkEye 360

MISSION OVERVIEW

About 'Virginia Is For Launch Lovers'



Virginia Is For Launch Lovers is Rocket Lab's first mission from Launch Complex 2, a pad built for the Electron rocket at the Mid-Atlantic Regional Spaceport within the NASA Wallops Flight Facility on Virginia's Eastern Shore.

The mission will deploy satellites for radio frequency geospatial analytics provider HawkEye 360. The mission will be the first of three Electron launches for HawkEye 360 in a contract that will see Rocket Lab deliver 15 satellites to low Earth orbit between late 2022 and 2024. These missions will grow HawkEye 360's constellation of radio frequency monitoring satellites, enabling the company to better deliver precise mapping of radio frequency emissions

anywhere in the world. Supporting Rocket Lab's vertical integration strategy, Rocket Lab will also supply HawkEye 360 with separation systems produced by Planetary Systems Corporation, a Maryland-based space hardware company acquired by Rocket Lab in December 2021.

Rocket Lab will not attempt to recover Electron for this mission.

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 HawkEye³⁶⁰

MISSION OVERVIEW

About 'Virginia Is For Launch Lovers'



HawkEye 360's Cluster 6 Satellites will deepen RF GEOINT coverage for the mid-latitude regions of the globe.

HawkEye 360 currently delivers a critical source of global knowledge based on radio frequency (RF) geospatial insights. Cluster 6 is a trio of next-generation satellites that will soon join the growing constellation HawkEye 360 has developed to detect and monitor RF signals globally. This latest set of satellites will be the first to enter an inclined orbit, further boosting revisits over the mid-latitude regions of the globe. This addition also brings an improved revisit rate, allowing for revisits as frequently as once per hour, anywhere in the world. The additional capacity, plus an expanded collection optimization to improve data in the 15–18 GHz range, exposes new and meaningful applications for our customers, especially in high-demand areas.

MORE ABOUT HAWKEYE 360'S CONSTELLATION:

- › HawkEye 360 satellites deploy in clusters of three and fly in formation using a specially designed propulsion system.
- › HawkEye 360 employs onboard Software Defined Radios (SDR) to tune across most of the frequency range from 144 MHz to 18 GHz.
- › HawkEye 360 uses proprietary algorithms to process the radio frequency (RF) data generated by the satellites.
- › HawkEye 360's next-gen satellites are approximately 30x30x45 cm, about the size of a microwave, and hold two payloads each.
- › HawkEye 360's Cluster 6 satellites are each equipped with 8 antennae, including a dedicated GNSS antenna, to collect VHF, UHF, X-Band, L-Band, S-Band, X-Band, and GPS Interference signals.

LAUNCH COMPLEX 2

Wallops Island, Virginia, USA



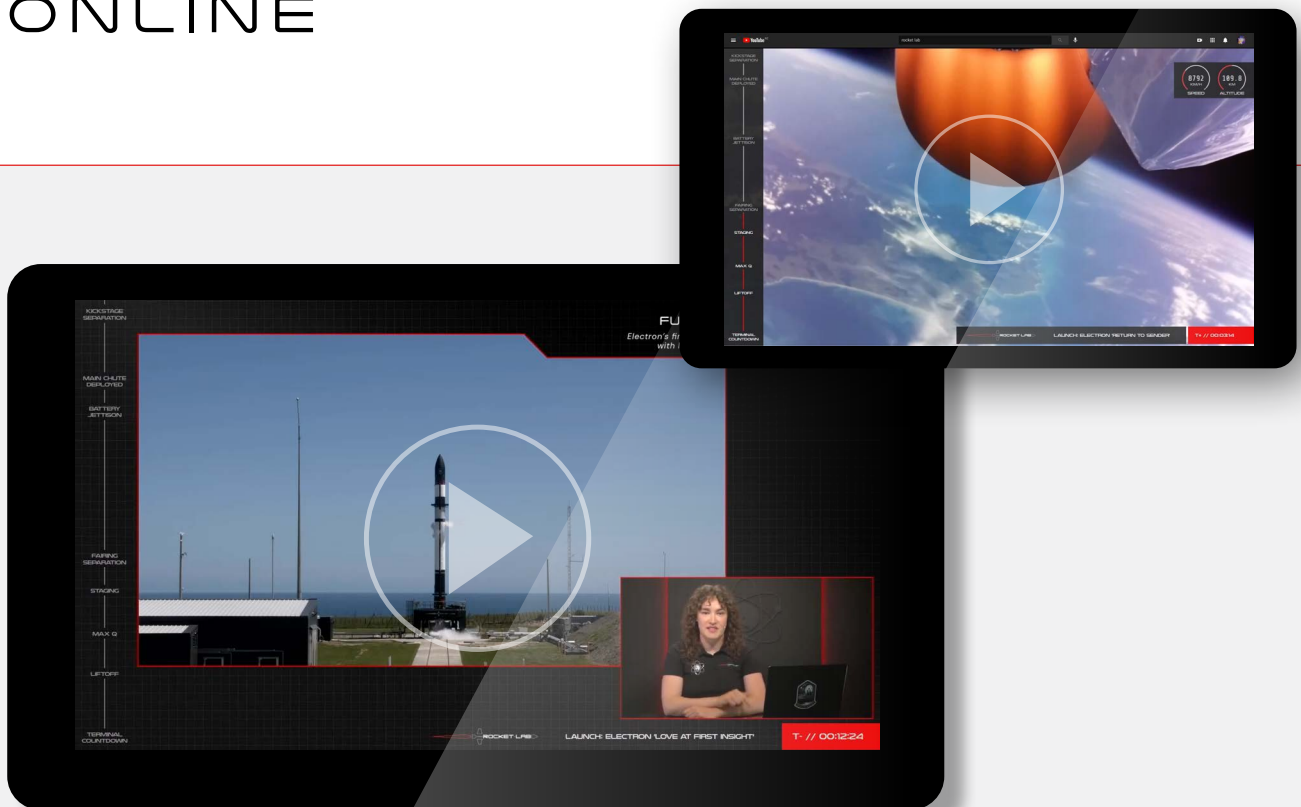
Launch Complex 2 is Rocket Lab's first launch site on U.S. soil. Designed to support up to 12 missions per year, Launch Complex 2 enables Electron missions rapid and reliable access to orbit for government and commercial customers.

Launch Complex 2 supplements Rocket Lab's existing site, Launch Complex 1 in New Zealand, from which 32 Electron missions have already launched. The two launch complexes combined can support more than 130 Electron launch opportunities every year, delivering unmatched flexibility for rapid, responsive small satellite launch.

Rocket Lab operates an Integration and Control Facility within the Wallops Research Park, a short drive from the pad itself. The facility is home to state-of-the-art payload integration cleanrooms, vehicle processing facilities and a mission control center.

The launch pad and production complex for Rocket Lab's large reusable Neutron launch vehicle will also be located at the Mid-Atlantic Regional Spaceport, streamlining operations across small and large launch. Construction on the Neutron Production Complex is underway now.

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 "Virginia Is For Launch Lovers" 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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 facebook.com/RocketLabUSA

VIEWING A LAUNCH IN PERSON

Rocket Lab encourages launch lovers to watch Electron's first launch from U.S. soil in person.

Visit one of these locations to watch Electron take to Virginia skies.

NASA VISITOR'S CENTER

Building J20 Route, 175 Chincoteague Rd,
Wallops Island, VA 23337, United States

Directions:

- From Rt 13, turn east at T's Corner stop light onto Chincoteague Rd/VA-175
- Located about 7 miles on Rt 175, outside of NASA Wallops Facility on right
- NOTE: There is NO PARKING permitted on Rt 175
- Gates to the Visitor Center will be open for this launch.

CURTIS MERRITT HARBOR

2246 Curtis Merritt Harbor Rd.,
Chincoteague Island, VA

Directions:

- From Rt 13, turn east at T's Corner stop light onto Chincoteague Rd/VA-175
- Follow Rt 175 across causeway and bridges to Chincoteague Island
- Turn right at the stop light onto Main Street, heading south
- The entrance to the Harbor is near the end of the road on the left.

QUEEN'S SOUND LANDING

Along Causeway on Rt 175 to
Chincoteague Island, VA

Directions:

- From Rt 13, turn east at Ts Corner stop light onto Chincoteague Rd/VA-175
- Follow Rt 175 7.9 miles to public boat landing on right
- NOTE: there is NO PARKING permitted on Rt 175.

TOWN DOCK/ROBERT REED PARK

4083 Main Street, Chincoteague Island, VA

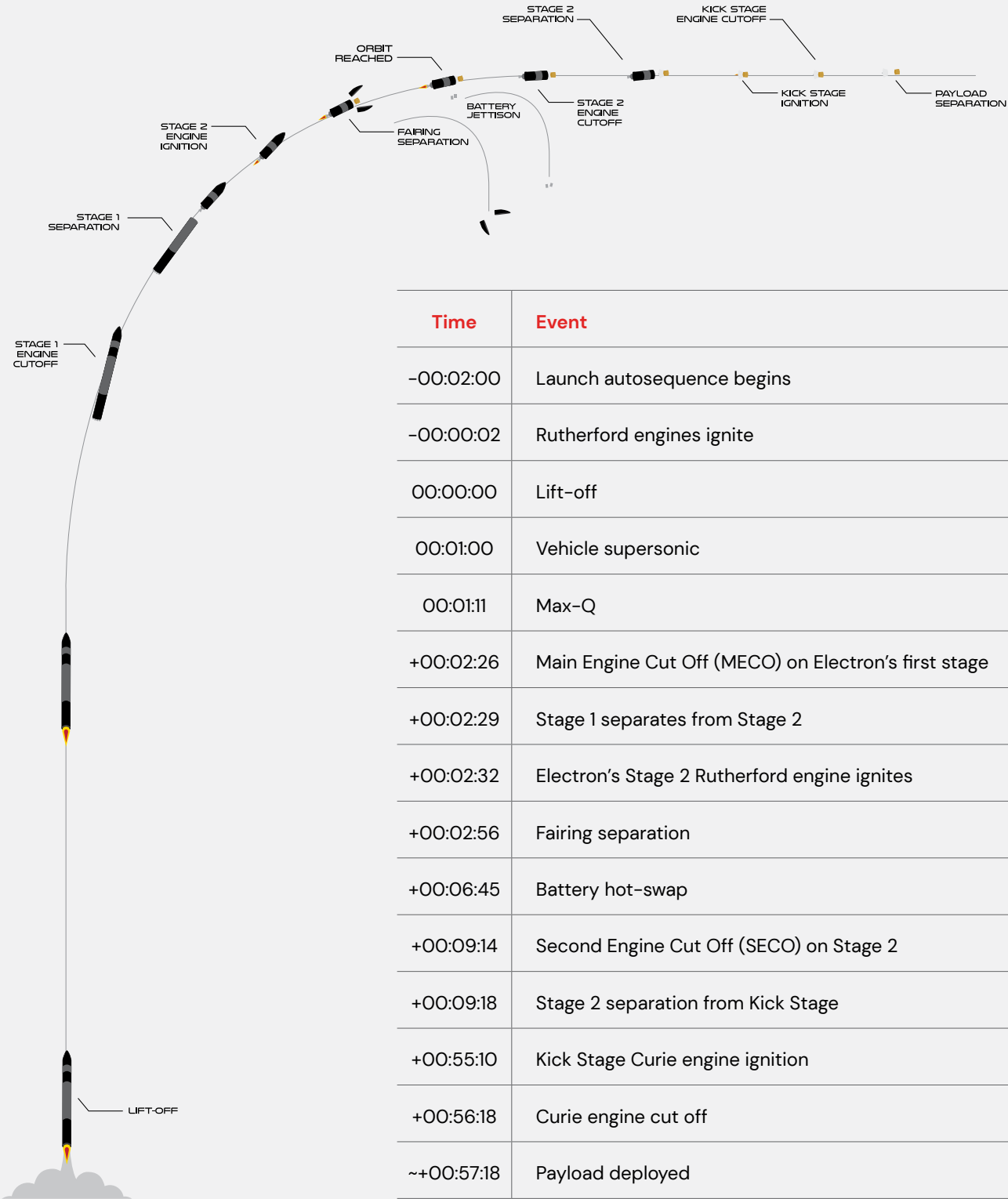
Directions:

- From Rt 13, turn east at T's Corner stop light onto Chincoteague Rd/ VA-175
- Follow Rt 175 across causeway and bridges to Chincoteague Island
- Turn right at the stop light onto Main Street, heading south
- Park is approximately .5 mile on the right. Parking at entrance is at Don's Seafood.

For more information about launch viewing locations, please visit or contact the Chincoteague Island Visitor's Center and Chamber of Commerce.

6733 Maddox Blvd.
Chincoteague Island, VA
info@chincoteaguechamber.com

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

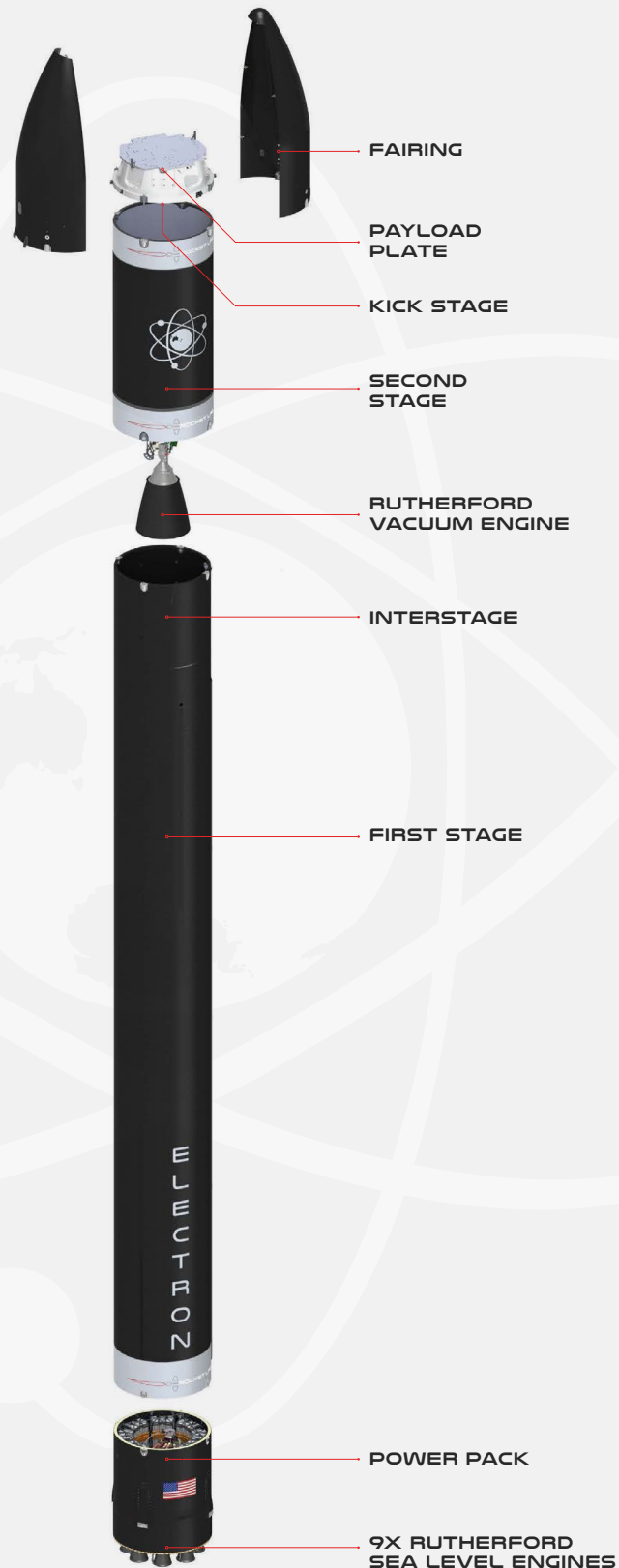
9x Rutherford Sea Level Engines

THRUST

5600 LBF Sea Level (Per Engine)

ISP

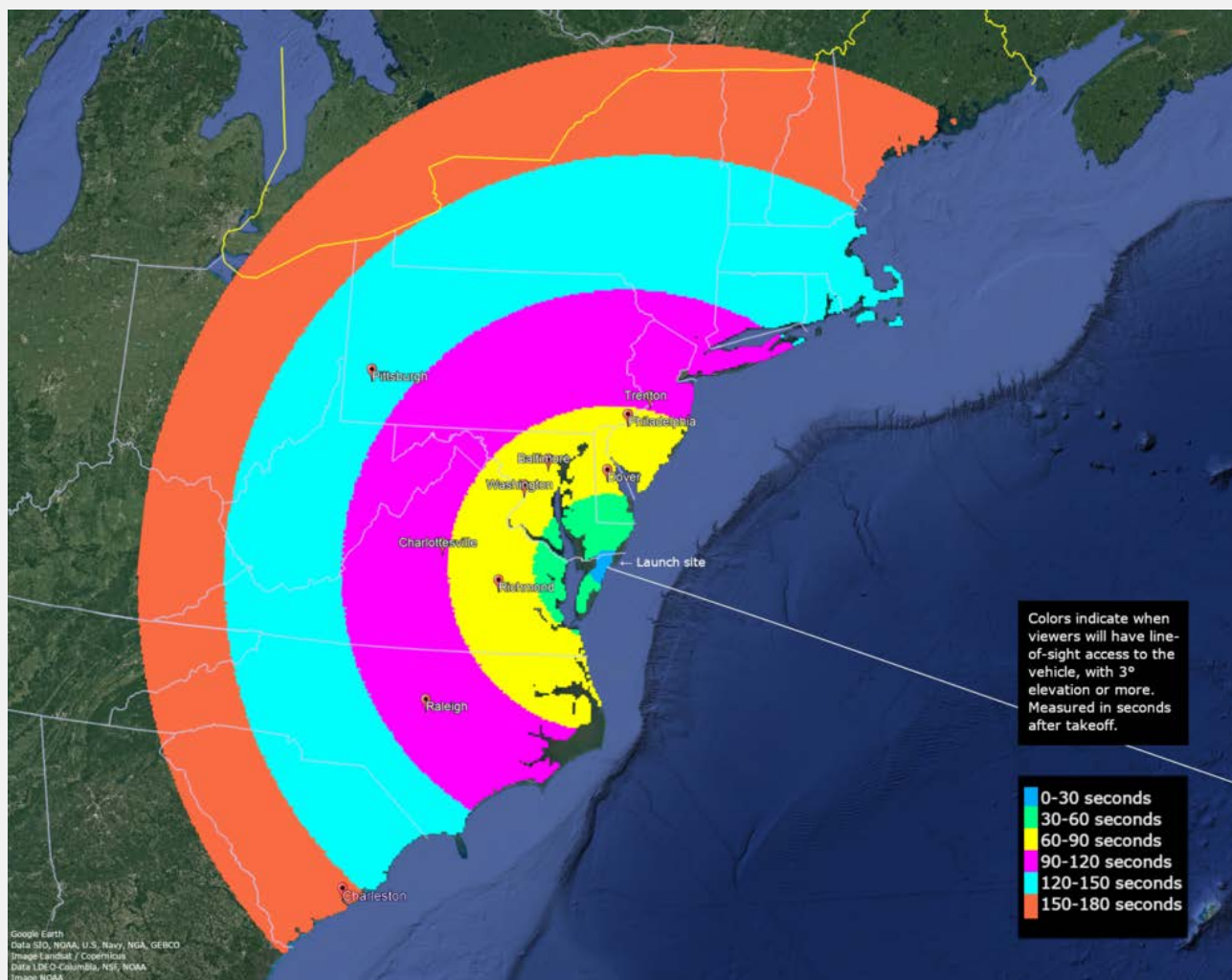
311 Sec



LAUNCH VISIBILITY MAP

The launch may be visible, weather permitting, to residents throughout much of the east coast of the United States.


Viewing locations on Chincoteague Island include Robert Reed Park on Main Street or Beach Road spanning the area between Chincoteague and Assateague Islands. The Virginia, Maryland and Delaware Atlantic beaches also provide good viewing locations. The NASA Visitor Center at Wallops will be open for this launch.



These circular areas show where and when people may see Rocket Lab's Electron launch in the sky, depending on cloud cover.


Credits: NASA Wallops/Mission Planning Lab

CONTACT US


 [rocketlabusa.com](https://www.rocketlabusa.com)

 media@rocketlabusa.com

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