science agencies to unite, to collaborate, and to drive the innovation necessary to lead before any of our competitors seek to leave us behind. That is why we have this bill. As the chair said, this has passed the House. Our colleagues in the Senate just need to do their jobs.

This collaboration between NSF and the DOE is not new. In fact, they have an extensive history of joint activities, such as support for the development of the Vera C. Rubin Observatory, a world-class tool for scientific discovery and astronomy located in Chile. We are proud of that partnership.

A testament to the power of these collaborations, this observatory just reached a major milestone with the installation of the Large Synoptic Survey Telescope, the LSST, the largest digital camera ever built. This facility will soon be ready to scan the sky for the next 10 years, creating an ultrahigh definition, time-lapsed record of our universe.

The DOE and NSF Interagency Research Act strengthens the legislative foundation of our beloved CHIPS and Science Act, a landmark bill that enables both agencies to foster a more collaborative research environment to maximize their collective impacts for our Nation.

Mr. Speaker, for all of these reasons, this bipartisan legislation falls upon us, and I encourage all of my colleagues to support it.

Mr. Speaker, I thank the gentleman from Indiana (Mr. BAIRD), my dear friend and one of my favorite colleagues—if that is okay and germane to say—for his collaboration on this bill. We are both midwesterners. He is an incredibly accomplished academic, veteran, and businessman from an important part of our Nation. I have had the sincere privilege of collaborating on legislation with the gentleman since we were first sworn into Congress.

Mr. Speaker, we are again partnering on H.R. 1350, and I urge my colleagues to vote in support of this bill, as I have done in other sessions, so that we can implore the Senate to do their part. We are introducing this bill early in the 119th session. We will pass it through the House and, hopefully, see this become law.

Mr. Speaker, I yield back the balance of my time.

Mr. BABIN. Mr. Speaker, I yield myself the balance of my time.

Mr. Speaker, H.R. 1350, the DOE and NSF Interagency Research Act, will support U.S. competitiveness in emerging technologies and key economic sectors while leveraging taxpayer dollars, enabling more to be accomplished with fewer resources.

Mr. Speaker, I appreciate the good work of my colleagues, Representatives STEVENS and BAIRD. I urge my colleagues to support this bill, and I yield back the balance of my time.

Mr. BAIRD. Mr. Speaker, I rise in support of the Department of Energy and National Science Foundation Interagency Research Act, and I thank Congresswoman HALEY STEVENS for working with me on this bipartisan bill.

The Department of Energy and the National Science Foundation are vehicles for some of our nation's cutting-edge scientific research. Combined, these agencies tackle the modern challenges of physics, quantum information sciences, Artificial Intelligence, and beyond. However, there is no clear directive for these organizations to work together.

This LegisLation explicitly directs the Secretary of Energy and the Director of the NSF to coordinate their activities to accelerate research and unlock new opportunities.

Operating in a silo is never the best practice when it comes to conducting scientific research, especially as our country looks to maximize the use of Americans' taxpayer dollars AND bolster our science and technology sectors to combat the growing threat of the Chinese Communist Party.

With this bill, the Department of Energy and the NSF can maximize their impact through coordination and leveraging each other's investments in research and development. The United States has earned its reputation as a world leader in scientific research and innovation, and now more than ever, we must reinforce critical partnerships that promote these advancements.

As we face increased competition from Communist China, we must ensure WE lead the world in research and development, including in areas like Artificial Intelligence, so that our country—not Communist China—continues to set the rules of the road.

Thank you again to Congresswoman Stevens for working with me on this commonsense, bipartisan approach that empowers American innovation. This legislation unanimously passed the U.S. House of Representatives in 2023, and I hope we see this bill across the finish line this Congress.

The SPEAKER pro tempore (Mr. KENNEDY of Utah). The question is on the motion offered by the gentleman from Texas (Mr. BABIN) that the House suspend the rules and pass the bill, H.R. 1350.

The question was taken; and (two-thirds being in the affirmative) the rules were suspended and the bill was passed.

A motion to reconsider was laid on the table.

DOE AND NASA INTERAGENCY RESEARCH COORDINATION ACT

Mr. BABIN. Mr. Speaker, I move to suspend the rules and pass the bill (H.R. 1368) to provide for Department of Energy and National Aeronautics and Space Administration research and development coordination, and for other purposes.

The Clerk read the title of the bill.

The text of the bill is as follows:

H. R. 1368

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE.

This Act may be cited as the ''DOE and NASA Interagency Research Coordination Act''.

SEC. 2. DEPARTMENT OF ENERGY AND NATIONAL AERONAUTICS AND SPACE ADMINISTRATION RESEARCH AND DEVELOPMENT COORDINATION.

(a) IN GENERAL.—The Secretary of Energy (in this section referred to as the ''Secretary'') and the Administrator of the National Aeronautics and Space Administration (in this section referred to as the ''Administrator'') may carry out, as practicable, cross-cutting and collaborative research and development activities to support the advancement of Department of Energy and National Aeronautics and Space Administration mission requirements and priorities. The Secretary and Administrator, in accordance with subsection (e), may make competitive awards to carry out such activities.

(b) MEMORANDA OF UNDERSTANDING.—The Secretary and the Administrator shall coordinate the activities under subsection (a) through memoranda of understanding, or other appropriate interagency agreements.

(c) COORDINATION.—In carrying out the activities under subsection (a), the Secretary and the Administrator may carry out the following:

(1) Conduct collaborative research and development activities in a variety of focus areas that may include the following:

(A) Propulsion systems and components, including nuclear thermal and nuclear electric propulsion, radioisotope power systems, thermoelectric generators, advanced nuclear fuels, and heater units.

(B) Modeling and simulation, machine learning, data assimilation, large scale data analytics, and predictive analysis in order to optimize algorithms for mission-related purposes.

(C) Fundamental high energy physics, astrophysics, and cosmology, including the nature of dark energy and dark matter, in accordance with section 305 of the Department of Energy Research and Innovation Act (42 U.S.C. 18643).

(D) Fundamental earth and environmental sciences, in accordance with section 306 of the Department of Energy Research and Innovation Act (42 U.S.C. 18644) and section 60501 of title 51, United States Code.

(E) Quantum information sciences, including quantum computing and quantum network infrastructure, in accordance with sections 403 and 404 of the National Quantum Initiative Act (15 U.S.C. 8853 and 8854).

(F) Radiation health effects, in accordance with section 306 of the Department of Energy Research and Innovation Act (42 U.S.C. 18644).

(G) Ground- and space-based technology necessary for the transmission to the Earth's surface of solar energy collected in space.

(H) Other areas of potential research and development collaboration the Secretary and the Administrator determine important to achieving agency missions and objectives.

(2) Develop methods to accommodate large voluntary data sets on space and aeronautical information on high-performance computing systems with variable quality and scale.

(3) Promote collaboration and data and information sharing between the Department of Energy, National Aeronautics and Space Administration, the National Laboratories, and other appropriate entities by providing the necessary access and secure data and information transfer capabilities.

(4) Support the Administration's access to the Department's research infrastructure and capabilities, as practicable.

(d) AGREEMENTS.—In carrying out the activities under subsection (a), the Secretary and the Administrator are authorized to—

(1) carry out reimbursable and non-reimbursable agreements between the Department of Energy and the National Aeronautics and Space Administration; and

(2) collaborate with other Federal agencies, as appropriate.

(e) MERIT REVIEW PROCESS.—The Secretary and the Administrator shall ensure any competitive awards made to carry out the activities under section (a) shall follow all appropriate laws and agency policies, including the following:

(1) Selection by merit-review-based processes.

(2) Consideration of applications from Federal agencies, National Laboratories, institutions of higher education, non-profit institutions, and other appropriate entities.

(f) REPORT.—Not later than two years after the date of the enactment of this section, the Secretary and the Administrator shall submit to the Committee on Science, Space, and Technology of the House of Representatives and the Committee on Energy and Natural Resources and the Committee on Commerce, Science, and Transportation of the Senate, a report detailing the following:

(1) Interagency research and development coordination activities between the Department of Energy and the National Aeronautics and Space Administration carried out under this section.

(2) How such coordination activities expand the technical capabilities of the Department and the Administration.

(3) Collaborative research and development achievements.

(4) Areas of future mutually beneficial activities, including potential applications of clean energy technologies, such as marine energy.

(5) Continuation of coordination activities between the Department of Energy and the National Aeronautics and Space Administration.

(g) RESEARCH SECURITY.—The activities authorized under this section shall be applied in a manner consistent with subtitle D of title VI of the Research and Development, Competition, and Innovation Act (enacted as division B Public Law 117–167; 42 U.S.C. 19231 et seq.).

The SPEAKER pro tempore. Pursuant to the rule, the gentleman from Texas (Mr. BABIN) and the gentlewoman from Michigan (Ms. STEVENS) each will control 20 minutes.

The Chair recognizes the gentleman from Texas.

GENERAL LEAVE

Mr. BABIN. Mr. Speaker, I ask unanimous consent that all Members may have 5 legislative days to revise and extend their remarks and include extraneous material on H.R. 1368, the bill now under consideration.

The SPEAKER pro tempore. Is there objection to the request of the gentleman from Texas?

There was no objection.

Mr. BABIN. Mr. Speaker, I yield myself such time as I may consume.

Mr. Speaker, I rise in support of H.R. 1368, the DOE and NASA Interagency Research Coordination Act.

The Department of Energy and NASA have an extensive history of collaboration, which has enhanced both our understanding of the universe and our ability to explore well beyond our planet.

The Voyager spacecrafts, which were launched more than 40 years ago and are now flying far beyond our own solar system in interstellar space, continue to operate with DOE's groundbreaking propulsion systems.

This DOE-NASA partnership has driven and will continue to drive advancements in high-performance computing, keeping us at the forefront of research and development.

Additionally, their collaborative work on nuclear energy is vital to establishing a long-term human presence on the Moon and next-generation in-space propulsion. However, these joint technological breakthroughs not only aid our space endeavors, but they also can be utilized here on Earth to increase global energy production from reliable energy resources.

Furthermore, this partnership will help to propel satellite development, space situational awareness, and even planetary defense from near-Earth objects.

In short, this bill enables two of our chief scientific agencies to do better work by tackling some of our most challenging scientific problems together.

Mr. Speaker, I thank my colleague, Representative BEGICH, for introducing this legislation. I also thank Representative WHITESIDES for cosponsoring it. This bipartisan bill earned unanimous support in the Committee on Science, Space, and Technology and passed in the House last Congress.

Mr. Speaker, I urge my colleagues to once again support it on the floor today, and I reserve the balance of my time.

Ms. STEVENS. Mr. Speaker, I yield myself such time as I may consume.

Mr. Speaker, I rise in support of the DOE and NASA Interagency Research Coordination Act, H.R. 1368.

The gentleman from Alaska (Mr. BEGICH) and the gentleman from California (Mr. WHITESIDES), the vice ranking member of the Committee on Science, Space, and Technology, introduced this bill. It is another great bipartisan bill.

These Members of Congress from the Western part of this Nation fully understand and appreciate what it means to have coordinated interagency activities on behalf of our competitive abilities. Enhancing this type of collaboration between the Department of Energy and the National Aeronautics and Space Administration will have a multiplier effect on the creative, innovative, and inspiring work of these two agencies. It is an important tool in furthering agency missions and the Nation's goals in science and exploration.

The Department of Energy and NASA's partnership is already demonstrating impressive results. For example, earlier this year, NASA and the DOE collaborated on selecting an award for continued industry work on a space microreactor design that could provide a supply of power for use on the Moon and beyond.

Just last week, scientists posted new data from the Department of Energy's ground-based Dark Energy Spectroscopic Instrument, providing insights on the mysterious dark energy of the universe that NASA's science satellites also study from space.

□ 1530

We are on the tipping point of major things. We are working on and seeing efficiency breathe its way into our government. The whole deal here is that if we get H.R. 1368, the Department of Energy and NASA will build on their longstanding partnership and do even more. They will save the taxpayer money, and they will advance this Nation. They will showcase that we are not getting in the way of where we want to go as a country because we are trimming bureaucracy.

The act authorizes the agencies to carry out cross-cutting and collaborative R&D activities and identifies nuclear power and propulsion, high energy physics and astrophysics, Earth and environmental sciences, and quantum information sciences as potential areas for joint activity.

I only hope that the citizens of America are tuned into this debate in this moment because this is really exciting.

The bill directs DOE and NASA to coordinate activities through MOUs, memorandum of understanding. The legislation authorizes the use of reimbursable and nonreimbursable agreements. Again, the effective utilization of the taxpayer dollar of which we here in the United States Congress are stewards of.

In addition, I will be providing direction on a merit review process between the two agencies, reporting and compliance with research security requirements in carrying out collaborative activities pursued under the act. This is a practical and awe-inspiring bill to maximize the research and development activities and capabilities and results of our Federal agencies.

Mr. Speaker, I enthusiastically urge my colleagues to vote ''yes'' on H.R. 1368.

Mr. Speaker, I reserve the balance of my time.

Mr. BABIN. Mr. Speaker, I yield such time as he may consume to the gentleman from Alaska (Mr. BEGICH).

Mr. BEGICH. Mr. Speaker, I rise in support of my bill, H.R. 1368, the Department of Energy and NASA Interagency Research Coordination Act.

This legislation authorizes the U.S. Department of Energy and the National Aeronautics and Space Administration to carry out research and development activities focused on the advancement of shared DOE and NASA mission priorities. This includes R&D in critical technology areas like nuclear thermal propulsion systems, astrophysics, radiation health effects, machine learning, and more.

DOE and its predecessor, the Atomic Energy Commission, have a long and successful history of interagency collaboration with NASA. Over the last 60 years, this relationship has evolved from radioisotope power systems to new areas of research such as quantum information and environmental sciences.

This interagency relationship has greatly benefited my home State of

Alaska. The North Slope of Alaska is home to the Department of Energy's Atmospheric Radiation Measurement, or ARM, user facility, which gathers data pertaining to clouds and radiation processes in cold environments and high altitudes.

Given its strengths, NASA has partnered with this DOE facility to conduct research in areas such as aerosols. In addition, any atmospheric data from ARM stands to benefit the Pacific Spaceport Complex on Kodiak Island in my home State of Alaska, which supports commercial and government suborbital and orbital launch missions, as well.

Additionally, H.R. 1368 requires the Secretary and the Administrator to implement research security provisions consistent with the CHIPS and Science Act of 2022. Given the transformational nature of these emerging technologies and their impact on national security, this language is necessary to protect our investments and breakthroughs from hostile powers such as the Chinese Communist Party.

I thank my colleague, Mr. WHITESIDES of California, for working with me on this important legislation and continuing the bipartisan tradition of the Science, Space, and Technology Committee.

Mr. Speaker, H.R. 1368 is a good governance and commonsense bill, and I urge my colleagues to support this legislation.

Ms. STEVENS. Mr. Speaker, I yield myself the balance of my time.

Mr. Speaker, the gentleman from the West, Mr. BEGICH and Mr. WHITESIDES, along with Mr. KENNEDY, who appear to be three freshman Members of Congress, have come together in an important way to introduce H.R. 1368. I continue to urge a ''yes'' vote on the DOE and NASA Interagency Research Coordination Act.

Mr. Speaker, I yield back the balance of my time.

Mr. BABIN. Mr. Speaker, H.R. 1368, the DOE and NASA Interagency Research Act is a smart piece of legislation that will ensure that we stay competitive in the global race to return humans to the Moon and then send crewed missions on to Mars.

Without key partnerships like this, we would be unable to take the crucial steps in energy production and propulsion technologies necessary to extend our reach beyond Earth. I thank Representative BEGICH and Representative WHITESIDES for their leadership in moving this bill forward.

Mr. Speaker, I urge my colleagues to support it, and I yield back the balance of my time.

The SPEAKER pro tempore. The question is on the motion offered by the gentleman from Texas (Mr. BABIN) that the House suspend the rules and pass the bill, H.R. 1368.

The question was taken; and (two-thirds being in the affirmative) the rules were suspended and the bill was passed.

A motion to reconsider was laid on the table.

INNOVATIVE MITIGATION PARTNERSHIPS FOR ASPHALT AND CONCRETE TECHNOLOGIES ACT

Mr. BABIN. Mr. Speaker, I move to suspend the rules and pass the bill (H.R. 1534) to strengthen and enhance the competitiveness of American industry through the research and development of advanced technologies to improve the efficiency of cement, concrete, and asphalt production, and for other purposes.

The Clerk read the title of the bill.

The text of the bill is as follows:

H.R. 1534

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE.

This Act may be cited as the ''Innovative Mitigation Partnerships for Asphalt and Concrete Technologies Act'' or the ''IMPACT Act''.

SEC. 2. ADVANCED CEMENT, CONCRETE, AND ASPHALT PRODUCTION RESEARCH PROGRAM.

(a) PROGRAM.—Part I of subtitle C of title V of division D of the Infrastructure Investment and Jobs Act (Public Law 117–58) is amended by adding at the end the following new section:

''SEC. 40523. ADVANCED CEMENT, CONCRETE, AND ASPHALT PRODUCTION RESEARCH PROGRAM.

''(a) DEFINITIONS.—In this section:

''(1) ADVANCED PRODUCTION.—The term 'advanced production' means production of cement, concrete, or asphalt with one or more of the following improvements with respect to the production of commercially available cement, concrete, or asphalt:

''(A) Improved cost-effectiveness.

''(B) Improved quality, durability, engineering performance, and resilience.

''(C) Improved efficiency of resource consumption and material demand.

''(2) ALTERNATIVE FUELS.—The term 'alternative fuels' means any solid, liquid, or gaseous materials, or a combination thereof, used to replace or supplement any portion of fuels used in combustion or pyrolysis for low-emissions cement, concrete, or asphalt.

''(3) COMMERCIALLY AVAILABLE.—The term 'commercially available', with respect to cement, concrete, and asphalt, means that the cement, concrete, or asphalt is—

''(A) readily and widely available for purchase in the United States; and

''(B) produced using a production method of cement, concrete, or asphalt products, as applicable, that is widely in use.

''(4) ELIGIBLE ENTITY.—The term 'eligible entity' means any of the following:

''(A) An institution of higher education.

''(B) An appropriate State or Federal entity, including a federally funded research and development center of the Department.

''(C) A nonprofit research institution.

''(D) A private entity.

''(E) Any other relevant entity the Secretary determines appropriate.

''(F) A partnership or consortium of two or more entities described in subparagraphs (A) through (E).

''(5) ENGINEERING PERFORMANCE-BASED STANDARD.—The term 'engineering performance-based standard' means an existing engineering standard with respect to which the requirements applicable to such standard are stated in terms of required results, with criteria for verifying compliance rather than specific composition, design, or procedure.

''(6) INSTITUTION OF HIGHER EDUCATION.—The term 'institution of higher education' has the meaning given such term in section 101 of the Higher Education Act of 1965 (20 U.S.C. 1001).

''(7) LOW-EMISSIONS CEMENT, CONCRETE, AND ASPHALT.—The term 'low-emissions cement, concrete, and asphalt' means cement, concrete, asphalt binder, or asphalt mixture that reduces, to the maximum extent practicable, greenhouse gas or directly-related copollutant emissions to levels below commercially available cement, concrete, or asphalt.

''(8) RURAL AREA.—The term 'rural area' has the meaning given such term in section 343(a) of the Consolidated Farm and Rural Development Act (7 U.S.C. 1991(a)).

''(b) ESTABLISHMENT.—Not later than 180 days after the date of the enactment of this section, the Secretary shall establish a program of research, development, demonstration, and commercial application of advanced tools, technologies, and methods for advanced production and use of low-emissions cement, concrete, and asphalt in order to accomplish the following:

''(1) Increase the technological and economic competitiveness of industry and production in the United States.

''(2) Expand and increase the stability of supply chains through enhanced domestic production, nearshoring, and cooperation with allies.

''(3) Achieve measurable greenhouse gas or directly related copollutant emissions reductions in the production processes for cement, concrete, and asphalt products.

''(4) Create quality domestic jobs.

''(c) REQUIREMENTS.—In carrying out the program under subsection (b), the Secretary shall carry out the following:

''(1) Coordinate with the programs and activities authorized under title VI of division Z of the Consolidated Appropriations Act, 2021 (relating to industrial and manufacturing technologies) and the amendments made by such title.

''(2) Coordinate across all relevant program offices of the Department, including the Office of Science, the Advanced Research Projects Agency-Energy, the Office of Clean Energy Demonstrations, the Office of Energy Efficiency and Renewable Energy, the Office of Fossil Energy, the Office of Industrial Efficiency and Decarbonization, the Office of Manufacturing and Energy Supply Chains, and the Office of Nuclear Energy.

''(3) Leverage, to the extent practicable, the research infrastructure of the Department, including scientific computing user facilities, x-ray light sources, neutron scattering facilities, and nanoscale science research centers.

''(4) Conduct research, development, demonstration, and commercial application of the advanced production of low-emissions cement, concrete, and asphalt that have the potential to increase domestic production and employment in both advanced and commercially available processes.

''(d) STRATEGIC PLAN.—

''(1) IN GENERAL.—Not later than 180 days after the establishment of the program under subsection (b), the Secretary shall develop a 5-year strategic plan identifying research, development, demonstration, and commercial application goals for such program. The Secretary shall submit such plan to the Committee on Science, Space, and Technology of the House of Representatives and the Committee on Energy and Natural Resources of the Senate.

''(2) CONTENTS.—The strategic plan under paragraph (1) shall—