NROL-82 Launch Press Kit

NATIONAL RECONNAISSANCE OFFICE

NRO/PAO [10005] ID 4.5.21

NROL-82

The National Reconnaissance Office (NRO) is proud to partner with United Launch Alliance (ULA) on our ninth launch aboard a Delta IV Heavy launch vehicle. The NROL-82 mission will launch from Vandenberg Air Force Base, California, and carry a national security payload designed, built and operated by the agency. NROL-82 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 31st launch in partnership with ULA, alongside other mission partners at the U.S. Space Force Space and Missile Systems Center and the 30th Space Wing.

The NROL-82 mission patch was designed to commemorate the many heroic acts and sacrifices made to protect our way of life. The NROL-82 logo depicts an eagle, America's symbol of freedom, wearing the traditional flight gear of a WWII Fighter Ace, specifically Gregory "Pappy" Boyington. In the background you will find an F4U Corsair, Boyington's aircraft, and the three stars on the patch honor those who have served, are serving, or will serve to preserve America's way of life. The Latin phrase, TACITAE LIBERTATIS CUSTODEMQUE, ties the logo together in its translation: Silent Guardians of Freedom. To read more about the logo inspiration, visit our social media accounts on Facebook, Instagram, and Twitter.

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.

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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 14,210 kg (31,330 lbs) to geosynchronous 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 more than 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)

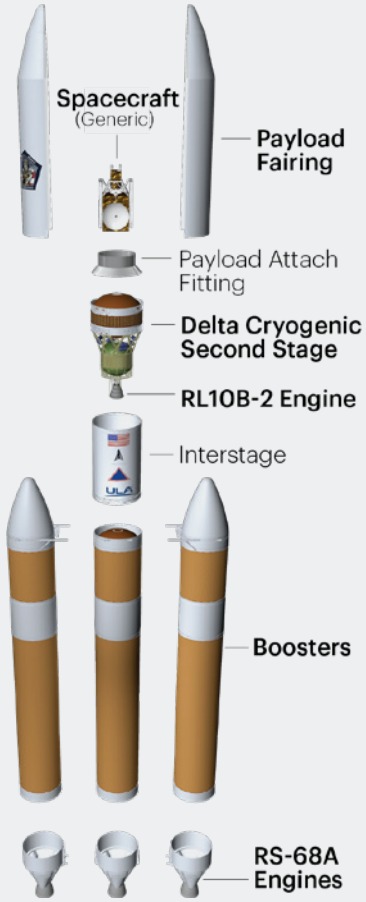
The PLF encapsulates the spacecraft to protect it from the launch environment on ascent. The 19.2-m (63-ft) long PLF makes the vehicle's height approximately 71 m (233 ft).

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 (705,200 lbs) of thrust for a combined total liftoff thrust of more than 2.1 million pounds.



Graphic credit: ULA

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Site Info

Space Launch Complex 6 (SLC-6)

NROL-82 will launch from Space Launch Complex 6 (SLC-6) at Vandenberg Air Force Base, California. The first launch from SLC-6 was on an Athena I rocket in August 1995. In 2000, Boeing took over SLC-6 and in 2006 ULA was formed, re-fitting the site to serve as the west coast home for the Delta IV launch vehicle family with modifications to the Mobile Assembly Shelter, Mobile Service Tower, Launch Tower, and other support structures. NROL-82 will be NRO's first launch from Vandenberg since Janunary 2019.

NROL-71 launches on a United Launch Alliance (ULA) Delta IV Heavy from SLC-6 in Jan. 2019. Photo credit: ULA

Recent Successes

The incredible collaboration of the NRO's team of civilian, military, and contractor personnel combined with strong mission partner, commercial, academic, and international relationships allows us to keep pushing the envelope in making the seemingly impossible possible.

-National Reconnaissance Office Director Dr. Chris Scolese

NROL-82 will be NRO's first launch of 2021 and will carry a national security payload designed, built and operated by the agency.

Despite the challenges of the COVID-19 pandemic, NRO last year successfully launched six missions from two countries. We started the year with our first dedicated mission launch from New Zealand in collaboration with Rocket Lab and the New Zealand Space Agency. NROL-151 was the first launch under NRO's Rapid Acquisition of a Small Rocket (RASR) contract. RASR enables NRO to explore new opportunities for launching small satellites through a streamlined, commercial approach. Our second launch of 2020 was also from New Zealand with these same partners, carrying 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.

In July 2020, NRO collaborated with NASA, Northrop Grumman, and Virginia Space/Mid-Atlantic Regional Spaceport to launch our first dedicated launch out of NASA's Wallops Flight Facility in Virginia. NROL-129 launched aboard a Northrop Grumman Minotaur IV rocket.

In November and December 2020, we collaborated with United Launch Alliance (ULA), the U.S. Space Force Space and Missile Systems Center, and the 45th Space Wing to launch NROL-101 on an Atlas V rocket and NROL-44 on a Delta IV Heavy rocket from Cape Canaveral Space Force Station, Florida.

Finally, also in December 2020 we collaborated with SpaceX for the first time since 2017 to launch NROL-108 on a Falcon 9 rocket from NASA's Kennedy Space Center, Florida. NRO is proud to have had several firsts throughout 2020 and we're looking forward to continued mission success in 2021 with the launch of NROL-82 and, later in the second quarter of CY2021, the launch of NROL-111 from Wallops Flight Facility, Virginia.

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

Visit **https://www.nro.gov/News/Press-Releases/** to view the latest launch press releases.

Future Launches

- NRO's next launch is NROL-111, scheduled for later this quarter from NASA's Wallops Flight Facility, Virginia

NROL-44 is pictured on a United Launch Alliance Delta IV Heavy on Space Launch Complex-37 at Cape Canaveral Air Force Station, Florida. Photo Credit: ULA

Follow @NatReconOfc on Twitter for live updates on launch day