

# NROL-44 Launch Press Kit



NATIONAL RECONNAISSANCE OFFICE



### NROL-44

The National Reconnaissance Office (NRO) is proud to partner with United Launch Alliance (ULA) on our eighth launch aboard a Delta IV Heavy launch vehicle. The NROL-44 mission will launch from Cape Canaveral Air Force Station, Florida, and carry a national security payload designed, built and operated by the agency. NROL-44 supports NRO's overall national security mission to provide intelligence data to the United States' senior policy makers, the Intelligence Community and Department of Defense. This is our 29th launch in partnership with ULA, alongside other mission partners at U.S.

Space Force Space and Missile Systems Center and the 45th Space Wing. The NRO's next launch, also from Cape Canaveral Air Force Station in 4th Ouarter CY2020, will be NROL-101.



The #NROL44 mission is represented by a patch with five wolves that show the solidarity across the Five Eyes (FVEY) community. The wolf's howl represents its capability to warn the pack as the first point of detection against threats.

#### **NRO** Mission

The National Reconnaissance Office (NRO) is an Intelligence Community element and Department of Defense organization responsible for developing, acquiring, launching and operating America's reconnaissance satellites, as well as operating associated data processing facilities in support of national security. Using NRO data, the National Security Agency, National Geospatial-Intelligence Agency, and other NRO mission partners produce intelligence products for the President, Congress, national policymakers, warfighters, and civil users. The NRO uses a variety of satellites to meet these mission needs - from small sats to more traditional, larger satellites. This approach allows the NRO to pursue a hybrid overhead architecture designed to provide global coverage against a wide range of intelligence requirements, carry out research and development efforts, and assist emergency and disaster relief efforts in the U.S. and around the world.



# Rocket & Launch Facts

United Launch Alliance's Delta IV Heavy is a heavy-lift launch vehicle, the largest type of the Delta IV family and one of the world's most powerful rockets. The Delta IV Heavy configuration is comprised of a common booster core (CBC), a cryogenic upper stage and a 5-meter-diameter payload fairing (PLF). The Delta IV Heavy employs two additional CBCs as liquid rocket boosters to augment the first-stage CBC. The Delta IV Heavy can lift 28,370 kg (62,540 lbs) to low Earth orbit and 13,810 kg (30,440 lbs) to geostationary transfer orbit. It is an all liquid-fueled rocket, consisting of an upper stage, one main booster and two strap-on boosters.



With more than a century of combined heritage, ULA has successfully delivered 140 missions to orbit that aid meteorologists in tracking severe weather, unlock the mysteries of our solar system, provide critical capabilities for troops in the field, deliver cutting-edge commercial services and enable GPS navigation.

### Payload Fairing (PLF)

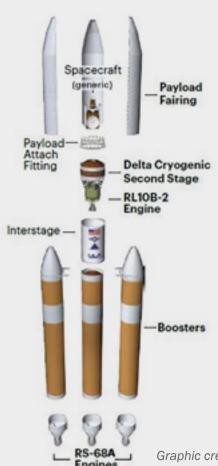
The PLF encapsulates the spacecraft to protect it from the launch environment on ascent. The 19.8-m (65-ft) long PLF makes the vehicle's height approximately 71.6 m (235 ft).

### Delta Cryogenic Second Stage (DCSS)

The DCSS is a cryogenic liquid hydrogen/liquid oxygen fueled vehicle, with a single RL10B-2 engine that produces 110.1 kilo-Newtons (24,750 lbs) of thrust.

#### **Boosters**

The Delta IV booster propulsion is provided by three liquid hydrogen and liquid oxygen-burning RS-68A engines. Each RS-68A engine produces 312.3 kilo-Newtons (702,000 lbs) of thrust for a combined total liftoff thrust of more than 2.1 million pounds.





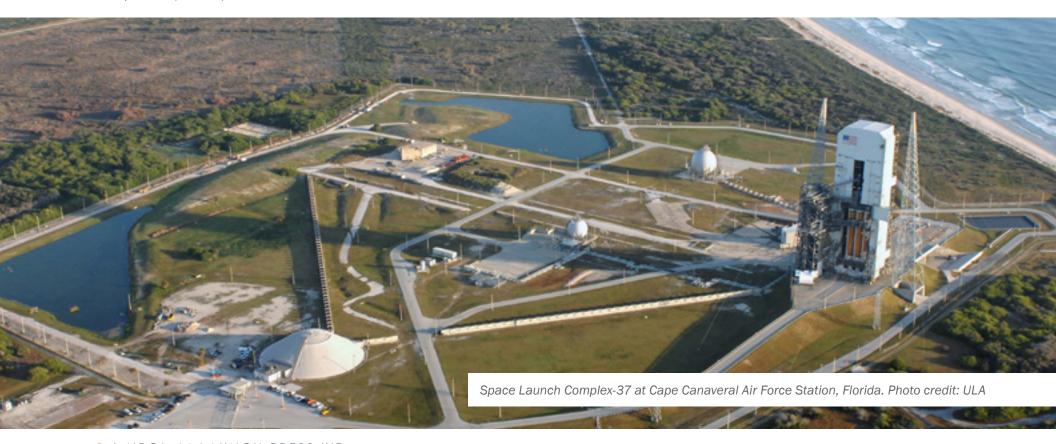


## Site Info

### **Space Launch Complex 37** (SLC-37)

NROL-44 will launch from Space Launch Complex 37 (SLC-37), the East Coast home of the Delta IV rocket at Cape Canaveral Air Force Station, Florida, SLC-37 is a classic launch pad design with a Fixed Umbilical Tower and a Mobile Service Tower, NASA constructed SLC-37 in the 1960s for un-crewed test flights in the Apollo-Saturn program. The complex consists of two launch pads, SLC-37A and SLC-37B;

SLC-37A has never been used, but SLC-37B launched un-crewed Saturn I flights (1964 to 1965) and Saturn IB flights (1966 to 1968), including the first un-crewed test of the Apollo Lunar Module in space. Starting in the late 1990s, SLC-37B was modified to serve as the launch site for Delta IV.





# Recent **Successes**

The combination of commercial capabilities, technological advancements, and governmentdeveloped systems provides opportunities to expand the supplier base, improve performance, reduce cost, and enhance resiliency.

### -Dr. Chris Scolese, Director, National **Reconnaissance Office**

NROL-44 will be NRO's fourth launch of 2020 and will carry a national security payload designed, built and operated by the agency.

The National Reconnaissance Office (NRO) recently collaborated with NASA, Northrop Grumman, and Mid-Atlantic

Regional Spaceport in July 2020 on our first dedicated launch out of NASA's Wallops Flight Facility in Virginia. NROL-129 carried a classified payload designed, built and operated by the NRO, and it launched aboard a Northrop Grumman Minotaur IV rocket. Read more here.

In June 2020, NRO collaborated with Rocket Lab to launch our second mission of 2020 aboard a Rocket Lab Electron rocket from the Mahia Peninsula. New Zealand. The launch was procured under the NRO's Rapid Acquisition of a Small Rocket (RASR) contract, announced in April 2018. RASR enables NRO to explore new opportunities for launching small satellites through a streamlined, commercial approach. This approach allows the NRO to pursue the use of both large and small satellites for an integrated architecture designed to provide global coverage against a wide range of intelligence requirements. This launch was named "Don't Stop Me Now" by Rocket Lab and carried three payloads designed,

built and operated by NRO, as well as two additional CubeSats - one for NASA and the other from the University of New South Wales, Canberra Space. Read more here.

In January 2020, NRO collaborated with Rocket Lab and the New Zealand Space Agency to launch NROL-151, our first dedicated mission from New Zealand. NROL-151 was the first launch under the NRO's RASR contract, read more **here**.



NROL-129 launches out of NASA's Wallops Flight Facility, Virginia, on July 15, 2020.



# **Future** Launches

- NRO's next scheduled launch from Cape Canaveral Air Force Station is NROL-101 in 4th Qtr of CY2020
- The next NRO launch from Vandenberg Air Force Base is scheduled for 4th Qtr CY2020
- The next launch from NASA Wallops is scheduled for 2nd Qtr CY2021
- The next launch from New Zealand is scheduled for 2nd Qtr CY2021

Watch Live! ULA will broadcast the countdown here approximately 20 minutes before the launch on September 29



Follow @NatReconOfc on Twitter and Instagram on launch day

