Congressional Research Service
Informing the legislative debate since 1914

IN FOCUS

Updated January 14, 2026

Defense Primer: National Security Space Launch Program

The U.S. Department of Defense (DOD) National Security Space Launch (NSSL) program acquires commercial launch services to deploy military and intelligence community satellites. These satellites are used for communications; positioning, navigation, and timing; missile warning and tracking; and space situational awareness, among other purposes. Congress, in 10 U.S.C. §2273, established as U.S. policy the need to ensure access to space by maintaining at least two launch vehicles able to deliver any national security payload into space. To meet that mandate, Congress authorizes and appropriates funding for NSSL and provides oversight of the program. The Full-Year Continuing Appropriations and Extensions Act, 2025 (P.L. 119-4), provided $1.87 billion for NSSL, according to DOD (which is using a secondary Department of War designation under Executive Order 14347). In the FY2025 reconciliation act (P.L. 119-21, §20003), Congress provided $500 million for NSSL infrastructure, to remain available through FY2029. DOD has requested $1.47 billion for NSSL in FY2026.

National Security Space Launch Program

The U.S. Space Force (USSF) Space Systems Command (SSC), based at Los Angeles Air Force Base, manages the NSSL program. DOD conducts NSSL launches at two locations: the Eastern Range at Cape Canaveral Space Force Station in Florida and the Western Range at Vandenberg Space Force Base in California. NSSL has launched satellites for the U.S. Space Force, the U.S. Air Force, the U.S. Navy, and the National Reconnaissance Office. NSSL providers use launch vehicles capable of either *heavy-lift* or *medium-lift*, generally defined as a payload capacity between 20,000 kg and 50,000 kg or between 2,000 kg and 20,000 kg, respectively. DOD acquires *small-lift* launch services, defined as a payload capacity of 2,000 kg or less, through the Rocket Systems Launch Program.

SSC directs a flight-worthiness certification process for potential NSSL launch providers. The certification process includes flight demonstrations, major subsystem reviews, and verification of payload interface requirements. The United States has two certified launch providers for NSSL missions: Space Exploration Technologies Corporation (SpaceX), flying its Falcon 9 and Falcon Heavy rockets, and the United Launch Alliance (ULA), flying its Vulcan rocket. Blue Origin is in the process of certifying a new launch vehicle, the New Glenn rocket.

As outlined in 10 U.S.C. §2273, one of the goals of NSSL is to lower the costs of national security space launches. For acquisitions, NSSL has opened competition between providers to reduce costs through competitively awarded contracts. The program also uses firm-fixed price contracts and *block buys*, a DOD-specific procurement mechanism that allows the agency to use a single contract to buy goods or services over multiple years, rather than annual contracts.

National Security Space Launch Evolution

NSSL evolved from an earlier Air Force program, the Evolved Expendable Launch Vehicle (EELV) program. In August 1994, the Clinton Administration issued the National Space Transportation Policy (NSTC-4), which tasked DOD with "the improvement and evolution of the current U.S. [heavy- and medium-lift] expendable launch vehicle (ELV) fleet." The National Defense Authorization Act for Fiscal Year 2004 (NDAA; P.L. 108-136, §2273) codified this policy in statute (10 U.S.C. §2273).

In fulfillment of NSTC-4, the Air Force established the EELV program in 1994. During the initial phase of the EELV program, the Air Force used nonrecurring, firm-fixed price contracts, with the commercial providers covering any additional costs. The Air Force amended its contracting approach in 2005, citing rising costs incurred by the commercial partners. The Air Force began instituting cost-plus contracts to support launch capabilities and infrastructure, while still issuing firm-fixed price contracts for launch services. In 2006, Boeing and Lockheed Martin formed the ULA joint venture, which became the sole provider for EELV launch services in 2006.

In 2013, the Air Force shifted to a block buy approach, saying this would save money and provide predictability for industry. The subsequent sole-source contracts awarded to ULA were considered Phase 1 of the amended EELV program. After Russia's 2014 invasion of Ukraine, Congress prohibited contracting with Russian suppliers of rocket engines for EELV and directed that DOD create a development program for new U.S.-made rocket engines (P.L. 113-291, §§1604, 1608). This program later formed the basis of future ULA and Blue Origin launch vehicles. In 2016, the Air Force shifted to competitively awarded EELV contracts, known as Phase 1A. Under Phase 1A, SpaceX won a firm-fixed price launch services contract in April 2016 for the use of expendable Falcon 9 rockets.

In 2018, DOD issued three Launch Service Agreements (LSAs), which were other transaction (OT) agreements to "facilitate development of ... launch system prototypes," to foster future competition. The Air Force awarded these agreements to Blue Origin, Northrop Grumman, and ULA in preparation for Phase 2. The FY2019 NDAA (P.L. 115-232) changed the program's name to NSSL and expanded the program to include reusable launch vehicles, such as SpaceX's Falcon 9 Block 5.

DOD continued to use competitively awarded block-buy contracts in Phase 2, which began in 2020. Out of 48 Phase

2 NSSL missions awarded, the Air Force assigned contracts for 22 launches to SpaceX and 26 launches to ULA from FY2022 to FY2027. After selecting SpaceX and ULA for Phase 2, the Air Force terminated its LSAs with Northrop Grumman and Blue Origin.

Phase 3 launches are set to begin in FY2026. For Phase 3, DOD is using a two-lane approach, intending to use both new and existing providers. In 2024, the Assistant Secretary of the Air Force for Space Acquisition and Integration stated that Lane 1 allows "an unlimited number of launch service providers to compete for ... less complex missions that have higher risk tolerance." To qualify for Lane 1, providers must have completed a launch or have a credible plan to do so. Blue Origin, SpaceX, and ULA won initial contracts in June 2024. In March 2025, the Space Force awarded additional Lane 1 contracts to Rocket Lab USA and Stoke Space, allowing them to compete for Lane 1 task orders beginning in FY2026, pending completion of their first successful launch.

In contrast, for Lane 2, DOD plans to use three providers for a full range of missions. To qualify, providers had to be able to access more difficult to reach orbits, "necessitating higher performance launch systems, and complex security and integration requirements," as described by a SSC media release. In April 2025, DOD awarded Phase 3 Lane 2 contracts to three suppliers—Blue Origin, SpaceX, and ULA—for approximately 54 missions from 2027 to 2032. The anticipated value for these contracts is up to $5.9 billion for SpaceX, $5.4 billion for ULA, and $2.4 billion for Blue Origin. For FY2026, SSC announced in October 2025 that SpaceX is assigned five missions with a total price of $714 million and ULA is assigned two missions with a price of $428 million.

Potential Issues for Congress

Competition

Among NSSL's goals is reducing costs by fostering competition between commercial providers. Two launch providers—ULA and SpaceX—have certified vehicles. Blue Origin seeks to certify its New Glenn launch vehicle. The Space Force has said it plans to seek additional providers through its Phase 3 Lane 1 awards. A report (S.Rept. 118-204) accompanying the Senate Appropriations Committee-reported Department of Defense Appropriations Act, 2025 (S. 4921), encouraged the Space Force to "include a greater diversity of providers and more competition" in NSSL Phase 3. Congress may continue to consider whether the Space Force has adequately fostered competition between launch providers. Potential mechanisms to increase competition include directing the Space Force to revive LSAs or creating another technology maturation program to support new entrants; amending statute to change U.S. policy to require the sustainment of space launch vehicles from a diverse set of companies, including new entrants; and directing the Space Force to evaluate additional mechanisms to encourage additional NSSL participants. Alternately, Congress may determine that Space Force efforts to diversify launch providers have been sufficient or that industry or the commercial marketplace should guide future technology development.

Launch Infrastructure

The Space Force anticipates supporting a total of 173 launch operations at the Eastern and Western Ranges in FY2026, up from supporting 25 launches a decade earlier, according to DOD press releases. In addition to NSSL launches, these ranges support commercial missions under cost-reimbursement agreements with the Space Force. Higher launch cadences have strained physical, logistical, and other aspects of range infrastructure. To modernize the ranges and accommodate higher launch cadences, the Space Force began implementing its Spaceport of the Future program (formerly known as Range of the Future) in FY2024. The FY2026 NDAA (P.L. 119-60, §1608) requires an annual report on the status of the initiative to include the suitability and feasibility of alternate launch locations or spaceports, which may reduce pressure on existing launch facilities. The results of these studies may inform future congressional oversight.

Launch infrastructure includes payload processing facilities, where satellites are prepared for launch. In a 2025 report, the Government Accountability Office (GAO) notes that Space Force officials describe payload processing capacity as "the greatest challenge facing DOD's space launch efforts." The Space Force is seeking to increase capacity at these facilities and improve its coordination for their use. Congress may consider oversight of these efforts.

New developments in commercial launch vehicles may also affect infrastructure at the Ranges. For instance, SpaceX is developing launch platforms at Cape Canaveral and Kennedy Space Center for its new *super-heavy* Starship rocket (which can carry payloads of up to 150,000 kg). The addition of Starship to projected launch schedules reportedly may result in a combined total of more than 300 annual government and commercial launches by 2035. The increased cadence could affect nearby infrastructure. The FY2026 NDAA (P.L. 119-60, §1610) requires the Air Force to publish a blast damage assessment guide for launch vehicles using Air Force range complexes.

The FY2024 NDAA (P.L. 118-31, §1603) requires DOD to charge commercial entities for direct costs associated with their use of the agency's launch facilities and allows DOD to charge indirect costs. The Space Force estimates it will collect about $89 million in direct cost and $16 million in indirect cost reimbursements in FY2026. The GAO reports that, since these reimbursements must be obligated in the year collected, the Space Force is limited in its ability to use these funds for large-scale infrastructure projects. Congress may consider whether or not to provide the Space Force with additional flexibility to obligate the funding. Congress may also consider the impact of reimbursement fees on industry.

Jennifer DiMascio, Analyst in U.S. Defense Policy
Rachel Lindbergh, Analyst in Science and Technology Policy
Hannah D. Dennis, Analyst in U.S. Defense Policy

IF12900

Disclaimer