U.S. Senator Martin Heinrich
Highlights FY20 National Defense Authorization Act

New Mexico Military Construction Projects

Kirtland Air Force Base

Senator Heinrich secured $15.5 million for the construction of a Combat Rescue Helicopter Simulator Facility at Kirtland Air Force Base. This facility will house new HH-60W simulators, training spaces, and equipment used by the 58th Special Operations Wing to train new students. This construction will allow for a seamless transition from the HH-60G legacy aircraft, to the new HH-60W and provide continuous Programmed Flight Training for its operators.

Senator Heinrich secured $22.4 million for the construction of a UH-1 Replacement Facility at Kirtland Air Force Base. This facility will house new simulators used for training flight crew personnel in the UH-1 replacement aircraft set for delivery to the 58th Special Operations Wing starting at the end of FY 2022. This construction will allow for an on-time delivery of the simulators, and critical training in the new aircraft.

Holloman Air Force Base

Senator Heinrich secured $20 million for the construction of a climate-controlled, storage and shipment facility at Holloman Air Force Base. The facility will be used to store, inspect, and prepare the movement of military support equipment and provide maximum protection of our expeditionary, warfighting resources. This will enable assets to be maintained in a constant state of readiness and postured for worldwide deployment with greatly reduced maintenance costs. The use of this facility will save the government $800,000 annually for the maintenance and/or replacement of these assets by preserving the shelf-life of items otherwise stored in the open; as well as save $120,000 a year in replacement costs of shipping containers damaged by exposure to weather.

White Sands Missile Range (WSMR)

Senator Heinrich secured $5.8 million to build a micro-grid at White Sands. The micro-grid will utilize a solar array, natural gas generator, and lithium ion battery system to power water wells to provide an uninterrupted water supply to WSMR. Currently, the wells are connected in such a way that leave them susceptible to power outages that could leave WSMR without drinkable potable water. This micro-grid system will ensure a reliable supply of water for the installation.

White Sands Missile Range Land Enhancements and White Sands National Park

The Senate Armed Services Committee adopted an amendment by Senator Heinrich that incorporates legislation to, amongst other things, finalize updated land exchanges between the Department of the Interior and the Department of the Army that have been pending since the 1970s. The exchange of parcels between White Sands National Monument and White Sands Missile Range will clean up boundary anomalies, transfer important missile range infrastructure

to the jurisdiction of the Army, and provide increased opportunities for visitors at the National Monument. The bill was developed in close consultation with the Army, the Air Force, the National Park Service, local elected officials, neighboring tribes, and local residents.

New Mexico Air National Guard

The Senate Armed Services Committee included language that requests the Secretary of the Air Force, in consultation with the Chief of the National Guard Bureau, to report back to the committee within 60 days to present options for achieving an operational flying mission in states currently without ownership of aircraft.

New Mexico is one of three states – New Mexico, Virginia, and Washington – that have an operational flying mission, but due to the classic associate construct they lack ownership of aircraft. The Air National Guard enterprise is based on established Capstone Principles that notionally set the foundational framework for mission allocation in the 54 states and territories. One of those Capstone Principles is to allocate at least one unit-equipped wing and flying squadron to each state.

The New Mexico congressional delegation is dedicated to working with the Air Force and the National Guard Bureau to ensure a unit-equipped flying squadron for the New Mexico Air National Guard (NMANG). New Mexico's outstanding flying weather, airspace and ranges around Kirtland Air Force Base (KAFB) offer excellent training capabilities. KAFB's location in central New Mexico allows for important co-training opportunities with Cannon and Holloman Air Force Bases, White Sands Missile Range, and Fort Bliss, Texas. Having hosted aircraft for decades, appropriate infrastructure such as runways and hangars are already in place that can save taxpayer dollars and accommodate additional aircraft.

New Mexico's National Laboratories and WIPP

Los Alamos National Laboratory's Plutonium Mission

Senator Heinrich again supported full funding to secure Los Alamos National Laboratory's (LANL) role as the nation's Center of Excellence for Plutonium Research. The bill authorizes $551 million for LANL's ongoing plutonium research and pit production programs. The funding supports personnel, equipment and other activities at LANL to meet pit production requirements by 2026; highlights include, $232 million for plutonium operations, $21 million to support pit production, $10.5 million for fire suppression upgrades in PF-4, $16 million for power and communications improvements and $168 million for construction related to replacing the outdated
Chemistry and Metallurgy Research (CMR) building at LANL.

Senator Heinrich included a provision in last year's NDAA directing the U.S. Department of Defense (DoD) to contract for an independent review of the National Nuclear Security Administration's (NNSA) preferred plutonium strategy. The assessment released last month

concluded that a key milestone will be achieving the goal of producing 30 plutonium pits per year at LANL by 2026. However, the assessment found DoD's requirement of 80 pits per year was unlikely to be met on NNSA's currently planned schedule or budget. In response, during committee markup Senator Heinrich secured another amendment requiring DoD to provide by December the administration's formal response to the potential requirement shortfall and options to mitigate the risk of further delays.

Defense Nuclear Facilities Safety Board

During committee markup, Senator Heinrich secured an amendment directing the Government Accountability Office (GAO) to review the U.S. Department of Energy's (DOE) new order 140.1 that governs the interface of the DOE with the independent Defense Nuclear Facilities Safety Board (DNFSB). Congress created the DNFSB in 1988 to provide oversight of public health and safety at the defense nuclear facilities managed by the Department of Energy, including Los Alamos National Laboratory, Sandia National Laboratory and Waste Isolation Pilot Plant. The DNFSB is concerned that the new order 140.1 could limit the board's oversight of DOE's facilities. The Department of Energy issued Order 140.1 without consultation with the DNFSB or with the local communities most impacted by the department's defense nuclear facilities. The board expressed its concerns in letters to the Secretary of Energy and held a public hearing this year in Albuquerque to gather information on the order's implementation by DOE. The GAO's review shall be provided to Congress by March 2020.

National Nuclear Security Administration (NNSA) Laboratory Directed Research and Development (LDRD)

Senator Heinrich successfully passed an amendment with unanimous support to permanently remove the overhead burden on NNSA labs for LDRD that currently double-taxes Sandia National Laboratories and Los Alamos National Laboratory. LDRD is a strategic research and development program that is critical to maintaining the scientific vitality of the national laboratories. In 2016, Congress suspended the overhead burden on the labs' LDRD for three years. Senator Heinrich's amendment this year permanently eliminates it for all NNSA nuclear laboratories and facilities.

National Nuclear Security Administration (NNSA) Employee Recruitment and Retention

The bill again includes a provision to make permanent NNSA's personnel management system that has been used successfully on a trial basis for over 10 years. Senator Heinrich secured this provision last year in the defense bill, but it was not included in the final conference report. The temporary personnel system has enhanced the recruitment and retention of federal employees of the Department of Energy's NNSA. NNSA needs to attract highly technical employees to manage critical national security programs, including about 800 based in New Mexico. Key advantages of NNSA's personnel system include helping attract and retain top talent by offering competitive salaries, reducing attrition rates, and properly rewarding high-performing employees.

National Laboratory Funding

Senator Heinrich supported full funding authorization for the National Nuclear Security Administration's (NNSA) nuclear weapons programs. Within NNSA's funding, Senator Heinrich secured full funding of $2.1 billion to continue the Life Extension Programs supported by Sandia and Los Alamos National Laboratories. This increase of $197 million over FY19 will maintain the existing weapons stockpile and assure safety and security.

For fiscal year 2020, the bill authorizes funding from NNSA of $1.99 billion for Sandia National Laboratories, an increase of $110 million over fiscal year 2019. For Los Alamos National Laboratory, the bill authorizes funding of $1.97 billion, up from $1.89 billion in fiscal year 2019.

Los Alamos National Laboratory (LANL) Environmental Cleanup

The bill authorizes $195.5 million for soil and water remediation and removal of radioactive waste. Funding is included again this year to address the hexavalent chromium and Royal Demolition eXplosive (RDX) plumes in groundwater in Los Alamos.

Waste Isolation Pilot Plant (WIPP)

The bill authorizes full funding of $398 million to operate the Waste Isolation Pilot Plant (WIPP), including $17.5 million to repair and replace degraded facility structures, systems, and components, $58 million to continue construction of additional ventilation for the mine and $34.5 million for a new utility shaft.

New Mexico's Defense R&D Labs, Test Ranges, and Industry

U.S. Department of Defense (DoD) Mentor-Protégé Program
The Defense Small Business Advancement Act of 2019

The Senate Armed Services Committee adopted an amendment by Senator Heinrich that incorporates S. 1320, the *Defense Small Business Advancement Act*. Senators Heinrich and Joni Ernst's (R-Iowa) bill language would permanently authorize the DoD's Mentor Protégé Program (MPP), which is the oldest continuously operating federal mentor-protégé program in existence, but expired last year. Originally established in 1991, the MPP helps eligible small businesses expand their footprint in the defense industrial base. Under the MPP, small businesses are partnered with larger companies. In the past five years, DoD's MPP has successfully helped more than 190 small businesses fill unique niches and become part of the military's supply chain. Senator Heinrich ensured the survival of the MPP when it faced expiration, and salvaged this influential, small-business focused program.

Directed Energy Test Range Workloads

Senator Heinrich secured $15 million for White Sands Missile Range in order to accommodate the increase in directed energy testing workloads to accommodate the increased demand in the 21st century. A lack of funding for increased directed energy testing is a serious issue; especially, given the workload and number of directed energy demonstrations and exercises have increased significantly since 1975. The projected workload for fiscal years 2018–2022 for the High Energy Laser Systems Test Facility at White Sands is large and growing, and has expanded to include high-powered microwave testing. Yet, funding remained at the same level. Senator Heinrich secured the funds necessary to meet the growing demand and support the appropriate test workloads.

High-Powered Microwave Research

In this year's NDAA, Senator Heinrich capitalized on the newly enacted authorities allowing the Joint Directed Energy Transition Office (JDETO) to conduct high-powered microwave research. Senator Heinrich successfully secured an increase of $5 million for JDETO to allow for needed basic research at the university level, and focus applied research efforts into the joint development of an effects database, common high-power radio frequency models, and predictive capabilities for the high-powered microwave technology capabilities. Senator Heinrich's efforts bring attention to the shift in the JDETO's responsibility to help oversee the development and transition of directed energy weapons systems from the laboratories to the battlefield.

High-Powered Microwave Test Range Asset

The Senate Armed Services Committee adopted an amendment by Senator Heinrich which supports the Air Force's development of an enduring testing and evaluation capability for high powered microwaves (HPM). The committee noted that such an asset at our nation's test ranges would support the transitioning of new and game changing directed energy technologies to the warfighter. Doing so would also help the military services develop the doctrine and concepts of operation that will bring these technologies to operational use. Currently, an enduring-frequency, agile, and tunable HPM asset is not available for evolving doctrine and HPM Directed Energy Concept of Operations at Major Range and Test Facility Bases.

Missile Defense Agency's Low Power Laser Demonstrator

The Senate Armed Services Committee adopted an amendment by Senator Heinrich expressing the committee's support for the Missile Defense Agency's (MDA) Low-Power Laser Demonstrator (LPLD) program. The language secured expresses continued support for LPLD for the development of a boost-phase missile intercept capability and multiple other applications and capabilities, and could be adapted to be an effective countermeasure against other threats, including cruise, surface-to-air, air-to-air, and hypersonic missiles. The language requests the DoD's plans for the flight test program for the LPLD project including:

(1) The expected date that operational airborne tests of the LPLD will begin;
(2) The expected required number of flight tests and expected cadence of flight tests that the LPLD project will require, and;

(3) A comprehensive description of the DoD's planned locations to conduct LPLD flights and tests, including a cost-benefit analysis for each location and an analysis of each location's suitability for the flight platforms anticipated to participate in the project.

3-D Printed Electronics Army Innovation Hub for Next Generation Additive Manufacturing

Senator Heinrich secured an additional $2 million for additive manufacturing (AM), which is already making innovative technological leaps that could yield major advances in more lethal and longer-ranged fires. New Mexico Tech and University of Texas at El Paso are leading entities in 3-D printing. This technology can combine existing and new materials into 3-D printed circuit architectures, producing smarter, lighter, and denser constructs to enable projectiles to double current ranges while achieving higher precision.

Hypersonics Prototyping and Production

The Senate Armed Services Committee adopted an amendment by Senator Heinrich that encourages the Department of Defense (DoD) to utilize the technical and scientific expertise at Sandia National Laboratories (SNL) necessary for the development of prototypes and to assist commercial industry in manufacturing.

The language recognizes the enormous contributions that SNL has made in the area of hypersonics. For over 30 years, SNL has emerged as the center of excellence for the prototyping and testing of hypersonic vehicles. SNL houses the most experienced scientists and engineers in the development of this technology, utilizing their hypersonic wind tunnel, and advanced laser diagnostic technology. Over seven years ago, Sandia conducted a successful flight test of the Advanced Hypersonic Weapon (AHW) concept for the U.S. Army Space and Missile Defense Command. This first-of-its-kind vehicle utilized a three-stage booster system and hypersonic glide vehicle. This test propelled SNL with data on hypersonic boost-glide technologies and test range performance for long-range atmospheric flight with emphasis on aerodynamics, navigation, guidance and control, and thermal protection technologies.

The language also notes that the technical expertise at SNL and the laboratory has been, and will continue to be, instrumental to the development and eventual production of hypersonics. The language encourages DoD to utilize the technical and scientific expertise at labs, including SNL, necessary for the development of prototypes and to assist commercial industry in manufacturing.

Navy Laser Weapon System Integration on Ships

The Senate Armed Services Committee adopted an amendment by Senator Heinrich that directs the Secretary of the U.S. Navy to provide a briefing to the committee no later than October 1, 2019, describing the path forward for shipboard integration of High Energy Laser (HEL) systems, and the risk reduction plan to achieve improved technology and manufacturing readiness levels for such higher power systems. The committee also directs the Navy to provide

briefings on the progress of laser systems development and testing every six months through fiscal year 2021.

The Navy has rapidly demonstrated laser weapon systems on surface ships. In 2014, the Navy deployed a 30 kilowatt (kW) Laser Weapon System (LaWS) on USS Ponce, which will be followed by a 150 kW LaWS on USS Portland (LPD-27) planned for 2019. The Navy also plans to integrate the 60 kW High Energy Laser and Integrated Optical-dazzler with Surveillance (HELIOS) program into Arleigh Burke-class destroyers beginning in 2021.

If successful, there may be additional opportunities to integrate HEL systems on large capital ships, including aircraft carriers and large amphibious ships, to increase the defensive capabilities and lethality of our carrier strike groups and expeditionary forces. There may also be broader applications of laser weapons for providing capability for fleet air defense from more Navy vessels.

STARBASE

Senator Heinrich secured an additional $15 million for the STARBASE program. This program is meant to improve the knowledge and skills of students in kindergarten through 12th grade in science, technology, engineering, and math (STEM) subjects, to connect them to the military, and to motivate them to explore STEM and possible military careers as they continue their education. STARBASE is a highly effective program run by our dedicated servicemembers and strengthens the relationships between the military, communities, and local school districts. The program allows students to participate in a 25-hour hands-on curriculum where they solve scientific challenges related to aerospace. Students learn the importance of STEM skills in real world situations and develop essential math and science fundamentals, while fostering positive relationships between military bases and their surrounding communities. STARBASE currently operates at 76 locations in 40 states, the District of Columbia, and Puerto Rico, primarily on military installations. New Mexico is one of those locations. Since its inception in 1991, over 825,000 students have benefitted from the STARBASE program, including 45,000 last year.

5th Generation Spectrum Sharing

As a member of the Cybersecurity Subcommittee, Senator Heinrich supported an increase in $25 million to support U.S. Department of Defense (DoD) spectrum sharing and to allow for full utilization of the 5th Generation (5G) network. The 5G wireless network is the foundation for future economic growth, and will have a vital impact on national security. As such, this funding will prepare DoD to use dynamic spectrum sharing technologies that will lead to more efficient and effective use of the 5G and future wireless networks.

New Mexico Space Missions

Department of Defense Launch Support and Infrastructure Program for Small-Class and Medium-Class Payloads

The Senate Armed Services Committee adopted an amendment by Senator Heinrich that authorizes the Secretary of Defense to carry out a program to enhance infrastructure and improve support activities for the processing and launch of Department of Defense (DoD) small-class and medium-class payloads. The language would establish a program and plan which would include how the Secretary intends to:

(1) Invest in infrastructure to improve operations at ranges and Federal Aviation Administration (FAA)-licensed spaceports consistent with usage by the DoD;
(2) Take measures to normalize processes, systems, and products across ranges and spaceports to minimize burden on launch providers; and
(3) Improve transparency, flexibility, and responsiveness for launch scheduling, factoring in proximity to, and quantity of, existing commercial airline flight patterns.

The provision would require the Secretary to submit to the congressional defense committees, not later than 270 days after the enactment of this Act, a report on the plan for such a program.

Spaceport America in New Mexico is a licensed inland spaceport that provides surface-to-space open sky launches landing in restricted flight zones. The New Mexico Spaceport is located next to White Sands Missile Range (WSMR) where the DoD controls the only restricted air space in the country besides the White House.

Space Sensor Layer

In an effort to develop a reliable defense against cruise missiles and hypersonic weapons, Senator Heinrich and Senator Deb Fischer (R-Neb.) added $108 million for a space sensor layer that will help correlate data and track the incoming target for intercept. Senator Heinrich crafted language to help prioritize this capability gap and increased funding.

Tactically Responsive Space Launch Operations Plan

The Senate Armed Services Committee adopted an amendment by Senator Heinrich that requires a plan from the U.S. Department of Defense (DoD)for tactical responsive launch. The language directs the Secretary of Defense, in consultation with the Director of National Intelligence, to develop a plan to leverage and analyze commercial space launch capabilities and to integrate these capabilities into DoD space operations. The language also requires the Secretary to provide a briefing to the congressional defense committees not later than March 1, 2020, on such plan.

Space Rapid Capabilities Office (Sp-RCO)

The Senate Armed Services Committee authorized $18.88 million for the Space Rapid Capabilities Office (Sp-RCO) which is housed at Kirtland AFB. As Ranking Member of the Strategic Forces Subcommittee, Senator Heinrich has fought to ensure New Mexico remains the small satellite center of excellence for the military. Senator Heinrich recently announced plans

for the establishment of additional classified workspace, near Sp-RCO, that can be used by potential commercial partners to facilitate the rapid fielding of new space capabilities.

Space Test Program (STP)

The Senate Armed Services Committee authorized $26.09 million for the Space Test Program (STP) which is housed at Kirtland Air Force Base. As Ranking Member of the Strategic Forces Subcommittee, Senator Heinrich has fought to ensure New Mexico remains the small satellite center of excellence for the military. Senator Heinrich has strongly supported STP's mission to secure launches for experimental spacecraft from emerging entrants including Rocket Lab or Vox Space that are smaller and far less expensive than traditional military satellites that are launched aboard larger rockets under the National Security Space Launch program. Senator Heinrich included provisions elsewhere in the mark to establish a program to improve infrastructure and launch support at FAA licensed spaceports. Since 1965, the STP has conducted space test missions for the purpose of accelerating Department of Defense space technology transformation while lowering developmental risk.

Rocket Systems Launch Program

The Senate Armed Services Committee authorized $13.19 million for the Rocket Systems Launch Program (RSLP) which is housed at Kirtland Air Force Base. As Ranking Member of the Strategic Forces Subcommittee, Senator Heinrich has fought to ensure New Mexico remains the small satellite center of excellence for the military. Senator Heinrich supports the Rapid Agile Launch Initiative which seeks to award launch service agreements with non-traditional, venture-class companies.

China Space Industrial Base Study

The Senate Armed Services Committee adopted an amendment by Senator Heinrich that directs the Secretary of Defense to provide, not later than March 15, 2020, a briefing on the current state of the small satellite and small launch industry in China, to include an assessment of the role of Chinese government support in the growth of these companies and a set of recommended steps and investments the Secretary should take to ensure the Department of Defense has long-term access to world-leading small satellite and small launch technologies and capabilities from U.S. companies.

Artificial Intelligence

Armed Forces Digital Advantage Act

The Senate Armed Services Committee adopted an amendment by Senator Heinrich that incorporated legislation introduced on May 15, 2019, the Armed Forces Digital Advantage Act (S. 1471), which emphasizes digital engineering as a core competency of the U.S. Department of Defense (DoD) and establishes a career track for computer scientists in the military. This effort

would modernize the DoD workforce by adding a recruitment focus and establishing military career tracks for digital engineering that will provide incentives for service members to specialize in computer science and have accelerated promotion tracks. The language requires a Chief Digital Engineering Recruitment and Management Officer and a plan for each Service to establish new career tracks.

As Artificial Intelligence (AI) becomes increasingly prioritized, computer coding skills should be treated similarly to mission-critical foreign language skills. In addition to building a younger generation of AI experts, this Act creates an avenue for educating mid-to-senior level leaders and policy makers about the importance of data. With mid-to-senior level leadership trained in AI and an appreciation for how data underlies AI, we have every opportunity to get ahead.

Artificial Intelligence Commercial Solutions

The Senate Armed Services Committee adopted an amendment by Senator Heinrich that secured $7.5 million specifically for accelerating commercial AI solutions. The committee noted the importance of accelerating AI applications in support of the Joint Artificial Intelligence Center's (JAIC) National Mission Initiatives, including disaster response and predictive maintenance. Heinrich's language supports the use of commercial AI solutions and urges the Defense Innovation Unit to coordinate with the JAIC to identify problem sets facing the Department and to seek commercial AI solutions.

U.S. Department of Defense Artificial Intelligence Investment Inventory

The Senate Armed Services Committee adopted an amendment by Senator Heinrich directing the Comptroller to brief the defense committees by September 1, 2019 on the total complement of artificial intelligence (AI) investments, to include PE and line numbers amounts with sufficient detail and description of those investments. Senator Heinrich is co-founder of the Senate Artificial Intelligence Caucus and believes it is important that the Department of Defense (DoD) have accurate insight to the nature and extent of investments in AI.

National Security Commission on Artificial Intelligence – Extension of Authority

The Senate Armed Services Committee adopted an amendment by Senator Heinrich that extends the duration of the current Artificial Intelligence Commission in order to account for time lost due to the government shutdown.

New Mexico Military Housing Reform and Contamination Clean-Up

Military Housing Reform

The Senate Armed Services Committee adopted an amendment by Senator Heinrich that establishes a uniform code of basic housing standards and requires inspections to ensure compliance. This uniform code provides for safety, comfort, and habitability for military housing

units and ensures the inspection of such units adhere to this standard. This is a critical step in addressing the problems associated with military housing around the world and ensuring our warfighters live in the healthy dwellings they deserve.

The Senate Armed Services Committee NDAA takes other meaningful steps to address serious issues with the Military Housing Privatization Initiative, including: creating a Tenant Bill of Rights, setting up a dispute resolution process, and increasing oversight Holding private military housing companies accountable by instating new quality assurance and quality control measures and increasing health and hazard inspections Strengthening management of military housing by providing an additional $301.8 million to ensure each installation has the necessary government housing personnel to implement thorough oversight and planning measures

Perfluorooctanesulfonic acid (PFOS) and Perfluorooctanoic acid (PFOA) Contamination Cleanup

The Senate Armed Services Committee adopted an amendment by Senator Heinrich to address Perfluorooctanesulfonic acid (PFOS) and Perfluorooctanoic acid (PFOA) contamination at Cannon Air Force Base. As a result of contamination, New Mexico dairy farmers' livelihoods are threatened. The contamination was caused by the U.S. Air Force, but the Air Force has not yet addressed immediate needs for filtration or long-term remediation. The legislative language provides the appropriate authorities to enable the Air Force to take action.

Senator Heinrich also fought for the continued funding of the ongoing Centers for Disease Control and Prevention human health study on PFAS in drinking water. Heinrich secured an additional $10 million to the President's Budget to demonstrate and validate the most promising innovative technologies that can meet the U.S. Department of Defense's most urgent requirements, provide a return on investment, and are executed through a free and open competition. This funding helps ensure the safety and welfare of service members and their dependents by eliminating or reducing the generation of pollution and use of hazardous materials and reducing the cost of remedial actions and compliance with environmental laws and regulations, specifically as it relates to per- and polyfluoroakyl substances; develop, demonstrate, validate, and field fluorine-free firefighting foam; and long-term environmental threats to sustain training and testing ranges.

New Mexico Military Energy Resilience

Military Environmental Research Programs

The Senate Armed Services Committee adopted an amendment by Senator Heinrich and Senator Angus King (I-Maine) that would direct $10 million for development and demonstration of long-duration, on-site battery storage for distributed energy applications, $10 million for development, demonstration and validation of secure microgrids for both installations and forward operating bases, $10 million for development, demonstration, and validation of non-fluorine based

firefighting foam and $5 million for development, demonstration, and validation of technologies that can harvest potable water from air.

U.S. Department of Defense Energy Siting Clearinghouse

Senator Heinrich strongly supported a bipartisan amendment adopted in committee that eliminated a provision proposed by the chairman that would have severely restricted the siting of wind farms in any area with military aircraft training and operations. The proposed provision was clearly not needed given that nearly all of New Mexico's existing wind farms are sited in these areas without harm to military operations or training. Any possible impacts from wind turbines on military and civilian aviation have always been successfully resolved through the U.S. Department of Defense's energy clearinghouse and Federal Aviation Administration's aeronautical study process. If it hadn't been eliminated, the proposal would have restricted New Mexico's ability to develop additional wind generation on federal, state and private land just as the state is transitioning to clean energy technologies.

Aerospace Technology Development/Demonstration

Senator Heinrich secured an additional $5 million to fund the design and manufacturing of aircraft active winglets and aft body drag reduction devices, as well as high pressure compressor blade coatings that have demonstrated reduced drag, shown fuel savings, and decreased maintenance requirements. These small fins adhere to each side of the C-17's aft fuselage to reduce drag and have shown a 1.2 percent reduction in fuel burn at cruise. This results in a cost savings of about $10 million each year for the 40+ years of the fleet.