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NOMINATION TO THE NATIONAL AERONAUTICS AND SPACE ADMINISTRATION, THE CONSUMER PRODUCT SAFETY COMMISSION, AND THE U.S. DEPARTMENT OF COMMERCE

HEARING

BEFORE THE

COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION UNITED STATES SENATE

ONE HUNDRED FIFTEENTH CONGRESS

FIRST SESSION

NOVEMBER 1, 2017

Printed for the use of the Committee on Commerce, Science, and Transportation



Available online: http://www.govinfo.gov

U.S. GOVERNMENT PUBLISHING OFFICE
37–226 PDF WASHINGTON : 2019

SENATE COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION

ONE HUNDRED FIFTEENTH CONGRESS

FIRST SESSION

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NOMINATION TO THE NATIONAL AERONAUTICS AND SPACE ADMINISTRATION, THE CONSUMER PRODUCT SAFETY COMMISSION, AND THE U.S. DEPARTMENT OF COMMERCE

WEDNESDAY, NOVEMBER 1, 2017

U.S. SENATE,
COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION,
Washington, DC.

The Committee met, pursuant to notice, at 10:33 a.m. in Room SR–253, Russell Senate Office Building, Hon. John Thune, Chairman of the Committee, presiding.

Present: Senators Thune [presiding], Wicker, Cruz, Fischer, Moran, Sullivan, Inhofe, Lee, Moore Capito, Gardner, Young, Nelson, Udall, Peters, Duckworth, Hassan, and Cortez Masto.

OPENING STATEMENT OF HON. JOHN THUNE, U.S. SENATOR FROM SOUTH DAKOTA

The CHAIRMAN. Good morning.

I want to say thank you to Congressman Bridenstine, to Ms. Baiocco, to Dr. Jacobs, and to Ms. Nikakhtar for being here, and for your willingness to serve in the important positions to which you have been nominated.

We have four well-qualified nominees before our Committee today. Congressman James Bridenstine has been nominated to serve as the next NASA Administrator. He was elected in 2012 to represent Oklahoma's First Congressional District, and currently serves on the House Armed Services Committee, and the Science, Space, and Technology Committee.

Congressman Bridenstine also has a distinguished military career, beginning in the Navy flying the E–2C Hawkeye off the USS Abraham Lincoln aircraft carrier, from which he flew combat missions in Iraq and Afghanistan. While on active duty, he transitioned to the F–18 Hornet and flew as an "aggressor" at the Naval Strike and Air Warfare Center.

After leaving active duty, Congressman Bridenstine flew counterdrug missions in Central and South America in the Navy Reserve, and currently is a member of the 137th Special Operations Wing of the Oklahoma Air National Guard.

During his tenure in Congress, Representative Bridenstine has established a reputation as a leader on space policy. In fact, one of his most well known supporters is the former astronaut, and the second human to step foot on the moon, Colonel Buzz Aldrin.

Another supporter, John Hamre, former Deputy Secretary of Defense under President Clinton, and current President and CEO of the Center for Strategic and International Studies, said of him, "I have worked with Members of Congress for 40 years. Only very rarely have I seen a Member of Congress with such intensity and sophistication on an urgent national priority."

I know that many on this Committee, particularly the Ranking Member, are passionate about the space program and the inspiring work of NASA. Congressman Bridenstine, we look forward to hearing more about your vision for the agency.

We are also joined today by Dana Baiocco, who has been nominated to serve as a Commissioner of the Consumer Product Safety Commission. Born and raised in Yorkville, Ohio, Ms. Baiocco joined the law firm of Jones Day in 1998 and became a partner in 2007. She was one of the founding partners of Jones Day's Boston office, which opened in 2011.

Ms. Baiocco has dedicated her legal career to product safety and liability issues that will serve her well at the CPSC.

Currently, the CPSC is led by a Chairman who does not have a functioning majority. Earlier this month, we reported favorably Ann Marie Buerkle to be Chairman and to an additional term on the Commission.

It is my hope that the Senate will prioritize the Buerkle and Baiocco nominations soon, so we can move swiftly toward establishing a Chairman with a functioning majority at the CPSC.

Neil Jacobs has been nominated to serve as the Assistant Secretary of Commerce for Environmental Observation and Prediction. If confirmed, he will serve as one of the Deputy Administrators of the National Oceanic and Atmospheric Administration.

Dr. Jacobs is currently the Chief Atmospheric Scientist at Panasonic Avionics Corporation, where he directs the research and development of the aviation weather observing program, as well as the company's numerical forecast models.

He is the Chair of the American Meteorological Society's Forecast Improvement Group, and also serves on the World Meteorological Organization's aircraft-based observing systems expert team.

Prior to joining Panasonic in 2005, Dr. Jacobs worked on various analyses and modeling projects including NASA's Earth Systems Science Program, NOAA's satellite program, and the Department of Energy's Ocean Margins Program.

Dr. Jacobs' experience makes him well-tailored to serve in a leadership role at NOAA.

Nazakhtar Nikakhtar has been nominated to serve as Assistant Secretary of Commerce for Industry and Analysis. Ms. Nikakhtar is currently a partner at Cassidy Levy Kent, a leading international trade law firm.

For over a decade, Ms. Nikakhtar has successfully represented U.S. businesses—particularly those in the industrial, agricultural, chemical, and steel sectors—in international trade law matters, including trade remedy matters, customs matters, and World Trade Organization dispute settlement.

Prior to private practice, she served at the Department of Commerce advising on legal and regulatory matters related to the en-

forcement of U.S. trade laws and bilateral trade negotiations, where she received several awards for her work.

Her technical expertise makes Ms. Nikakhtar a well qualified candidate to run the Industry and Analysis unit at the International Trade Administration.

As I have noted, all of these nominees are well qualified for the positions to which they have been nominated and I look forward to their swift confirmation.

Once again, I want to thank all of you for appearing today, for testifying, and for your willingness to fill these critical posts.

At this point, I will turn to Ranking Member Nelson for any opening remarks he would like to make.

STATEMENT OF HON. BILL NELSON,
U.S. SENATOR FROM FLORIDA

Senator NELSON. Thank you, Mr. Chairman.

And I want to welcome our nominees, and I want to thank you for your public service, and also thank you for offering yourselves for public service.

In the interest of time, my opening focus will be on the NASA nomination, and I will include a statement in the record with regard to the other witnesses.

The Chairman has already said it that, of course, I am passionate about NASA having a qualified and elected leader, and it comes from the deep respect that I have for NASA.

Indeed, NASA is a family in many ways and for everything that the space program does to advance our national security, our economy, our understanding of the cosmos and of ourselves, and for the hope and inspiration that NASA provides to all.

It also comes—this deep respect for NASA—comes from having witnessed, very directly, the tragic consequences when NASA leadership has failed us.

We have 3 new human spaceflight vehicles right now that are at the most critical phase of their development. We have over 70 ambitious science missions in operation and 50 more under development.

Now, as much as ever, NASA needs and deserves an Administrator who is up to the challenge of leading the agency through this critical juncture. We are about to embark on putting Americans back into space on American rockets within a year and a half, 2 years.

And we are about to embark within 2 years on the start of sending humans all the way to Mars and to bring them back safely. And that big rocket will launch within two years, the largest rocket ever.

And so, failure at this particular juncture could jeopardize the lives of brave astronauts and setback the search for life beyond Earth for decades. Failure is not an option.

The NASA Administrator should be a consummate space professional who is technically and scientifically competent, and is a skilled executive. More importantly, the Administrator must be a leader who has the ability to unite scientists, engineers, commercial space interests, policymakers, the Congress, and the public on a shared vision for future space exploration.

Now, Congressman Bridenstine, you have been nominated. I respect that and respect the process, and we want to get into the process of understanding how you would meet these criteria.

As I have said, NASA is a family. This committee has heard me say many times NASA is not political. The leader of NASA should not be political. The leader of NASA should not be bipartisan. The leader of NASA should be nonpartisan. And when that has occurred that it has been partisan in the past, we have had a disaster, and I have shared with you one of those disasters in our conversation earlier this morning.

While your time as a pilot and your service to our country in the military is certainly commendable, it does not make you qualified to make the complex and nuanced engineering, safety, and budgetary decisions for which the head of NASA must be accountable.

What is troubling to members of this Committee is your past statements on climate change are troubling as compared to your most recent statements on climate change. And from a scientific perspective, it has sparked great concern from climate experts as to your statements in the past.

But that brings me to my greatest concern about your nomination. Your recent public service career does not instill the confidence about your leadership or ability to bring people together. Unity is so important in NASA instead of division. What your record is—and you will have a chance to discuss it—your record and your behavior in Congress has been divisive and it has been extreme as any that we have seen in Washington.

And this Senator is wondering, how does that fit with the leader of a technical agency where unity is often right on the line as to what is going to happen in success or failure of a mission or a program?

You have advocated for discriminatory policies toward the LGBT community. That runs contrary to the civil rights of Americans.

On the House floor, you had called President Obama dishonest, incompetent, and vengeful, and you followed up by calling Vice President Biden, "Equally unfit and even more embarrassing." But the divisive behavior and remarks does not stop there and it has not been reserved just for Democrats.

You attacked Speaker John Boehner for reaching across the aisle. You later tweeted your opposition to Paul Ryan because he was critical of the vile remarks that candidate Donald Trump had made about sexually assaulting women.

You made television commercials—and thus has evoked the comments that have been made publically by our colleague, Senator Rubio—you made television commercials deriding his work to find common ground on immigration and claiming that he was working to make America less safe. And that is in the transcript of those television commercials that you cut.

Later in Arizona, the GOP challenger to Senator McCain in his reelection in 2016, you accused—the GOP challenger had accused Senator McCain of being directly responsible for the rise of ISIS. And then you endorsed that challenger in her Republican primary against Senator McCain.

I think most of us here would believe that Senator McCain is an American hero. And I can tell you also as a bipartisan member of

the Armed Services Committee, where he chairs, I can tell you that those who would do our country harm have no greater enemy than John McCain.

And you have supported the Senate Conservatives Fund, a Political Action Committee that opposed Senator McConnell, opposed him in his primary, and any number of other Republican senators who did not meet the Committee's ideals.

So Congressman, you have gone to great lengths to try to convince folks—and I enjoyed our visit this morning—that you want to keep NASA a bipartisan and nonpartisan place and to work across party lines. But that is not what you said in January 2014 at a convention in South Carolina, and I am going to quote your words.

"You have collusion between Republicans and Democrats in Washington, D.C. They are coming together, and they are making deals . . . You have Republicans and Democrats trying to come together . . . But what we need is fighters. We need people who will stand up and say, 'No, we are not going to do this anymore.'"

So Congressman, on behalf of every Member who has devoted their career to reaching across the aisle to build consensus and to find working solutions for the American people, I want you to know that this senator is quite skeptical, and I take offense at that kind of quote. That we need fighters, not people coming together, not you have Republicans and Democrats trying to come together. That line of thinking is why Washington is broken.

NASA represents the best of what we can do as a people, and NASA is one of the last refuges of partisan politics. And when it has got partisan in the past, we have gotten in trouble. NASA needs a leader who will unite us, not divide us.

Respectfully, Congressman Bridenstine, I think you have a long way to go to prove to be that leader.

Mr. Chairman, that is my comment.

[The prepared statement of Senator Nelson follows:]

PREPARED STATEMENT OF HON. BILL NELSON, U.S. SENATOR FROM FLORIDA

Mr. Chairman, I'd like to extend a welcome to our nominees this morning. In the interest of time, my opening will focus on our NASA nominee. I'll include a statement in the record on our other witnesses.

It is certainly no secret how passionate I am about NASA having qualified and effective leadership. This passion comes from a deep respect I have for NASA and for everything the space program does to advance our national security, our economy, our understanding of cosmos and of ourselves, and for the hope and inspiration that NASA provides to all. It also comes from having witnessed, very directly, the tragic consequences when NASA leadership has failed us.

We have three new human spaceflight vehicles that are all at the most critical phase of their development. We have over 70 ambitious science missions in operation and 50 more under development. Now, more than ever, NASA needs—and deserves an administrator who is up to the challenge of leading the agency through this critical juncture. Because at this juncture, success will mean our triumphant return to deep space and rapidly expanding economic activity in Earth orbit. Failure, on the other hand, could jeopardize the lives of brave astronauts and set back the search for life beyond Earth for decades. Failure is not an option.

The NASA administrator should be a consummate space professional who is technically and scientifically competent and a skilled executive. More importantly, the administrator must be a leader who has the ability to unite scientists, engineers, commercial space interests, policymakers and the public on a shared vision for future space exploration.

Frankly, Congressman Bridenstine, I cannot see how you meet these criteria.

While your time as a pilot and your service to our country in the military is certainly commendable, it does not qualify you make the complex and nuanced engineering, safety and budgetary decisions for which the head of NASA must be accountable. Moreover, your past statements on climate change are troubling from a scientific perspective and have sparked great concern from climate experts around the nation, which brings me to my greatest concern regarding your nomination.

Your recent public service career does not instill great confidence about your leadership skills or ability to bring people together. In fact, your record and behavior in Congress is as divisive and extreme as any in Washington.

You have advocated for discriminatory policies toward the LGBT community, which runs contrary to the civil rights of these Americans and poisons our national discourse.

On the House floor, you called President Obama dishonest, incompetent and vengeful and followed it up by calling Vice President Biden "equally unfit and even more embarrassing." But your divisive behavior and remarks don't stop there and haven't been reserved just for Democrats.

You attacked Speaker John Boehner for reaching across the aisle. You later tweeted your opposition to Paul Ryan because he was critical of the vile remarks candidate Donald Trump made about sexually assaulting women.

You made television commercials attacking my friend and fellow Senator from Florida, Marco Rubio, deriding his work to find common ground on immigration and claiming he was working to make America less safe.

Later in Arizona, the GOP challenger to Senator McCain accused him of being directly responsible for the rise of ISIS. You then endorsed her in her Republican primary challenge to Senator McCain. Most of us believe John McCain is an American hero. As a bipartisan member of the Armed Services Committee, I can tell you that those who would do our country harm have no greater enemy than Chairman McCain.

And you've supported the Senate Conservatives Fund, a political action committee that opposed Senator McConnell in his primary and any number of other Republican senators who did not meet the committee's extremist ideals.

Mr. Bridenstine, you've gone to great lengths to try to convince folks that you want to keep NASA bipartisan and work across party lines, but that is not what you said in January 2014 at a convention in South Carolina.

These are your words not mine:

> *"You've got collusion between Republicans and Democrats in Washington, D.C.. They're coming together and they're making deals . . . You've got Republicans and Democrats trying to come together . . . But what we need is fighters. We need people who will stand up and say 'no, we're not going to do this anymore . . ."*

Congressman Bridenstine, on behalf of every member who has devoted their career to reaching across the aisle to build consensus and to find working solutions for the American people, I take offense to that. That line of thinking is why Washington is broken.

NASA represents the best of what we can do as a people. NASA is one of the last refuges from partisan politics. NASA needs a leader who will unite us, not divide us. Respectfully, Congressman Bridenstine, I don't think you're that leader.

The CHAIRMAN. Thank you, Senator Nelson.

We are going to turn to our panel. Before we do that, and we are going to start on my left and your right with Congressman Bridenstine, with your opening statements.

I would ask you, if you can, to confine your remarks to about 5 minutes, and obviously, we will include your entire written statements in the record.

And so, that is how we are going to proceed. The statements will be in the record. Obviously, we want to give our members as many opportunities to ask questions as we possibly can.

Before we allow Congressman Bridenstine to proceed though, however, his home State senator and a member of this Committee, Senator Inhofe, is here to make his introduction.

So Senator Inhofe is recognized.

STATEMENT OF HON. JIM INHOFE,
U.S. SENATOR FROM OKLAHOMA

Senator INHOFE. Thank you, Mr. Chairman.

I am pleased to introduce the real Jim Bridenstine, a friend, a colleague, a fellow pilot, and a resident of our city of Tulsa. We have a couple of things in common.

One is, we are both pilots and have extensive aviation background and the other is, we both served the First Congressional District of Oklahoma. He actually is serving today in the district that I was first elected to in the House.

I believe his background as an aviator, a lifelong passion for space, and efforts in Congress to modernize our Nation's space program will serve him well as the next NASA Administrator.

Jim has dedicated much of his adult life to serving his country, first as an active duty Navy pilot in Iraq and Afghanistan, serving as an Instructor in the Naval Strike and Air Warfare Center, and as a Naval reservist combating drug trafficking in Central and South America.

Jim currently serves as a Major in the Oklahoma Air National Guard. He is a recognized leader on space and weather issues.

In 2015, *SpaceNews* named him one of five space leaders making a difference, citing his efforts to ensure the more effective use of satellite-based weather data, promoted responsible opportunities for commercial space launches, and recognized the intersection of space and national security of the United States.

Jim's interest in aviation and space was obvious when he served as the Director of the Tulsa Air and Space Museum and organized the Quick Trip Air and Rocket Racing Show in 2010, which I happened to fly in.

NASA is poised to unleash the economic and potential of coordinated public and private investment in space activities, and I look forward to that leadership.

I would comment—since it was brought up as to what are the qualifications—that two very well respected people, Buzz Aldrin and Greg Autry, made the joint statement, "It does not take a rocket scientist to run NASA," and they go into the details as to the job that James Webb had done at one time.

I am quoting them, now, in a joint statement. "Finding another Webb is no easy task. The President considered several excellent candidates, some of whom we personally admire. But in the spirit of Webb's leadership, U.S. Representative Jim Bridenstine is the President's nominee and we heartily endorse him."

So it is my pleasure to introduce my House member, Jim Bridenstine.

The CHAIRMAN. Thank you, Senator Inhofe.

Congressmen Bridenstine, please proceed with your opening statement.

STATEMENT OF HON. JAMES BRIDENSTINE,
NOMINEE TO BE ADMINISTRATOR,
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

Representative BRIDENSTINE. Thank you, Senator Inhofe, for that very kind introduction mentioning my pilot experience. I recognize I am the junior pilot from the State of Oklahoma in the Oklahoma

delegation, and I appreciate your help, and support, and your service to the same constituents I now serve.

Thank you to Chairman Thune, and Ranking Member Nelson, members of the Senate Committee on Commerce, Space, and Transportation.

It is an honor to appear before you today as the nominee for NASA Administrator.

I want to recognize my family who is here with me. My wife Michelle, and my children Walker, Sarah, and Grant. Without their love and support, I would not be here in front of you today.

NASA is an extraordinary agency with an extremely talented and diverse workforce. It has brought about civilization-changing events and scientific discoveries. It has inspired billions of people and it represents what is exceptional about the United States of America, a spirit of adventure, a spirit of exploration, and a thirst for greater understanding of the Earth and the cosmos.

I am truly humbled by the prospect of leading this agency. I grew up reading about the heroes of the Apollo era, heroes like Gene Cernan, a Naval aviator and the last man, so far, to walk on the Moon. Stories like his inspired me to be a pilot and to serve my country in uniform.

NASA is at a critical time in history. Humanity is ready to go to Deep Space for the first time in 45 years. To do this sustainably, we must develop a consensus agenda, driven by science, and based on national interests.

Should I be confirmed, it will be my intention to build off the work accomplished by the great people at NASA during the last administration, and to move forward by following the guidance of the NASA Transition Authorization Act, appropriations legislation, and the science decadal surveys. We must all do this together.

No agency can match NASA's return on investment for taxpayer dollars, not just in inspiration, exploration, and science, but also in its direct impact to the U.S. economy.

For example, NASA's contributions to aeronautics have made air travel significantly cleaner, safer, and quieter. As a pilot myself, I hope to lead NASA through the next era of X-planes or experimental planes.

There are many near-term opportunities for NASA, none more than to once again launch American astronauts on American rockets from American soil and to safely return them home.

The first combined launch of the space launch system and the Orion multipurpose crew vehicle is drawing near. These two vehicles will be the backbone for returning humans to Deep Space and fulfilling the NASA Transition Authorization Act's goal of getting humans to Mars.

I believe in this Administration's vision of getting to Mars by using the Moon as a proving ground, and through a grand unity of effort by NASA, the Administration, Congress, industry, and our international partners.

In addition, NASA's Commercial Crew partners are drawing closer to reestablishing a capability we have not had since the retirement of the Space Shuttles, to regularly launch Americans to the International Space Station on American rockets.

Of course, the most important part of every human space flight mission is making sure that our astronauts return home safely.

I know what it means for lives to be on the line when making difficult decisions, including my own life. And if confirmed, I will work to promote a NASA culture where safety, transparency, and independent oversight are celebrated.

In order to move humans into Deep Space, we must have a vibrant, commercial, Low Earth Orbit economy. The future of LEO, including the International Space Station, will be a priority if I am confirmed.

I also plan to lead a focused, space technology program, which will form the foundation of a future expansion of economic activity in LEO and beyond.

NASA has inspired generations of scientists, engineers, and explorers, and it continues to do so with incredible discoveries across NASA's science divisions.

These include the search for ancient and extant life with the upcoming Mars 2020 and Europa missions, the launch of the James Webb Space Telescope, Parker Solar Probe, and Earth science missions like NISAR, IceSat–2, and so much more that will help us better understand our changing planet.

It is an honor of a lifetime to be nominated by the President and to be considered by the Senate for NASA Administrator. Working together, America can lead the way forward in space, inspiring the world, unlocking the mysteries of our universe, and motivating a new generation of young women and young men.

Thank you for allowing me to appear before you and I look forward to your questions.

[The prepared statement and biographical information of Rep. Bridenstine follow:]

PREPARED STATEMENT OF HON. JAMES BRIDENSTINE, NOMINEE FOR ADMINISTRATOR, NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

Thank you, Senator Inhofe, for the kind introduction. Chairman Thune, Ranking Member Nelson, members of the Senate Committee on Commerce, Science, and Transportation, it is an honor to appear before you as the nominee for Administrator of the National Aeronautics and Space Administration.

I want to recognize my family here with me: my wife, Michelle, and my children Walker, Sarah, and Grant. Without their love and support, I would not be here today in front of you.

NASA is an extraordinary agency with an extremely talented and diverse workforce. It has brought about civilization-changing events and scientific discoveries, has inspired billions, and represents what is exceptional about the United States of America—a spirit of adventure, of exploration, and the thirst for a greater understanding of the Earth and our universe.

I am truly humbled by the prospect of leading this agency. I grew up reading about the heroes of the Apollo era, like Gene Cernan, a Naval aviator and the last man to walk on the Moon. Stories like his inspired me to be a pilot and to serve my country in uniform.

I piloted the E–2C Hawkeye off the USS Abraham Lincoln in both Iraq and Afghanistan, where I had responsibility for command and control of theaters of battle. I then later became an instructor at the highest levels of Naval aviation, weapons and tactics, which required a high capacity for grasping technical issues and systems. I also had the honor of flying F–18 Hornets at the Naval Strike and Air Warfare Center.

In 2012, I ran for Congress and have served here since January of 2013. I continued as a Navy Reservist until transitioning to the Oklahoma Air National Guard in 2015, joining a Special Ops Wing.

In the House of Representatives, I serve on the Armed Services Committee and the Committee on Science, Space and Technology. I have had the great pleasure of working with many of you on this Committee on a bipartisan basis.

NASA is at a crucial time in its history, preparing to explore Deep Space again for the first time in forty-five years. To do this sustainably, we must develop a consensus-driven agenda, based on national interests. Should I be confirmed, it will be my intention to build off the work done by the great people at NASA during the last administration, and to move forward by following the guidance of the NASA Transition Authorization Act, appropriations legislation, and science decadal surveys. We must all do this together.

There are many great near-term opportunities for NASA, none more than the opportunity to once again launch American astronauts on American rockets from American soil, and safely return them home. In addition, the first combined launch of the Space Launch System and Orion Multi-Purpose Crew Vehicle is drawing near. EM–1 will be a huge test for Deep Space exploration and a crucial test for ultimately sending humans beyond Earth orbit for the first time since 1972. NASA will need healthy resources and full support from the Administration and Congress to keep this program on schedule, and I intend to be the agency's biggest advocate for this goal.

NASA's Commercial Crew partners are drawing closer to bringing us a capability we have not had since the retirement of the Space Shuttle. NASA is a great tool of American foreign policy, and our partnerships in space are shining examples of diplomacy. However, without our own domestic access to space, partnerships turn into dependencies, and this is not sustainable.

Getting new vehicles to launch will enhance our leadership, strengthen our partnerships, and bring about capabilities that will not only serve NASA and the International Space Station, but could one day serve other nations and other LEO platforms. Seeing the Commercial Crew program through to success will be a top priority of mine, should I be confirmed.

The success of these programs means our astronauts come home safely. This fact is not lost on me and I do not take this lightly. I know what it means for lives to be on the line when

making decisions. If confirmed as Administrator, I will work to promote a NASA culture where safety, transparency, and independent oversight are celebrated.

No agency can match NASA's return on investment for taxpayer dollars, not just in inspiration, exploration, and science, but also in its direct impact on the economy. NASA technological development drives innovation within the industrial base, generating spin-off technologies in every economic sector. For example, NASA's contributions to aeronautics have made air travel significantly cleaner, safer, and quieter, and have driven a multi trillion dollar-per-year industry. As a pilot myself, I hope to lead NASA through its next era of X-planes, including the Low Boom Supersonic aircraft and the X–57 Maxwell.

If confirmed as Administrator, I also intend to drive the commercial space economy further out beyond Earth. In order to move humans sustainably into Deep Space we must have a vibrant commercial LEO economy, and ISS transition will be a focus if I am confirmed. I also plan to lead a focused space technology program which will develop improved solar electric propulsion, in-space robotic assembly, and closed-loop environmental control and life support systems, all of which will form the foundation of a future expansion of economic activity in LEO and beyond.

Another critical opportunity will be the development of future architectures for exploration and science. The NASA Transition Authorization Act of 2017 directs NASA to continue its efforts to get humans to Mars. The Administration has expressed that it would like NASA to return to the Moon. These goals are not mutually exclusive and in fact work together; I have long been a proponent of returning to the Moon, particularly as a proving ground for missions deeper into space.

We must also recognize that NASA currently has more mission than it has budget. The days of Apollo when NASA's budget represented 3 to 4 percent of the Federal budget are not likely to return. Nor would we want to necessarily replicate that model, as it proved to ultimately be unsustainable. Fortunately, times have changed and great advancements have been made. The American and international space industries are more capable than ever before. A lot of this is

due to investments in research and technology development made by NASA decades ago that entrepreneurial Americans have taken and advanced further. So rather than pitting various sectors of this industry against one another, or fitting certain capabilities into pre-determined boxes, should I be confirmed, NASA will develop exploration and science architectures that leverage everything the United States and its international partners have to offer. This way, we will maximize resources and ensure NASA can carry out not only exploration missions back to the Moon and on

to Mars, but Earth Science, Planetary Science, Heliophysics, Astrophysics, and Aeronautics research.

NASA has inspired generations of scientists, engineers, and explorers and it continues to do so with incredible discoveries across NASA's science divisions that are unlocking the fundamental mysteries of the universe. If confirmed, I look forward to promoting the scientific community's priorities as embodied by the science decadal survey recommendations that further advance the boundaries of human knowledge and American leadership in the Earth and space sciences. These include the search for ancient and extant life with the upcoming Mars 2020 and Europa missions, the launch of the James Webb Space Telescope and the awe-inspiring images it is anticipated to produce, Parker Solar Probe—a heliophysics mission that will provide a greater understanding of the relationship between the sun and Earth, and Earth Science missions like NISAR and IceSat-2 that increase our understanding of the Earth as a system and can enable solutions to the most pressing issues we face on our home planet.

Finally, when it comes to space programs we are discussing timelines of decades, not months. We are also discussing critical data sources and information gathering efforts. There must be consistency and constancy. Without it, NASA experiences shifting priorities and funding, which prevent progress and discovery, waste taxpayer dollars, and erode morale at the agency. This is detrimental to our space program and our Nation. Should I be confirmed, it will be my intention to build off the work done by the great people at NASA during the last administration, and move forward following the guidance of the NASA Transition Authorization Act, appropriations legislation, and science decadal surveys. It would be my goal to leave in place programs that can be continued by the next administration regardless of political party.

Doing this will require consensus. The only way to get that is to work together as a community—Congress, the Administration, industry, scientists, academia, nonprofits, everybody. It is my commitment to strive every day to ensure we are meeting the national interest in a sustainable, maintainable, and supportable way.

These are exciting times, and it is an honor of a lifetime to even be considered for this position. I have dedicated much of my adult life to serving my country, and should the Senate confirm me I look forward to doing so in a new position. Working together, we can maintain American leadership in space. We can continue to accomplish stunning achievements that inspire the world and encourage other nations to partner with us. We can continue providing valuable data and information about our planet and our universe. We can motivate a new generation of girls and boys to enter the fields of science, technology, engineering and math.

Thank you again for allowing me to appear before you. I look forward to your questions.

A. BIOGRAPHICAL INFORMATION

1. Name (Include any former names or nicknames used):
James Frederick Bridenstine "Jim".
2. Position to which nominated: NASA Administrator.
3. Date of Nomination: 15 September 2017.
4. Address (List current place of residence and office addresses):

Residence: Information not released to the public.

Office: 216 Cannon House Office Building, Washington, D.C. 20515.

Office: 2448 E. 81st St, Suite 5150, Tulsa, OK 74137.

5. Date and Place of Birth: 15 June 1975; Ann Arbor, MI.
6. Provide the name, position, and place of employment for your spouse (if married) and the names and ages of your children (including stepchildren and children by a previous marriage).
Spouse: Michelle Ivory Bridenstine, N/A.
7. List all college and graduate degrees. Provide year and school attended.

B.A., Rice University, 1998.
M.B.A., Cornell University, 2009.

8. List all post-undergraduate employment, and highlight all management level jobs held and any non-managerial jobs that relate to the position for which you are nominated.

01/2013–Present, Member of Congress.

04/2015–Present, Oklahoma Air National Guard.

03/2010–04/2015, United States Navy Reserve, E–2C Hawkeye Aircraft Pilot.

06/2011–09/2012, Wyle Laboratories, E–2C Hawkeye Aircraft Subject Matter Expert.

01/2012–07/2012, Zoellner Enterprises, Business Development.

11/2010–04/2011, Deloitte, E–2C Hawkeye Aircraft Subject Matter Expert.

12/2008–08/2010, Tulsa Air and Space Museum & Planetarium, Executive Director.

05/2007–12/2008, Wyle Laboratories, E–2C Hawkeye Aircraft Subject Matter Expert.

05/1998–05/2007, United States Navy, E–2C Hawkeye and F–18C Pilot.

9. Attach a copy of your resumé.
See attached resumé.

10. List any advisory, consultative, honorary, or other part-time service or positions with Federal, State, or local governments, other than those listed above, within the last ten years. N/A

11. List all positions held as an officer, director, trustee, partner, proprietor, agent, representative, or consultant of any corporation, company, firm, partnership, or other business, enterprise, educational, or other institution within the last ten years.

04/2015 to Present, Oklahoma Air National Guard.

03/2010–04/2015, United States Navy Reserve, E–2C Hawkeye Aircraft Pilot.

06/2011–09/2012, Wyle Laboratories, E–2C Hawkeye Aircraft Subject Matter Expert.

01/2012–07/2012, Zoellner Enterprises, Business Development.

11/2010–04/2011, Deloitte, E–2C Hawkeye Aircraft Subject Matter Expert.

12/2008–08/2010, Tulsa Air and Space Museum & Planetarium, Executive Director.

05/2007–12/2008, Wyle Laboratories, E–2C Hawkeye Aircraft Subject Matter Expert.

05/1998–05/2007, United States Navy, E–2C Hawkeye and F–18C Pilot.

12. Please list each membership you have had during the past ten years or currently hold with any civic, social, charitable, educational, political, professional, fraternal, benevolent or religious organization, private club, or other membership organization. Include dates of membership and any positions you have held with any organization. Please note whether any such club or organization restricts membership on the basis of sex, race, color, religion, national origin, age, or handicap.

Member, South Tulsa Baptist Church (2009 to Present).

Member, National Republican Club of Capitol Hill (2013 to Present).

Member, National Rifle Association (2012 to Present).

Member, Association of the United States Navy (2011–2012).

13. Have you ever been a candidate for and/or held a public office (elected, non-elected, or appointed)? If so, indicate whether any campaign has any outstanding debt, the amount, and whether you are personally liable for that debt.

Candidate for U.S. House of Representatives 2012, 2014, 2016

Member of Congress, 1st District of Oklahoma, Jan 2013 to Present

No campaign debt

14. Itemize all political contributions to any individual, campaign organization, political party, political action committee, or similar entity of $500 or more for the past ten years. Also list all offices you have held with, and services rendered to, a state or national political party or election committee during the same period.

Date	Payable To	Amount
	From Friends of Jim Bridenstine, Inc.	
9/5/2012	Tulsa County Republican Party	1,500.00
10/3/2012	Mullin for Congress	1,000.00
1/16/2013	Congressional Institute, Inc.	1,051.00
9/13/2013	Tulsa GOP	1,500.00
1/1/2014	Oklahoma Republican Party	5,000.00
1/15/2014	Oklahoma Republican Party	15,000.00

Date	Payable To	Amount
6/25/2014	Mullin for Congress	2,000.00
7/21/2014	Daines for Montana	2,000.00
9/24/2014	Republican Party of Tulsa County	1,500.00
10/23/2014	Defenders of Liberty	500.00
11/21/2014	Oklahoma Republican Party	20,000.00
11/21/2014	Alliance for Vigilance	1,000.00
4/23/2015	Oklahoma Republican Party	5,000.00
5/22/2015	Oklahoma GOP	2,000.00
6/28/2015	Tulsa County GOP	1,000.00
6/30/2015	DeSantis for Florida	2,000.00
9/1/2015	Defenders of Liberty	1,000.00
10/22/2015	Oklahoma Federation of Republican Women	1,000.00
3/15/2016	Oklahoma Republican Party	5,200.00
7/25/2016	Kansans for Huelskamp	2,000.00
8/8/2016	Ward for Senate	2,000.00
8/18/2016	Mary Thomas for Congress	2,000.00
9/14/2016	Republican Party of Tulsa County	1,362.50
9/20/2016	Defenders of Liberty	1,000.00
11/7/2016	Republican Party of Tulsa County	1,000.00
12/12/2016	Senate Conservatives Fund	5,000.00
6/21/2017	Labrador For Governor	5,000.00
6/21/2017	Labrador For Governor	5,000.00
	From Jim Bridenstine Personally	
6/18/2017	Brian O'Hara (for State Senate)	1,000.00

I have held no office for a political party, nor have I been employed by any campaign.

15. List all scholarships, fellowships, honorary degrees, honorary society memberships, military medals, and any other special recognition for outstanding service or achievements.

Eagle Scout, Boy Scouts of America

Rice University Athletic Scholarship (Swimming)

Phillip Morris Academic Scholarship

Navy Commendation Medal with Combat "V"

Navy Commendation Medal

Air Medal

Navy and Marine Corps Achievement Medal

Global War on Terrorism Expeditionary Medal

Global War on Terrorism Service Medal

National Defense Service Medal

Armed Forces Expeditionary Service Medal

Expert Pistol Medal

Battle Efficiency Ribbon

Navy Unit Commendation Ribbon

Sea Service Deployment Ribbon

16. Please list each book, article, column, or publication you have authored, individually or with others. Also list any speeches that you have given on topics relevant to the position for which you have been nominated. Do not attach copies of these publications unless otherwise instructed.

Speeches on Space

Space Budget Forum-Air Force Association & Jacques & Associates
Topic: Federal budget outlook
16 Jun 2017

Zero G Summit—Space Trust
Topic: Importance of space for international partnerships
25 May 2017

Address fly In—Colorado Springs business group
Topic: Role of space in the economy
17 May 2017

Space Classified session—Space Symposium
Topic: Classified space threats
5 Apr 2017

Corporate Partnership Dinner—Space Symposium
Topic: Policy ideas for the National Space Council
4 Apr 2017

Fusion Forum—Space Generation Advisory Council
Topic: Necessity for policymakers and technical experts to collaborate
2 Apr 2017

Space Security forum—Center for Strategic and International Studies
Topic: Space threats and policies needed to counter
22 Mar 2017

Keynote—Satellite Industry Association Leadership Dinner
Topic: Space situational awareness, SATCOM priorities, spectrum protection
6 Mar 2017

Reception—SLS/Orion Suppliers conference
Topic: Support for and importance of SLS/Orion 1
5 Feb 2017

Business Meeting—Satellite Industry Association
Topic: Space situational awareness policy provisions
13 Feb 2017

Keynote—Commercial Space Transportation Conference
Topic: Regulatory and policy environment of commercial space
8 Feb 2017

Galloway Symposium—International Institute of Space Law
Topic: Need for legislation to comply with Article VI of the Outer Space Treaty
7 Dec 2016

Space-Based Environmental Intelligence—American Astronomical Society
Topic: Importance of earth science and overview of policies affecting NOAA satellites
1 Dec 2016

Keynote—Air Force Association Schriever Space Future Forum
Topic: Space threats and policies to counter them
18 Nov 2016

Annual Meeting—Lunar Exploration Analysis Group
Topic: Reasons to go back to the Moon
2 Nov 2016

Keynote—Future Space Leaders
Topic: Encourage the next generation to stay active in space policy and industry
14 Jul 2016

Address fly in—Accelerate Colorado
Topic: General role of space in the economy
14 Jun 2016

Keynote—Mitchell Institute Space Breakfast Series
Topic: American Space Renaissance Act provisions included in NDAA
19 May 2016

Keynote—Commercial Space Transportation Advisory Committee
Topic: American Space Renaissance Act provisions relating to commercial space
28 Apr 2016

Address class—Georgetown Law
Topic: American Space Renaissance Act relating to international law
18 Apr 2016

Keynote—Space Symposium
Topic: Introduce American Space Renaissance Act
13 Apr 2016

Government Affairs Breakfast—Space Symposium
Topic: Introduce American Space Renaissance Act
13 Apr 2016

Executive Breakfast Series—Commercial Spaceflight Federation
Topic: Need for legislation on space situational awareness and to comply with Article VI of the Outer Space Treaty
9 Feb 2016

Space Budget Forum-Air Force Association & Jacques & Associates
Topic: Federal budget outlook
8 Feb 2016

Keynote—Embry Riddle Space Traffic Management Conference
Topic: Space Traffic Management and Space Situational Awareness policies
12 Nov 2015

Keynote—Commercial Space Transportation Advisory Committee
Topic: Need for greater funding in FAA/AST
20 Oct 2015

Address dinner—Inmarsat Board of Directors
Topic: General Q&A on SATCOM policy
16 Sep 2015

Address conference—Satellite Industries Association
Topic: SATCOM policies
8 Jul 2015

Keynote—Mitchell Institute Space Breakfast Series
Topic: SATCOM priorities in the NDAA
12 Jun 2015

Panel Discussion—Satellite 2015
Topic: Commercially Hosted Government Payloads
16 Mar 2015

Keynote—Commercial Space Transportation Conference
Topic: Partnerships between commercial and government agencies such as NASA, DoD, NOAA
4 Feb 2015

Keynote—SATCON
Topic: Next Generation Space Architectures
12 Nov 2014

State of the Aerospace Defense Industry—OK Chamber of Commerce
Topic: Role of space in the aerospace defense industry
27 Oct 2014

Keynote—Washington Space Business Roundtable
Topic: The need to incorporate commercial satellite weather data into NOAA's models
16 Sep 2014

Published Writings

Increasing the visibility of the Commercial Space Transportation Office (with Rep. Derek Kilmer)
The Hill
28 Mar 2017

Shoot the Next One Down, Mr. President
breitbart.com
16 Feb 2017

Oklahoma's congressional delegation: 'Obamacare' fails Oklahoma (with Reps. Cole, Lucas, Mullin, and Russell)
Tulsa World
17 Jan 2017

Transforming U.S. Space Policy
Room: The Space Journal
Fall/Winter 2016

U.S. Rep. Jim Bridenstine: Trust Trump . . . to be the better president
Tulsa World
6 Nov 2016

Real Culprit/Capital View
NATIONAL GUARD magazine
April 2016

Make FAA/AST the "FAA for Space"
SpaceNews
18 Jan 2016

U.S. Rep. Jim Bridenstine: Omnibus bill cedes power to 'lawless' administration
Tulsa World
17 Jan 2016

Ted Cruz's True Record on Military Funding and National Security Is Unassailable
National Review
17 Feb 2016

Tulsa Leaders' Essays
Tulsa Beacon
7 Jan 2016

The 'Read the Bill Act'
breitbart.com
6 Jan 2016

Congress Can and Should Still Defund Planned Parenthood
breitbart.com
3 Dec 2015

Time for Action on Commercial Weather Data
SpaceNews
26 Oct 2015

Representing You in Washington
Sand Springs News
3 Sept 2015

How to Ignore Obama's Straw Men and Override the Terrible Iran Deal
National Review
21 Jul 2015

U.S. Rep. Jim Bridenstine: Iran nuclear deal is a failure
Tulsa World
19 Jul 2015

'Proven Fundraiser' Ted Cruz Can Defeat the Clinton Machine in 2016
breitbart.com
18 Jul 2015

Rep. Jim Bridenstine: 'I will not be complicit in paving Iran's way to a nuclear weapon'
Tulsa World
14 Jul 2015

U.S. Rep. Jim Bridenstine: Necessary conditions for an Iran deal
Tulsa World
30 Jun 2015

NOAA's Commercial Data Policy
SpaceNews
24 Jun 2015

U.S. Rep. Jim Bridenstine and Sen. Ted Cruz: Unleash the American energy renaissance now
Tulsa World
13 Jun 2015

Maintaining U.S. Military Preeminence Globally
breitbart.com
18 Jun 2015

U.S. Rep. Jim Bridenstine: Federal courts are 'last hope' to overturn President Barack Obama's 'lawlessness on immigration'
Tulsa World
4 Mar 2015

U.S. Rep. Jim Bridenstine: Senate should reject attorney general candidate because of Obama administration's 'persistent, lawless conduct'
Tulsa World
26 Feb 2015

U.S. Rep. Jim Bridenstine: Forecast for U.S. weather forecasting is getting cloudy
Tulsa World
12 Feb 2015

The Moral Case for Keeping Guantanamo Open
National Review
13 Jan 2015

Why I Will Not Vote for John Boehner to Be House Speaker
The Daily Signal
2 Jan 2015

Private Sector Can Boost U.S. Weather Forecasting
SpaceNews
8 Dec 2014

We Can't Trust the IAEA on Iran
National Review
21 Nov 2014

U.S. Rep. Jim Bridenstine: The speaker vote
Tulsa World
14 Nov 2014

Winds of Change for Weather Data
SpaceNews
20 Oct 2014

Ebola: Obama's Latest Failure
breitbart.com
16 Oct 2014

It's Time to End This War on Youth
RedAlertPolitics.com
30 July 2014

Single Purchasing Agent May Be Best Option for DoD Satcom
SpaceNews
16 Jun 2014

Imminent Sale of French Warships to Russia Lets 'Evil Triumph'
breitbart.com
16 Jun 2014

Nation Needs More AWACS Planes, Not Fewer (with Rep. Tom Cole)
NewsOK.com
27 May 2014

Men, Women in Uniform Should Always Be Priority (with Rep. Tom Cole)
The Oklahoman
25 May 2014

U.S. Rep. Jim Bridenstine: American energy impacts global stability
Tulsa World
12 Apr 2014

Common Core Will Federalize Education
breitbart.com
13 Mar 2014

Tax Reform Is Insufficient
breitbart.com
26 Feb 2014

Disabled Veterans Are Not a Bargaining Chip
breitbart.com
14 Jan 2014

Obama's Politics of War Cannot Continue in Afghanistan
breitbart.com
9 Jan 2014

Bridenstine: Obama should treat friends better
The Hill
4 Nov 2013

Bridenstine Asks Senators to Stand Strong: Obamacare
Tulsa World
26 Sep 2013

Defunding 'Obamacare' is right strategy
Tulsa World
3 Aug 2013

Checking the power of incumbency (with Rep. Beto O'Rourke)
Politico
15 May 2013

Now It's Time To Deliver
RedState.com
6 May 2013

Drugs vs. American virtue
Tulsa World
14 Mar 2011

Letter to the editor: Space (shuttle) race intensifies
Tulsa World
6 Jun 2010

Letter to the editor: Air show exceeds expectations
Tulsa World
2 May 2010

Aviation Industry Requires Education
Tulsa Business Journal
21 Dec 2009

17. Please identify each instance in which you have testified orally or in writing before Congress in a governmental or non-governmental capacity and specify the date and subject matter of each testimony.

Testimony in front of Congress

Transportation, Housing and Urban Development Appropriations Subcommittee
Topic: FAA Office of Commercial Space Transportation
9 Mar 2017

Defense Appropriations Subcommittee
Topic: National Security Space
9 Mar 2017

Defense Appropriations Subcommittee
Topic: National Security Space
15 Mar 2016

Rules Committee
Topic: Student Success Act
25 Feb 2015

18. Given the current mission, major programs, and major operational objectives of the department/agency to which you have been nominated, what in your background or employment experience do you believe affirmatively qualifies you for appointment to the position for which you have been nominated, and why do you wish to serve in that position?

For three terms in Congress, I have led comprehensive, bipartisan, space reforms with the objective of preserving America's preeminence and global leadership in space. My legislative accomplishments were recognized by Space News when it named me as one of "Five Space Leaders Making a Difference" in the world (*http://spacenews.com/5-space-leaders-making-a-difference/*). These efforts have led me to a deep understanding of the complex challenges NASA will face bringing together traditional space companies and new space entrepreneurs into a comprehensive NASA vision for both exploration and science. Traditional and new space companies are both critical to accelerating America's space renaissance.

My committee assignments and subcommittee chairmanship placed me in a position of responsibility for oversight of America's civil, commercial, and national security space. NASA is an incredible leadership and soft power tool for the United States of America. With NASA's global leadership, we will pioneer the solar system,

sending humans back to the Moon, to Mars, and beyond. This requires a consistent, sustainable strategy for deep space exploration.

I am fully familiar with NASA's role as a purchasing agent for NOAA and how critical this partnership is to protect lives and property. As a United States Representative from Oklahoma, I have led efforts to improve severe weather prediction and I have come to appreciate how complex Earth is as a system. NASA must continue studying our home planet. Unfortunately, Earth Science sometimes gets pitted against planetary science for resources. This is not in the best interest of NASA, the United States, or the world. Mars once had a magnetic field, rivers, lakes, and an ocean on its north pole. At some point, Mars changed dramatically and we should strive to understand why. Studying other planets can inform our understanding of Earth. NASA must continue to advance both Earth Science and planetary science for the benefit of mankind.

As the Executive Director of the Tulsa Air and Space Museum & Planetarium, I saw children of all backgrounds benefit from NASA's STEM education programs. NASA's stunning achievements make it uniquely situated to educate, inspire and motivate future generations of Americans.

As a Naval Aviator, I was entrusted by the U.S. Government to fly aircraft worth over $80 million off aircraft carriers and to conduct battlefield command and control of hardware worth billions of dollars while protecting and enabling thousands of warfighters. I have flown combat missions in Afghanistan and Iraq and instructed at the highest levels of Naval Aviation. As a Navy Reservist, I have conducted counter-drug missions in Central and South America. I understand the importance of team cohesion for mission accomplishment. Military aviation has given me first-hand experience with national security space-based capabilities including navigation, communication, weather, imagery, and associated networks and waveforms.

I have participated in simulation experiments with future warfighting technologies and determined requirements necessary to support and initiate acquisition programs. On behalf of the armed forces, I have developed requests for proposal and evaluated the corporate responses. I understand the complexity of large acquisitions and the legal necessity of managing them properly.

Serving as NASA Administrator would challenge me to utilize the sum total of my experiences and knowledge to lead one of America's most trusted and esteemed agencies. NASA has an unsurpassed track record of achievement enabled by brilliant scientists and engineers, fearless astronauts, and exceptionally capable technology companies. Given that record, contemplating the possibility of contributing to NASA's future success is both humbling and energizing. I can think of no higher honor in the service of my country than to lead NASA.

19. What do you believe are your responsibilities, if confirmed, to ensure that the department/agency has proper management and accounting controls, and what experience do you have in managing a large organization?

Agency heads are required by law to evaluate and report on internal controls and financial systems (Federal Managers Financial Integrity Act, Federal Financial Management Improvement Act, and 0MB Circular A–123). I intend to conduct internal reviews of current controls and consider recommendations from external reviewers such as the OIG and GAO. If confirmed as NASA Administrator, it will be my responsibility to lead and oversee NASA's Mission Support Council, the organization responsible for oversight of NASA's internal control program.

As a Member of Congress, I make decisions concerning the laws and budget of the United States. I must wisely exercise this responsibility to the benefit of the United States and my constituents. My committee assignments and subcommittee chairmanship have placed me in a position to oversee agencies responsible for America's civil, commercial, and national security space policy and programs. OIG and GAO reports often inform the direction of oversight by congressional committees. Should I be confirmed, I will work diligently to ensure NASA complies in a timely manner with Congressional oversight requests. I would like to work hand in hand with Congress to benefit the Agency.

As a Naval Aviator, I was entrusted by the U.S. Government to fly aircraft worth over $80 million off aircraft carriers and to conduct battlefield command and control of hardware worth billions of dollars while protecting and enabling thousands of warfighters. I have flown combat missions in Afghanistan and Iraq, counter-drug missions in Central and South America, and instructed at the highest levels of Naval Aviation.

20. What do you believe to be the top three challenges facing the department/agency, and why?

I believe NASA's top three challenges are:

- Maintaining consistency and constancy of purpose while establishing a consensus agenda that can bridge multiple administrations regardless of party. This is essential to avoid resource-wasting program cancellations and maintain high morale both within the Agency and its contractor workforce;
- Maintaining and building international partnerships while ending dependency on unfriendly nations to avoid exploitable vulnerabilities;
- Bringing together traditional space companies and new space entrepreneurs into a comprehensive NASA vision to maximize resources and create efficiencies.

B. POTENTIAL CONFLICTS OF INTEREST

1. Describe all financial arrangements, deferred compensation agreements, and other continuing dealings with business associates, clients, or customers. Please include information related to retirement accounts.

Not Applicable.

2. Do you have any commitments or agreements, formal or informal, to maintain employment, affiliation, or practice with any business, association or other organization during your appointment? If so, please explain.

I currently serve in the Oklahoma Air National Guard. Should I be confirmed, I will transfer to the Air Force Standby Reserve (from Tide 32 to Title 10 of the U.S. Code).

3. Indicate any investments, obligations, liabilities, or other relationships which could involve potential conflicts of interest in the position to which you have been nominated. None.

4. Describe any business relationship, dealing, or financial transaction which you have had during the last ten years, whether for yourself, on behalf of a client, or acting as an agent, that could in any way constitute or result in a possible conflict of interest in the position to which you have been nominated. None.

5. Describe any activity during the past ten years in which you have been engaged for the purpose of directly or indirectly influencing the passage, defeat, or modification of any legislation or affecting the administration and execution of law or public policy.

I have been a Member of Congress since 2013.

In 2009, as the Executive Director of the Tulsa Air and Space Museum & Planetarium, I responded to a NASA request for information on the final placement and display of retired space shuttle orbiters. I requested letters of support from the Oklahoma congressional delegation.

6. Explain how you will resolve any potential conflict of interest, including any that may be disclosed by your responses to the above items.

I do not foresee any conflicts of interest, but will follow the guidance of the Office of Government Ethics and NASA Legal Counsel.

C. LEGAL MATTERS

1. Have you ever been disciplined or cited for a breach of ethics, professional misconduct, or retaliation by, or been the subject of a complaint to, any court, administrative agency, the Office of Special Counsel, professional association, disciplinary committee, or other professional group? If yes:

a. Provide the name of agency, association, committee, or group:

House Ethics Committee and Office of Congressional Ethics (OCE)

b. Provide the date the citation, disciplinary action, complaint, or personnel action was issued or initiated:

I was notified of initiation of an OCE preliminary review on 01/29/2015. On 03/19/2015 the House Committee on Ethics notified me that it was initiating an information review of the same issue.

A report adopted by the House Committee on Ethics on July 29, 2015 (U.S. House of Representatives, Committee on Ethics, Report Adopted July 29, 2015: In the Matter of Officially-Connected Travel by House Members to Azerbaijan in 2013; dated July 31, 2015) declared that I and other House Members acted in good faith and that the Committee would take no further action with respect to any House Member or employee concerning the issue reviewed.

c. Describe the citation, disciplinary action, complaint, or personnel action:

In March 2013, I was invited to participate in privately sponsored travel to a conference in Baku, Azerbaijan. My travel was sponsored by an organization that represented to the House Committee on Ethics ("the Committee") that it was eligible to sponsor the travel. I submitted the required travel pre-approval forms to the Committee and received written approval from the Committee on May 8, 2013. I de-

parted on May 25 and returned on May 30. Nine other Members of Congress participated in the Azerbaijan Trip. Over a year after my return, an anonymous complaint was filed with the Office of Congressional Ethics (OCE) alleging that the travel expenses for the Member trips were paid by entities ineligible to sponsor such travel.

d. Provide the results of the citation, disciplinary action, complaint, or personnel action.

Extensive reviews by both the OCE and the House Committee on Ethics led the Committee to conclude in its final report on the matter that I (and other Members of Congress) acted in good faith in accepting privately sponsored travel.

Additionally, I and other Members of Congress received unsolicited gifts while visiting Azerbaijan in May 2013, including hand-crafted rugs. Upon return to the U.S., I had the two rugs that I received immediately appraised. Their individual values exceeded the allowable limit set by the Foreign Gifts and Decorations Act, so I proactively filed a report with the House Committee on Ethics. I then sought the Committee's guidance and returned the rugs. According the Office of Congressional Ethics, I was the only Member to do so prior to the Office of Congressional Ethics and House Committee on Ethics reviews of the Azerbaijan trips. I received other small gifts including music CDs that were discarded when I returned home and a porcelain tea set that I turned over to the Clerk of the House. I also gave a coffee table book, which may have been a personal purchase, to the Library of Congress Surplus Books Program.

Quoting from the Committee's final report adopted July 29, 2015:

> *The evidence demonstrates that the House travelers submitted their* [travel preapproval] *forms in good faith, and there is no evidence the House travelers knew, or should have known, if the sponsors' false statements regarding the true source of funding for the travel. Because the House travelers acted in good faith, and the evidence was inconclusive as to the true source of funds for the travel, the Committee concluded that the Trips did not constitute an impermissible gift of travel, and decided no further action is required regarding the House travelers' acceptance of any trip expenses.*
>
> *Separate and apart from the travel expenses that were the subject of the Committee's preapproval process, evidence indicates that many House travelers received various tangible gifts during the Trips. In general, Committee approval to accept privately sponsored, officially connected travel is limited to accepting costs related to the trip, not to tangible gifts that may be offered to the traveler.*
>
> *The tangible gifts received by House travelers on the Trips in this matter may have been permissible under the House Gift Rule. However, the various provisions of the Gift Rule that may have permitted acceptance of these gifts require knowledge of the donor to assess whether a particular provision of the Gift Rule applies.*
>
> *The Committee could not determine the source of these gifts. Since the donor was unknown, it is unlikely that many of the tangible gifts could be accepted under any provision of the House Gift Rule. However, either under their own initiative or at the Committee's recommendation, all Members have voluntarily remedied, or committed to remedy, any impermissible gifts received in connection with the Trips. In addition, the Committee has contacted House staff who participated in the trips and provided guidance to them about tangible gifts they may have received. Therefore, the Committee will take no further action with respect to any House Member or employee in this issue.*
>
> Source: *U.S. House of Representatives, Committee on Ethics, Report Adopted July 29, 2015: In the Matter of Officially-Connected Travel by House Members to Azerbaijan in 2013; dated July 31, 2015, pp. 2–3.*

2. Have you ever been investigated, arrested, charged, or held by any Federal, State, or other law enforcement authority of any Federal, State, county, or municipal entity, other than for a minor traffic offense? If so, please explain. No.

3. Have you or any business or nonprofit of which you are or were an officer ever been involved as a party in an administrative agency proceeding, criminal proceeding, or civil litigation? If so, please explain. No.

4. Have you ever been convicted (including pleas of guilty or *nolo contendere*) of any criminal violation other than a minor traffic offense? If so, please explain. No.

5. Have you ever been accused, formally or informally, of sexual harassment or discrimination on the basis of sex, race, religion, or any other basis? If so, please explain. No.

6. Please advise the Committee of any additional information, favorable or unfavorable, which you feel should be disclosed in connection with your nomination. None.

D. RELATIONSHIP WITH COMMITTEE

1. Will you ensure that your department/agency complies with deadlines for information set by congressional committees? Yes.
2. Will you ensure that your department/agency does whatever it can to protect congressional witnesses and whistle blowers from reprisal for their testimony and disclosures? Yes.
3. Will you cooperate in providing the Committee with requested witnesses, including technical experts and career employees, with firsthand knowledge of matters of interest to the Committee? Yes.
4. Are you willing to appear and testify before any duly constituted committee of the Congress on such occasions as you may be reasonably requested to do so? Yes.

RESUMÉ OF JAMES FREDERICK BRIDENSTINE

Objective

To serve the United States of America as NASA Administrator

Summary

- Eagle Scout Boy Scouts of America
- Member of Congress representing Oklahoma's First District
- Champion for bipartisan space reform (national security. civil, commercial}
- Military pilot with combat experience in Iraq and Afghanistan
- Commanded and controlled theaters of battle as a pilot in the E–2C Hawkeye
- Flew F–18 Hornets as an adversary for TOPGUN Instructors
- Highest level tactical instructor Within Naval Aviation (Level 5 Instructor)
- Trusted by the U.S. government with a Top Secret/SCI clearance

Experience

Member of the United States House of Representatives (Jan 2013–present)

- *Member of the House Armed Services Committee*
- Subcommittee on Strategic Forces
- Subcommittee on Seapower and Project ion Forces
- *Member of the House Science, Space and Technology Committee*
- Subcommittee on Space
- Subcommittee on Energy
- Former Chairman of the Environment Subcommittee
- *Effective Champion for Comprehensive Space Policy Reform*
- Named by SpaceNews as one of 5 space leaders in the world making a difference in space (SpaceNews, 2015)
- *Authored Numerous 2017 NASA Transition Authorization Act Provisions*
- Allowed the NASA Administrator to determine a maximum probable loss for commercially provided launches and set the insurance requirements to that determination to reduce costs and increase flexibility
- Called for a review of concepts and technologies for removing orbital debris
- Required NASA to develop a post-ISS plan to avoid a gap in low Earth orbit platforms
- Expressed Congress' support for the Venture Class Launch Services pro gram to enhance the domestic launch industry
- *Co-Authored the Bipartisan Weather Research and Forecasting Innovation Act*
- Authorized a space-based Commercial Weather Data Pilot Program within NOAA
- Incorporated oversight mechanisms on future NOAA flagship satellite programs
- *Authored Numerous 2017 Omnibus Space Provisions*
- Encouraged NASA to develop plans to return to the Moon to test capabilities that will be needed to go to Mars including developing in situ resource utilization
- Funded a space-based Commercial Weather Data Pilot Program within NOAA and DoD

- Required NOAA to evaluate competitively purchased weather data as a potential follow on to the first tranche of COSMIC–2 satellites
- Increased funding for FAA Office of Commercial Space Transportation
- *Authored Numerous 2017 NOAA Space Provisions*
- Authorized funding for Operationally Responsive Space to establish a program based on NASA's Venture Class Launch Services
- Encouraged Air Force to make greater use of commercially hosted payloads
- Required a true apples-to-apples comparison of MILSATCOM and COMSATCOM in the wideband Analysis of Alternatives
- Authorized the Protected Tactical Service SATCOM program
- Authorized the SMC SATCOM Pathfinder program
- Authorized and required implementation of commercial SATCOM pilot program within DoD
- Authorized a space-based Commercial Weather Data Pilot Program
- Required analysis on leveraging commercial facilities for the Air Force Satellite Control Network
- *Authored Numerous 2018 NOAA Space Provisions (Pending Senate/House Conference)*
- Extends space-based Commercial Weather Data Pilot Program by one year
- Encourages Other Transaction Authorities (OTAs) for the SMC Pathfinder program
- Creates capstone training event for space operators (Space Flag)
- Directs development of space-based sensors for missile launch tracking and targeting
- Establishes pilot program for space-based mapping of electromagnetic spectrum
- Supports National Geospatial Intelligence Agency (NGA) acquiring non-traditional sources of geospatial intelligence
- Increases resources for a military operational capability for responsive launch, specifically for commercial small launch
- Supports continued investment in the use of commercial capabilities to enhance resilience and lower costs of the Air Force Satellite Control Network
- Encourages SecAF to operationalize extant commercial SSA capabilities to rapidly meet war-fighter requirements
- *Co-authored the bipartisan American Space Commerce and Free Enterprise Act (passed Committee)*
- Provides a mechanism for the U.S. Government to approve commercial remote sensing and private non-traditional space activities (human habitats, robotic servicing, lunar missions, and more) while meeting treaty obligations
- *Authored Numerous 2018 CJS Appropriations Space Provisions (passed Committee)*
- Funds a demonstration for commercial lunar landers within NASA
- Requires NASA to prioritize partnerships with American companies that can provide capabilities for deep space
- Includes specific funding for Venture Class Launch Services
- Encourages NASA to procure Earth Science data from commercial providers
- Continues funding for NOAA's space-based Commercial Weather Data Pilot Program
- Requires NOAA to comply with statutory deadlines for remote sensing licensing
- *Authored 2018 THUD Appropriations Provision to increase funding for the FAA Office of Commercial Space Transportation (Passed Committee)*

Oklahoma Air National Guard—Air Force Pilot (Apr 2015–Present)

- Member of the first Guard wing attached to Air Force Special Operations Command
- Training to fly an MC–12 intelligence, surveillance, reconnaissance aircraft in support of special operations

U.S. Navy Reserve—Navy Pilot (Mar 2010–Apr 2015)

- Flew E–2C Hawkeyes in support of counter-narcotics operations in South America, Central America, the Caribbean Sea, and the eastern Pacific
- Detected, monitored, and interdicted drug trafficking air and surface vehicles
- Commanded and controlled U.S. air and surface assets employed in the drug war from an airborne platform

Wyle Laboratories—Subject Matter Expert (Jun 2011–Sep 2012)

- Part-time support reviewing and editing training materials for foreign sales of E–2C Hawkeye aircraft

Zoellner Enterprises—Marketing and Business Development (Jan 2012–Jul 2012)

- Created and implemented marketing campaign for Zoellner Optometric

Deloitte Consulting—Subject Matter Expert (Nov 2010–Apr 2011)

- Consulted on modifications and enhancements for legacy E–2C Hawkeye Aircraft

Tulsa Air and Space Museum and Planetarium—Executive Director (Dec 2008–Aug 2010)

- Created comprehensive strategy for promotion, expansion and growth of the museum
- Led Tulsa's effort to acquire a retiring space shuttle
- Created the QuickTrip Air and Rocket Racing Show, Tulsa's largest air show, attended by astronauts Buzz Aldrin, John Herrington, and Richard Garriott

Wyle Laboratories—Subject Matter Expert (May 2007–Dec 2008)

- Served as the E–2D aircraft subject matter expert on an E–2D simulator source selection team
- Generated simulator requirements and request for proposal for the E–2D simulator
- Evaluated proposals from industry and selected contractor for production
- Supported the U.S. Navy in contract administration of flight simulators and weapon system simulators to ensure programs stayed on budget and on time

U.S. Navy—Active Duty Pilot (May 1998–May 2007)

- Dual qualified pilot in F–18C Hornet and E–2C Hawkeye 333 aircraft carrier landings
- 41 combat missions in Afghanistan and Iraq
- *Weapons and Tactics Instructor WTI at the Naval Strike and Air Warfare Center NSAWC*
- Highest level instructor in U.S. Navy—Level 5 Instructor
- Trained Advanced Mission Commanders from all E–2C squadrons in the classroom, in simulators, and in the air
- Developed and managed a standardized curriculum for Advanced Mission Commanders to use to train their respective squadrons
- Taught instructional techniques and methods to instructors
- Charged With standardizing procedures, weapons, and tactics training fleet wide
- Flew the F–18C on enemy profiles to provide training for TOPGUN instructors
- Evaluated Carrier Strike Group Large Force Exercises (LFEs) and briefed carrier air wings on points of strength and areas for improvement
- Monitored enemy threats and tactics to revise training materials to maintain course integrity
- *Hawkeye Tactical Analysis Team (HETAT)*
- Conducted flight simulation in a virtual warfare center to collect data on future weapon systems and tactics
- Briefed U.S. Navy senior staff on operational requirements for the E–20 aircraft
- Provided operator feedback to government contractors during the development of the new E–20 aircraft and simulator
- *Carrier Airborne Early Warning Squadron 113 (VAW–113)*
- Flew combat missions in Iraq and Afghanistan

- Flew counter drug operations in the Caribbean
- Naval Air Training and Operations Procedures (NATOPS) Instructor—Responsible for ensuring every squadron pilot operated under standardized flight and instrument procedures. Reported squadron readiness directly to the squadron Commanding Officer
- Instructor Carrier Aircraft Plane Commander (ICAPC)—Responsible for training squadron in enemy threats and tactics
- Airframes and Corrosion Control Division Officer—led a crew of 20 airframe maintenance personnel
- Schedules Officer—wrote daily flight schedule for 25 aircrew

Athletic Honors

Captain of the Rice University Men's Varsity Swim Team, Rice record holder in 100 butterfly, 200 butterfly, and 400 medley relay, Rice men's swimming MVP, Rice University athletic scholarship, Oklahoma state champion in 100 butterfly, 200 medley relay, 400 freestyle relay, Oklahoma swimmer of the year, water polo All American

The CHAIRMAN. Thank you, Congressman.

Ms. Baiocco.

STATEMENT OF DANA BAIOCCO, NOMINEE TO BE COMMISSIONER, CONSUMER PRODUCT SAFETY COMMISSION

Ms. BAIOCCO. Good morning, Chairman Thune, Ranking Member Nelson, and members of the Senate Committee on Commerce, Science, and Transportation.

I am humbled and honored to be before you today as a nominee for a vital, independent agency, the Consumer Product Safety Commission.

I would like to thank President Donald Trump for nominating me and for his confidence.

If I am confirmed by the Senate, I will strive every day to carry out my duties to the American people with focus, clarity, and compassion. I will do so in a manner that is expected by this Committee.

Please allow me the indulgence of introducing my family and friends, who are here with me today. Directly behind me is my husband, Andy Susko. Although we have only been married a very short time, he is a constant source of comfort and support.

My daughter, Ava Bruening, is also here today directly behind me. She is a sophomore at the Brimmer and May School in Boston, Massachusetts and she is missing school to be here today, but I think this is a wonderful opportunity and a rare opportunity for her to see our Government in action. And I hope this experience for her is a profound one.

My parents, Joyce and Jerry Baiocco, are here from Ohio. My sister, Stacey Williams, and my niece, Morgan Williams, are also here. My stepson and daughter-in-law, Matt and Nicole Susko, are watching online from their home in New Hampshire. My other stepson John, and his brand new wife of 3 days, are in Illinois.

I am also lucky to have several of my colleagues and friends here today.

But I would also like to take the time to thank all of the good, hardworking people of my hometown of Yorkville, Ohio, for the hundreds of notes of support that they have extended to my family. They remind me of what an enormous responsibility I will have, if

confirmed, as they are just a small sample of the American people who I, and the agency as a whole, will work for.

I was born in West Virginia, raised in Ohio. I attended Ohio University, where I received a degree in journalism. I was accepted into the four-year night school program at Duquesne University School of Law in Pittsburgh, Pennsylvania. During my last year of night school, and for one year of post-graduation, I was the law clerk for the Honorable Gustave Diamond in district court for the Western District of Pennsylvania.

I joined Jones Day an associate in 1998. I became a partner of the firm in 2007. And in 2011, the firm asked me to go to Boston and open our Boston office.

In my opinion, Jones Day and the lawyers and staff at this global law firm, are second to none, not only in terms of intellectual and legal acumen, but also in terms of mentorship, collegiality, and client service. I have learned something from each and every one of them. Over the last 19 years at Jones Day, I would like to thank them all for their contributions, as my successes have come, not on my own, but always as a part of a team.

The Consumer Product Safety Commission plays an important role in the safety of our Nation's consumers. If confirmed, I will bring to the Commission all of the skills I have developed and built over my career.

I will be guided by the rule of law. I will promote transparency between the Commission and all of its stakeholders. And I will encourage an open door policy between the Commission and all advocacy groups. Rigorous debate and an open mind to all points of view are essential to any good decision-making process.

I will work in a collaborative way with my fellow Commissioners, if confirmed, and with this Committee because collaboration matters. Safety and the protection of the American people are not bipartisan. They are all inclusive.

The CPSC is charged with a mission that touches on every single person in this room and beyond: my family, your families, and the families across America. The issues that come before the CPSC are often complicated and require the study and analysis of laws, regulations, science, and the application of common sense.

If confirmed, there are substantive areas that I would like to focus on as a Commissioner. First, the Commission must have a plan to stay as current as possible on the technology, and the new and unique types of products coming onto the market every day.

We need to understand the data, the science, the processes underlying every product to stay abreast of marketplace dynamics, changing consumer preferences, and to maintain vigilance over emerging hazards.

If confirmed, I will draw upon my experiences and I will meet with all stakeholders, continuing my philosophy of touching, seeing, and learning the products to help the Commission stay well informed.

Second, I think the Commission must always work to protect consumers from unreasonable risks while balancing the American public's right to have access to a range of affordable product choices and recreational activities. We are all very different people and our choices and interests are many.

Finally, I know the Commission is currently looking at the issue of recall effectiveness, and I look forward to contributing my own ideas and make sure that consumers are being reached across a variety of platforms.

Thank you for the opportunity to testify and thank you for the opportunity to appear before this Committee.

I look forward to your questions.

[The prepared statement and biographical information of Ms. Baiocco follow:]

PREPARED STATEMENT OF DANA BAIOCCO, NOMINEE TO BE A COMMISSIONER, CONSUMER PRODUCT SAFETY COMMISSION

Good morning Chairman Thune, Ranking Member Nelson, and members of the Committee on Commerce, Science, and Transportation. I am honored to be before you today as a nominee to a vital, independent agency, the Consumer Product Safety Commission.

I would like to thank President Donald Trump for nominating me. I am humbled by his confidence and, if confirmed by the Senate, I will strive every day to carry out my duties to the American people with focus, clarity, and compassion. I will do so in a manner consistent with the high expectations of this Committee.

Please allow me the indulgence of introducing to you my family and friends, who are here today. My husband, Andy Susko, is here with me. Although we have only been married a short time, he is a constant source of comfort and support. My daughter, Ava Bruening, is also here today. She is a sophomore at Brimmer and May School in Boston, Massachusetts. She is missing school to be here but, I think today she will have a rare opportunity to see our system of government in action. My parents, Joyce and Jerry Baiocco, are here from Ohio, my sister Stacey Williams and my niece, Morgan Williams, are also here from Ohio. My stepson and daughter-in-law, Matt and Nicole Susko, are watching online from their home in New Hampshire. I am also lucky to have several of my colleagues and friends here today. I would like to thank all of the good, hard-working people in my hometown of Yorkville, Ohio, for the hundreds of notes of support that my family has received. They remind me of what an enormous responsibility I will have, if confirmed, as they are just a small sample of the American people, who I and the agency as a whole, will work for.

I was born in West Virginia, raised in Ohio, and attended Ohio University, where I received a degree in Journalism. I was accepted into the 4-year night school program at Duquesne University School of Law in Pittsburgh, Pennsylvania. During my last year of night school, and for one year after graduation, I served as a federal law clerk to the Honorable Gustave Diamond in the District Court of the Western District of Pennsylvania. I became an associate at Jones Day in 1998 and a partner of the firm in 2007. I moved to Boston to help open the firm's Boston office in 2011. In my opinion, Jones Day and the lawyers and staff at this global law firm, are second to none, not only in terms of intellectual and legal acumen, but also in terms of mentorship, collegiality, and client service. I have learned something from each and every person I have met over the last 19 years at Jones Day and I thank them all. My successes have come, not on my own, but always as a part of a team.

The Consumer Product Safety Commission plays an important role in the safety of our Nation's consumers. If confirmed, I will bring to the Commission, all of the skills I have developed and built over my career. I will be guided by the rule of law, I will promote transparency between the Commission and all of its stakeholders, and I will encourage an open door policy between the Commission and all advocacy groups. Rigorous debate and an open mind to all points of view are essential to any good decision-making process.

I will work in a collaborative way with my fellow Commissioners and with this Committee because collaboration matters. Safety and protection of the American people are not partisan issues. They are all inclusive. The CPSC is charged with a mission that touches on every single person in this room and beyond, including my family, your families, and the families across America. The issues that come before the CPSC are often complicated and require the study and analysis of laws, regulations, science, and the application of common sense.

If confirmed, there are substantive areas that I would like to focus on as a Commissioner. First, the Commission must have a plan to stay as current as possible with technology and the new and unique types of consumer products coming onto

the market every day. We need to understand the data, science, and process underlying a product to stay abreast of marketplace dynamics, changing consumer preferences, and to maintain vigilance over emerging hazards. If confirmed, I will draw upon my experiences and I will meet with all stakeholders, continuing my philosophy of seeing, touching, and learning the products to help the Commission stay well informed.

Second, I think the Commission must always work to protect consumers from unreasonable risks while balancing the American public's right to have access to a range of affordable product choices and recreational activities. We are all very different people and our choices and interests are many. Finally, I know the Commission is currently looking at the issue of recall effectiveness, and I look forward to contributing my own ideas to make sure consumers are being reached across a variety of platforms.

Thank you for the opportunity to testify and to appear before the Committee today. I look forward to answering your questions.

A. BIOGRAPHICAL INFORMATION

1. Name (Include any former names or nicknames used): Dana Baiocco (Dana Baiocco Dudek).

2. Position to which nominated: Commissioner, CPSC.

3. Date of Nomination: September 28, 2017.

4. Address (List current place of residence and office addresses):

Residence: Information not released to the public.
Office: 100 High Street, 21st Floor, Boston, MA 02110.

5. Date and Place of Birth: Aug. 9, 1966; Wheeling, WV.

6. Provide the name; position, and place of employment for your spouse (if married) and the names and ages of your children (including stepchildren and children by a previous marriage).

Andrew F. Susko, Partner, White & Williams, LLP (spouse); Matthew Susko (stepson, 30 yrs); Jonathan Susko (stepson, 28 yrs).

7. List all college and graduate degrees. Provide year and school attended.

Duquesne University School of Law (Juris Doctor, *cum laude,* 1997)
Ohio University, E.W. Scripps School of Journalism (B.S., Journalism, 1988)

8. List all post-undergraduate employment, and highlight all management level jobs held and any non-managerial jobs that relate to the position for which you are nominated.

Professional Firms	
2007–present	Partner, Jones Day 500 Grant St., Pittsburgh, PA 15219 (2007–2010) 100 High St., 21st Floor, Boston, MA. 02110 (2011–present)
1998–2006	Associate, Jones Day, 500 Grant St., Pittsburgh, PA 15219
Government	
1996–1998	Judicial Law Clerk to The Honorable Gustave Diamond United States District Court for the Western District of Pennsylvania, Joseph F. Weis, Jr. U.S. Courthouse, 700 Grant Street, Pittsburgh, PA 15219

9. Attach a copy of your resumé. (Attached)

10. List any advisory consultative, honorary; or other part-time service or positions with Federal, State, or local governments, other than those listed above, within the last ten years. None.

11. List all positions held as an officer, director, trustee, partner, proprietor, agent, representative, or consultant of any corporation, company, firm, partnership, or other business, enterprise, educational, or other institution within the last ten years. See Resumé.

12. Please list each membership you have had during the past ten years or contently hold with any civic, social, charitable, educational, political, professional, fraternal, benevolent or religious organization, private club, or other membership organization. Include dates of membership and any positions you have held with any organization. (See list below). Please note whether any such club or organization restricts membership on the basis of sex, race, color, religion, national origin, age, or handicap. No.

Professional

Pennsylvania Bar Association, Current Member; Chair, House of Delegates (2009–2011); Board of Governors (2009–2012); Zone 12 Representative to the House of Delegates (2005 to present); Co-Chair, Commission on Women in the Profession (2006–2008); Federal Rules Committee (2006)

Massachusetts Bar Association, Current Member

Boston Bar Association, Current Member; MDUL Committee Member (2016) Member, International Aviation Women's Association (2008–2013)

Civic

Member, Beacon Hill Civic Association and its Zoning and Licensing Committee (Boston, MA 2015–2016)

Charitable

Children's Hospital of Philadelphia, Carousel Ball Fundraising Committee (2012–2017)

Emerald Necklace Conservancy, Liff Committee, Fundraising (2013–2016) (To support the care and maintenance of Boston City Parks)

Magee Women's Institute Cabinet Member (2015) (The Institute is a collaboration of scientists and world-class researchers across institutions and disciplines focused on reproductive sciences and women's health research.)

Brimmer and May School, Annual Fund Committee (2014 to present)

The United Way, Young Leaders Audit Committee Volunteer (2009–2010)

Not for Profit

Board Member, Commonwealth Institute (Mission: To assist women CEO's, entrepreneurs, and senior corporate executives by helping them grow their businesses and careers in the Boston area) (2011–2015)

Other

International Wine and Food Society, Boston Chapter (2013–2017)

13. Have you ever been a candidate for and/or held a public office (elected, non-elected, or appointed)? No. If so, indicate whether any campaign has any outstanding debt, the amount, and whether you are personally liable for that debt.

N/A

14. Itemize all political contributions to any individual, campaign organization, political party, political action committee, or similar entity of $500 or more for the past ten years. Also list all offices you have held with, and services rendered to, a state or national political party or election committee during the same period.

To the best of my recollection, over the past ten years, I personally contributed $500 to Martha Coakley for Governor in 2014 and $1,000 to the Governor Charlie Baker Committee in 2017. I have not held any offices with any state or national political party, political action committee, or campaign committee in the past ten years.

15. List all scholarships, fellowships, honorary degrees, honorary society memberships, military medals, and any other special recognition for outstanding service or achievements.

Legal 500—leading lawyer or recommended in litigation for product liability and mass tort defense: consumer products (including tobacco) (2013–2014), toxic tort (2014–2016), automotive/transport (2015–2016), and aerospace/aviation (2007, 2009–2011, and 2014); Selected by American Lawyer Media as one of 35 Pennsylvania lawyers as a "2005 Lawyer on the Fast Track;" Named a "Pennsylvania Super Lawyer, Rising Star" by Philadelphia Magazine and Law & Politics (2005–2007); Duquesne University School of Law Awards: Justice Louis Mandarino Honor Society for Achievement in Trial and Appellate Advocacy; Trial and Appellate Moot Court Honor Societies, Officer and Member; Order of Barristers; McGinley Scholarship Recipient.

16. Please list each book, article, column, or publication you have authored, individually or with others. Also list any speeches that you have given on topics relevant to the position for which you have been nominated. Do not attach copies of these publications unless otherwise instructed.

Written Works

No Summer Vacation for Device Regulators: An Overview of Recent Legislation and FDA Activity, Part I (November 2012)
[PDF available at: *www.jonesday.com/dbaiocco/*]

No Summer Vacation for Device Regulators: An Overview of Recent Legislation and FDA Activity, Part II (November 2012)
[PDF available at: *www.jonesday.com/dbaiocco/*]

Aviation Crisis Management: Are You Really Ready? *Jones Day Practice Perspectives: Product Liability & Tort Litigation* (Winter 2012) [PDF available at: *www.jonesday.com/dbaiocco/*]

The Americanization of Aviation Claims, *Jones Day Practice Perspectives: Product Liability & Tort Litigation* (Summer 2007)
[PDF available at *www.jonesday.com/dbaiocco/*]

Runway Safety and Airport Operations: Are You Responsible, *The Public Record* (December 2006) [PDF available at: *www.ionesday.com/dbaiocco/*]

Implementing the Montreal Accord: Practical Implications of the Aviation Liability Treaty, *Airline Business Report White Paper 2004:* Charting a Course to Meet Today's Market Challenges [PDF available at: *www.jonesday.com/dbaiocco/*]

The Significance of Other Accidents in Aviation Trials, *Aviation Litigation Quarterly* (July 2004) [PDF available at: *www.jonesday.com/dbaiocco/*]

Excluding NTSB Final Aircraft Accident Reports and FAA Airworthiness Directives at Trial, *Air and Space Lawyer* (Spring 2003) [PDF available at *www.jonesday.com/dbaiocco/*]

Relevant Speaking Roles

Pennsylvania Bar Institute Presents: The Preparation and Trial of the Products Liability Case: A Course for the Experienced Practitioner Pittsburgh (May 11, 2011), Philadelphia (May 20, 2011) (Instructor/Panel Member)

Boston Bar Association CLE Presenter, "Preparing Expert Witnesses for Deposition" (with written materials) (March, 2011)

PBI Fundamentals of Products Liability Law, Pittsburgh (November 11, 2010) (Speaker)

Proven Strategies For Successfully Managing the Demands of a Law Practice and Personal Life, Pennsylvania Bar Institute CLE Program, Pittsburgh (January 31, 2007) (Speaker)

17. Please identify each instance in which you have testified orally or in writing before Congress in a governmental or non-governmental capacity and specify the date and subject matter of each testimony. None.

18. Given the current mission, major programs, and major operational objectives of the department/agency to which you have been nominated, what in your background or employment experience do you believe affirmatively qualifies you for appointment to the position for which you have been nominated, and why do you wish to serve in that position?

Over the past 19 years, I developed a diverse litigation practice, which involved, in part, consumer and other products. I assisted clients who chose to participate in the CPSC's voluntary recall program, and have participated in other Federal agency enforcement proceedings and safety related programs. I also obtained various administrative and staffing experiences at my firm. For example, I assisted the firm in opening its Boston office, and I served as the hiring partner for two years in that office. I oversaw the Pittsburgh office Speaker Series and served on the Firm's web committee. In addition, during my tenure as Chair of the Pennsylvania Bar Association House of Delegates, (2009–2011), I presided over all discussions, debates, votes, and the adoption of resolutions by this policy making mm of the Association. I anticipate that all of these experiences, coupled with my commitment to the Rule of Law, the applicable statutes and relevant case law, will allow me to contribute to the overall vitally of the Agency.

19. What do you believe are your responsibilities, if confirmed, to ensure that the department/agency has proper management and accounting controls, and what experience do you have in managing a large organization?

As one of five Commissioners, I believe my responsibilities will include working collaboratively to advance the mission of the Commission. This necessarily will include working with Staff, testifying before Congress on the progression and status of Agency initiatives and directives, overseeing and participating in hearings and meetings with stakeholders, and applying all applicable laws and regulations governing the Commission's authority and chummiest.

20. What do you believe to be the top three challenges facing the department/agency, and why?

I believe that three challenges facing the CPSC are: (1) keeping up with technology and the new and unique types of consumer products coming onto the market; (2) protecting the American public from unreasonable risks of harms while balancing the American public's right to have access to a range of affordable product choices and recreational activities; and (3) facilitating programs that promptly and effectively address all stakeholder issues.

B. POTENTIAL CONFLICTS OF INTEREST

1. Describe all financial arrangements, deferred compensation agreements, and other continuing dealings with business associates, clients, or customers. Please include information related to retirement accounts.

If confirmed, I will withdraw from the Jones Day's partnership. Pursuant to my partnership agreement, following my withdrawal, I will receive reimbursement of my capital contribution paid to me in a lump sum within 30 days of withdrawal. However, the firm may withhold a portion of my capital account as a reserve for account reconciliation and tax payments the film makes on behalf it its partners. I will also receive my final partnership share distribution, less any payments necessary to satisfy open personal lines of credit, in a lump sum within 30 days of withdrawal from the firm. I will continue to participate in the firm's qualified defined benefit plan and the defined contribution plan. The plan sponsor will not make further contributions after my separation from the firm. My retirement funds are invested in the following types of accounts: American Funds Growth Fund of America, Dodge & Cox Stock and Income Fund, Hotchkis & Wiley Mid Cap Value I, Vanguard Institutional Index Instl Pl. PIMCO All Asset Institutional Fund, Wells Fargo Stable Value E, Morgan Stanley Inst. International Equity Fund, T. Rowe Price Instl. High Yield and Mid-Cap Growth funds, Putnam Dynamic Risk Allocation, U.S. Treasury Bonds, and various Jones Day Funds (Jones Day Real Estate Fund, Jones Day 2020, 2025, 2035, 2040 Funds, Jones Day Fixed Income Fund, Jones Day Income Research TIPS Fund, Jones Day Emerging Markets Fund). All parent and child funds are listed in detail on my Executive Branch Personnel Public Financial Disclosure Report.

2. Do you have any commitments or agreements, formal or informal, to maintain employment, affiliation, or practice with any business, association or other organization during your appointment? No. If so, please explain. N/A

3. Indicate any investments, obligations, liabilities, or other relationships which could involve potential conflicts of interest in the position to which you have been nominated. None known at this time.

4. Describe any business relationship, dealing, or financial transaction which you have had during the last ten years, whether for yourself, on behalf of a client, or acting as an agent, that could in any way constitute or result in a possible conflict of interest in the position to which you have been nominated.

During the nomination process, I consulted with the Office of Government Ethics and the CPSC's Designated Agency Ethics Official to identify potential conflicts of interest. Any conflicts will be resolved in accordance with the terms of the Ethics Agreement that I have entered into with the CPSC's Ethics Official (a copy of which has been provided to the Committee). I am not aware of any other conflicts of interest at this time.

5. Describe any activity during the past ten years in which you have been engaged for the purpose of directly or indirectly influencing the passage, defeat, or modification of any legislation or affecting the administration and execution of law or public policy.

During my tenure as Chair of the Pennsylvania Bar Association House of Delegates, (2009–2011), an elected position, I presided over all discussions, debates, votes, and the adoption of resolutions by this policy making aim of the Association. The Minutes of those meetings (October 19, 2009, December 4, 2009, November 19, 2010, May 14, 2010, May 6, 2011) are available at the Pennsylvania Bar Association, 100 South St., Harrisburg, PA 17101.

6. Explain how you will resolve any potential conflict of interest, including any that may be disclosed by your responses to the above items.

Any potential conflicts will be resolved in accordance with the terms of the Ethics Agreement that I have entered into with the Commission's Designated Ethics Official (a copy of which has been provided to the Committee). If any other potential conflict arises, I will seek the advice and counsel of the CPSC's Designated Ethics Official and, if faced with a legitimate conflict of interest, I will recuse myself and/or divest as necessary.

C. LEGAL MATTERS

1. Have you ever been disciplined or cited for a breach of ethics, professional misconduct, or retaliation by, or been the subject of a complaint to, any court, administrative agency, the Office of Special Counsel, professional association, disciplinary committee, or other professional group? No. If yes:

a. Provide the name of agency, association, committee, or group;

b. Provide the date the citation, disciplinary action, complaint, or persom1el action was issued or initiated;

c. Describe the citation, disciplinary action, complaint, or personnel action;

d. Provide the results of the citation, disciplinary action, complaint, or personnel action.

N/A

2. Have you ever been investigated, arrested, charged, or held by any Federal, State, or other law enforcement authority of any Federal, State, county, or municipal entity, other than for a minor traffic offense? No. If so, please explain. N/A

3. Have you or any business or nonprofit of which you are or were an officer ever been involved as a party in an administrative agency proceeding, criminal proceeding, or civil litigation? Yes. If so, please explain. N/A

Dana Baiocco Dudek v. Joseph A. Dudek (Case No. FD–96–9837) is a civil divorce action filed in the Court of Common Pleas of Allegheny County, Pennsylvania (Family Division). In conjunction with this action, I also filed and was granted an Election to Resume Prior Name (*i.e.,* Dana Baiocco Dudek to Dana Baiocco).

David C. Bruening v. Dana Baiocco (Case No. FD11–006582–016) is a civil divorce and custody action filed in the Court of Common Pleas of Allegheny County, Pennsylvania (Family Division).

Members of the Board of Trustees of 33 Brimmer Street Condominium Trust, Dana Baiocco and Katherine Wright v. Geoffrey O. Hills and Elise Hills a/k/a Elise Larner (Case No. 15–CV–03200) is a civil action for declaratory, injunctive and other relief filed in the Massachusetts Superior Court by me and Katherine Wright, in our capacities as trustees, on behalf of the board of trustees of a three-unit condo building to enforce compliance with the documents governing the administration of the condominium.

4. Have you ever been convicted (including pleas of guilty or *nolo contendere)* of any criminal violation other than a minor traffic offense? No. If so, please explain. N/A

5. Have you ever been accused, formally or informally, of sexual harassment or discrimination on the basis of sex, race, religion, or any other basis? No. If so, please explain. N/A

6. Please advise the Committee of any additional information, favorable or unfavorable, which you feel should be disclosed in connection with your nomination. Please see resumé for any additional information.

D. RELATIONSHIP WITH COMMITTEE

1. Will you ensure that your department/agency complies with deadlines for information set by congressional committees? Yes.

2. Will you ensure that your department/agency does whatever it can to protect congressional witnesses and whistle blowers from reprisal for their testimony and disclosures? Yes.

3. Will you cooperate in providing the Committee with requested witnesses, including technical experts and career employees, with firsthand knowledge of matters of interest to the Committee? Yes.

4. Are you willing to appear and testify before any duly constituted committee of the Congress on such occasions as you may be reasonably requested to do so? Yes.

RESUMÉ OF DANA BAIOCCO

Legal Career

Jones Day
Partner
Boston Office: 100 High St., 21st Floor, Boston, MA 02110, 2010–Present

- Boston Office Hiring and Recruiting Partner (2011–2013)
- Boston Office Business Development Partner (2011–2013)

Pittsburgh Office: 500 Grant St., Pittsburgh, PA 15219, 1998–2010

United States District Court for the Western District of Pennsylvania 1996–1998
Judicial Law Clerk to The Honorable Gustave Diamond

Court Admissions	Admission Date
U.S. Court of Appeals for the Third Circuit	June, 1998
U.S. Court of Appeals for the Ninth Circuit	December, 2006
U.S. Court of Appeals for the First Circuit	March, 2015
U.S. District Court for the Western District of Pennsylvania	December, 1997
U.S. District Court for the District of Massachusetts	April, 2012
U.S. District Court for the Eastern District of Pennsylvania	October, 2014
Courts of the Commonwealth of Pennsylvania	January, 1998
Courts of the State of Massachusetts	February, 2012

Education

Duquesne University School of Law J.D., *cum laude* 1997

- Justice Louis L. Manderino Honor Society for Achievement in Appellate & Trial Advocacy
- McGinley Scholarship Recipient
- National Order of Barristers-Excellence in Courtroom Advocacy
- Appellate Moot Court Honor Society, Co-Chair
- Trial Moot Court Honor Society, Vice-Chair
- ATLA Trial Moot Court Competition Finalist
- Law Faculty (Professor Kellen McClendon) Research Assistant for Duty of Care in Managed I1ealth Care and Restatement (Second) § 402A

Cambridge University Summer Law Program (via Valparaiso University School of Law)

- The United States Supreme Court with Chief Justice William H. Rehnquist (Summer, 1995)
- Gender Discrimination with Justice Ruth Bader Ginsburg (Summer, 1994)

Ohio University,. E.W.. Scripps School of Journalism, B.S., Journalism 1988

Legal Honors and Awards

- *Legal 500:* Leading lawyer in litigation for products liability and mass tort defense: consumer products (including tobacco) (2013–2014), toxic tort (2014–2016), automotive/transport (2015–2016), and aerospace/aviation (2007, 2009–2011, 2014)
- *American Lawyer Media:* Pennsylvania Lawyer on the Fast Track (2005)
- *Philadelpltia Magazine/Law & Politics:* Pennsylvania Super Lawyer, Rising Star (2005–2007)

Bar Association Service and Memberships

- *Boston Bar Association,* MDL Committee Member (2016)
- *Pennsylvania Bar Association,* Chair, House of Delegates (2009–2011); Board of Governors (2009–2011); Zone Representative to the House of Delegates (2005–2011), Co-Chair of tl1e Commission on Women in the Profession (2007–2009)
- *Pennsylvania Bar Institute,* Faculty Member—Continuing Legal Education

  —*The Preparation and Trial of the Products Liability Case* (Pittsburgh/Philadelphia, 2010)

  —*PBI Fundamentals of Products Liability Law* (Pittsburgh, 2010)

  —*Proven Strategies for Successfully Managing the Demands of a Law Practice and Personal Life* (Pittsburgh, 2007)

  —*Keys to Effective Motions Practice in the Civil Case And Preparing/or and Taking Depositions* (2001)
- American Inns of Court (Pittsburgh Chapter), Program Committee Co-Chair, Executive Board Member (2002–2004), Program Committee Member (2004–2005), Group Leader for "Tripped Up: Electronic Surveillance in the Workplace" *Awarded Fifth Place at the American Inns of Court National Conference (1999–2001)

Boards and Committees

- Commonwealth Institute Board Member (Boston, 2011–2015)
- Beacon Hill Civic Association Zoning and Licensing Committee (Boston, 2015–2016)
- The Executive Women's Council of Pittsburgh (2000–2006)
- Wagner Family Charities Board Member (1998–2002)

Charities and Fundraising

- Children's Hospital of Philadelphia, Carousel Ball Fundraising Committee (2014 to present)
- Emerald Necklace Conservancy, Liff Committee (Boston, 2013–2016)
- Magee Women's Institute Cabinet Member (Pittsburgh/Boston, 2015)
- Brimmer and May School, Annual Fund Committee (2014 to present)
- International Wine and Food Society, Boston Chapter (2013 to present)
- The United Way, Young Leaders Audit Committee Volunteer (2009–2010)

Certifications and Related Memberships

- Private pilot certificate, VFR rating
- Member, International Aviation Women's Association (2008–2013)

Publications

- American Bar Association Litigation Section, Mass Torts Committee Treatise—Mass Torts In The United States: Strategy and Practice: *Recalls: Automobiles, Medical Devices, Consumer Products* (not yet published, in editing stage)
- *No Summer Vacation for Device Regulators: An Overview of Recent Legislation and FDA Activity,* Parts I and II (November, 2012)
- Jones Day Practice Perspectives: Product Liability & Tort Litigation: *Avialion Crisis Management: Are You Really Ready?* (Winter, 2012)
- Jones Day Practice Perspectives: Product Liability & Tort Litigation: *The Americanization of Aviation Claims* (Summer, 2007)
- The Public Record: *Runway Safety and Airport Operations: Are You Responsible?* (November, 2006)
- *Implementing the Montreal Accord: Practical Implications of the Aviation Liability Treaty, Airline Business Report White Paper 2004: Charting a Course to Meet Today's Market Challenges*
- Aviation Litigation Quarterly: *The Significance of Other Accidents in Aviation Trials* (July, 2004)
- Air and Space Lawyer: *Excluding NTSB Final Aircraft Accident Reports and FAA Airworthiness Directives at Trial* (Spring, 2003)

Speaking Engagements

- The Commonwealth Institute Strategies for Success (Keynote Speaker, 2012)
- American Conference Institute's 3rd Annual Forum on Defending and Managing Aviation Litigation (Boston, 2011)
- The Changing Legal Climate Surrounding Ownership Structuring, Use, and Operation of Corporate Jets (Cleveland and Columbus, 2007)
- IATA Legal Symposium: The Americanization of Aviation Claims (Istanbul, Turkey, 2007)

Chairman THUNE. Thank you, Ms. Baiocco.

Dr. Jacobs, we have an introductory statement from Senator Burr. He is chairing an Intelligence Committee hearing that is underway right now. He wishes he could be here in person, but we will submit that for the record.

[The information referred to follows:]

PREPARED STATEMENT OF HON. RICHARD BURR,
U.S. SENATOR FROM NORTH CAROLINA

Chairman Thune, Ranking Member Nelson, members of the Senate Committee on Commerce, Science, and Transportation, and other distinguished guests, I'm pleased to appear before this committee to voice my strong support for and introduce my

fellow North Carolinian Dr. Neil Jacobs as the nominee to be Assistant Secretary of Commerce for Environmental Observation and Prediction. I believe that after careful examination that this Committee will come to the same conclusion as I have that he is an exceptional nominee.

Dr. Jacobs has had a distinguished career in atmospheric science. Prior to starting his professional career he received a dual bachelors of science degree in mathematics and physics from the University of South Carolina. Following completion of his undergraduate work he received a Master's of Science in air-sea interaction and a PhD in numerical modeling from North Carolina State University.

Dr. Jacobs is currently the Chief Atmospheric Scientist at Panasonic Avionics Corporation where he is charged with directing the research and development of both the aviation weather observing program, as well as numerical forecast modeling. Prior to joining Panasonic in 2005, Dr. Jacobs worked at AirDat on various analysis and modeling projects including NASA's Earth Systems Science Program, GOES satellite imagery, Department of Energy's Ocean Margins Program, and the National Weather Service's Atlantic Surface Cyclone Intensification Index. Dr. Jacobs's private sector career coupled by his lengthy academic resume makes him well suited to take responsibility for all of NOAA's observing systems and converting that information into useable prediction products.

Let me again reiterate my support for Dr. Neil Jacobs and thank him for being here today and his willingness to serve his country in this important role. I hope the Committee will agree with me that this is a well-qualified nominee and he will be confirmed swiftly as the Assistant Secretary of Commerce for Environmental Observation and Prediction.

Thank you.

The CHAIRMAN. So please proceed with your remarks.

Dr. JACOBS. Thank you.

STATEMENT OF NEIL JACOBS, JR., PH.D.,
NOMINEE TO BE ASSISTANT SECRETARY OF COMMERCE,
ENVIRONMENTAL OBSERVATION AND PREDICTION

Dr. JACOBS. Thank you, Chairman Thune, Ranking Member Nelson, and members of the Committee.

I would also like to thank the President and Secretary Ross for their trust and confidence in me with this nomination to be Assistant Secretary of Commerce for Environmental Observation and Prediction.

If I have the honor of being confirmed, I look forward to working with all of you on the important work performed by NOAA in the areas of observations, analysis, and forecasting.

I am the son and grandson of Air Force veterans. My father's F–4 was shot down in Vietnam. After being rescued, he met my mom who was working for the American Red Cross in the Philippines. He returned to the Air Force Academy as a flight instructor in Colorado Springs, where I was born.

I grew up in Florida at Homestead Air Force Base near Miami, and later moved to South Carolina partly to avoid repeated hurricane strikes. Not long after the move, our house in Charleston was nearly destroyed by hurricane Hugo. Having spent my entire life close to the ocean surfing, diving, and fishing, I was naturally drawn toward pursuing an educational path in air-sea interaction and numerical weather prediction.

Upon leaving academia, I was part of a startup company that was later acquired by Panasonic. The technology I was involved with was designed to supplement the Radiosonde Weather Balloon program by transmitting observations collected on aircraft through satellite-based communication systems.

The sensor was also installed on several manned and unmanned aerial platforms operated by NASA and the Naval Research Laboratory, as well as NOAA's own P–3.

My team and I decided early on that we would leverage the peer review scientific process conducted by NOAA to promote our products. We provided the data free of charge for 4 years, so that NOAA scientists could vet the data based on their own quality and reliability standards.

Part of this program led to a decade-long, public-private-academic global modeling effort that rivaled the best in the world. In addition to supporting research at several universities and the National Center for Atmospheric Research, Panasonic also has major facilities in Washington State, New Jersey, Florida, Colorado, and North Carolina.

Having witnessed industry's rapid growth across the entire forecast value chain from observation collection to end user products, I began to wonder what would happen if industry decided to bypass the public sector. This would be a travesty, and the end result would be taxpaying citizens not having access to the best available weather information for the protection of life and property.

Two years ago, my father passed away on my birthday. I wanted to follow in his footsteps, but a medical condition prevented me from being a pilot. At his memorial service, I was humbled by the large turnout of Academy cadets and veterans, and I was compelled to find a way to give back. I knew instantly, when I was approached for this position, that this was my opportunity to use my specialized knowledge and skills to serve my country.

While my formal training and expertise is in the area of observing systems, data assimilation, modeling, and high performance computing, my real world experience in structuring public-private-academic sustainable business models under constrained budgets will play a key role in improving NOAA's observing and predictive capabilities.

The U.S. weather enterprise is at a turning point. If we navigate this paradigm shift successfully, the result will be a mutually beneficial outcome for all three sectors: public, private, and academic.

If not addressed, the three sectors may find themselves in a competitive situation, to the detriment of the American people.

The framework for addressing this is outlined in the Weather Research and Forecasting Innovation Act of 2017, and implementing this Act will be a top priority.

If confirmed, it would be a tremendous honor to help lead such a distinguished organization of scientists, engineers, forecasters, and uniformed officers.

I can assure the Committee that I will do my absolute best to ensure this team of 12,000 professionals have the resources and leadership needed to produce transparent, objective, and defendable science so that decisions based on this weather and climate information can be made with confidence.

I would like to thank my wife Jen, who is a computational biologist at Duke University, for her support and understanding, while balancing her career with raising our two sons, Nicolaus and Theodore, ages 4 and 2.

Mr. Chairman, Ranking Member Nelson, and members of the Committee, thank you again for the opportunity to be here.

I would be pleased to answer any questions you may have.

[The prepared statement and biographical information of Dr. Jacobs follow:]

PREPARED STATEMENT OF NEIL JACOBS, JR., PH.D., NOMINEE TO BE ASSISTANT SECRETARY OF COMMERCE, ENVIRONMENTAL OBSERVATION AND PREDICTION

Thank you, Chairman Thune, Ranking Member Nelson, and Members of the Committee. I would also like to thank the President and Secretary Ross for their trust and confidence in me with this nomination to be the Assistant Secretary of Commerce for Environmental Observation and Prediction. If I have the honor of being confirmed, I look forward to working with all of you on the important work performed by NOAA in the areas of observations, analysis, and forecasting.

I am the son and grandson of Air Force veterans. My father's F–4 was shot down in Vietnam. After being rescued, he met my mom who was working for the Red Cross in the Philippines. He returned to the Air Force Academy as a flight instructor in Colorado Springs, where I was born. I grew up in Florida at Homestead Air Force Base near Miami, and later moved to South Carolina. Not long after the move, our house in Charleston was nearly destroyed by hurricane Hugo. Having spent my entire life close to the ocean surfing, diving, and fishing, I was naturally drawn towards pursuing an educational path in air-sea interaction and numerical weather prediction.

Upon leaving academia, I was part of a start-up company that was later acquired by Panasonic. The technology I was involved with was designed to supplement the weather balloon program by transmitting observations collected on aircraft through a satellite-based communication system. The sensor was also installed on several manned and unmanned platforms operated by NASA and the Naval Research Laboratory, as well as NOAA's own P–3.

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While my formal training and expertise is in the areas of observing systems, data assimilation, modeling, and high performance computing, my real-world experience in structuring public-private-academic sustainable business models, most under constrained budgets, will play a key role in improving NOAA's observing and predictive capabilities.

The U.S. Weather Enterprise is at a turning point. If we navigate this paradigm shift successfully, the result will be a mutually-beneficial outcome for all three sectors, private, public and academic. If not addressed, the three sectors may find themselves in a competitive situation, to the detriment of the American people. The framework for addressing this is outlined in the Weather Research and Forecasting Innovation Act of 2017, and implementing this Act will be a top priority.

If confirmed, it would be a tremendous honor to help lead such a distinguished organization of scientists, engineers, forecasters and uniformed officers. I can assure the Committee that I will do my absolute best to ensure this team of 12,000 professionals have the resources and leadership needed to produce transparent, objective and defendable science, so that decisions based on this weather and climate information can be made with confidence.

I would like to thank my wife Jen, who is a computational biologist at Duke University, for her support and understanding, while balancing her career with raising our two sons Nicolaus and Theodore, ages 4 and 2.

Mr. Chairman, Ranking Member Nelson, and Members of the Committee, thank you again for the opportunity to be here. I would be pleased to answer any questions you may have.

A. BIOGRAPHICAL INFORMATION

1. Name (Include any former names or nicknames used): Neil Andrew Jacobs Jr.

2. Position to which nominated: Assistant Secretary of Commerce for Environmental Observation and Prediction.

3. Date of Nomination: October 3, 2017.

4. Address (List current place of residence and office addresses):

5. Date and Place of Birth: December 12, 1973; Colorado Springs, CO.

6. Provide the name, position, and place of employment for your spouse (if married) and the names and ages of your children (including stepchildren and children by a previous marriage).

Jennifer Modliszewski, Research Associate, Duke University.

7. List all college and graduate degrees. Provide year and school attended.

B.S. Physics, 1996. University of South Carolina.

B.S. Math, 1996, University of South Carolina.

M.S. Atmospheric Science (Air-sea interaction), 2000, North Carolina State University.

Ph.D. Atmospheric Science (Numerical modeling), 2005, North Carolina State University.

8. List all post-undergraduate employment, and highlight all management-level jobs held and any non-managerial jobs that relate to the position for which you are nominated.

2013 to Present. Chief Atmospheric Scientist, Panasonic Avionics Corporation (5,000 employees).

2004–13, Director of Research and Business Development, AirDat, LLC (80 employees).

9. Attach a copy of your resumé. A copy is attached.

10. List any advisory, consultative, honorary, or other part-time service or positions with Federal, State, or local governments, other than those listed above, within the last ten years.

I have never had a position in Federal, State, or local government.

11. List all positions held as an officer, director, trustee, partner, proprietor, agent, representative, or consultant of any corporation, company, firm, partnership, or other business, enterprise, educational, or other institution within the last ten years.

American Meteorological Society (AMS) Forecast Improvement Group (Chair 2015 to Present; Lead, NWP 2012–14)

Federal Aviation Administration (FAA) Continuous Lower Emissions, Energy, and Noise (CLEEN)

World Meteorological Organization (WMO) Expert Team on Aircraft-Based Observing Systems (ET–ABO)

12. Please list each membership you have had during the past ten years or currently hold with any civic, social, charitable, educational, political, professional, fraternal, benevolent or religious organization, private club, or other membership organization. Include dates of membership and any positions you have held with any organization. Please note whether any such club or organization restricts membership on the basis of sex, race, color, religion, national origin, age, or handicap.

American Meteorological Society; Forecast Improvement Group (Chair 2015 to Present; Lead, NWP 2012–14)

World Meteorological Organization; Expert Team on Aircraft-Based Observing Systems

American Geophysical Union

American Meteorological Society

Gamma Beta Phi, National Honor Society

Geological Society of America

National Forensics League

Phi Beta Kappa, Honor Society

Pi Mu Epsilon, National Math Honor Society

Sigma Pi Sigma, National Physics Honor Society (President: 1993–1996, USC Chapter)

Sigma Xi, Honor Society

Durham YMCA

Greensboro Velo Club (Pro Cycling Team)

Rotary International

Trout Unlimited

*None of these restrict membership on the basis of sex, race, color, religion, national origin, age, or handicap.

13. Have you ever been a candidate for and/or held a public office (elected, non-elected, or appointed)? If so, indicate whether any campaign has any outstanding debt, the amount, and whether you are personally liable for that debt. No.

14. Itemize all political contributions to any individual, campaign organization, political party, political action committee, or similar entity of $500 or more for the past ten years. Also list all offices you have held with, and services rendered to, a state or national political party or election committee during the same period. None.

15. List all scholarships, fellowships, honorary degrees, honorary society memberships, military medals, and any other special recognition for outstanding service or achievements.

Pi Mu Epsilon, National Math Honor Society

Sigma Pi Sigma, National Physics Honor Society (President: 1993–1996, USC Chapter)

Gamma Beta Phi, National Honor Society

National Forensics League Scholarship

Phi Beta Kappa, Honor Society

Sigma Xi, Honor Society

16. Please list each book, article, column, or publication you have authored, individually or with others. Also list any speeches that you have given on topics relevant to the position for which you have been nominated. Do not attach copies of these publications unless otherwise instructed.

Invited lectures at government meteorological centers:

NCEP, Camp Springs, MD. *PWS global ensemble system,* 21 July 2016

UK Met Office, Exeter, UK, *PWS global model and data assimilation,* 13 July 2016

ECMWF, Reading, UK, *Assimilation of ABOs into a global modeling system,* 12 July 2016

UK Met Office, Exeter, UK, *Estimation of TAMDAR Error and Assimilation Experiments,* 27 Apr 2012

ECMWF, Reading, UK, *Utility of TAMDAR aircraft observations for NWP,* 26 Apr 2012

NCEP EMC, Camp Springs, MD, *Optimization of TAMDAR for NWP,* 23 Aug 2011

SMN, Mexico City, Mexico, *Operational forecasting with TAMDAR,* 23 Jun 2011

ECMWF, Reading, UK, *Unique aspects of aircraft data assimilation.* 10 Nov 2010

Publications

Gao, F., X.-Y. Huang, N. Jacobs, H. Wang, 2017: Assimilation of Wind Speed and Direction Observations: Results from real observation experiments. *Tellus A,* in press.

Zhang. X., H. Wang, X.-Y. Huang, F. Gao, and N. Jacobs, 2015: Using Adjoint-Based Forecast Sensitivity Method to Evaluate TAMDAR Data Impacts on Regional Forecasts, *Advances in Meteorology,* Vol. 2015, Article ID 427616, 13 pg, 2015.

Gao, F., P. P. Childs, X.-Y. Huang, N. A. Jacobs, and J. Z. Min, 2014: A Relocation-based Initialization Scheme to Improve Track-forecasting of Tropical Cyclones. *Adv. Atmos. Sci.,* 31(l), 27–36.

Jacobs, N., D. Mulally, A. Anderson, J. Braid, P. Childs, A. Huffman, E. Wilson, and F. Gao, 2015: Recent Advancements in the TAMDAR Sensor Network Expansion, (IOAS–AOLS). AMS, Phoenix, AZ.

Jacobs, N., F. Gao, P. Childs, X. Y. Huang, and H. Wang, 2015: Optimization of In-situ Aircraft Observations for Various Assimilation Techniques. (IOAS–AOLS), AMS. Phoenix, AZ.

Liu, Y., M. Xu, L. Pan, Y. Liu, N. Jacobs, and P. Childs, 2015: Implementation of a CONUS RTFDDA system with radar data assimilation for convection-resolvable analysis and prediction, (IOAS–AOLS), AMS, Phoenix, AZ.

Jacobs, N. A., D. J. Mulally. and A. K. Anderson, 2014: Correction of Flux Valve-Based Heading for Improvement of Aircraft Wind Observations*J. Atmos. Oceanic Technol.* 31. 1733–1747.

Jacobs, N. A., and J. E. Rex, 2013: Benefits and Utility of Tropospheric Airborne Meteorological Data Reporting, *Air Traffic Control Quarterly,* January, First Quarter. 2013.

Huang, X.-Y., F. Gao, N. A. Jacobs, and H. Wang, 2013: Assimilation of wind speed and direction observations: a new formulation and results from idealized experiments. *Tellus A.* 65, l9936.

Wyszogrodzki, A. A., Y. Liu, N. A. Jacobs, P. Childs, Y. Zhang, G. Roux, and T. T. Warner, 2013: Analysis of the surface temperature and wind forecast bias of the NCAR-AirDat operational CONUS 4km RTFDDA forecasting system, *Meteorol. Atmos. Phys.,* 121, 3–4.

Jacobs, N. A., P. Childs, M. Croke, A. Huffman, J. Nelson, J. T. Braid, Y. L. Liu, and X. Y. Huang, 2013: An update on the TAMDAR global network expansion, Special Symposium on Advancing Weather and Climate Forecasts: Innovative Techniques and Applications, Austin, TX.

Nelson, J., J. T. Braid, A. K. Anderson. N. A. Jacobs, P. Childs, M. Croke, and A. Huffman, 2013: Alaska TAMDAR and the RTFDDA WRF QC System, ARAM, AMS, Austin, TX.

Huffman, A., P. Childs, M. Croke, N. A. Jacobs, and Y. L. Liu, 2013: Verification of the NCAR-AirDat operational RT–FDDA–WRF for the 2011 and 2012 spring convective seasons. IOAS, AMS, Austin, TX.

Gao, F., N. A. Jacobs, X. Y. Huang, and P. Childs, 2013: Direct assimilation of wind speed and direction for the WRF model, Special Symposium on Advancing Weather and Climate Forecasts: Innovative Techniques and Applications, AMS, Austin, TX.

Richardson, H., N. A. Jacobs, P. Childs, P. Marinello, and X. Y. Huang, 2013: UAS observations and their impact on NWP during TUFT, ARAM, AMS, Austin, TX.

Gao, F., P. Childs, X. Y. Huang, and N. A. Jacobs, 2013: A new method for vortex relocation within a balanced flow field, NWP, AMS, Austin, TX.

Gao, F., X. Zhang, N. Jacobs, X.-Y. Huang, Xin Zhang, P. Childs, 2012. Estimation of TAMDAR Observational Error and Assimilation Experiments. *Wea. Forecasting,* 27, 4. 856–877.

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Gao, F., Xiaoyan Zhang, X.-Y. Huang, Xin Zhang, N. Jacobs. P. Childs. 2011: Preliminary Results of Directly Assimilating Wind Speed and Direction Based on WRFDA 3D-Var System. 12th WRF Users' Workshop, Boulder, Colorado, 20–24 June 2011.

Zhang, Y. Y. Liu, N. A. Jacobs, P. Childs, T. Nipen, T. T. Warner, L. D. Monache, G. Roux, A. Wyszogrodzki, W. Y. Y. Cheng, W. Yu, and R.-S. Sheu, 2012: Evaluation of the impact of assimilating the TAMDAR data on WRF based RTFDDA simulations and the RTFDDA performance on predicting warm-season precipitation over the CONUS, *Wea. Forecasting.* under revision.

Liu, Y., T. Warner, S. Swerdlin, T. Betancourt, J. Knievel, 8 . Mahoney, J. Pace, D. Rostkier-Edelstein, N. A. Jacobs, P. Childs, and K. Parks, 2011: NCAR en-

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Huffman, A., N. A. Jacobs, M. Croke, P. Childs, X. Y. Huang, and Y. Liu, 2011: Verification and Sensitivity of the NCAR-AirDat Operational Forecasting Systems to TAMDAR Observations. 15th Symposium (IOAS–AOLS), AMS, Seattle, WA.

Jacobs, N. A., F. Gao, P. Childs, X. Zhang, X. Y. Huang, X. Zhang, M. Croke, and Y. Liu, 2011: Optimization of In-situ Aircraft Observations for Various Assimilation Techniques. 15th Symposium (IOAS–AOLS). AMS, Seattle, WA.

Jacobs, N. A., M. Croke, P. Childs, Y. Liu, X. Y. Huang, and R. Delong, 2011: The Utility of TAMDAR in the NextGen-Oriented CLEEN Program. Second Aviation, Range and Aerospace Meteorology Special Symposium on Weather-Air Traffic Management Integration (ARAM), AMS, Seattle, WA.

Croke, M., N. A. Jacobs, D. J. Mulally, A. K. Anderson, J. T. Braid, P. Childs. A. Huffman, Y. Liu, and X. Y. Huang, 2011: Recent Advancements in the TAMDAR Sensor Network Expansion. 15th Symposium on Integrated Observing and Assimilation Systems for the Atmosphere, Oceans and Land Surface (IOAS–AOLS), AMS, Seattle, WA.

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Jacobs, N. A., and Y. Liu, 2006: A comprehensive quantitative precipitation forecast statistical verification study, Doc. and Tech. Note AirDat, LLC. 25 pp.

Jacobs, N. A., Y. Liu, and C.-M. Druse, 2006: Evaluation of temporal and spatial distribution of TAMDAR data in short-range mesoscale forecasts, AMS Annual Meeting, 10th Symp. IOAS–AOLS.

Jacobs, N. A., S. Raman, and G. M. Lackmann, 2006: Sensitivity of East Coast winter storms to sea surface temperature gradients, AMS Annual Meeting, 14th Conf. Sea-Atmos.

Jacobs, N. A., G. M. Lackmann and S. Raman 2005: The combined effects of Gulf Stream-induced baroclinicity and upper-level vorticity on U.S. East Coast extratropical cyclogenesis. *Mon. Wea. Rev.,* 133, 2494–2501.

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Jacobs, N. A., S. Raman, G. M. Lackmann, and P. P. Childs, Jr, 2004: Role of the Gulf Stream on extratropical cyclogenesis, AMS Annual Meeting, 20th Conf. WAF/NWP pp. 318–322.

Raman, S., N. Jacobs, and M. Simpson, 2003: Numerical simulation of land-air-sea interactions during the northeasterly monsoon over Indian Ocean. INDOEX conf. Bangalore, India.

Jacobs, N. A., 2001: Latent and sensible heat fluxes over the Gulf Stream region during OMP. AGU, Boston, MA. Preprint pp 412–417.

Jacobs, N., 2000: Physical Oceanographic Processes and Air-Sea Interactions of extratropical cyclogenesis during the Oceans Margins

Program, Thesis, Department of Marine, Earth, and Atmospheric Science, North Carolina State University, Raleigh, NC. 178pp.

Jacobs, N., C. Petrusak, V. Connors, O. DeMaster, T. Hopkins, 1998: Earth System Science: Integration of Computer Modeling and Laboratory Studies. 25 conf GSA/ESSE, pp. 127–131.

Jacobs, N., V. Connors, T. Hopkins, D. DeMaster, B. Sweet, 1998: The Evolution of Earth System Science at North Carolina State University. 25 conf GSA/ESSE, pp. 417–421.

Jacobs. N.. 1997: Modeling e-folding time decay of super-cooled semiconductor clocks, Thesis, Department of Physics. University of South Carolina, Columbia, SC. 234pp.

17. Please identify each instance in which you have testified orally or in writing before Congress in a governmental or non-governmental capacity and specify the date and subject matter of each testimony.

Hearing: Leading the Way: Examining Advances in Environmental Technology (21 June 2017) House of Representatives, Committee on Science, Space, and Technology, Subcommittee on Environment: Tropospheric airborne meteorological data reporting, conventional weather observations, and their impact in numerical models.

Hearing: Private Sector Weather Forecasting: Assessing Products and Technologies (8 June 2016) House of Representatives, Committee on Science, Space, and Technology. Subcommittee on Environment: The advancing capabilities of numerical weather prediction in the weather enterprise. Public-private-academic partnerships, which for sustainable business models.

18. Given the current mission, major programs, and major operational objectives of the department/agency to which you have been nominated, what in your back-

ground or employment experience do you believe affirmatively qualifies you for appointment to the position for which you have been nominated, and why do you wish to serve in that position?

At Panasonic, I lead a group of private-sector scientists and software engineers that have developed a global weather model that has skill on par/and better than the European Centre for Medium-Range Weather Forecasts (ECMWF) that produces the *"Euro"* model. This was accomplished on a meager budget that industry analysts claimed was impossible to even get the program off the ground. Our U.S.-based team at Panasonic Weather Solutions (PWS), mostly in North Carolina, proved the critics wrong. I have extensive experience with public-private-academic partnerships for weather model and observing system development. As a founding member of the PWS predecessor company *AirDat*, I directed the private side of the National Weather Service's very first atmospheric observational data acquisition as a subscription service. This is a great example of a successful public-private partnership that is still in existence today. I have past experience in satellite data and imagery from GOES to Radio Occultation (GPSRO), and understand the advantages of commercial weather data to augment our current data. This includes processing, quality control, and assimilating into forecast models. Having worked alongside NOAA and NWS employees and scientists as a scientific collaborator, I have earned their trust and respect. Additionally, I have great working relationships with key World Meteorological Organization member countries and their respective National Meteorological Service Directors. For the last three years, I have served as the Chair of the Forecast Improvement Group (FIG) for the American Meteorological Society. FIG members are NOAA, university, and private sector atmospheric scientists and meteorologists, who share the common interest of improving weather forecasting, modeling and prediction for the United States. Lastly, I want to serve my country. Growing up, I wanted to follow my father's career by serving in the U.S. Air Force as a fighter pilot but a medical condition prevented me from flying jets. When this opportunity presented itself, I thought that working for NOAA is another way to serve my country. The best way I can do that is by using my skills and expertise to return NOAA's National Weather Service to the world's most advanced weather forecasting and modeling agency.

19. What do you believe are your responsibilities, if confirmed, to ensure that the department/agency has proper management and accounting controls, and what experience do you have in managing a large organization?

My responsibility, as the Assistant Secretary of Commerce for Environmental Observation and Prediction, will be to work closely with NESDlS, NOS, NWS and OAR, and provide leadership for these line offices to better manage their assets in their service to the American people. As duly confirmed by the Senate, and as political appointees, we have an obligation to comply with the direction and oversight provided by Congress to manage our agency to the best of our abilities and within the letter of the law. Panasonic Avionics Corporation, a division of Panasonic North America, provides avionics, engineering services, meteorological data and other technical services to numerous leading air carriers operating in dozens of countries and National Meteorological Service agencies across the world. As their Chief Atmospheric Scientist, the team I managed had business relationships across the world that handled complex transactions and weather-related industry challenges. Being an executive for a large entity requires the proper balancing and management of multiple agendas and budgets, working with many teams with different and sometimes opposing strategies, and always working closely with corporate counsel when their expert guidance would be required. The private sector works towards the bottom line; in government, the bottom line is serving the American people.

20. What do you believe to be the top three challenges facing the department/agency, and why?

(1) *Weather Forecasting and Modeling*—Return NOAA NWS to the world's leader in global weather forecast modeling capability. The United States led the world in weather forecasting and modeling for decades, but has not kept pace with overseas competition, and is struggling to maintain the status of third most accurate global weather model among National Meteorological Services. As a matter of national pride, we will restore American technical superiority for this vital service for the country and our military serving around the world.

(2) *Increase Observational and Predictive Resource Capabilities*—For example, in Hurricane Harvey, NWS did a great job, but data gaps still exist. One area for improvement is to increase our knowledge to better manage QPE, which stands for Quantitative Precipitation Estimation. It is a method of approximating the amount of precipitation that has fallen at a location or across a

region, and is critical for everything ranging from water resource management to flash flood prediction. QPE maps are compiled using several different data sources including radar estimates, manual and automatic field observations, and satellite data. Scientists at NWS–NCEP and OAR would agree that this process must be improved. A second area for improvement has already been addressed by Congress in HR 353. Specifically. the bill section introduced by Senator Richard Burr asked NOAA to identify the existing radar data gaps in the United States. That report, I understand, is being developed for Congress. Ending radar gaps is critical. We cannot have whole population areas underserved by geographical gaps in this basic observational coverage. The challenge that I will face will be to come back to Congress to discuss how much it will cost to provide this vital coverage to better protect our citizens. There are additional ways that we must improve our Observational and Predictive Capabilities, but we need to examine where costs savings might be realized within existing budgets, and to discuss with Congress tradeoffs that can improve operational efficiencies thereby enabling NOAA to better serve the American people.

(3) *Manage Satellite Costs*—The FY 2017 President's Budget Request for NESDIS was $2,303.7 million. This sum represents the largest portion of NOAA's annual budget. It is my understanding that NESDIS is due to release its new satellite architecture study that discusses where NESDIS plans to go in the decades ahead. It would be premature for me to second guess what NESDIS is planning; however, keeping in line with my second answer, NOAA needs to increase and improve both the data volume and data utility of its earth observation satellites, as well as ground stations, data storage, and dissemination capabilities. As the volume of data increases exponentially, the United States must invest in the proper infrastructure to manage the data, and develop cutting-edge software to extract maximum value from the data.

B. POTENTIAL CONFLICTS OF INTEREST

1. Describe all financial arrangements, deferred compensation agreements, and other continuing dealings with business associates, clients, or customers. Please include information related to retirement accounts.

I have no financial arrangements, deferred compensation agreements, or other continuing dealings with business associates, clients, or customers. I do have an IRA and 401k.

2. Do you have any commitments or agreements, formal or informal, to maintain employment, affiliation, or practice with any business, association or other organization during your appointment? If so, please explain. None.

3. Indicate any investments, obligations, liabilities, or other relationships which could involve potential conflicts of interest in the position to which you have been nominated.

In connection with the nomination process, I have consulted with the Office of Government Ethics and Department of Commerce agency ethics officials to identify any potential conflicts of interest. Any potential conflicts of interest will be resolved in accordance with the terms of my ethics agreement. I understand that my ethics agreement has been provided to the Committee. I am not aware of any potential conflict of interest other than those that are the subject of my ethics agreement.

4. Describe any business relationship, dealing, or financial transaction which you have had during the last ten years, whether for yourself, on behalf of a client, or acting as an agent, that could in any way constitute or result in a possible conflict of interest in the position to which you have been nominated. None.

5. Describe any activity during the past ten years in which you have been engaged for the purpose of directly or indirectly influencing the passage, defeat, or modification of any legislation or affecting the administration and execution of law or public policy.

Four years ago, Panasonic Avionics Corporation contracted with a DC-based lobbyist to represent their interest in the successful passage of HR 2413, 1561 and finally 353, The Weather Research and Forecast Innovation Act of 2017. Congress passed HR 353 earlier this year and President Trump signed the bill in April creating Public Law 115–25.

6. Explain how you will resolve any potential conflict of interest, including any that may be disclosed by your responses to the above items.

Any potential conflicts of interest will be resolved in accordance with the terms of my ethics agreement. understand that my ethics agreement has been provided to the Committee.

C. LEGAL MATTERS

1. Have you ever been disciplined or cited for a breach of ethics, professional misconduct, or retaliation by, or been the subject of a complaint to, any court, administrative agency, the Office of Special Counsel, professional association, disciplinary committee, or other professional group? No.

If yes:

a. Provide the name of agency, association, committee, or group;

b. Provide the date the citation, disciplinary action, complaint, or personnel action was issued or initiated;

c. Describe the citation, disciplinary action, complaint, or personnel action;

d. Provide the results of the citation, disciplinary action, complaint, or personnel action.

2. Have you ever been investigated, arrested, charged, or held by any Federal, State, or other law enforcement authority of any Federal, State, county, or municipal entity, other than for a minor traffic offense? If so, please explain. No.

3. Have you or any business or nonprofit of which you are or were an officer ever been involved as a party in an administrative agency proceeding, criminal proceeding, or civil litigation? No.

If so, please explain.

4. Have you ever been convicted (including pleas of guilty or *nolo contendere*) of any criminal violation other than a minor traffic offense? If so, please explain. No.

5. Have you ever been accused, formally or informally, of sexual harassment or discrimination on the basis of sex, race, religion, or any other basis? If so, please explain. No.

6. Please advise the Committee of any additional information, favorable or unfavorable, which you feel should be disclosed in connection with your nomination. None.

D. RELATIONSHIP WITH COMMITTEE

1. Will you ensure that your department/agency complies with deadlines for information set by congressional committees? Yes.

2. Will you ensure that your department/agency does whatever it can to protect congressional witnesses and whistle blowers from reprisal for their testimony and disclosures? Yes.

3. Will you cooperate in providing the Committee with requested witnesses, including technical experts and career employees, with firsthand knowledge of matters of interest to the Committee? Yes.

4. Are you willing to appear and testify before any duly constituted committee of the Congress on such occasions as you may be reasonably requested to do so? Yes.

NEIL ANDREW JACOBS JR. CURRICULUM VITAE

Areas of Expertise

Mesoscale and microscale dynamics, numerical weather prediction, variational and ensemble-based data assimilation methods, atmospheric transport, and mesoscale modeling. Mid-latitude convective systems, fronts, and small-scale convection-induced flows such as the sea breeze and urban heat island circulations. Surface flux relations and boundary layer dynamics as a function of enhanced thermal gradient grid resolution. Regional climate fluctuations as a result of western boundary current variability. Forecasting of tropical and extratropical long period ocean swell generation. Satellite, aircraft and UAS-based observing systems, weather-related flight route optimization, avionics, and aviation forecasting. Environmental economic policy, public-private partnerships, and small-business innovation and strategy.

Education

Ph.D. in Atmospheric Science (Numerical Weather Prediction), May 2005, North Carolina State University

Thesis: The Role of Marine Thermal Gradient Structure on Gulf Stream-Related Extratropical Cyclogenesis. (Thesis Advisors: *Dr. Sethu Raman* and *Dr. Gary M. Lackmann;* Committee Members: Dr. Ping-Tung Shaw, Kermit K. Keeter, and Dr. Kiran Alapaty).

M.S. in Air-Sea Interaction, May 2000, North Carolina State University

Thesis: Physical Oceanographic Processes and Air-Sea Interactions Associated with Extratropical Cyclogenesis During the Ocean Margins Program. (Thesis Advisor: *Dr. Leonard J. Pietrafesa;* Committee: Dr. Lian Xie, Dr. Sethu Raman, and Dr. John M. Morrison).

B.S. in Physics, May 1996, University of South Carolina*

B.S. in Mathematics, May 1996, University of South Carolina

Minor in Economics, Cognate in Computer Science, Cognate in Marine Science
Graduated magna cum laude

Industry Employment

2013–Present, Chief Atmospheric Scientist, Panasonic Avionics Corporation (5,000 employees). Oversee the development and deployment of weather-related data and products. Oversee the development of global forecast products and advanced high-resolution data assimilation to enable better decision-making by industry, commercial aviation, and international and domestic governmental agencies.

2004–13, Director of Research and Business Development, AirDat, LLC (80 employees). Analysis of the impact of TAMDAR data on numerical models such as GFS, WRF, RUC, and RT–FDDA. Development of methods to optimize real-time 4D-Var data assimilation. Oversee the development of new TAMDAR-based products and high resolution forecasts. Contracts with DoD, NCAR, NASA, NOAA, FAA, LLNL, UKMO, and ECMWF.

1998, Co-Developer, Computer modules for NASA's Earth System Science Program (ESSE), NASA Goddard.

1997, Programmer and GOES Satellite imagery processor, Langley, VA.

1995–97, Baikal Research Group, modeling the physical properties of Lake Baikal, Russia.

1995–97, Physical Limnology of Winyah Bay: Analysis and modeling of waves, salinity, temperature, and current. U. of South Carolina.

1993–97, Programmer, Oak Ridge National Lab, Nuclear Physics Branch, TN. Joint with College of Charleston and U. of South Carolina.

Research Experience

2005–present, (Panasonic/AirDat/NCAR/NASA/NOAA–GSD, UKMO): Analysis of the impact of TAMDAR data on numerical models such as WRF, RAP, RT–FDDA, GFS, UK Met Unified, ECMWF. Development of methods to optimize 4D-Var and EnKF assimilation. Development and testing of advanced flight optimization algorithms for safety and fuel efficiency.

2000–06, (State Climate Office (SCO) of North Carolina/NWS–RDU): Research involved atmospheric modeling (WRF) of surface temperature grid resolution to account for frontogenesis and sensible heat fluxes into the atmosphere over the southeast U.S. and coastal waters.

1997–2003, Research Scientist, SCONC, Physical oceanography, mesoscale air-sea interaction and near-shore modeling (MM5/WRF).

Computer Skills

Programming Languages: Fortran, C, C++, C#, Perl, R, MySQL, Python, HTML, Java, ksh, and IDL.

Computing Environments: HPC, Linux, UNIX, IBM–AIX, Mac, MPI, Slurm, Windows, Open/FreeBSD, Darwin.

Software/Models including: GFS, GSI, MPAS, FV3, WRFDA, WW3, POM, HYCOM, GrADS, NCL, IDV, ArcGIS, MATLAB, ecFlow.

Courses Taught

2007–09, (NCSU): Atmospheric Thermodynamics (MEA 312)

2005–07, (Meredith): Meteorology (GEO 942)

2002–04, (Meredith): Earth Science and Lab (GEO 200, 240L)

2003–04, (Meredith): Introduction to GIS (GEO 943)

2000–01, (NCSU): Meteorology I, II (MEA 213, 214)

1998–99, (NCSU): Oceanography and Lab (MEA 200, 210L)

1997–99, (NCSU): Earth System Science (MEA 100)

1993–97, (USC): Calculus and non-calculus based physics (PHYS 101, 102, 211, 212)

1993–97, (USC): Calculus and non-calculus based physics labs (PHYS 101L–212L)

Professional Organizations

American Geophysical Union American Meteorological Society

Gamma Beta Phi, National Honor Society Geological Society of America

National Forensics League

Phi Beta Kappa, Honor Society

Pi Mu Epsilon, National Math Honor Society

Sigma Pi Sigma, National Physics Honor Society (President: 1993–1996, USC Chapter) Sigma Xi

Committees

American Meteorological Society (AMS) Forecast Improvement Group (Chair 2015–Present; Lead, Modeling 2012–14)

Federal Aviation Administration (FAA) Continuous Lower Emissions, Energy, and Noise (CLEEN)

World Meteorological Organization (WMO) Expert Team on Aircraft-Based Observing Systems (ET–ABO)

Invited Center Lectures

NCEP, Camp Springs, MD (hosts: Drs. Vijay Tallapragada and Bill Lapenta), *PWS global ensemble system,* 21 July 2016

UK Met Office, Exeter, UK (host: Dr. Dale Barker), *PWS global model and data assimilation,* 13 July 2016

ECMWF, Reading, UK (host: Dr. Anna Ghelli), *Assimilation of ABOs into a global modeling system,* 12 July 2016

UK Met Office, Exeter, UK (host: Dr. Dale Barker), *Estimation of TAMDAR Error and Assimilation Experiments,* 27 Apr 2012

ECMWF, Reading, UK (host: Dr. Erik Andersson), *Utility of TAMDAR aircraft observations for NWP,* 26 Apr 2012

NCEP EMC, Camp Springs, MD (host: Dr. Stephen Lord), *Optimization of TAMDAR for NWP,* 23 Aug 2011

SMN, Mexico City, Mexico (host: Dr. Felipe Adrian Vazquez), *Operational forecasting with TAMDAR,* 23 Jun 2011

ECMWF, Reading, UK (hosts: Drs. Erland Källén and Erik Andersson), *Unique aspects of aircraft data assimilation,* 10 Nov 2010

Congressional Testimony

Hearing: Leading the Way: Examining Advances in Environmental Technology (21 June 2017)

House of Representatives, Committee on Science, Space, and Technology, Subcommittee on Environment

Hearing: Private Sector Weather Forecasting: Assessing Products and Technologies (8 June 2016)

House of Representatives, Committee on Science, Space, and Technology, Subcommittee on Environment

Many additional statements co-prepared and reviewed for Hearing witnesses

Publications

Gao, F., X.-Y. Huang, *N. Jacobs,* H. Wang, 2017: Assimilation of Wind Speed and Direction Observations: Results from real observation experiments. *Tellus A,* in press.

Zhang, X., H. Wang, X.-Y. Huang, F. Gao, and *N. Jacobs,* 2015: Using Adjoint-Based Forecast Sensitivity Method to Evaluate TAMDAR Data Impacts on Regional Forecasts, *Advances in Meteorology,* Vol. 2015, Article ID 427616, 13 pg, 2015.

Gao, F., P. P. Childs, X.-Y. Huang, *N. A. Jacobs,* and J. Z. Min, 2014: A Relocation-based Initialization Scheme to Improve Track-forecasting of Tropical Cyclones. *Adv. Atmos. Sci., 31*(1), 27–36.

Jacobs, N., D. Mulally, A. Anderson, J. Braid, P. Childs, A. Huffman, E. Wilson, and F. Gao, 2015: Recent Advancements in the TAMDAR Sensor Network Expansion, (IOAS–AOLS), AMS, Phoenix, AZ.

Jacobs, N.., F. Gao, P. Childs, X. Y. Huang, and H. Wang, 2015: Optimization of In-situ Aircraft Observations for Various Assimilation Techniques, (IOAS–AOLS), AMS, Phoenix, AZ.

Liu, Y., M. Xu, L. Pan, Y. Liu, *N. Jacobs,* and P. Childs, 2015: Implementation of a CONUS RTFDDA system with radar data assimilation for convection-resolvable analysis and prediction, (IOAS–AOLS), AMS, Phoenix, AZ.

Jacobs, N. A., D. J. Mulally, and A. K. Anderson, 2014: Correction of Flux Valve–Based Heading for Improvement of Aircraft Wind Observations. *J. Atmos. Oceanic Technol., 31,* 1733–1747.

Jacobs, N. A., and J. E. Rex, 2013: Benefits and Utility of Tropospheric Airborne Meteorological Data Reporting, *Air Traffic Control Quarterly,* January, First Quarter, 2013.

Huang, X.-Y., F. Gao, *N. A. Jacobs,* and H. Wang, 2013: Assimilation of wind speed and direction observations: a new formulation and results from idealized experiments. *Tellus A, 65,* 19936.

Wyszogrodzki, A. A., Y. Liu, *N. A. Jacobs,* P. Childs, Y. Zhang, G. Roux, and T. T. Warner, 2013: Analysis of the surface temperature and wind forecast bias of the NCAR-AirDat operational CONUS 4km RTFDDA forecasting system, *Meteorol. Atmos. Phys., 121,* 3–4.

Jacobs, N. A., P. Childs, M. Croke, A. Huffman, J. Nelson, J. T. Braid, Y. L. Liu, and X. Y. Huang, 2013: An update on the TAMDAR global network expansion, Special Symposium on Advancing Weather and Climate Forecasts: Innovative Techniques and Applications, Austin, TX.

Nelson, J., J. T. Braid, A. K. Anderson, *N. A. Jacobs,* P. Childs, M. Croke, and A. Huffman, 2013: Alaska TAMDAR and the RTFDDA WRF QC System, ARAM, AMS, Austin, TX.

Huffman, A., P. Childs, M. Croke, *N. A. Jacobs,* and Y. L. Liu, 2013: Verification of the NCAR-AirDat operational RT–FDDA–WRF for the 2011 and 2012 spring convective seasons, IOAS, AMS, Austin, TX.

Gao, F., *N. A. Jacobs,* X. Y. Huang, and P. Childs, 2013: Direct assimilation of wind speed and direction for the WRF model, Special Symposium on Advancing Weather and Climate Forecasts: Innovative Techniques and Applications, AMS, Austin, TX.

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tems to TAMDAR Observations. 15th Symposium (IOAS–AOLS), AMS, Seattle, WA.

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Jacobs, N., V. Connors, T. Hopkins, D. DeMaster, B. Sweet, 1998: The Evolution of Earth System Science at North Carolina State University. 25 conf GSA/ESSE, pp. 417–421.

Jacobs, N., 1997: Modeling e-folding time decay of super-cooled semiconductor clocks, Thesis, Department of Physics, University of South Carolina, Columbia, SC. 234pp.

* Recipient of USC undergraduate debate full scholarship (1992–96); 3 National Championships
1996–present, Collegiate policy (cx) debate programs (coaching, brief-writing, strategy), Baylor, Stanford, Dartmouth, and USC.
Commercial Driver License NC: Class B (GVWR 26,001 lbs or more)

REFERENCES available upon request

The CHAIRMAN. Thank you, Dr. Jacobs.

Next up is Ms. Nikakhtar and Mississippi Senator Wicker has an opening statement.

STATEMENT OF HON. ROGER F. WICKER, U.S. SENATOR FROM MISSISSIPPI

Senator WICKER. Thank you, Mr. Chairman.

It is my honor to introduce to the members of the Committee Ms. Nazakhtar Nikakhtar. She is a resident of Maryland. She graduated from UCLA and has her Master's and J.D. degrees from Syr-

acuse University. She is now, among other things, an adjunct professor at Georgetown University.

She is not a resident of the State of Mississippi, but we wish she were a resident of Mississippi. The reason I am introducing her is that she is so well-regarded in my home state for her more than a decade of service to a number of U.S. industries on international trade matters that are important, not only to our economy, but also to the economy of the entire country.

Her effective advocacy for food safety, especially when it comes to imports, has been particularly appreciated in my home State of Mississippi.

Likewise, her work on behalf of Delta Council, one of the most important economic development organizations in our state has supported critical economic development in Mississippi and in the entire Gulf region.

Ms. Nikakhtar is dedicated to instituting equitable international trade policy. She has helped uncover unfair and fraudulent trading practices around the world, practices that were jeopardizing the future growth and prosperity of the United States, and our industries. Her work has facilitated needed trade relief while strengthening our potential for growth here at home.

The Department of Commerce's efforts to strengthen the global competitiveness of the United States will benefit from Ms. Nikakhtar's extensive experience and tireless leadership on international trade.

I congratulate her on her nomination and welcome her to today's hearing.

The CHAIRMAN. Thank you, Senator Wicker.

Ms. Nikakhtar.

STATEMENT OF NAZAKHTAR ("NAZAK") NIKAKHTAR, NOMINEE TO BE ASSISTANT SECRETARY, INDUSTRY AND ANALYSIS, U.S. DEPARTMENT OF COMMERCE

Ms. NIKAKHTAR. Thank you, Senator Wicker, for the very kind introduction. I am grateful.

Mr. Chairman, Ranking Member Nelson, and members of the Committee.

I thank you for the opportunity to appear here today. I am honored to be considered for the position of Assistant Secretary for Industry and Analysis at the U.S. Department of Commerce.

With me today are my husband, Gene Degnan, and my parents, Manijeh and Bijan Nikakhtar. I am proud to say that my husband and my parents have served our Government as Federal employees for many, many years.

My husband served for over a decade at the Department of Commerce, and my parents served for over 40 years collectively as physicians at the VA hospital taking care of our Nation's veterans.

My brother, Nersi Nikakhtar, also a physician at the VA hospital, had work obligations and is in Minneapolis today where he resides. I am proud to be part of a family that honors Government service.

I immigrated to America with my family 37 years ago. I can remember from a young age how proud I was to be an American, and how I admired the entrepreneurial spirit of Americans, the innova-

tion, the incredible work ethic, and the thriving industries competing on the international stage.

I knew growing up that I wanted to be part of the American industrial growth, to be part of the engine that drives the American economy forward. So, I went to school to study law and economics. I obtained my Juris Doctor and Master's in Economics from Syracuse University in 2002. I then headed to Washington, D.C. with the hope of entering public service.

I was fortunate to begin work at the Department of Commerce. I began my career first as an industry analyst at the Bureau of Industry and Security, and subsequently at the International Trade Administration. I worked with, and learned from, incredibly smart and talented civil servants there. But, at the agency, I learned firsthand that America's commitment to free and fair trade was not always reciprocated.

I watched U.S. industries struggle to stay alive in the midst of unfair trade. Our industries were eroding, our output was declining, and good, hardworking Americans were losing their jobs because our trading partners were not competing fairly.

I have audited these foreign companies. I have witnessed firsthand their business strategies of selling goods at less than fair value in order to capture increased market share.

As one foreign company official confessed, underselling was, in essence, "tuition" to eventually dominate the U.S. market. This experience instilled in me the need for strong enforcement of our trade laws to level the playing field for American companies and American workers.

I joined the private sector several years later as a lawyer representing industries in trade remedy disputes: industries in the steel sector, in aquaculture, agriculture commodity goods, chemicals, and minerals.

I am well aware of the issues our industries face in being competitive both at home and abroad. I have worked hard, I have worked relentlessly to level the playing field to save American jobs. That is my commitment to U.S. industries when I return to the Commerce Department.

At Industry and Analysis, my goal will be to ensure that U.S. companies are the most competitive in the world. We have to work on creating greater market access for our manufacturing and services sectors, for our technology companies, and for our small and medium-sized businesses.

We have to take a serious look at how to re-shore jobs and how to revitalize job growth in our most economically depressed regions. We have to look at our industries one by one to determine what constraints they face in becoming more competitive domestically and globally.

This requires robust economic analysis and careful evaluation of trade policy options. This requires coordination with other Government agencies, as well as diplomacy with our trading partners. It involves creative thinking and problem solving.

I came to America knowing that this is the greatest country in the world: the driver of technological innovation, where opportunities are boundless, and the American dream is accessible to everyone. I want to make sure that my son, my 15 month old, grows up

in a country where he and every American can thrive and succeed; a country that continues to be the world leader in innovation and output.

I want to thank my family for supporting my decision to re-enter public service. And, if confirmed, I look forward to dedicating my time in service to working for American companies, American workers, and the U.S. Government to spur economic growth and to create jobs.

I thank you again for the opportunity to be here in front of this Committee.

I look forward to your questions.

[The prepared statement and biographical information of Ms. Nikakhtar follow:]

PREPARED STATEMENT OF NAZAKHTAR ("NAZAK") NIKAKHTAR, NOMINEE FOR ASSISTANT SECRETARY, INDUSTRY AND ANALYSIS, U.S. DEPARTMENT OF COMMERCE

Mr. Chairman, Ranking Member Nelson, and members of the Committee, I'd like to thank you for the opportunity to appear here today. I am honored to be considered for the position of Assistant Secretary for Industry & Analysis at the U.S. Department of Commerce.

With me today are my husband, Gene Degnan, and my parents, Manijeh and Bijan Nikakhtar. I'm proud to say that my husband and my parents have served our Government as Federal employees for many, many years. My husband served for over a decade at the Department of Commerce, and my parents served for over 40 years collectively as physicians at the VA hospital taking care of our Nation's veterans. My brother, Nersi Nikakhtar, also a physician at the VA hospital, had work obligations and is in Minneapolis today where he resides. I'm proud to be part of a family that honors government service.

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At Industry & Analysis, my goal will be to ensure that U.S. companies are the most competitive in the world. We have to work on creating greater market access for our manufacturing and services sectors, for our technology companies, and for our small and medium-sized businesses. We have to take a serious look at how to re-shore jobs and how to revitalize job growth in our most economically depressed

regions. We have to look at our industries—one by one—to determine what constraints they face in becoming more competitive domestically and globally.

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I want to thank my family for supporting my decision to re-enter public service. And, if confirmed, I look forward to dedicating my time in service to working for American companies, American workers and the U.S. Government to spur economic growth and to create jobs.

I thank you again for the opportunity to be here in front of this Committee. I look forward to your questions.

A. BIOGRAPHICAL INFORMATION

1. Name (Include any former names or nicknames used): Nazakhtar Nikakhtar ("Nazak" for short)

2. Position to which nominated: U.S. Department of Commerce, International Trade Administration, Industry and Analysis—Assistant Secretary.

3. Date of Nomination: October 2, 2017.

4. Address (List current place of residence and office addresses):

Residence: Information not released to the public.
Office: Cassidy Levy Kent (USA) LLP, 2000 Pennsylvania Ave., NW, Ste 3000, Washington, D.C. 20006

5. Date and Place of Birth: July 15, 1973; Tehran, Iran. Legally immigrated to the United States in late 1979.

6. Provide the name, position, and place of employment for your spouse (if married) and the names and ages of your children (including stepchildren and children by a previous marriage).

Spouse: Eugene ("Gene") Degnan, Attorney (Of Counsel) at Morris Manning Martin LLP.

7. List all college and graduate degrees. Provide year and school attended.

Bachelor of Arts: University of California, Los Angeles, B.A. French Literature, 1999

Juris Doctor: Syracuse University, College of Law, 2002

Master of Economics: Syracuse University, Maxwell School of Citizenship and Public Affairs, 2002

8. List all post-undergraduate employment, and highlight all management-level jobs held and any non-managerial jobs that relate to the position for which you are nominated.

Research Assistant to Prof. Robin Paul Malloy at Syracuse University, 2001–2002*

Editor in Chief, Syracuse Journal of International Law and Commerce, 2001–2002* **

U.S. Department of Commerce, Bureau of Industry and Security, Industrial Base Studies, Industry Analyst, 2002–2003*

U.S. Department of Commerce, International Trade Administration, Enforcement and Compliance, International Trade Analyst, 2002–2004*

U.S. Department of Commerce, International Trade Administration, Enforcement and Compliance, Special Assistant to Senior Enforcement Coordinator of Non-Market Economy Unit, 2004–2007* **

Law Offices of Stewart and Stewart, Attorney (Associate), 2007–2011*

Georgetown University Law Center, Adjunct Professor, 2009–2011* **

Akin GNP Strauss Hauer & Feld, LLP (Associate), 20011–2013*

Akin Gump Strauss Hauer & Feld, LLP (Of Counsel), 2013–2015

Cassidy Levy Kent (USA) LLP, Partner, 2015 to present* **

Degnan & Degnan, LLC, Principal, 2013 to present**

* Jobs that relate to position for which I have been nominated.
** Management-level jobs

9. Attach a copy of your resumé. A copy is attached.
10. List any advisory, consultative, honorary, or other part-time service or positions with Federal, State, or local governments, other than those listed above, within the last ten years. None.
11. List all positions held as an officer, director, trustee, partner, proprietor, agent, representative, or consultant of any corporation, company, firm, partnership, or other business, enterprise, educational, or other institution within the last ten years.

Cassidy Levy Kent (USA) LLP, Partner, 2015 to present
Degnan & Degnan, LLC, Principal, 2013 to present

12. Please list each membership you have had during the past ten years or currently hold with any civic, social, charitable, educational, political, professional, fraternal, benevolent or religious organization, private club, or other membership organization. Include dates of membership and any positions you have held with any organization. Please note whether any such club or organization restricts membership on the basis of sex, race, color, religion, national origin, age, or handicap.

Maryland State Bar (inactive), 2006 to present

District of Columbia Bar (active), 2010 to present

Court of International Trade (active), approx. 2008 to present

Court of Appeals for the Federal Circuit (active), approx. 2015 to present

13. Have you ever been a candidate for and/or held a public office (elected, nonelected, or appointed)? If so, indicate whether any campaign has any outstanding debt, the amount, and whether you are personally liable for that debt. No.
14. Itemize all political contributions to any individual, campaign organization, po1itical party, political action committee, or similar entity of $500 or more for the past ten years. Also list all offices you have held with, and services rendered to, a state or national political party or election committee during the same period. None.
15. List all scholarships, fellowships, honorary degrees, honorary society memberships, military medals, and any other special recognition for outstanding service or achievements.

U.S. Department of Commerce Medal, Silver (2003)

U.S. Department of Commerce Medal, Silver (2004)

U.S. Department of Commerce Medal, Bronze (2005)

Super Lawyer, International Trade, Rising Star's List, 2014

Super Lawyer, International Trade, Rising Star's List, 2015

Super Lawyer, International Trade, Rising Star's List, 2016

16. Please list each book, article, column, or publication you have authored, individually or with others. Also list any speeches that you have given on topics relevant to the position for which you have been nominated. Do not attach copies of these publications unless otherwise instructed.

Speaker, U.S. Court of International Trade, Judicial Conference, Inspection of Customs and Commerce (2016)

Author, U.S. Department of Commerce Announces Final Tariffs on Chinese and Taiwanese Solar Products (2014)

Author, U.S. Department of Commerce Imposes Preliminary Antidumping Duties on Chinese Solar Products (2014)

Author, U.S. Department of Commerce Imposes Preliminary Countervailing Duties on Chinese Solar Products (2014)

Author, U.S. Subsidiary of SolarWorld Files New AD/CVD Petitions on Chinese-Origin Solar Cells (2014)

Withdrawal of Tolling Regulations in Antidumping Proceedings (2008)

Acknowledgement for legal and economic research in: Robin Paul Malloy, Law in A Market Context: An Introduction to Market Concepts in Legal Reasoning (Cambridge University Press, 2004)

Acknowledgement for legal and economic research in: Robin Paul Malloy, Framing the Market: Representations of Meaning and Value in Law, Markets, and Culture, 51 Buff. L. Rev. 1 (2003)

Contributor: U.S. Department of Commerce, A Survey of the Use of Biotechnology in U.S. Industry, available at *http://www.tecbnology.gov/reports/Biotechnology/CDl20a_0310.pdf* (October 2003)

17. Please identify each instance in which you have testified orally or in writing before Congress in a governmental or non-governmental capacity and specify the date and subject matter of each testimony. None.

18. Given the current mission, major programs, and major operational objectives of the department/agency to which you have been nominated, what in your background or employment experience do you believe affirmatively qualifies you for appointment to the position for which you have been nominated, and why do you wish to serve in that position?

I have extensive professional experience representing U.S. industries in international trade disputes involving billions of dollars in trade. Through my work, I have leveled the playing field for numerous U.S. industries, helped save U.S. companies from collapse, and saved hundreds of thousands of American jobs. I have lead large teams of attorneys and economists in conducting detailed economic analyses of U.S. industries, scrutinizing unfair trade practices of foreign companies and governments, and successfully advocating for appropriate trade relief before U.S. Government agencies. My work involves strategic coordination among private sector stakeholders and U.S. Government agencies—this is critical to effective advocacy.

Previously, as an adjunct professor at Georgetown University Law Center, I designed and taught law courses on WTO Dispute Settlement and Negotiations. Before entering private practice, I served at the U.S. Department of Commerce's International Trade Administration as a Special Assistant to the Senior Enforcement Coordinator of the China/Non-Market Economy Unit In that position, I led the agency's administration of numerous trade cases, advised on legal and regulatory matters related to the enforcement of U.S. trade laws, and participated in bilateral negotiations on trade issues between the United States and China. I also served at the U.S. Department of Commerce's Bureau of Industry and Security as an industry analyst, where I performed key statistical analyses for the U.S. Government's first official survey of the U.S. biotechnology industry. I received several award medals from the Department of Commerce for my work on behalf of U.S. industries. Additionally, I have been repeatedly recognized by Super Lawyers as a "Rising Star" in International Trade Law.

19. What do you believe are your responsibilities, if confirmed, to ensure that the department/agency has proper management and accounting controls, and what experience do you have in managing a large organization?

A leader in Government must be able to deliver tangible results to the American people with limited agency resources. Over the past 15 years in both the U.S. Government and in the private sector, I have overseen the work of hundreds of personnel and have been responsible for billions of dollars in trade. As a U.S. Government official, I have led U.S. Government teams in conducting detailed audits of large multinational corporations, and I have developed and implemented sound policies to correct trade distortions for U.S. industries—all with limited agency resources. In private practice, I have coordinated U.S. industries, often comprised of fierce competitors, in successfully petitioning the U.S. Government for relief from unfair trade—again with limited client resources. I look forward to bringing my management experience to the Department of Commerce's Industry and Analysis division, where I will work every day to advance the interests of U.S. industries while serving as a responsible steward of U.S. taxpayer dollars.

20. What do you believe to be the top three challenges facing the department/agency, and why?

1. *Revitalization of U.S. Industries*—The growth and economic success of U.S. industries are key objectives of the Department of Commerce. Comprehensive policies need to be developed to accelerate job gains, investment in industries, and growth in GDP.

2. *Global Competitiveness of U.S. Industries*—Our trading partners' declining openness to U.S. exports is threatening the growth and prosperity of our industries. Barriers to trade must be overcome by innovative export promotion strategies.

3. *Leveling the Playing Field for U.S. Industries*—Unfair trade practices of our trading partners are continuing to devastate U.S. industries. The Department of Commerce should continue ramping up its efforts to level the playing field for American workers and companies.

B. POTENTIAL CONFLICTS OF INTEREST

1. Describe all financial arrangements, deferred compensation agreements, and other continuing dealings with business associates, clients, or customers. Please include information related to retirement accounts. None.

2. Do you have any commitments or agreements, formal or informal, to maintain employment, affiliation, or practice with any business, association or other organization during your appointment? If so, please explain. None.

3. Indicate any investments, obligations, liabilities, or other relationships which could involve potential conflicts of interest in the position to which you have been nominated.

Any potential conflict of interest will be resolved in accordance with the terms of my ethics agreement, which was developed in consultation with ethics officials at the Department of Commerce and the Office of Government Ethics. I understand that my ethics agreement has been provided to the Committee. I am not aware of any potential conflict other than those addressed by my ethics agreement.

4. Describe any business relationship, dealing, or financial transaction which you have had during the last ten years, whether for yourself, on behalf of a client, or acting as an agent, that could in any way constitute or result in a possible conflict of interest in the position to which you have been nominated. None.

5. Describe any activity during the past ten years in which you have been engaged for the purpose of directly or indirectly influencing the passage, defeat, or modification of any legislation or affecting the administration and execution of law or public policy.

I served on the Executive Committee, and as Co-Chair of the Lawyer's Committee, of the Committee to Support U.S. Trade Laws (CSUSTL) from October 2016 through September 2017. This is a voluntary position for which I was not compensated. CSUSTL is comprised of representatives of U.S. manufacturing and agricultural producers who engage in trade remedy cases (principally antidumping and countervailing duty proceedings) before U.S. Government agencies and the courts, including the U.S. Department of Commerce (DOC), U.S. International Trade Commission (ITC), the U.S. Court of International Trade (CIT), and the Court of Appeals for the Federal Circuit (CAFC).

As Co-Chair of the Lawyer's Committee, in the Spring of 2017, I met with the United States Trade Representative's Office and Chief International Trade Counsel for House Ways and Means (Democrats) to propose amendments to the U.S. statute and Department of Commerce regulations aimed at improving the U.S. Government's ability to enforce its trade laws and better protect American companies from unfair trade.

I resigned from my position at CSUSTL on September 30, 2017, once President Trump issued his intent to nominate me for the position of Assistant Secretary.

6. Explain how you will resolve any potential conflict of interest, including any that may be disclosed by your responses to the above items.

I am not aware of any potential conflict of interest. Should any potential conflicts of interest arise, they will be resolved in accordance with the terms of my Ethics Agreement, and with the advice and recommendation of ethics officials at the Department of Commerce General Counsel's Office.

C. LEGAL MATTERS

1. Have you ever been disciplined or cited for a breach of ethics, professional misconduct, or retaliation by, or been the subject of a complaint to, any court, administrative agency, the Office of Special Counsel, professional association, disciplinary committee, or other professional group? If yes:

a. Provide the name of agency, association, committee, or group;

b. Provide the date the citation, disciplinary action, complaint, or personnel action was issued or initiated;

c. Describe the citation, disciplinary action, complaint, or personnel action;

d. Provide the results of the citation, disciplinary action, complaint, or personnel action.

No.

2. Have you ever been investigated, arrested, charged, or held by any Federal, State, or other law enforcement authority of any Federal, State, county, or municipal entity, other than for a minor traffic offense? If so, please explain. No.

3. Have you or any business or nonprofit of which you are or were an officer ever been involved as a party in an administrative agency proceeding, criminal proceeding, or civil litigation? If so, please explain. No.

4. Have you ever been convicted (including pleas of guilty or *nolo contendere*) of any criminal violation other than a minor traffic offense? If so, please explain. No.
5. Have you ever been accused, formally or informally, of sexual harassment or discrimination on the basis of sex, race, religion, or any other basis? If so, please explain. No.
6. Please advise the Committee of any additional information, favorable or unfavorable, which you feel should be disclosed in connection with your nomination. No.

D. RELATIONSHIP WITH COMMITTEE

1. Will you ensure that your department/agency complies with deadlines for information set by congressional committees? Yes.
2. Will you ensure that your department/agency does whatever it can to protect congressional witnesses and whistle blowers from reprisal for their testimony and disclosures? Yes.
3. Will you cooperate in providing the Committee with requested witnesses, including technical experts and career employees, with firsthand knowledge of matters of interest to the Committee? Yes.
4. Are you willing to appear and testify before any duly constituted committee of the Congress on such occasions as you may be reasonably requested to do so? Yes.

RESUMÉ OF NAZAK NIKAKHTAR

Experience

Representative industry experience: Catfish, Urea, Ammonium Nitrate, Refrigerants, Ball Bearings, Tapered Roller Bearings, Coated Paper, Shrimp, Residential Washers, Power Transformers, Diamond Sawblades, Steel Pipe, Chlorinated Isocyanurates, Corrosion-Resistant Steel, Narrow Woven Ribbons, Cut-to-Length Steel Plate, Aircraft Parts.

Cassidy Levy Kent (USA) LLP Washington, District of Columbia
Partner August 2015 to present

- Represent and advise U.S. industry clients on a wide range of international trade matters including antidumping and countervailing duty proceedings and customs issues relating to country of origin, duty evasion, and other forms of fraud.
- Litigate complex trade cases on behalf of U.S. industries before the U.S. Department of Commerce, U.S. International Trade Commission, Court of International Trade and Court of Appeals for the Federal Circuit.
- Advise clients on trade policy matters and World Trade Organization (WTO) dispute settlement.
- Advise clients on restructuring businesses and industries to improve competitiveness.
- Develop government relations strategies for clients in areas of trade and customs.

Akin Gump Strauss Hauer & Feld LLP Washington, District of Columbia
Counsel January 2014–August 2015
Associate Attorney July 2011–December 2013

- Represented U.S. companies and foreign governments and companies in antidumping and countervailing duty proceedings.
- Litigated cases before the U.S. Department of Commerce, U.S. International Trade Commission, and U.S. Court of International Trade.
- Assisted clients with U.S. export control investigations and compliance programs, and developed and implemented technology and information strategies, controls, and corrective action plans.
- Collaborated with clients' in-house attorneys and outside counsel to conduct and support risk assessments and investigations.
- Advised clients on various customs regulatory matters and valuation laws.

Stewart and Stewart, Law Offices Washington, District of Columbia
Associate Attorney September 2007–July 2011

- Represented U.S. industry and labor union clients in antidumping and countervailing duty proceedings before the U.S. Department of Commerce and U.S. Court of International Trade.

- Advised clients on compliance with U.S. export control requirements and ensured that client transactions conformed to applicable laws and regulations.

Georgetown University Law Center Washington, District of Columbia
Adjunct Professor, Law School January 2009–May 2011

- Instructor to LL.M. students on WTO negotiations and dispute settlement in course entitled "Multilateral Trade Negotiations at the World Trade Organization."

U.S. Department of Commerce Washington, District of Columbia
International Trade Administration August 2004–September 2007
Special Assistant to Senior Enforcement Coordinator, Non-Market Economy Office

- Developed and advised on agency policies and practices relating to the enforcement of U.S. trade laws.
- Supervised the conduct of over 70 separate international trade disputes.
- Participated in bilateral trade negotiations with foreign government officials.
- Investigated and audited sales and accounting records of large foreign companies for purposes of evaluating trade practices and compliance with U.S. and international trade laws.
- Authored comprehensive legal and policy reviews for publication by the agency.

U.S. Department of Commerce Washington, District of Columbia
International Trade Administration March 2003–August 2004
Import Administration, International Trade Analyst

- Conducted investigations, administrative reviews, court-ordered remand redeterminations and suspension agreements for antidumping cases involving products covering the agricultural, industrial and manufacturing sectors.
- Performed legal, economic, statistical and accounting examinations of companies involved in international trade disputes, and provided legal and economic recommendations to senior government officials in the resolution of such disputes.

U.S. Department of Commerce Washington, District of Columbia
Bureau of Industry and Security, Analyst December 2002–March 2003

- Conducted statistical analysis for official U.S. government report on the economic and technological performance of the U.S. biotechnology industry.

District Court for Central District of California Los Angeles, California
Judicial Extern June 2000–August 2000
Veterans Affairs Medical Center, Wadsworth Los Angeles, California
Research Assistant June–August 1994, 1995

Education

Syracuse University, College Of Law Syracuse, New York
Juris Doctor, May 2002

Certificate and Honors

- Law and Market Economy Certificate
- International Law Group, selected to participate in a specialized course focusing on international law and litigation.

Activities

- Editor-in-Chief, *Syracuse Journal of International Law and Commerce* (May 2001–June 2002).
- Graduate Research Assistant to Professor Robin Paul Malloy, Professor of Law and Economics (August 2001–May 2002).
- Student Judge, College of Law Judicial Board (March 2000–May 2002).
- Editor, *Syracuse Journal of International Law and Commerce* (June 2000–May 2001).
- Chairperson, College of Law Grant Opportunity Program (May 2000–May 2001).

Syracuse University, The Maxwell School of Citizenship and Public Affairs
Department of Economics Syracuse, New York
Master, Economics, May 2002

University of California, Los Angeles Los Angeles, California

Bachelor, French Literature and Political Science, March 1999

Professional Qualifications/Recognition

Bar Memberships

- Maryland State Bar
- District of Columbia Bar
- U.S. Court of International Trade
- U.S. Court of Appeals for the Federal Circuit

Awards/Recognitions

- *Super Lawyers 2016,* Rising Star
- *Super Lawyers 2015,* Rising Star
- *Super Lawyers 2014,* Rising Star
- Bronze Medal Award, U.S. Department of Commerce (2006)
- Silver Medal Awards (2), U.S. Department of Commerce (2004 and 2005)
- Other awards for professional achievements, U.S. Department of Commerce (2003, 2004, 2005, 2006)

Languages

- Oral and written proficiency in French and Farsi (Iranian language)

Publications

- *U.S. Department of Commerce Announces Final Tariffs on Chinese and Taiwanese Solar Products* (2014).
- *U.S. Department of Commerce Imposes Preliminary Antidumping Duties on Chinese Solar Products* (2014).
- *U.S. Department of Commerce Imposes Preliminary Countervailing Duties on Chinese Solar Products* (2014).
- *U.S. Subsidiary of SolarWorld Files New AD/CVD Petitions on Chinese-Origin Solar Cells* (2014).
- Acknowledgement for legal and economic research in: Robin Paul Malloy, *Law in A Market Context: An Introduction to Market Concepts in Legal Reasoning* (Cambridge University Press, 2004).
- Acknowledgement for legal and economic research in: Robin Paul Malloy, *Framing the Market: Representations of Meaning and Value in Law, Markets, and Culture,* 51 Buff. L. Rev. 1 (2003).
- Contributor: U.S. Department of Commerce, *A Survey of the Use of Biotechnology in U.S. Industry,* available at *http://www.technology.gov/reports/Biotechnology/CD120a_0310.pdf* (October 2003).

The CHAIRMAN. Thank you, Ms. Nikakhtar.

I will start by asking a question of all four of you. I know each of you appreciates the importance of cooperation between the Executive Branch and Congress. Nevertheless, these confirmation hearings give us an opportunity to underscore that point.

The question is, if confirmed, will you pledge to work collaboratively with this Committee, and its members, and to provide thorough and timely responses to our requests for information?

Rep. BRIDENSTINE. Yes, sir.

Ms. BAIOCCO. Yes, Chairman.

Dr. JACOBS. Yes.

Ms. NIKAKHTAR. Absolutely, Mr. Chairman. It is very important.

The CHAIRMAN. Thank you.

Congressman Bridenstine, tell me about your approach to continuing U.S. leadership in space with both the international and commercial partners? How do you see balancing these with, what are sometimes, competing interests?

Rep. BRIDENSTINE. Thank you for that question, sir.

This does, oftentimes in Washington, come about as competing interests. Different parts of the space community may be competing against each other. And then trying to determine: what is uniquely American and where can we partner with our international partners.

The way I see it, sir, is what we need to do is create architectures that are in the interest of the United States of America. And then ultimately figure out, within those architectures, what piece can be done with traditional contracts—where the United States Government purchases, owns, and operates capability—and other types of contracts where we can just buy a service. Each one of these contracts would be different depending on whatever the circumstance is.

I would also say that if we are to attain our highest ideals and achieve our most ambitious objectives, we absolutely need to continue our international partnerships. We have had tremendous success on the International Space Station and a host of other capabilities.

Certainly, it would be my objective, should I be confirmed, to continue those partnerships and even grow those partnerships; ultimately, the goal being to get to Mars and, again, to return to the Moon as a proving ground.

That is going to require not just funds from the United States, but it is going to require partners from around the world.

The CHAIRMAN. Thank you.

Ms. Baiocco, I say this with some regret, but unnecessary partisanship has plagued the CPSC in recent years. And given that agency's important role in protecting American consumers, it is an issue that is of great concern to me, and one which I have pressed with previous nominees to the CPSC.

It is important that we have leadership at the CPSC that is committed to reaching consensus and lowering the temperature of the partisanship. I am optimistic about your nomination as an outside the Beltway candidate and as a no-nonsense litigator.

How do you feel your background will prepare you to work effectively with your fellow Commissioners?

Ms. BAIOCCO. Thank you, Chairman, for that question.

My background, I think, prepares me for exactly that type of scenario. I have never stood up on behalf of a client or in court with just myself. It has always been part of a team.

Everybody brings something to the table. Everybody has a perspective. It needs to be heard. The most effective people in any situation are those who listen first and talk second.

I believe that what I have learned in my years of experience as a, I will use your term, no-nonsense litigator is to zero in and get rid of the nonsense because our goals here are all the same.

While the process may differ, depending upon your points of view, at the end of the day, our goal here is to protect the American people. That cannot be, it should not be, and it does not even make sense to be partisan.

The CHAIRMAN. Thank you.

Dr. Jacobs, there have been many discussions of which you have been a part within the weather community about how to improve

the weather enterprise. So the National Weather Service, academia, and the private sector better coordinate among themselves.

These discussions can often leave out the most important stakeholder, and that is the American people who rely on the National Weather Service's forecasts.

Our weather legislation, which you mentioned, the Weather Research and Forecasting Innovation Act of 2017, which became law earlier this year, recognized the essential role of the National Weather Service in protecting life and property by codifying the role of Warning Coordination Meteorologist.

In the private sector, you did not have the mission obligation to protect life and property. But if confirmed, ensuring the protection of life and property has to be a top priority.

So the question is, would you commit to making the protection of life and property a top priority and ensuring that Warning Coordination Meteorologists receive the support that they need to do their jobs?

Dr. JACOBS. Absolutely.

The CHAIRMAN. If confirmed, how would you ensure that as NOAA increases its collaboration with the private sector, the priority focus remains on providing forecasts to the American people rather than enhancing the weather enterprise for its own sake?

Dr. JACOBS. Well, the quality and reliability thresholds for both on-time delivery of critical forecasts, as well as accuracy and air timeliness of observing system data would be set by NOAA.

So they would be setting the thresholds for the standards that the private sector would have to adhere to through public-private partnerships.

The CHAIRMAN. OK. Well, we hope that you will keep a clear-eyed focus on, as I mentioned earlier, the important priority. And that, of course, is the American people.

That was what we were trying to get at with the legislation and we hope that as you enter into this important role, that that will be something that is front and center in your mind as well.

Senator Nelson.

Dr. JACOBS. Thank you.

Senator NELSON. Thank you, Mr. Chairman.

Mr. Chairman, I would like to enter into the record an op-ed written by Congressman Bridenstine.

The CHAIRMAN. Without objection. So ordered.

[The information referred to follows:]

National Review—February 16, 2016

TED CRUZ'S TRUE RECORD ON MILITARY FUNDING AND NATIONAL SECURITY IS UNASSAILABLE

By Jim Bridenstine

As a military pilot and veteran of the Iraq and Afghanistan wars, I am proud that this week Ted Cruz showed us again why he is the candidate best qualified to be commander-in-chief. Yesterday he laid out a serious, detailed plan for a Reagan-style rebuild of our military that will enable us to utterly defeat the radical Islamic terrorists who have vowed to destroy us. Senator Cruz understands that the essence of "peace through strength" is having the strength to maintain peace, and he's ready to do this hard work. I am proud to have endorsed him and will be proud to serve under him.

Ted Cruz has proven to be a leader who is not afraid to stand up to bullies. He is true to his word. As a combat veteran, I am convinced Ted Cruz is the leader who will keep us safe, support our troops, and defend our Nation.

Although Marco Rubio has promised *not to "badmouth other Republicans,"* he and his campaign are now spreading the falsehood that Cruz doesn't care about our troops and are wrongly smearing a good man. They should know better.

The Rubio team has criticized Cruz for voting against National Defense Authorization Acts, suggesting that he's weak on defense. But Cruz had substantive objections to some of provisions in the acts, not to their funding levels. In legislation, sometimes you have to vote no to get to a better yes. You do that because you care about the troops and the Constitution they are sworn to defend.

He slams Cruz's principled stand, but *Rubio didn't even show up* to vote on final passage of the NDAA in October 2015. The next month, he *skipped as well* the defense-appropriation vote that actually funds the military.

Cruz was there to do his job and voted to fund our troops. Moreover, in March 2015 *he voted for Rubio's own amendment* that would have raised the defense budget from $620 to $697 billion for Fiscal Year 2016.

And Cruz has laid out the most detailed plan to rebuild the military. It includes increasing our Army to at least 525,000 trained and fully equipped soldiers, more than in Rubio's proposal. Cruz's plan increases equipment as well. It rebuilds our Navy, ensuring that we have at least 350 ships, and our Air Force, ensuring at least 6,000 aircraft, including airplanes and 1,500 tactical fighter aircraft.

Under Cruz, we can be assured that we have the strongest military in the world. To suggest otherwise doesn't match the record or the character of my friend and colleague Ted Cruz.

Americans' real concern should be with Rubio's candidacy. He's made deals with Democrats at great cost to our national security. As a member of the Gang of Eight, not only did he support massive amnesty while failing to secure the border, but he also supported giving the president unilateral authority to admit more refugees who have not been properly vetted. And he's stood by that dangerous proposition. Senator Cruz and other leaders in the Senate have introduced legislation to ban the entry of not-properly-vetted refugees from terrorist-ridden regions. Senator Rubio has chosen not to support the measure.

Recall that Rubio sided with the Obama-Clinton foreign policy in Libya, which was an utter disaster. "It turned out fine," *Rubio said,* just five months before four Americans, including Ambassador J. Christopher Stevens, were murdered in Benghazi. Voters should ask whether that is the same kind of judgment that Rubio would use in other areas, such as Syria. He has polished his campaign rhetoric, but when the pressure mounts, he has been quick to abandon conservative principles and slow to keep his promises to voters.

We need a leader whom we can trust. We need a commander-in-chief who puts our national-security interests first. And we need a leader who will honor the Constitution and guide America into a secure and prosperous future. Ted Cruz will do just that.

—Jim Bridenstine is a veteran of the wars in Iraq and Afghanistan. As a Navy pilot, he flew the EC–2 Hawkeye in combat missions off the USS Abraham Lincoln. *He represents Oklahoma's first congressional district.*

Senator NELSON. Congressman, in this op-ed—and I want you to have an opportunity to square some of the things that you have said and written—in this op-ed, you attack Senator Marco Rubio, saying, "He has made deals with Democrats at great cost to our national security."

And you say he supported "Massive amnesty while failing to secure the border."

And you say about Senator Rubio, "When the pressure mounts, he has been quick to abandon conservative principles and slow to keep his promises to voters."

Then you did a television video and you said, "Marco Rubio's amnesty bill would have made this country less safe."

In another ad, you said Senator Rubio joined forces with President Obama to "Provide amnesty without border security."

Tell us, tell the Committee, why did you say these things?

Rep. BRIDENSTINE. Sir, I have been involved in politics for four and a half years in the House of Representatives, and I have been involved in a number of very difficult issues, and represented my constituents the best I absolutely could.

And I would say, sir, that it is very different representing the First District of Oklahoma from being a NASA Administrator. And that particular issue, I do not see as being something that would be necessarily relevant to the position of NASA Administrator, should I be confirmed.

Senator NELSON. So saying things that the recipient of those remarks, Senator Rubio, says are not true, you are saying that that is just not relevant to you being considered as NASA Administrator?

Rep. BRIDENSTINE. Sir, that was a debate that was had, I think, in 2014 and it was an important debate that we had as a country, and we are past it now.

Sir, it would be my highest ambition to lead NASA in a way where that is not an issue.

Senator NELSON. Well, I think it is a question of how would you lead NASA? All right. Let me give you another example.

Is it true, as I have said in my opening remarks, that you endorsed Kelli Ward in her primary challenge last year to John McCain?

Is that true?

Rep. BRIDENSTINE. That is true. A friend of mine in the National Guard who, I guess, knew her asked for that support, and I did support her with a campaign contribution. I have not met her.

Senator NELSON. Well, interestingly, you did that and prior to you endorsing her, let me tell you what she said of John McCain.

She said, "John McCain is directly responsible for the rise of ISIS."

She also said, again, before you endorsed her, that Hilary Clinton and John McCain's, "Reckless policies and fuzzy utopian ideals have destabilized the Middle East and triggered a massive refugee crisis, which they want to import into the U.S. to fatten up the Welfare rolls."

That is what she said about John McCain.

So you say that you endorsed her even after she had said all those things by virtue of someone asking you to endorse her?

Rep. BRIDENSTINE. Sir, I did not know. I do not live in Arizona, and I am unaware of those comments.

Senator NELSON. A NASA Administrator has to be responsible for the comments that they make.

I suppose, then, that you would testify here that you are not aware that after Senator McCain defeated Kelli Ward last year, she has now gone on to challenge Senator Flake in this primary before Senator Flake decided to step down.

And then when it was announced that Senator McCain had a brain tumor, a cancerous brain tumor, the same lady, Kelli Ward said in a radio interview that she hopes McCain's family and advisors will advise him to step away as quickly as possible.

And later in the interview, she said she hopes that if Senator McCain steps down, the Arizona Governor would consider appointing her to his seat.

You both, as you have said, donated and received money. Well, you have not said this.

On the Senate Conservative's Fund, you said you have been a member of the Senate Conservatives Fund. You have donated and received money to them.

Is that correct?

Rep. BRIDENSTINE. That is correct.

Senator NELSON. Are you——

Rep. BRIDENSTINE. I do not know about being a member. I do not know of a membership, sir, but they have donated and I have contributed to their efforts as well.

Senator NELSON. Are you aware that that conservative fund seeks to unseat Republican Senators including the Senate Majority Leader?

Rep. BRIDENSTINE. I have not been tracking that, sir.

Senator NELSON. Well, you have participated in it and, again, I wonder does NASA need someone that has been so involved in politics in these kinds of causes. You can say that politics is politics, which you have stated earlier.

But these are some of the most divisive tactics that this Senator has ever seen in either party. And this is just you attacking people in your own party.

So how do you move past all of that and keep NASA from being dragged down into a divisive political background?

Rep. BRIDENSTINE. Thank you for that question.

Sir, the advocacy I have had for the constituents of Oklahoma is the same advocacy I would like to bring to NASA. Advocating for that agency, I think, is important especially as we are going through another budget iteration.

NASA is a critical piece of the United States of America and when you think about all of the contributions to space that NASA has contributed to, the way we navigate, the way we communicate, the way we produce food and energy.

Earlier, I heard Dr. Jacobs talk about the Weather Research and Forecasting Innovation Act. That is a piece of legislation, sir, that I was the author of in the House of Representatives back in 2013, 2014.

And because of the efforts that I made at that time with the support of Representative Suzanne Bonamici from Oregon, a Democrat, we were able to get that bill past the finish line in the House.

And sir, I would like to thank you for your support because without you, it would not have passed the Senate, and of course, Chairman Thune as well.

So I do have a history of working with both sides of the aisle on important issues for our country.

One of the thoughts that Chairman Thune had is as we think about the space architecture and weather forecasting, how do we make sure that we are doing it, not just to benefit industry, but to make sure we are getting the right information for our constituents?

Sir, as somebody who has worked very hard on behalf of my constituents to move us to a day where we have zero deaths from tornadoes, that bill, the Weather Research and Forecasting Innovation Act, very important to me.

And a piece of it was determining how do we get the best global initial conditions for weather forecasting? And a lot of that is done through technologies currently Suomi NPP and the COSMIC constellation, but also now we are looking at an era where it could be, in essence, commercialized with GPS radio occultation technology that is being launched.

I was the author of a pilot program to get commercial data to feed the very numerical weather models that he was talking about.

So, sir, I would say that when it comes to space issues, and when it comes to issues that are important for the national security of this country, I have worked across the aisle with great Americans to bring about, I think, legislation that will ultimately serve every American.

It is also true that as a Member of the House of Representatives representing Oklahoma, I have advocated for issues that are not relevant to NASA and that is a part of my background.

I do believe, sir, that ultimately that could serve me quite well, not because of what side of the aisle I am on, but because I do believe the NASA Administrator, should I be confirmed, will need to work with Congress daily.

And it was my highest ambition, sir, and I mean this sincerely, to work directly with you to make sure that we are building that consensus agenda. We need a consensus agenda because what I want to do, should I be confirmed, is make sure that NASA is following through on the great work you have done on the NASA Transition Authorization Act and appropriations for NASA in the last administration, carry it through this administration and leave behind a legacy that the next administration, regardless of political party, can follow up on.

And working with you, sir, that absolutely is my highest ambition, and I want to make sure that NASA remains, as you said, apolitical. And I will do that to the utmost of my ability, should I be confirmed.

Senator NELSON. Mr. Chairman, I have finished these questions and I just want to say that, obviously, this is uncomfortable. Obviously, this is not fun, but it is my responsibility as the Ranking Member to bring out the kind of relationships, and acts, and words that the nominee is before us for the consideration of the Committee.

Thank you, Mr. Chairman.

The CHAIRMAN. Thank you, Senator Nelson.

And I have a couple of items to enter into the record, too.

Congressman Bridenstine does have letters of support from 54 prominent individuals and space-related organizations including Democratic Congressman Ed Perlmutter, former NASA Administrator Sean O'Keefe, astronaut Buzz Aldrin, and many others.

And so I will enter those into the record without objection.

[The information referred to follows:]

ONEFIRE HOLDING COMPANY, LLC
Jenks, OK, October 24, 2017

Dear Chairman Thune and Ranking Member Nelson:

We write today to express our support for Representative Jim Bridenstine's nomination to be the Administrator of the National Aeronautics and Space Administration.

Onefire Holdings, a wholly owned subsidiary of the Muscogee (Creek) Nation, is tasked with managing and growing the commercial portfolio of the Tribe. We have gotten to know the Congressman during his time in the House of Representatives, and have found him to be a partner and advocate of the people of our Tribe. Bridenstine has been a leader on issues near and dear to the people of the Muscogee (Creek) Nation, including space-based capabilities for national defense and improved weather forecasting that will save lives.

We know Jim Bridenstine to be a committed and dedicated public servant who will serve honorably as NASA Administrator. We request that the Senate Committee on Commerce, Science, and Transportation confirm his nomination.

Thank you,

MIKE PAYNE,
CEO,
Onefire Holdings, LLC.

MAXAR TECHNOLOGIES
October 25, 2017

Hon. JOHN THUNE,
Chairman,
Senate Committee on Commerce, Science, and Transportation,
Washington, DC.

Hon. BILL NELSON,
Ranking Member,
Senate Committee on Commerce, Science, and Transportation,
Washington, DC.

Dear Chairman Thune and Ranking Member Nelson,

On behalf of Maxar Technologies, I am writing to request your support for Congressman Jim Bridenstine's nomination to serve as the next NASA administrator. Jim Bridenstine has spent most of his life in public service, first as a Navy pilot and later as a Member of Congress. Representative Bridenstine has been a staunch advocate for industry and has reinvigorated the discussion about what it means to have U.S. leadership in space. The Congressman has consistently demonstrated a willingness to listen, learn, and hear all sides of an issue, balancing policy and resources with a strong vision for America's future in space. Moreover, Congressman Bridenstine has a history of working across the aisle and his experience in achieving bipartisan solutions will serve him well as NASA Administrator.

Space has never been more important to U.S. national security, the domestic economy, and American scientific development. All of us at Maxar are excited to continue to work with Jim Bridenstine as NASA Administrator and, again, ask for your support during his confirmation hearing next week.

Thank you for your committee's ongoing efforts to bolster American space exploration and development, and we appreciate your time and consideration.

Sincerely,

MARCY STEINKE,
Senior Vice President,
Government Relations and Public Policy,
Maxar Technologies.
DigitalGlobe/SSL/MDA/Radiant Solutions

BIGELOW AEROSPACE
Washington, DC, 25 October 2017

Hon. JOHN THUNE,
Chairman,
Senate Commerce, Science, and Transportation Committee,
Washington, DC.

Dear Chairmen Thune;

It is with great pleasure that I convey my support for Representative Jim Bridenstine to be the next NASA Administrator. I firmly believe that he possesses the qualities that this position demands, and is the best candidate for the job.

With over four decades of commercial sector business experience, I have interacted with leaders, directors and presidents of all kinds and I thoroughly understand the demands of management and leadership. Having met and communicated with Mr. Bridenstine on several occasions, I have come to believe that he fits the strength that NASA and this country needs.

We are embarking on a competitive challenging time vis-à-vis China in human spaceflight. Good, even great leadership will be paramount. NASA cannot pivot like a basketball player, and unfortunately can only move like an aircraft carrier. This means that effective and judicious management with a sense of urgency in these times is key.

Thank you for the opportunity to express my support.

Respectfully,

ROBERT BIGELOW,
Founder and President,
Bigelow Aerospace.

BIGELOW AEROSPACE
Washington, DC, 25 October 2017

Hon. BILL NELSON,
Ranking Member,
Senate Commerce, Science, and Transportation Committee,
Washington, DC.

Dear Ranking Member Nelson,

It is with great pleasure that I convey my support for Representative Jim Bridenstine to be the next NASA Administrator. I firmly believe that he possesses the qualities that this position demands, and is the best candidate for the job.

With over four decades of commercial sector business experience, I have interacted with leaders, directors and presidents of all kinds and I thoroughly understand the demands of management and leadership. Having met and communicated with Mr. Bridenstine on several occasions, I have come to believe that he fits the strength that NASA and this country needs.

We are embarking on a competitive challenging time vis-à-vis China in human spaceflight. Good, even great leadership will be paramount. NASA cannot pivot like a basketball player, and unfortunately can only move like an aircraft carrier. This means that effective and judicious management with a sense of urgency in these times is key.

Thank you for the opportunity to express my support.

Respectfully,

ROBERT BIGELOW,
Founder and President,
Bigelow Aerospace.

BIGELOW AEROSPACE
Washington, DC, 25 October 2017

Hon. TED CRUZ,
Chairman,
Space, Science, and Competitiveness Subcommittee,
Washington, DC.

Dear Chairman Cruz,

It is with great pleasure that I convey my support for Representative Jim Bridenstine to be the next NASA Administrator. I firmly believe that he possesses the qualities that this position demands, and is the best candidate for the job.

With over four decades of commercial sector business experience, I have interacted with leaders, directors and presidents of all kinds and I thoroughly understand the demands of management and leadership. Having met and communicated with Mr. Bridenstine on several occasions, I have come to believe that he fits the strength that NASA and this country needs.

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Respectfully,

ROBERT BIGELOW,
Founder and President,
Bigelow Aerospace.

BIGELOW AEROSPACE
Washington, DC, 25 October 2017

Hon. EDWARD J. MARKEY,
Ranking Member,
Space, Science, and Competitiveness Subcommittee,
Washington, DC.

Dear Ranking Member Markey,

It is with great pleasure that I convey my support for Representative Jim Bridenstine to be the next NASA Administrator. I firmly believe that he possesses the qualities that this position demands, and is the best candidate for the job.

With over four decades of commercial sector business experience, I have interacted with leaders , directors and presidents of all kinds and I thoroughly understand the demands of management and leadership. Having met and communicated with Mr. Bridenstine on several occasions, I have come to believe that he fits the strength that NASA and this country needs.

We are embarking on a competitive challenging time vis-à-vis China in human spaceflight. Good, even great leadership will be paramount. NASA cannot pivot like a basketball player, and unfortunately can only move like an aircraft carrier. This means that effective and judicious management with a sense of urgency in these times is key.

Thank you for the opportunity to express my support.

Respectfully,

ROBERT BIGELOW,
Founder and President,
Bigelow Aerospace.

SIERRA NEVADA CORPORATION
Louisville, CO, October 25, 2017

Hon. JOHN THUNE,
Chairman,
Senate Commerce, Science, and Transportation Committee,
Washington, DC.

Hon. TED CRUZ,
Chairman,
Space, Science, and Competitiveness Subcommittee,
Washington, DC.

Hon. BILL NELSON,
Ranking Member,
Senate Commerce, Science, and Transportation Committee,
Washington, DC.

Hon. EDWARD J. MARKEY,
Ranking Member,
Space, Science, and Competitiveness Subcommittee,
Washington, DC.

RE: Nomination of Congressmen Jim Bridenstine for NASA Administrator

Dear Chairmen Thune and Cruz, and Ranking Members Nelson and Markey:

I am writing on behalf of Sierra Nevada Corporation (SNC) to provide this letter of support for the nomination and appointment of Congressman Bridenstine to the role of NASA Administrator. SNC now has employment in nearly 20 States and over 50 Congressional jurisdictions which gives us a broad view of the needs of our country.

SNC Space Systems, which I have had the privilege to lead from its foundation, has a significant involvement in all aspects of space. We have participated in over 450 missions to space and have built over 4,000 systems, subsystems and components that have traveled to Earth orbit, the Moon, Sun and to seven planets. In our history, we have been involved in over 70 major missions with NASA and are currently engaged in the next Mars mission. Additionally, our Dream Chaser Space Vehicle has been chosen as one of the NASA commercial resupply vehicles to service the International Space Station. Through this history I have had the pleasure of working with five NASA Administrators and ten NASA Centers.

The Congressman's background and qualifications are well known to the Committee and need not be repeated. Reasonable people can debate them. What we wish to add is our direct impressions and experience. I have had the opportunity to spend significant time with Congressman Bridenstine over the last several years as he has continued learning about the space industry. My experience has been through direct and frequent dialogue, as an observer in public conferences and sessions and through his interaction with the Commercial Spaceflight Federation for which I am a founder and now Chairman Emeritus. Being in the space industry teaches you that there are no shortcuts to success. There is equally no shortcut to understanding the complex space industry. Jim has methodically, and with deliberate intent, expanded his knowledge of the current state of space activities and where it might go. I have watched as he listened, learned, questioned and formed his views and I can say that this has created a far greater knowledge of space than what might appear in any bio.

We are at a critical time in space which will require leadership, enthusiasm, courage and the ability to work through complex issues in collaboration with many different factions. It will also call for the Administrator to rise above the noise and act in a forward looking and positive manner to help the United States expand its leadership in space. This is imperative for our Nation, our economy, our innovation and science communities and for our country's future. We believe that Congressman Bridenstine can be this Administrator.

Not everything about a person can be found in a resume or in history. It is about a person's actions, character and how one rises to meet broad new challenges. Jim has served with distinction in his military service, through his leadership in Congress, in his thoughtful approach to space legislation and in his acting on the belief for nonpartisanship in U.S. Space policy. He has a clear vision for our future in space and we believe would he be an effective, positive and progressive NASA Administrator who can connect all branches of government, industry and international relationships.

Thank you for taking the time to consider our input. I welcome any questions you have about SNC's support for Mr. Bridenstine. We look forward to working with you as the confirmation process advances.

Thank you for your leadership on this important issue.

Sincerely,

MARK N. SIRANGELO,
Sierra Nevada Corporation.

NATIONAL ASSOCIATION OF SPACEPORTS
October 25, 2017

Hon. JIM BRIDENSTINE,
United States House of Representatives,
Washington, DC.

Dear Representative Bridenstine,

On behalf of the National Association of Spaceports, which represents FAA-licensed spaceports that support civil, defense and commercial space launch, I write to share our congratulations on your nomination to serve as NASA Administrator as well as our appreciation for your leadership in Congress on behalf of state spaceports. We believe you will bring this strong commitment to supporting and encouraging greater use of licensed U.S. spaceports as NASA administrator.

As you know, spaceports in Virginia, Alaska, Oklahoma and Texas, as well as other states across the country, have emerged over the last decade as key launch sites on the East and West coasts for orbital launch, as well as new suborbital sites inland. Our association is working to highlight the contributions of these new launch sites, which state governments have invested hundreds of millions of dollars to strengthen our national launch resiliency, incubate new commercial technologies, create more high-value jobs in space-development infrastructure, and to improve opportunities for current and new launch providers. We lead the world in the nascent industry of commercial space development. But we have stiff international competition.

As a thought leader in Congress on space issues, you have been an active legislator and thoughtful author of policy to strengthen national space efforts, improve the partnership between the FAA and State-run spaceports, and cultivate spaceports as key infrastructure for advancing private, civil and military space capabilities. We are particularly appreciative of provisions in your American Space Renaissance Act that would strengthen the partnership between state spaceports and FAA, as well as better integrate new spaceport infrastructure in national space policy planning.

We look forward to continuing to work with you in your new leadership role at NASA, and are grateful for your commitment to America's spaceports.

GEORGE ZAMKA,
Chairman of the Board,
National Association of Spaceports.

The National Association of Spaceports (NASP) is the premier trade association dedicated to the advancement and success of America's spaceports. NASP works in tandem with other trade associations, corporations, and government agencies to promote the positive aspects of spaceport operations, to increase spaceport development, and to provide a vocal and representative presence for the launch sites—where commercial space development takes off.

INMARSAT INC.
Washington, DC, October 25, 2017

To: Senator THUNE,
Senator NELSON,
United States Senate,
Commerce Committee.

Dear Senators,

It is with great pleasure that I write to you in support of the nomination of Rep. Jim Bridenstine to be the next Administrator of NASA. For the nearly 40 years I've worked in the satellite industry, I've met few Members of Congress with the interest and passion for the satellite industry and space policy that I've seen with Rep. Bridenstine.

Though his experience as a Naval Aviator and Oklahoma Congressman would naturally steer him to defense and weather matters in space, Rep. Bridenstine has gone well beyond parochial interests and taken the time to dive into some of the key strategic issues affecting the Nation's future in space, including technology development, the challenges of space traffic management and space debris and the proper balance of interests in future Federal satellite service acquisition policy. He ranks among the most thoughtful and articulate Members in almost all matters of space policy and acquisition.

As the largest mobile satellite communications company and leading supplier of satellite services to governments worldwide, Inmarsat highly values the select few leaders that take the time to truly understand and promote the interests of all of those who use the domain of space to advance the U.S. economy, national security, scientific and educational aspirations.

As someone who has personally worked on many NASA programs and directly for and with several prior NASA Administrators, I can recommend Rep Bridenstine most wholeheartedly. He has the passion and intellect to lead this world-class institution in its mission to advance science and the U.S. interests in space.

I thank you for your continued service to the Nation.

With appreciation,

PETER HADINGER,
President,
Inmarsat Inc.

SOLAERO TECHNOLOGIES CORPORATION
Albuquerque, NM, October 25, 2017

Hon. JOHN THUNE,
Chairman,
United States Senate Committee on Commerce, Science, and Transportation.

Hon. BILL NELSON,
Ranking Member,
United States Senate Committee on Commerce, Science, and Transportation.

Dear Chairman Thune and Ranking Member Nelson:

We write today in support of Representative Jim Bridenstine's nomination to be the Administrator of the National Aeronautics and Space Administration. At this critical time in our Nation's history, it is important that NASA have effective and visionary leadership. We believe Congressman Bridenstine will provide that leadership.

During his time in Congress, Bridenstine has proven himself to be a passionate advocate for America's space program, from civil space to national security space to commercial space. He has taken the time to get to know this community and its stakeholders within industry, government, academia and NGOs, and has shown an ability to have a keen understanding of the issues. Bridenstine has been extremely effective taking this understanding, building bipartisan coalitions, and enacting visionary policies to advance American leadership in space.

Congressman Bridenstine served honorably as a pilot in the Navy, the Navy Reserves, and now the Oklahoma Air National Guard. He has demonstrated a commitment to serving his nation. Taking this commitment and combining it with his passion, knowledge, and understanding of space, we are confident he will make a great NASA Administrator.

Sincerely,

BRAD CLEVENGER,
President & CEO,
SolAero Technologies Corporation.

MOON EXPRESS INC.
Cape Canaveral, FL, October 25, 2017

Senator JOHN THUNE,
Chairman,
Senate Committee on Commerce, Science, and Transportation,
Washington, DC.

Dear Chairman Thune:

I write to you to express my strong support of Jim Bridenstine's nomination as NASA Administrator.

During his five years in Congress, Rep. Bridenstine has been a thoughtful advocate of improvements in America's military, commercial, and civil space enterprises. He has championed new ideas without bashing traditional institutions. He has helped coalesce a new generation of bipartisan space supporters in Congress to promote a multi-mission NASA that does everything from improving aviation safety to monitoring the environment to leading the world in human and robotic space explo-

ration. He has supported Defense Department studies on the effects of climate change on military installations. And as a museum director and space entrepreneur, he has worked to inspire young people in his state and investors in new rocket planes.

Jim radiates a passion for space that that will help inspire the next generation of space scientists, engineers, and entrepreneurs. Of course, his patriotic background as a naval aviator has also given him a warfighter's appreciation for the space products and services that have been essential to American national security since the first Gulf War.

I have had the pleasure of working with Mr. Bridenstine as Moon Express seeks to return America to the surface of the Moon next year. He has been a champion in addressing the policy challenges that space entrepreneurs face and has tirelessly advocated on the industry's behalf to create a pathway for companies such as ours to receive clear Federal authorizations to undertake private sector space missions. Moon Express recently received authorization to fly the first commercial mission to the Moon from regulators, a historic precedent that will provide us the opportunity to provide low-cost access to the Moon for NASA's exploration technology and science programs, as well as other potential customers.

In short, Jim has indispensable qualities that are rarely found together: a personal passion and vision of America's future in space; the ability to lead peers as well as team members to achieve a goal; a proven track record of promoting regulatory reforms; and the trust and support of a U.S. President.

I believe Jim could be one of the greatest leaders of the U.S. space program, and that the committee will come to appreciate why I and so many long-time experts in the U.S. space community have been inspired by his knowledge, passion, and vision for space over the past five years. I hope that you will vote to confirm him as NASA Administrator.

Sincerely,

ROBERT (BOB) RICHARDS,
Founder and CEO.

cc: Senator Bill Nelson, Ranking Member, Senate Committee on Commerce, Science, and Transportation

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26 October 2017

Hon. JOHN THUNE, Chairman,
Hon. BILL NELSON, Ranking Member,
Senate Committee on Commerce, Science, and Transportation,
U.S. Capitol,
Washington, DC.

Dear Chairman Thune and Ranking Member Nelson,

It is with great pleasure and confidence that I write to unconditionally support the nomination of Congressman Jim Bridenstine for the position of Administrator, National Aeronautics and Space Administration. I believe Mr. Bridenstine possesses the intellectual capacity, domain knowledge, political insight, and boldness of vision needed to steer the world's foremost ship of Earth, aeronautics and space science, exploration and education.

I met Mr. Bridenstine during his first term in Congress, when he began work on a weather forecast improvement bill. He reached out for input to my institution, the University of Oklahoma, which is home to the National Weather Center-a pioneer in the observation and prediction of severe storms and tornadoes (at OU, I serve as Regents' Professor of Meteorology and Vice President for Research). Rising quickly to chair the House authorizing subcommittee for the National Oceanic and Atmospheric Administration and other key agencies involved in research, Mr. Bridenstine became a champion for science broadly, and his weather bill was the first in decades that sought to enhance our Nation's ability to forecast extreme weather events—something that was sorely needed.

I was immediately impressed by Mr. Bridenstine's ability to grasp complex technical subjects, his understanding of the big picture as well as details, and his insight into the Federal budget. Most important, however, I found him to be teachable and open to new ideas and approaches that achieved his overall goals. Ultimately, his weather bill was passed with bi-partisan support and signed into law.

Some in the scientific community view Mr. Bridenstine as having certain narrow positions, for example, in opposition to Earth Science or climate research. My experience has been that Mr. Bridenstine appreciates the importance of understanding the entire Earth-to-Sun system, and wishes to establish a balanced portfolio of re-

search that advances knowledge and informs policymaking. He believes in using sound science to make decisions, and in openness and transparency as part of the process.

I believe the Nation would be exceptionally well served with Mr. Bridenstine as NASA Administrator, and I appreciate the opportunity to provide input on this important decision.

Sincerely,

DR. KELVIN K. DROEGEMEIER,
Norman, Oklahoma.

COMMERCIAL SPACEFLIGHT FEDERATION
Washington, DC, 26 October 2017

Hon. JOHN THUNE,
Chairman,
Senate Commerce, Science, and Transportation Committee,
Washington, DC.

Hon. BILL NELSON,
Ranking Member,
Senate Commerce, Science, and Transportation Committee,
Washington, DC.

Chairman Thune, Ranking Member Nelson, and Senators of the Committee:

It is a pleasure to enthusiastically endorse the nomination of Congressman Jim Bridenstine to lead the National Aeronautics and Space Administration as its next Administrator.

I am a planetary scientist, astrophysicist, and aerospace engineer by training. I am also a believer in the power of space exploration to inspire, to catalyze our economic engine, to provide new resources and technology, to generate new knowledge, and to create a better future for all of us.

I have written hundreds of scientific papers on subjects ranging from space vehicle rendezvous theory to studies of the Earth's atmosphere, to planetary origins, to gamma ray bursts, to detection techniques for planetary systems around other stars.

I have been on 29 space mission teams, from brief suborbital science missions, to Space Shuttle expeditions, to Earth orbiting science satellites, to planetary missions across our solar system. I have been fortunate to lead on 14 of those missions, including the New Horizons mission sent to explore the Pluto system in 2015 and in so doing conducted the farthest exploration of planets in the history of space exploration.

I was also fortunate to have former NASA Administrator Michael Griffin entrust me with the leadership of NASA's Science Mission Directorate (SMD). As Associate Administrator for SMD, I oversaw all of NASA's $5B planetary, astrophysical, heliospheric, and Earth Science efforts at NASA Headquarters here in Washington. During my tenure we steeply increased the rate of new mission starts while simultaneously bringing cost overruns down dramatically.

Today, I am a private citizen and the Board Chair of the Commercial Spaceflight Federation, the largest industry association of companies dedicated to advancing the development of commercial spaceflight of all kinds. I am an advocate for both human and robotic exploration of space, for public outreach surrounding space exploration, for the development of new space technologies, and for space exploration as an effective tool for soft power projection across the world.

I've had the pleasure to know some of you on this committee from my work and from testimony I have given. In fact, the first member of this committee that I met was Senator Nelson, when, in 1986, he flew on the same Space Shuttle mission that I first served as a Principal Investigator on. And I was, like Senator Nelson, shocked and saddened later that same month when the next space shuttle mission, Challenger STS–5lL, exploded, losing six friends and two experiments I was involved in. So in addition to understanding and being part of the U.S. space science enterprise for over 30 years, and advocating for Earth Science in the previous Republican Administration when I served at NASA Headquarters, I also intimately understand and have been deeply personally affected by the dearest costs of space exploration.

I first came to know Congressman Bridenstine about a year ago, but for some time before that I was keenly aware that he shares the same passions I—and I know many of you—do for space exploration, and that he has been a highly effective space exploration and space commercialization policy leader.

I am honored to support his nomination to be NASA Administrator, and to pledge my enthusiastic support to him as he undertakes this difficult and oftentimes thankless role.

Why do I strongly support Jim Bridenstine's nomination?

- Because of his high integrity, which is key to leading NASA.
- Because of his dedication to hard work and to listening to outside advice.
- Because of his high energy level, which is also very much needed.
- Because of his deep passion for space exploration and how it can improve our lives, our economy, and the better future we all seek for our children.
- Because he supports the Decadal Survey process and its mandates that guide all the space and Earth Science enterprises at NASA.
- Because he is a forceful advocate for both expanded human and robotic exploration of space.
- Because he believes human industrial activity is the source of climate change.
- Because he is a passionate advocate for expanding the role of commercial companies in space.
- Because he has indicated he would like to see both the exploration and science enterprises grow at NASA.
- Because he believes space should be nonpartisan.
- And because he brings a very much welcome, and needed, new set of practiced policy and political skills that have often been missing at NASA.

Some people have said that despite his amazing education—four degrees at Rice and Cornell universities—his service to our country as a combat and later a reserves pilot, and his successful career as a representative in Congress, that Mr. Bridenstine is not qualified to serve as NASA Administrator, because he is neither a scientist nor an engineer.

Well, I am both of those things. And in my view what NASA needs most today in its Administrator is neither scientific nor engineering acumen. NASA has a workforce of over 18,000 including thousands of the country's—actually the world's—top space engineers and scientists.

I do not think one more scientist or engineer there—even at the Agency's helm—will measurably advance NASA as much as a skilled and visionary leader who believes in space science and exploration and who can effectively guide NASA to new heights using his political and policy skills, his exuberance, energy, and effectiveness. What the Agency needs in my estimation is a leader who can inspire, who can advocate, and who can guide our space efforts to again be the envy of the world and an engine of historic significance.

That person is Jim Bridenstine, and I hope you will confirm his nomination so NASA and our country can benefit as soon as possible from his skills, his passion, and his dedication to NASA's mission.

Sincerely,

S. ALAN STERN,
Board Chair,
Commercial Spaceflight Federation,
Former NASA Associate Administrator for Science.

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26 October 2017

Hon. JOHN THUNE,
Chairman,
United States Senate Committee on Commerce, Science, and Transportation.

Hon. BILL NELSON,
Ranking Member,
United States Senate Committee on Commerce, Science, and Transportation.

Dear Chairman Thune and Ranking Member Nelson,

The purpose of this letter is to provide my endorsement for Congressman Jim Bridenstine to be the next NASA Administrator. By way of background, I have been the president and CEO of the Center for Strategic and International Studies since early 2000. Before that, I served as deputy secretary of defense under President Clinton. I have had the pleasure to work with Rep. Bridenstine these last two years in conjunction with a study we undertook in space policy here at CSIS. I have worked with members of Congress for 40 years. Only very rarely have I seen a member of Congress focus with such intensity and sophistication on an urgent national priority. I was deeply impressed by his leadership. I am confident he will bring that to his prospective role as the head of NASA.

Rep. Bridenstine is a fine leader with a keen intellect. I have enjoyed the chances that I have had to work with him in my capacity at CSIS. I know that he is the right choice for this position.

JOHN J. HAMRE,
President and CEO,
Center for Strategic and International Studies.

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26 October 2017

Hon. JOHN THUNE,
Chairman,
United States Senate Committee on Commerce, Science, and Transportation.

Hon. BILL NELSON,
Ranking Member,
United States Senate Committee on Commerce, Science, and Transportation.

Dear Chairman Thune and Ranking Member Nelson,

The purpose of this letter is to provide my strongest endorsement for Congressman Jim Bridenstine to be the next NASA Administrator. By way of background, I am a retired Air Force General Officer and have been in the Space business for 37 years. During this period, I worked with many great leaders in the Air Force, NASA, NOAA and the Intelligence Community. Over the last four years, I have had the privilege to meet and work with Congressmen Jim Bridenstine and I would rank him at the top of the space leader list. His leadership, intellectual energy, and ability to understand and resolve complex space issues set him apart from the others.

Additionally, Congressman Bridenstine is the right leader at the right time to lead the NASA team for the following reasons:

- First, he is an articulate and visionary leader that is focused on creating a more resilient space architecture to support United States national security and economic imperatives. In April 2016, he introduced the American Space Renaissance Act to jump start our commercial and national security space enterprise and to address the threats to our National Security and our global economy. It's a groundbreaking piece of legislation and it's already guiding resource decisions that will help restore the United States as the preeminent nation for the peaceful use of space.
- Second, he has excellent communication and interpersonal skills. He has the unique ability to grasp complex issues and distill them into smaller more manageable pieces. I've seen him do this several times. It's a rare trait that takes the complexity out of the equation and allows him to communicate in easy to understand terms and get everyone on board.
- Third, he is a team player and coalition builder. His ability to quickly identify and characterize issues, lay out a plan, and rally the team to resolve them will be essential to move NASA and the Nation forward in space. His demonstrated ability to work with leaders from the U.S. Government, commercial industry, and the international community will be key to creating more innovative and affordable space options for our Nation.

Finally, he is one of the finest leaders I have met. He is a true professional in every sense of the word and his knowledge of space is unrivaled in the Washington DC arena. This knowledge, coupled with his natural leadership and communication skills, make him the right choice for NASA Administrator.

PETER F. HOENE,
Brigadier General,
USAF (Retired).

GWACS DEFENSE INC.
Jenks, Oklahoma, October 26, 2017

Dear Chairman Thune and Ranking Member Nelson:

I write today to give my company's robust and enthusiastic support for Representative Jim Bridenstine's nomination to be the Administrator of the National Aeronautics and Space Administration.

GWACS Defense, Inc., is a company that builds cutting edge acoustic gunshot detection systems to provide security and save lives. Our next generation technology

will utilize space based communications for global situational awareness and local active shooter events for immediate gee-location of hostile shooters. Our company partners with QUALCOMM and other critical satellite technology companies. In moving out on providing this capability, we have worked with the Congressman on policies which are important to our technology which will have a dramatic affect in reducing and/or eliminating future active shooter events such as the recent massacre in Las Vegas. Jim Bridenstine has demonstrated extraordinary technical acumen to understand spectrum, encryption, space-based networks, and many other aspects affecting our technology.

We believe that Congressman Bridenstine will bring this thoroughness arid technical capacity to NASA and with his leadership NASA can play a critical in helping with the security and safety of Americans through our great nation and around the world. It is our high honor to support his nomination.

Thank you,

JUD GUDGEL,
Chief Executive Officer,
GWACS Defense Inc.

AIRBUS AMERICAS, INC.
Herndon, VA, October 26, 2017

Senator JOHN THUNE,
Chairman, Senate Committee on Commerce, Science, and Transportation,
Washington, DC.

Senator BILL NELSON,
Ranking Member,
Senate Committee on Commerce, Science, and Transportation,
Washington, DC.

Dear Chairman Thune and Ranking Member Nelson:

I write today in support of Representative Jim Bridenstine's nomination to be the Administrator of the National Aeronautics and Space Administration (NASA). Airbus, a global space industry leader and manufacturer of the Orion service module, recognizes the importance of selecting an experienced and passionate leader of the NASA. We believe Representative Bridenstine will provide strong leadership at this critical time in our Nation's space history.

Congressman Bridenstine has proven to be a passionate advocate for America's space programs, from civil space to national security space to commercial space. He is a recognized leader within the space stakeholders community; industry, government, academia and NGOs, and has shown an ability to have a keen understanding of our issues. As a Member of Congress, Bridenstine has been extremely effective building bipartisan coalitions and enacting visionary policies to advance American leadership in space.

Congressman Bridenstine served honorably as a pilot in the Navy, the Navy Reserves, and now the Oklahoma Air National Guard, further demonstrating his commitment to serving his nation. Taking this commitment and combining it with his passion, knowledge, and understanding of the space industry and space policies, I am confident he will make a great NASA Administrator.

Respectfully yours,

ALLAN MCARTOR.

ONEWEB, LTD.
Arlington, VA, October 26, 2017

Hon. JOHN THUNE,
Chairman,
United States Senate Committee on Commerce, Science, and Transportation,
Washington, DC.

Hon. BILL NELSON,
Ranking Member,
United States Senate Committee on Commerce, Science, and Transportation,
Washington, DC.

Dear Chairman Thune and Ranking Member Nelson:

As an American with a history in both space and aviation, I write to you today in support of Representative Jim Bridenstine's nomination to be the Administrator of the National Aeronautics and Space Administration. It is important that NASA have effective and visionary leadership. I believe Congressman Bridenstine will provide that leadership.

During his time in Congress, Congressman Bridenstine has been a passionate advocate for America's space program and has actively engaged in the type of complex matters he will oversee in civil space, national security space, and commercial space as the Administrator of NASA.

He has taken the time to get to know the space sector and its stakeholders within industry, government, academia and NGOs, and has shown a keen understanding of the key issues involving space. Congressman Bridenstine has capably used this understanding to build bipartisan coalitions and enact visionary policies to advance America's leadership in space.

Congressman Bridenstine served honorably as a pilot in the Navy and the Navy Reserves, and currently serves in the Oklahoma Air National Guard. He has demonstrated a commitment to serving his nation. That commitment, combined with his passion, knowledge, and understanding of space, would in my opinion make him an outstanding NASA Administrator.

Sincerely,

GREG WYLER,
Founder & Executive Chairman

ASSOCIATION OF THE UNITED STATES NAVY
Alexandria, VA, October 26, 2017

To whom it may concern,

On behalf of the Association of the United States Navy (AUSN), we strongly urge you to support James Bridenstine as the next Administrator of the National Aeronautics and Space Administration.

Since 1954 the Association of the U.S. Navy has served as the voice for America's Sailors and is the premier advocate for a strong Navy and national defense. Since the nascent days of Alan Shepard and Wally Schirra, NASA has turned to the Navy to find the best and brightest to lead from the front. The future success of the space program rests in a strong commercial-government partnership. The next administrator must therefore be equipped to consider non-standard and asymmetric proposals, ideas, and concepts. James Bridenstine's background clearly shows he is well equipped to deliver exactly this kind of creative and critical thought leadership.

A distinguished Navy and Air Force pilot, James Bridenstine has served his country with honor and distinction in two different branches. He has planned and flown combat missions from aircraft carriers, trained the Navy's best pilots as an instructor at the Naval Strike and Air Warfare Center (the parent command to TOPGUN), planned and conducted asymmetrical counter-narcoterrorism missions, and continues to fly in support of the Air Force Special Operations Command.

Furthermore, James Bridenstine's strong educational background with a triple major at Rice and an MBA from Cornell further strengthen his resume. His choice to culminate his many years of experience and success in the Navy with a transfer to the Air National Guard so that he could continue actively serving in uniform while still serving in Congress reflects a heart surrendered to the best interests of our country, beyond his own interests.

James Bridenstine's background demonstrates that he is a most qualified and committed candidate, and AUSN profoundly believes he is the candidate we can trust most to support the needs of our Nation. The Association of the United States

Navy strongly encourages you to support James Bridenstine as the next Administrator of the National Aeronautics and Space Administration.

Sincerely,

MICHAEL J. LITTLE,
Director of Legislative Affairs,
AUSN.

October 26, 2017

Hon. JOHN THUNE,
Chairman, Committee on Commerce, Science, and Transportation,
United States Senate,
Washington, DC.

Hon. BILL NELSON,
Ranking Member, Committee on Commerce, Science, and Transportation,
United States Senate,
Washington, DC.

Dear Senators Thune and Nelson,

I write to express my strongest personal recommendation, and urge your support for a unanimous confirmation, for Representative Jim Bridenstine (OK–1) for the position of Administrator, National Aeronautics and Space Administration (NASA).

I have personally known Mr. Bridenstine for nearly a decade. His in-depth technical knowledge and passion for NASA's mission are unmatched. As the next leader of NASA, he will build on the impressive legacy of America's space agency.

Mr. Bridenstine and I served together in the United States Navy where I was his Commanding Officer. He led by example and his professionalism, leadership and integrity were examples for all who served with him. Further, Mr. Bridenstine is a man of faith, family, and country. His personal qualities are matched only by his scientific intelligence and administrative acumen. Mr . Bridenstine is committed to serving the United States and will be an outstanding Administrator.

I am honored and humbled to ask for your support of Mr. Bridenstine . He is the right person with the right skills to lead NASA. I am confident the Committee and Senate will agree. Thank you for your continued service to our great nation.

With appreciation,

GERALD TODD HEYNE,
Captain, USN, Retired.

ASTROBOTIC TECHNOLOGY, INC.
Pittsburgh, PA, October 26, 2017

Hon. JIM BRIDENSTINE,
U.S. House of Representatives,
Washington, DC.

Dear Rep. Bridenstine:

On behalf of the Astrobotic team, I want to congratulate you on your nomination to serve as NASA Administrator and thank you for your leadership in Congress to support America's return to the Moon. You have been a leading champion of NASA's Lunar CATALYST program as well as an advocate for the bipartisan effort to fund NASA participation on robotic lunar lander demonstration missions in the House FY 2018 Commerce-Justice-Science Appropriations bill, which would provide $30 million in FY 2018 to support these lunar mission opportunities.

It has been nearly 50 years since the United States last had a lunar lander capable of a soft landing on the Moon. American companies, like Astrobotic, have been hard at work over the last decade privately developing a robotic Lunar Lander to restore this capability for NASA and other government, academic and commercial users. That is why NASA's Lunar CATALYST program—which worked with Astrobotic and other industry partners to support this development—along with NASA's recent RFIs seeking information on lunar science and technology payloads as well as lunar lander services, are so instrumental in supporting Lunar Lander demonstration missions and services.

As Vice President Pence noted in his October 5th speech at the inaugural National Space Council meeting, "The moon will be a stepping-stone, a training ground, a venue to strengthen our commercial and international partnerships as we

refocus America's space program toward human space exploration." We applaud this announcement and believe that NASA and its industry partners are well positioned to enable robust exploration missions on and around the Moon over the next several years.

Astrobotic is excited to lead this return to the Moon through its ongoing partnership with NASA, as well as its 2019 mission that will be launched by United Launch Alliance's Atlas V rocket—the only lunar lander launching from U.S. soil. Additionally, with the Space Launch System (SOLS) rocket and Orion spacecraft, NASA has developed and is preparing to launch the exploration-class systems necessary to return American astronauts to lunar orbit and build the Deep Space Gateway, which will provide a critical platform for robotic and, eventually, human missions to the lunar surface. The upcoming Exploration Missions and Gateway will also enable new opportunities to leverage robotic lunar landers to access the Moon's surface for the first time since Apollo 17, enabling a range of affordable science, technology and exploration expeditions within the current budget profile.

Again, we congratulate you on your nomination and appreciate your continued leadership to support NASA's work with industry to enable a range of U.S., international and commercial missions to ensure American leadership in space, especially in our return to the Moon.

Sincerely,

JOHN THORNTON,
CEO,
Astrobotic Technology, Inc.

MILITARY-VETERANS ADVOCACY, INC.
Slidell, LA, October 26, 2017

Senator JOHN THUNE, Chairman,
Senator BILL NELSON, Ranking Member,
United States Senate Commerce, Science, and Transportation Committee,
Washington, DC.

Dear Chairman Thune and Ranking Member Nelson:

I would like to take this opportunity to recommend Congressman Jim Bridenstine for the position of Administrator of the National Aeronautics and Space Administration. Congressman Bridenstine has been a military pilot in both the United States Navy and the Air National Guard. His experience in avionics and aviation will help Shinto continue the expansion and exploration of outer space. He is a proponent of space technology and the commercial potential for exploiting space resources on the Moon and beyond.

I have dealt with the Congressman throughout his tenure and have found him receptive to new ideas. He is a proven leader who has led the way in Congress on space issues. This has been recognized by *Space News* who called him a game changer in the space program. I believe that Congressman Bridenstine has the ability to shepherd the return of the United States to manned space flight and that he is the best candidate to do so.

I note that the Congressman's work as Chairman of the Environment Subcommittee of the House Science, Space, and Technology Committee has been exemplary. He has worked hard on deregulation and has convinced the National Oceanic and Atmospheric Administration to upgrade their weather forecasting models. I believe he will bring the same analytical and technical ability to the post of Administrator.

Many say that the problem; of the world are on Earth. The solutions, however, are in space. We need a leader like Jim Bridenstine to take American back into space. He enjoys my full confidence and support.

Sincerely,

JOHN B. WELLS,
Commander USN (Retired),
Executive Director.

SPACEPORT AMERICA
Las Cruces, NM, October 26, 2017

Dear Chairman John Thune and Ranking Member Bill Nelson,

I write to you on behalf of Spaceport America, the world's first purpose-built commercial spaceport, to express our enthusiastic support for Representative Jim Bridenstine's nomination as NASA Administrator. Through his service in Congress, on the House Committee of Science, Space, and Technology as well as the Committee on Armed Services, Mr. Bridenstine has demonstrated the leadership, temperament and resolve to effect bipartisan efforts to facilitate the growth of a commercial space sector that is globally competitive and advances United States leadership in a generation of new markets and innovation-driven entrepreneurship.

Mr. Bridenstine's space legislation, along with his support of other congressional space initiatives on both sides of the aisle, reveals his commitment to the goals of our national space policy to energize a competitive domestic space industry that works in international cooperation to extend the benefits of space to all, while strengthening our Nation's stability in space and increasing its assurance of mission-essential functions enabled by commercial, civil, scientific, and national security spacecraft and infrastructure.

Spaceport America supports Mr. Bridenstine's vision of a space agency that effectively combines the economic engine of American free enterprise with the substantial resources and expertise of the U.S. Government to ensure that the United States remains the leader of space exploration and the global space economy. The combination of his strong aeronautical expertise, his knowledge of space policy, and his visionary leadership is what our Nation needs in this new dynamic global space marketplace.

Thank you for taking the time to consider our input. We look forward to working with you as the confirmation process advances.

DANIEL HICKS,
Chief Executive Officer,
New Mexico Spaceport Authority.

Vienna, VA, 26 October 2017

Dear Chairman Thune and Ranking Member Nelson,

I am writing to express my strongest personal support for the confirmation of Jim Bridenstine to the position of NASA Administrator.

Jim and I flew in the same community and were both in VAW–77 where we conducted Counter-Narco Terrorism operations throughout Central and South America and the Caribbean. The operations were non-standard and required an immense amount of creative operational planning and creative tactical development. The execution of these plans then required us to operate the E–2C Hawkeye aircraft in non-traditional operating environments, flying non-traditional profiles

All this to say the following—ducks like ducks. Standard cookie-cutter nominees get expected standard results. In Jim Bridenstine you have the opportunity to confirm a man who looks at problems as opportunities, and challenges as training environments. You cannot expect transformational growth from an industry insider.

The leadership required to be exercised by a Naval Aviator is unlike that found elsewhere in the military. We are not exclusively pilots—indeed, we are trained to be officers and leaders first, and pilots second. The required volume and combination of intellectual, emotional, and moral capacity is unequalled. A normal day for a Navy Pilot embarked on an aircraft carrier consists of spending most the daylight hours leading Sailors in the maintenance department; then pivoting in a moment into operational planning for the next day's combat strike; followed by another pivot into launching and flying a completely unrelated check flight; all while training and mentoring the younger pilots in the squadron.

What NASA needs in this challenging time is a person with the ability to look at the issues which have become ubiquitous to the current leaders, and see the unique hidden in plain sight, the unexpected, the opportunities that exist everywhere but are mostly ignored because people do not understand them for what they are.

What NASA needs is an Administrator like Jim Bridenstine. I fervently encourage you to confirm him for this position. Please feel free to reach out to me with any questions at *navy8or@gmail.com* or 703.321.6994 (cell).

Very Respectfully,

CAPT BRETT KORADE,
USN (Ret).
E–2/C–2/FA–18/C–12 pilot

OKLAHOMA SPACE INDUSTRY DEVELOPMENT AUTHORITY
Burns Flat, OK, October 27, 2017

U.S. Senate Committee,
Commerce, Science, and Transportation,
Washington, DC.

Dear Chairman Thune and Ranking Member Nelson,

The Oklahoma Space Industry Development Authority (OSIDA) respectfully ask for your support to empower Jim Bridenstine to become the next NASA Administrator. He has a dynamic vision for the future of the United States Space Program and has been instrumental with the ongoing development of Space Commerce which Oklahoma also plays a major role in that capacity.

We have worked with Jim for over 10 years including his time in Congress. He has demonstrated an extensive technical knowledge of aerospace and aviation businesses echoing his broad based understanding of their strategic importance.

His introduction of the American Space Renaissance Act, to permanently secure the United States of America as the preeminent spacefaring nation, reflects the benefits that can be directly tied to our Nation leading the way in exploring and commercializing space. The Act rejects a strategic vision that will involve both military and commercial space systems. It will provide domestic and commercial space launch capabilities as well as encourage commercial space innovation.

Very Respectfully,

BILL N. KHOURIE,
Executive Director,
Oklahoma Space Industry Development Authority.

INTELSAT
McLean, VA, October 27, 2017

Hon. JOHN THUNE,
Chairman,
United States Senate Committee on Commerce, Science, and Transportation.

Hon. BILL NELSON,
Ranking Member,
United States Senate Committee on Commerce, Science, and Transportation.

Dear Chairman Thune and Ranking Member Nelson:

We write today in support of Representative Jim Bridenstine's nomination to be the Administrator of the National Aeronautics and Space Administration. At this critical time in our Nation's history, it is important that NASA have effective and visionary leadership. We believe Congressman Bridenstine will provide that leadership.

During his time in Congress, Bridenstine has proven himself to be a passionate advocate for America's space program, from civil space to national security space to commercial space. He has taken the time to get to know this community and its stakeholders within industry, government, academia and NGOs, and has shown an ability to have a keen understanding of the issues. Bridenstine has been extremely effective taking this understanding, building bipartisan coalitions, and enacting visionary policies to advance American leadership in space.

Congressman Bridenstine served honorably as a pilot in the Navy, the Navy Reserves, and now the Oklahoma Air National Guard. He has demonstrated a commitment to serving his nation. Taking this commitment and combining it with his pas-

sion, knowledge, and understanding of space, we are confident he will make a great NASA Administrator.

Thank you,

STEPHEN R. SPENGLER,
Chief Executive Officer.

NATIONAL GUARD ASSOCIATION OF OKLAHOMA
Oklahoma City, OK, October 27, 2017

To Whom It May Concern:

It is an honor and a pleasure to offer Recommendation for Congressman Jim Bridenstine for Administrator for NASA on behalf of the National Guard Association of Oklahoma (NGAOK).

Congressman Bridenstine has served with distinction in the Oklahoma Air National Guard. His professional leadership as a Commissioned Officer of the 137th Special Operations Group and as a Naval Aviator makes him uniquely qualified in the area of National Security and Space Security. With Space Security being a new realm of a National Security Threat, we need a proven dedicated conscientious leader at NASA.

We have every confidence in his ability and leadership to serve in this Nation well. He has demonstrated his competence, character, and loyalty to the utmost.

He have stood for the men and women in the National Guard of Oklahoma and the Nation without hesitation or reservation, we highly recommend Jim Bridenstine to serve in this capacity.

Thank you for your consideration.

Sincerely,

JOSHUA ODQUIST,
President.

LEISNOI INCORPORATED
Anchorage, AK, October 27, 2017

Chairman JOHN THUNE,
Ranking Member BILL NELSON,
U.S. Senate Committee on Commerce, Science, and Transportation,
Washington, DC.

SUBJECT: Confirmation Hearing for NASA Administrator

Dear Senators Thune and Nelson,

Please accept this letter recommending the confirmation of Representative Jim Bridenstine as our nations next Administrator for the National Aeronautics and Space Administration (NASA).

As a village corporation established in 1971 by the Alaska Native Claims Settlement Act (ANCSA), Leisnoi supports responsible development of our resources and preserving our heritage. Leisnoi has lands and shareholders in the Chiniak area of Kodiak Island, close to the Pacific Spaceport Complex—Alaska (PSCA), a commercially licensed spaceport operated by Alaska Aerospace Corporation. We have long supported development of an aerospace industry in Kodiak that provides increased opportunities for commercial operations and jobs for local residents.

As our Nation looks to regain leadership in space, PSCA provides an ideal location for both government and commercial launches that require affordable access to polar orbits. Representative Bridenstine's vision to increase efforts in commercial solutions for access to space, bodes well for the future of NASA and could provide opportunities for PSCA to become a more integral part of our Nation's space program.

Thank you for holding the confirmation hearing for Representative Bridenstine to be the next NASA Administrator. His leadership at NASA will mark a renaissance for space activities by the United States and be a significant factor in making our space program both more affordable and dynamic. Increasing commercial activities, while concurrently streamlining the regulatory process, will result in expanded job opportunities, increased industry potential, and ensure we maintain a viable alternative launch location to bring more polar orbit launch activities back to the United States. This will be great for America and for Alaska.

It is with great admiration that I fully endorse Representative Bridenstine to be our next NASA Administrator and ask for your favorable consideration of his nomination.

Respectfully submitted,

JANA TURVEY,
President and CEO.

October 27, 2017

Hon. JOHN THUNE,
Chairman,
Senate Commerce, Science, and Transportation Committee,
Washington, DC.

Hon. BILL NELSON,
Ranking Member,
Senate Commerce, Science, and Transportation,
Washington, DC.

Dear Chairman Thune and Ranking Member Nelson:

We are writing in our individual capacities as industry experts who have all served in leadership positions on the Commercial Space Transportation Advisory Committee, to offer our strong support for Representative Jim Bridenstine to be the next NASA Administrator. We believe that he has the leadership ability, the vision, and the energy to enable NASA to reach its full potential.

During his tenure in Congress, Rep. Bridenstine has consistently demonstrated leadership in space policy. He has earned a reputation for thoughtful, creative approaches to the challenges facing NASA. His signature bill, the American Space Renaissance Act, contains a number of innovative proposals that have already been integrated into other legislation and signed into law. Rep. Bridenstine is a tireless and effective advocate for NASA both within Congress and with the Administration. As a combat veteran, he brings a valuable national security perspective to his advocacy for the Agency.

A NASA Administrator must be able to unite the Agency and its stakeholders behind a vision for space exploration, and then execute the plan that will fulfill that vision. Rep. Bridenstine is well-suited for this role; he balances the various interests within NASA in a way that plays to their strengths and will make the Agency more capable. We believe he will be effective at managing the Agency's programs of record while leveraging the innovation and investment of the commercial sector to accomplish more per budget dollar.

The upcoming nomination hearing will give you and your colleagues an excellent opportunity to witness firsthand Rep. Bridenstine's passion, vision, and commitment to American leadership in space. We urge you to confirm his nomination and appreciate your time and consideration.

Sincerely,

Mike Gold (COMSTAC Chair)

Michael Lopez-Alegria (COMSTAC Vice Chair)

Oscar Garcia (Chair, InterFlight Global Corporation; Chair of the COMSTAC Standards Working Group)

Christopher Kunstadter (Senior Vice President and Global Underwriting Manager—Space/Aerospace Insurance; Chair of the COMSTAC Business/Legal Working Group)

Mark Sundahl (Charles R. Emrick Jr.-Calfee, Halter & Griswold Professor of Law; Director, Global Space Law Center; Chair of the COMSTAC International Space Policy Working Group)

MLA SPACE, LLC
Washington, DC, October 27, 2017

Hon. JOHN THUNE,
Chairman,
Senate Commerce, Science, and Transportation Committee,
Washington, DC.

Hon. BILL NELSON,
Ranking Member,
Senate Commerce, Science, and Transportation Committee,
Washington, DC.

Dear Chairman Thune and Ranking Member Nelson,

I am writing to express my enthusiastic and unequivocal support for the nomination of Representative Jim Bridenstine to lead the National Aeronautics and Space Administration as its next Administrator.

The Agency is at a critical juncture; the change of Administration offers a unique opportunity to chart a meaningful strategic course that will remove any doubt surrounding America's position as undisputed world leader in civil space, and then to use its unmatched knowledge and human resources to sail it. This will require a steady hand at the helm—one bold enough to set a visionary and forward-looking direction, and someone with experience navigating sometimes challenging political waters.

In my ongoing tenure as Vice-Chair of the Federal Aviation Administration's Commercial Space Transportation Advisory Committee, I have been very favorably impressed with Congressman Bridenstine' s depth and breadth of knowledge on matters important to the commercial space industry. His addresses—both to the COMSTAC and on other occasions—demonstrate a remarkably high level of interest, preparation and consideration. His American Space Renaissance Act introduced innovative and thoughtful ideas to help evolve policies in the rapidly changing civil space landscape, many of which have since been adopted in other legislation and since signed into law.

From a human spaceflight perspective, the incoming Administrator will be faced with the daunting tasks of continuing the exploitation of the International Space Station and its National Lab facilities, executing the deep space exploration developmental programs of record, and leading the world in the commercialization of low Earth orbit. Having spent twenty years at NASA and then serving as President of the Commercial Spaceflight Federation, I have been on both sides of the tension between traditional space industry and the developing "new space" sector. Likewise, Congressman Bridenstine has been a "blue-suiter" as a Naval Aviator and combat veteran, but also recognizes the value of capitalizing on the entrepreneurial forces of competition and economic efficiency. With the relatively flat budgets that NASA likely faces in spite of its very long task list, it will be increasingly important to equitably balance the deep knowledge and expertise of the traditional companies with the innovation and agility of their emergent counterparts.

Finally, in my nearly forty years as an aviator, astronaut and aerospace consultant, I have had the opportunity to serve—and observe—many leaders. The best are informed but open-minded, principled but not ideological, and skilled enough to advance their organization's agenda in the face of obstacles. Representative Bridenstine displays all of these attributes.

I am grateful for the opportunity to cast my vote in support of the confirmation of Congressman Bridenstine as the next NASA Administrator; I urge you to do the same.

Sincerely,

MICHAEL LOPEZ-ALEGRIA,
Principal.

INTERNATIONAL SPACE SAFETY FOUNDATION

For Immediate Release

October 27, 2017

THE INTERNATIONAL SPACE SAFETY FOUNDATION SUPPORTS PRESIDENT TRUMP'S NOMINATION OF REPRESENTATIVE JAMES BRIDENSTINE TO BE NASA ADMINISTRATOR

The Houston, Texas based International Space Safety Foundation (ISSF), and the ISSF's sister group, the International Association for the Advancement of Space Safety (IAASS), based in the Netherlands, the two leading non-profit organizations promoting the safe and sustainable long term use of space, today expressed their strong support for President Trump's nomination of James Bridenstine to be the NASA Administrator. Both organizations see his nomination as a positive step forward, and expect Representative Bridenstine to provide the much-needed leadership for combining NASA's long safety experience and outstanding technical resources with the visionary drive and innovation spirit of commercial entities.

Michael Kezirian, PhD, President and CEO of ISSF, stated that "we at the ISSF stand ready to support Jim Bridenstine as the new NASA Administrator and look forward to continue the dialog with him on promoting the advances in space safety as a necessary condition for the development and growth of a vibrant commercial space industry." Kezirian and the ISSF particularly support Bridenstine's view that the safety regulatory environment for the commercial space industry must be lean and provide certainty and clarity to business, and are convinced that those goals can be achieved by applying proven best practices to protect the participant and uninvolved public alike. "At the ISSF, we see space safety as a collective responsibility of the aerospace industry," explained Kezirian. "We must bring NASA' s experience of more than fifty years of human spaceflight to industry through the development and compliance with common safety standards." In this context, ISSF advocates the creation of a Commercial Space Safety Institute, and hope to work with Representative Bridenstine to make that a reality once he is confirmed as NASA Administrator.

Tommaso Sgobba, Executive Director of IAASS added "At a time when space is no longer an exclusive arena of governments and national space agencies, with many new, ambitious entrants entering the spaceflight business, the effective control of operational risks is the key factor for industry growth and expansion. Bridenstine's views as a member of the Science, Space and Technology Committee of the U.S. House of Representatives on the increased commercial involvement in space exploration and the importance of a return to the Moon and the vision to ultimately reach Mars as a proving ground for private industry are very encouraging for the international community of space. safety professionals." He also considers Bridenstine's experience as a Navy pilot to be a valuable asset, and noted that "space bound systems and aviation traffic will share a more and more crowded airspace, with aviation increasingly relying on space-based safety-critical services, and air launches perhaps becoming an important segment of the launch business."

About James Bridenstine:

Mr. Bridenstine was elected in 2012 to represent Oklahoma's First Congressional District. He serves on the House Armed Services Committee and the Science, Space and Technology Committee. Mr. Bridenstine began his Naval aviation career flying the E–2C Hawkeye off the USS Abraham Lincoln aircraft carrier. It was there that he flew combat missions in Iraq and Afghanistan. While on active duty, he transitioned to the F–18 Hornet and flew as an "aggressor" at the Naval Strike and Air Warfare Center. After leaving active duty, Mr. Bridenstine returned to Tulsa, Oklahoma to be the Executive Director of the Tulsa Air and Space Museum & Planetarium and flew counter-drug missions in Central and South America in the Navy Reserve. He holds a triple major from Rice University and an M.B.A. from Cornell University. Mr. Bridenstine is currently a member of the 137th Special Operations Wing of the Oklahoma Air National Guard.

About IAASS and ISSF:

The International Space Safety Foundation (ISSF) and the International Association for the Advancement of Space Safety (IAASS) are sister non-profit organizations with similar aims. They are dedicated to furthering policies of international cooperation and scientific progress in the field of space safety through educational initiatives, certifications, and funding of research. ISSF and IAASS and seek to advance technical, organizational, and socio-political cultures to make space missions, vehicles, stations, extraterrestrial habitats, equipment, and payloads safer for the general public, ground personnel, space travelers, and crews. They also support the

preservation of the orbital environment to ensure safe use and access by present and future generations.

The ISSF is a non-profit 501c(3) registered in California with its senior leadership based in Houston, Texas. The IAASS is a registered association under Dutch law, is based in Noordwijk (Netherlands). Both organizations work closely together and have a world-wide membership which is comprised of space agencies, aerospace corporations, and space safety professionals. More information can be found at:

issf.space-safety.org
iaass.space-safety.org

Contact:

Michael Listner, USA
Dieter Isakeit, The Netherlands

AURORA FLIGHT SCIENCES CORPORATION
October 27, 2017

Hon. JOHN THUNE, Chairman,
Hon. BILL NELSON, Ranking Member,
U.S. Senate Committee on Commerce, Science, and Transportation,
Washington, DC.

Dear Chairman Thune and Ranking Member Nelson,

In preparation for the U.S. Senate Committee on Commerce, Science and Transportation to consider the nomination of Rep. Jim Bridenstine to serve as the Administrator of the National Aeronautics and Space Administration, I request that you include this letter of support in your deliberations.

Aurora Flight Sciences is a small aerospace company with significant experience in assisting NASA. Our work has ranged from scientific research aboard the International Space Station to the development of the DS, a highly efficient new technology for commercial aviation. During his term in office, Congressman Bridenstine has demonstrated a deep commitment to understanding both civilian and defense space programs. In Congress, he quickly assumed considerable leadership on major space and aviation issues. He also has amassed extensive firsthand experience on a wide range of aviation issues as a former Navy pilot. The Congressman is keenly aware of the important role of the industrial base that provides critical capabilities to the aerospace industry. I am convinced he will be an effective advocate of NASA's role in aeronautics research, which plays a direct role in America's current and future world aviation leadership.

Rep. Bridenstine is prepared to lead NASA and the many challenges and opportunities facing the agency.

Thank you for consideration this request.

Sincerely,

JOHN S. LANGFORD, PH.D.
Founder and CEO,
Aurora Flight Sciences Corporation.

SPACEFLIGHT INDUSTRIES
Seattle, WA, September 21, 2017

Hon. JOHN THUNE, Chairman,
Hon. BILL NELSON, Ranking Member,
Committee on Commerce, Science, and Transportation,
United States Senate,
Washington, DC.

Re: Support for Confirmation of Representative Jim Bridenstine for NASA Administrator

Dear Chairman Thune and Ranking Member Nelson,

On behalf of Spaceflight Industries, a Seattle, WA company, I am writing in strong support of the nomination of Representative Jim Bridenstine to be the next Administrator of NASA.

Representative Bridenstine has been a strong supporter and friend of industry for years and we see him as a potential agent of change for good at NASA and in the Administration in general on all space policy.

At a time when the United States is witnessing a renaissance in the space industry, it is equally facing strong headwinds both domestically and internationally that could undermine this rapidly evolving sector and therefore the thousands of high-tech jobs and export Dollars that it generates. The innovation, resources and energy that the private sector is devoting to help build and maintain U.S. strategic dominance is threatened in a number of ways that keep a thumb on the growth of the industry.

Chief among these concerns for Spaceflight Industries and its customers is the lack of appropriate U.S. launch opportunities for companies seeking to orbit spacecraft. The lack of ability to find the right domestic launch opportunity is creating a situation where many U.S. companies could go out of business before they are able to prove their business models. Meanwhile international competitors do not face similar domestic restrictions on launch.

Representative Bridenstine has always made himself available to listen to our concerns and to throw his weight behind solutions that help address these concerns. As a rapidly growing U.S. company, we are deeply invested in the success of our customers and we are confident that Representative Bridenstine will be forward leaning, open minded and seek solutions that benefit the industry at large. For these reasons and those stated above, I wholeheartedly recommend his confirmation by the Senate.

Sincerely,

JASON ANDREWS,
CEO,
Spaceflight Industries.

EUTELSAT AMERICA CORP.
October 27, 2017

United States Senate,
Committee on Science, Space and Transportation,
Washington, DC.

Re: Support for the Nomination of Representative James Bridenstine to be NASA Administrator

Dear Chairman Thune:

As a leading provider of satellite telecommunications to the Department of Defense, Eutelsat America Corp. (Eutelsat) fully supports the nomination of Representative James Bridenstine (R OK) to become the 13th Administrator of the National Aeronautics and Space Administration (NASA). Rep. Bridenstine understands that a resilient space enterprise hinges on the integration of government and commercial capabilities. Through his experience as a Member of Congress, we believe Rep. Bridenstine has developed the skills and foundational knowledge necessary to successfully carry out the role of NASA Administrator.

Since he was elected in 2012, Rep. Bridenstine has been a leader in national security space issues through his service on the House Armed Services Committee and the Science, Space and Technology Committee. Last year, Rep. Bridenstine introduced the "American Space Renaissance Act," which would provide critical updates to national space policy and take a holistic approach to the American space enterprise. Many of his space reform ideas were adopted as part of the Fiscal Year 2017 National Defense Authorization Act.

Rep. Bridenstine understands the challenges facing NASA in its quest to better confront changing U.S. space priorities and conduct successful missions to Mars. Furthermore, Rep. Bridenstine recognizes the need to build resiliency and flexibility into space operations and acquisitions as space has become a warfighting domain. For example, he has been a vocal proponent of the Air Force's pathfinder programs and the Wideband Analysis of Alternatives, which aim to use innovative acquisition models to yield increased efficiency and effectiveness. At a time when budget constraints and relationships in Congress are so important, Rep. Bridenstine's leadership will fill a critical capability gap and ensure that NASA's long-term goals are accomplished on time and on budget.

The United States' dominance in space can no longer be taken for granted and will require the leadership and vision that we see in Rep. Bridenstine. Eutelsat America strongly believes Rep. Bridenstine will fulfill the administration's objective of reinvigorating America's role as a leader in space as our Nation's NASA Administrator. We ask that the Committee on Science, Space and Transportation rapidly

vote to recommend to the full Senate that Rep. Bridenstine be confirmed immediately as NASA Administrator.

Sincerely,

DAVID BAIR,
Chief Executive Officer,
Eutelsat America Corp.

CHICKASAW NATION INDUSTRIES, INC.
Norman, OK, October 27, 2017

Hon. JOHN THUNE,
Chairman,
Committee on Commerce, Science, and Transportation,
United States Senate,
Washington, DC.

Hon. BILL NELSON,
Ranking Member,
Committee on Commerce, Science, and Transportation,
United States Senate,
Washington, DC.

Dear Chairman Thune and Ranking Member Nelson:

On behalf of the Chickasaw Nation and our wholly owned subsidiary, Chickasaw Nation Industries, Inc. ("CNI"), we are writing to express our support for Congressman Jim Bridenstine s nomination to be the next Administrator of the National Aeronautics and Space Administration.

The Chickasaw Nation is headquartered in Ada, Oklahoma, and together with CNI which is located in Norman, Oklahoma has national operations in over 40 states and global operations in 6 continents.

We own a computational physics modeling and simulation entity in North Carolina and have received top security clearance as a participant in national security for Federal contracting. In these scientific, technical and security related issues, Jim Bridenstine excels. In Congress, he has been a leader on utilizing space based assets to improve weather forecasting and modeling and is a strong advocate to ensure we have the capabilities necessary to surpass our adversaries in space. His grasp of technical issues is rare among members of Congress, and his attention to these important policies has been critical to the success of U.S. scientific advances over the past 5 years

We are confident Jim Bridenstine's knowledge and passion will serve NASA well, and we ask you to support his nomination and advance his confirmation.

Sincerely,

DAVID L. NIMMO,
President/CEO,
Chickasaw Nation Industries, Inc.

Arlington, Virginia, October 27, 2017

Hon. JOHN THUNE,
Chairman,
The United States Senate Committee on Science, Space, and Transportation,
Washington, DC.

Re: Support for the Nomination of Rep. James Bridenstine to be NASA Administrator

Dear Chairman Thune:

I am honored to support Rep. Jim Bridenstine's nomination to be the next NASA Administrator. As a former NASA astronaut, I have a very personal understanding of the risks and rewards of space exploration. As a former NASA Associate Administrator for Space Operations and Human Space Flight, I also understand the agency's missions and challenges, and I believe Rep. Bridenstine is the kind of leader the agency needs at this critical inflection point for NASA. I urge you and your colleagues to approve his nomination.

From his time flying as a naval aviator aboard aircraft carriers, Rep. Bridenstine has a keen appreciation that complex systems and missions require leadership and

teamwork from 'below decks' to the cockpit. As a former naval aviator myself, I have great admiration for his courage and skills under intense operational stress. NASA needs that kind of administrator.

As a leading voice on national security space issues while serving on prominent committees with jurisdiction over the Department of Defense and NASA, Rep. Bridenstine has a keen awareness of the vital importance of NASA's missions and the inherent bureaucratic obstacles, budget constraints, that he will need to overcome. I believe he will transition NASA from its 20th century infrastructure and government-centric approach to a more modem, blended commercial and government 21st century space exploration enterprise.

Furthermore, Rep. Bridenstine recognizes how dependent our Nation has become on space for everyday activities ranging from navigation to communications to banking. Understanding the importance of those missions and with the reestablishment of the National Space Council under Vice President Pence's leadership Rep. Bridenstine has the background to be a key voice preserving our national leadership in space, while paving the way for the future.

NASA and our space programs are at an inflection point, and we need strong leadership and fresh ideas in order to achieve our Nation's lofty goals. Though this is an incredibly exciting time for exploration and innovation, we must also realize that the United States is no longer the sole, dominant power in space. As our adversaries including China and Russia develop more advanced satellite technologies.

We need someone like Rep. Bridenstine to guide NASA into the 2l't century of space exploration. I believe Rep. Bridenstine has the passion and expertise required to be an exceptional Administrator and I ask that the Committee on Science, Space and Transportation approve Rep. Bridenstine's nomination to become our Nation's 13th NASA Administrator.

Sincerely,

WILLIAM F. READDY,
Former NASA Astronaut,
Captain, U.S. Navy (retired).

STINGER GHAFFARIAN TECHNOLOGIES
Greenbelt, MD, October 27, 2017

Hon. JOHN THUNE, Chairman,
Senate Commerce, Science, and Transportation Committee,
Washington, DC.

Hon. BILL NELSON, Ranking Member,
Senate Commerce, Science, and Transportation Committee,
Washington, DC.

Dear Chairman Thune and Ranking Member Nelson,

As the Committee begins its deliberations on who will lead the Nation's civil space program, I am writing to express my strong support for the nomination of Rep. Jim Bridenstine (R–OK) for NASA Administrator.

Based upon his military service, his experience as a combat aviator and science educator, and his strong knowledge about and passion for space science and human space flight, I believe the Congressman is the right person for this period in NASA's history. He is well versed in NASA and military space programs from his service on the House Science, Space and Technology and Armed Services Committees. As a fiscal conservative, he is well aware of the need to be a careful steward of the Nation's tax dollars when they are invested in things like the space program. But it is his passion for NASA and its people and programs—something that I have come to appreciate in getting to know him—that gives me the most hope about his tenure as Administrator.

In addition, I think his service in the House makes him far more conscientious in working with both Houses of Congress and the members of this Committee in particular to forge a future for NASA that inspires, promotes exploration beyond low earth orbit and invests in scientific discovery. It is these kinds of partnership which NASA desperately needs for it to be effective in these fiscally challenging times. It's my belief and hope that Jim Bridenstine—Navy pilot, science educator and public servant—will use his experience and passion for space to deliver on building that collaboration with Congress to effectively implement the vision articulated by Vice President Pence while preserving NASA's key heritage in space science, developing new technologies and advancing aeronautics research.

Since graduating from college after immigrating to the U.S. more than four decades ago, I have spent my entire adult life working in and around the Nation's civil space program. As an engineer, entrepreneur and business executive, it has been an honor to work with the men and women at NASA on some of its most notable flagship missions—including the Hubble Telescope, Landsat, the Space Shuttle and the International Space Station. Jim Bridenstine appreciates the depth of their service and the need to use his time as NASA Administration to build out from all that they have accomplished.

Given the many challenges which NASA faces, I believe NASA and the Nation can use Mr. Bridenstine's many talents to take the space program to new heights. For this reason, I strongly urge you to expedite his nomination and recommend him for confirmation as NASA Administrator by the full Senate.

Sincerely,

KAMAL S. GHAFFARIAN, PHD,
Chief Executive Officer/President.

Manassas, VA, October 29, 2017

Hon. JIM BRIDENSTINE,
United States House of Representatives,
Washington, DC.

Dear Representative Bridenstine,

I am writing this letter to personally congratulate you on your nomination for NASA administrator and to say why, as a former astronaut, I see your nomination as a tremendous opportunity for NASA to build its leadership in space and advance safely and boldly into a new era of space exploration.

We briefly met in July of 2015 and you discussed your background, interests and involvement in the space industry. From that introduction and from what I know of your space policy initiatives and experience as a Carrier-based U.S. Navy F–18 pilot, I have an assured enthusiasm that you will safely and vigorously discharge your responsibilities as Administrator to enhance safety in an era of evolving relationships between NASA and commercial providers of space services.

NASA human spaceflight accidents are national tragedies because of the astronauts that were lost. The accidents caused an erosion of national confidence. The Columbia accident was unfortunately very much like the Challenger Accident seventeen years before. In both of NASA's Shuttle accidents, engineers had a clear understanding of the failures and the risk to vehicle and crew, but that understanding was lost in the bureaucracy supporting those missions. From your experience as a Naval Aviator, operating in the complex system of systems that is Navy Carrier aviation, you understand the importance of a healthy command safety climate, and you know it is the maintainer, the crew, and the final checker who are the last line of defense against catastrophe, and the Naval Aviation Safety Program that is the first. In the domain of human spaceflight, it is the engineer, the technician, and the astronaut on the last line, and NASA's safety program on the first. Every NASA space mission is a test flight, and I am sure that you will fully support the Astronaut Office and NASA's Office of Safety and Mission Assurance as essential and integral to NASA Astronaut safety.

Additionally, and in closing, from your service in the U.S. Navy, you know firsthand how to lead a diverse operational organization. People of all ranks and backgrounds are treated with respect and consideration so that they in turn can contribute fully as members vested in the organization's success. As NASA Administrator, you will support all NASA personnel so that they will be able to give their best to encourage and inspire all Americans.

My Best Wishes for a successful confirmation and tenure as NASA Administrator.

GEORGE ZAMKA.

CHEROKEE NATION
Tahlequah, OK, October 30, 2017

Hon. JOHN THUNE, Chairman,
Hon. BILL NELSON, Ranking Member,
U.S. Senate Committee on Commerce, Science, and Transportation,
Washington, DC.

Dear Chairman Thune and Ranking Member Nelson,

As the U.S. Senate Committee on Commerce. Science and Transportation prepares to take up the nomination of Congressman Jim Bridenstine to serve as the Administrator of the National Aeronautics and Space Administration. we request that you include this letter of support from the Cherokee Nation in your deliberations.

Congressman Bridenstine has demonstrated a deep commitment to understanding both the civilian and defense space programs. In Congress. he quickly assumed considerable leadership on major space and aviation issues. He also has assumed extensive firsthand experience as a former Navy pilot. The Congressman is keenly aware of the important role of the industrial base that provides critical capabilities to the aerospace industry.

We believe Congressman Bridenstine is prepared to lead NASA and the many challenges and opportunities facing the agency.

Thank you for consideration of this request. If you have any questions or require further information, please contact our Director of Government Relations, Kimberly Teehee at Kim-Teehee@cherokee.org or (202) 615–9505.

Sincerely,

BILL JOHN BAKER,
Principal Chief,
Cherokee Nation.

PANASONIC
Lake Forest, CA, October 30, 2017

Hon. JOHN THUNE, Chairman,
Hon. BILL NELSON, Ranking Member,
Committee on Commerce, Science, and Transportation,
United States Senate,
Washington, DC.

Dear Senators Thune, Nelson and Members of the Committee:

I am pleased to recommend the nomination of Neil Jacobs for Assistant Secretary of Commerce for Environmental Observation and Prediction and Deputy Assistant Administrator of NOAA. I believe that he possesses the scientific knowledge, business management and leadership skills to help strengthen NOAA and improve its critical services to the Nation.

Neil is the driving force behind Panasonic Weather Solutions' outstanding achievements in numerical weather forecasting over the past several years. I began working with Neil when Panasonic acquired our weather forecasting division in 2013. His love for meteorology, both the science and its practical application, is unmatched. He constantly works to find ways to improve the science leading to better forecasts that can inform businesses and the public of accurate daily conditions as well as significant weather events, improving safety and driving efficiencies. Neil has been involved in all aspects of meteorology during the time I've known him from lecturing at forums such as the American Meteorological Society and the World Meteorological Organization, to driving forecast model improvements and new business opportunities as senior scientist at Panasonic Weather. He has a solid grasp of science, innovation and business, which is a powerful combination.

I know Neil to be an intelligent, honorable person with the commitment to serve the public with integrity, bringing vision and passion to the role. I strongly urge his confirmation.

Please don't hesitate to contact me if you have any questions.

Sincerely,

CHRIS LUNDQUIST,
Vice President,
Corporate Planning and Business Development.

KONIAG, INC.
Kodiak, AK, October 30, 2017

Chairman JOHN THUNE,
Ranking Member BILL NELSON,
U.S. Senate Committee on Commerce, Science, and Transportation,
Washington, DC.

SUBJECT: Confirmation Hearing for NASA Administrator

Dear Senators Thune and Nelson,

I am writing today to recommend the confirmation of Representative Jim Bridenstine as our Nation's next Administrator for the National Aeronautics and Space Administration (NASA).

Koniag, Inc. is a regional Alaska Native Corporation formed under the terms of the Alaska Native Claims Settlement Act of 1971. Koniag, Inc. has approximately 3,900 Alutiiq Shareholders. Our region encompasses the Kodiak Archipelago in the Gulf of Alaska and a portion of the Alaska Peninsula. Koniag supports responsible development of our resources while respecting our rich heritage and culture and developing sustained employment opportunities for our shareholders. With lands located on Kodiak Island, we are neighbors to the Pacific Spaceport Complex—Alaska (PSCA), a Federal Aviation Administration (FAA) commercially licensed, state-of-the-industry spaceport that provides access to planetary orbital space for commercial and government interests.

PSCA has been underutilized since first developed in the late 1990s, yet it provides an ideal location for both government and commercial launches that require access to low earth orbit, sun synchronous orbit, polar orbit, and highly elliptical orbits, complementing the equatorial capabilities offered by Cape Canaveral in Florida and the Mid-Atlantic Regional Spaceport in Virginia. Representative Bridenstines strong interest to advance commercial space would provide increased opportunities for NASA to further expand affordable launches by utilizing PSCA, especially for launches of the emerging small launch vehicle market that require access to polar orbit.

Koniag, Inc. and Alaska Aerospace have a long relationship and we are pleased that Representative Bridenstine shares our vision for the future of expanding commercial launch capabilities of our great nation to once again secure leadership in space. We heartily recommend his confirmation as the next NASA Administrator.

Respectfully submitted,

ELIZABETH PERRY, PHD,
CEO,
Koniag, Inc.

Cc: The Honorable Dan Sullivan, United States Senate

DATA—ANALYSIS—SOLUTIONS, LLC
October 30, 2017

Hon. JOHN THUNE, Chairman,
Hon. BILL NELSON, Ranking Member,
Committee on Commerce, Science, and Transportation,
United States Senate,
Washington, DC.

Dear Senators Thune, Nelson and Members of the Committee:

It is with the utmost of pleasure that I send this letter of endorsement in support of the nomination of Dr. Neil Jacobs for Assistant Secretary of Commerce for Environmental Observation and Prediction and Deputy Assistant Administrator of NOAA. I am highly confident that Dr. Jacobs possesses the scientific knowledge, business management and leadership skills to help strengthen the National Oceanic & Atmospheric Administration (NOAA) in working to improve NOAA's critical services to the safety and economic well-being of the Nation.

As the former Chair of the NOAA Science Advisory Board (8 years on the FACA Board, with 6 as the Chair, during the Bush Administration), I can speak, from in-depth knowledge of NOAA, that Dr. Jacobs is an absolutely superb choice to help provide NOAA with industry's perspectives on the further enhancement of its observational networks and its prognostic capabilities. Moreover, as the former Commissioner of the American Meteorological Society's (AMS) Weather, Climate and Water Enterprise, which brought together Private Industry, Federal Agencies and Academia, I again can attest to Neil's involvement in the Commission activities and to

his commitment to the enterprise of engaging the three communities to work together to improve weather and water related safety from natural hazards and to improving the delivery of NOAA's vital services to the Nation.

During the period when I served as the Head of the Department of Marine, Earth & Atmospheric sciences at North Carolina State University, I also served as the Chair of Dr. Jacob's Master's and Doctoral graduate research and education committees. Over a several year period, I came to know Neil very well and to know that he possesses a deep knowledge and understanding of the interactive coupling of observations, data and modeling of environmental systems; which were the topics of both his M.S. thesis and his PhD dissertation. Both studies were related to measuring and modeling atmospheric storms, both from the atmospheric and oceanographic perspectives. Neil possesses the knowledge base and qualifications to see the value of observations and modeling from both sides of the air-sea interfaces and has a very probing mind, always pushing for the facts as well as they could be revealed via observations and modeling. At that time, Neil also became intrigued with the possibility of making weather observations from aircraft and of the next possibility of using those data to be assimilated into prognostic weather forecast models in real-time. We discussed this possibility at length. This interest served him well in his professional career and endeavors following his graduation from NC State.

In his employment with the Panasonic Avionics Corporation, Dr. Jacobs has directed the underlying research and the subsequent development of both the airborne meteorological data reporting system (known as TAMDAR), as well as the numerical models run by Panasonic. Neil introduced that capability to the NOAA National Weather Service (NWS) which now includes those data and model outputs as part of the NWS portfolio. I worked with Neil on brokering that relationship with the Office of the Director of the NWS.

Presently Neil is the chair of the AMS's Forecast Improvement Group (FIG), and also serves on the World Meteorological Organization's (WMO) aircraft based observing systems expert team. Prior to joining Panasonic Inc., Dr. Jacobs worked on various analyses and modeling projects including the National Aeronautics & Space Administration's (NASA) Earth Systems Science Program, the NOAA GOES satellite imagery, the Department of Energy's (DOE) Ocean Margins Program (in which I was the PI), and the NWS's Atlantic Surface Cyclone Intensification Index. Obviously Neil has developed cross-cutting multiple Federal agency and international experience and interactions as well.

In closing I can only say that this is a unique opportunity for the Department of Commerce, for NOAA and for the Nation to have a scientist of Dr. Jacob's caliber in this important position. Neil is collegial, thoughtful, and a team player and will be an outstanding leader for NOAA. I urge his confirmation.

Respectfully,

DR. LEONARD J. PIETRAFESA, PH.D.,
Professor Emeritus,
North Carolina State University.
Burroughs & Chapin Scholar,
Coastal Carolina University.

2nd Chair, NOAA Science Advisory Board (FACA)
3rd Commissioner, AMS Weather & Climate Enterprise
1st Chair, American Geophysical Union Focus Group on Science & Society
1st Chair, Association of Public & Land-grant University's Board on Oceans & Atmosphere
CEO of Data-Analysis-Solutions (DAS) LLC

GEOOPTICS, INC
Pasadena, CA, October 30, 2017

Hon. JOHN THUNE, Chairman,
Hon. BILL NELSON, Ranking Member,
Committee on Commerce, Science, and Transportation,
United States Senate,
Washington, DC.

Dear Senators Thune, Nelson and Members of the Committee,

It is my great pleasure to endorse the nomination of Neil Jacobs for Assistant Secretary of Commerce for Environmental Observation and Prediction and Deputy Assistant Administrator of NOAA. I believe that he possesses the scientific knowledge,

business management and leadership skills to help strengthen NOAA and improve its critical services to the Nation.

Over the past 8 years I have had many conversations with Neil within the American Meteorological Society and in regard to mutual business interests. He is one of today's most intelligent and accomplished scientists. In addition to his keen understanding of meteorology, model building and high-performance computing, he is well acquainted with Federal Government operations and priorities and will be an excellent addition to the Commerce and NOAA leadership team.

As a former NOAA Administrator from 2001–2008, and now involved in leading an environmental data enterprise, I view Neil as a perfect fit for this assignment. Neil will be an outstanding leader for NOAA. I urge his confirmation.

Sincerely,

CONRAD C. LAUTENBACHER, JR. VADM, USN RET
CEO,
GeoOptics, Inc.

WEATHERFLOW INC.
Scotts Valley, CA, October 30, 2017

Hon. JOHN THUNE, Chairman,
Hon. BILL NELSON, Ranking Member,
Committee on Commerce, Science, and Transportation,
United States Senate,
Washington, DC.

Dear Senators Thune, Nelson and Members of the Committee:

It is with great pleasure and conviction that I offer my support, and the support of the WeatherFlow team, for the nomination of Dr. Neil Jacobs for Assistant Secretary of Commerce for Environmental Observation and Prediction and Deputy Assistant Administrator of NOAA. Dr. Jacobs is a preeminent leader within the Weather Enterprise, and he has both the scientific knowledge and business management skills to help NOAA evolve and thrive in the face of pressures on many fronts.

WeatherFlow is a commercial leader in providing decision tools based on a need for an accurate understanding of past, current, and forecasted weather conditions. As CEO of WeatherFlow, I have worked closely with Dr Jacobs in his position at Panasonic Avionics over the last several years and been familiar with his work for the past decade. Both Panasonic and WeatherFlow have provided crucial data to NOAA, at a fraction of the cost of production of that data, under NOAA's National Mesonet Program. I have seen Neil work tirelessly to help shape this NOAA program to be both fair to Panasonic and fair to the US taxpayer. He has played a large role as this program has evolved to be increasingly beneficial to NOAA's mission.

Our working cooperation has afforded me a first-hand view of Dr. Jacobs' work in the academic, government and business spheres. He is first and foremost a scientist, but even beyond his tremendous knowledge in the field of numerical weather prediction, he possesses a deep intellect that further allows him to broadly apply his knowledge, that in recent years has become evident in his strategic business management. He has consistently shown that he can apply his scientific knowledge to both business and government challenges, and to note where cooperation between those sectors can further benefit the nation. As a member of the private sector, Neil has consistently relied on a strong sense of fairness and has provided a consistent moral compass throughout Panasonic's cooperation with government, and I know he will show that same spirit and fortitude as one of NOAA's senior leaders.

I have worked with many others in the academic and business worlds for the past twenty years, and I can unequivocally state that Dr. Jacobs is unique in terms of both his combination of scientific and practical capabilities and his natural skill as a leader. When applied to the breadth and depth of challenges facing NOAA, this combination is likely to pay important dividends to the citizens and economy of our nation.

In view of his skills and accomplishments, it is again with great conviction that I endorse Dr. Jacobs' confirmation. Having someone of Neil's knowledge, skill, and character in the NOAA leadership is a great opportunity for the country.

Thank you for your consideration.

Sincerely,

BUCK LYONS,
Chief Executive Officer,
WeatherFlow Inc.

SURFLINE/WAVETRAK INC.
Huntington Beach, CA, October 30, 2017

Hon. JOHN THUNE, Chairman,
Hon. BILL NELSON, Ranking Member,
Committee on Commerce, Science and Transportation,
United States Senate,
Washington, DC.

Dear Senators Thune, Nelson and Members of the Committee,

I'm writing to give my support and endorsement for Neil Jacobs to become the next Assistant Secretary of Commerce for Environmental Observation and Prediction and Deputy Assistant Administrator of NOAA. In the years I have known Neil, I've been impressed with his zest for science, particularly in the realm of improving the scale and quality of weather observations throughout the world as a source of truth and as a source of inputs into sophisticated atmospheric modeling. Neil is a savvy combination of scientist, computer programmer and business manager and his efforts at improving global wind modeling in founding Air-Dat, now part of Panasonic Weather, have been extraordinary. Entrepreneur, scientist and manager are generally not words used in the same sentence to describe an individual, but in Neil's case they're apropos.

Possibly more important from my perspective, is Neil's love for the ocean. Like many Floridians who discover surfing, Neil's zeal for finding good surf wherever he might be and employing a natural curiosity for protecting the ocean color much of his world view. I have witnessed that in my interactions with Neil both professionally and personally.

As the Chairman and CEO of Surfline/Wavetrak Inc., I oversee a business entity that serves millions of surfers and ocean enthusiasts throughout the world and care deeply about the state of weather modeling and the organizations and agencies that advance global climate models. Our team is always on the look out for the best ways of helping ocean enthusiasts "know before they go" and science is at the root of that. It's this quest that led us to the work Neil was doing at Panasonic.

Neil's connection to science, sophisticated ensemble modeling based upon new modes of observation and his zeal for the ocean make him the ideal person, in my opinion, to advance the mission of NOAA in the coming years. I can't think of a better person to represent the U.S. in advancing our interests as the world's leader in weather prediction than Neil Jacobs and heartily endorse him. If you have any questions or need more information, please feel free to call or write me to discuss this endorsement at your convenience.

Sincerely,

JEFF BERG,
Chairman and CEO,
Surfline/Wavetrak Inc.

LOEB HOLDING CORPORATION
New York, NY, October 31, 2017

Hon. JOHN THUNE, Chairman,
Hon. BILL NELSON, Ranking Member,
Committee on Commerce, Science, and Transportation,
United States Senate,
Washington, DC.

Dear Senators Thune, Nelson and Members of the Committee,

It is my great pleasure to endorse the nomination of Neil Jacobs for Assistant Secretary of Commerce for Environmental Observation and Prediction and Deputy As-

sistant Administrator of NOAA. I believe that he possesses the scientific knowledge, business management and leadership skills to help strengthen NOAA and improve its critical services to the Nation.

Neil is a man of extraordinary personal and scientific integrity. I would be delighted to have him represent the United States with the discharge of his responsibilities as the Assistant Secretary of Commerce for Environmental Observation and Prediction and Deputy Assistant Administrator of NOAA.

I am Managing Director of Loeb Holding Corporation. I was also Chairman of AirDat LLC, a weather data and forecasting organization for which Neil was Chief Scientist.

This is a unique opportunity for the country for NOAA to have a scientist of his caliber. Neil will be an outstanding leader for NOAA. I urge his confirmation.

Sincerely,

BRUCE L. LEV,
Managing Director,
Loeb Holding Corporation.

SPACE FRONTIER FOUNDATION
Arlington, VA, October 30, 2017

Hon. JOHN THUNE,
Chairman,
Senate Committee on Commerce,
Science, and Transportation,
Washington, DC.

Hon. C. WILLIAM NELSON,
Ranking Member,
Senate Committee on Commerce,
Science, and Transportation,
Washington, DC.

Dear Chairman Thune and Ranking Member Nelson,

We thank you for this opportunity to weigh in on the issue of President Trump's nomination of Congressman James Bridenstine to be NASA administrator. The Space Frontier Foundation is a grass roots organization, with more than 30 years of history as advocates for the emerging commercial space industry. We represent a growing body of professionals, researchers, scientists, entrepreneurs, and investors who are helping to develop this rapidly growing new business sector, and as a 501c3, we are dedicated to educating and informing our community, and the world, about this growing economic opportunity. We appreciate this opportunity to share our thoughts on Congressman Bridenstine's nomination.

Congressman Bridenstine has a history with space and NASA. In 2007, he started the Rocket Racing League team known as Bridenstine Rocket Racing. Later, he became the executive director of the Tulsa Air and Space Museum. During his Congressional tenure, he has worked extensively on space issues, including writing the Space Renaissance Act. However, while this history demonstrates significant involvement and interest in space, to us the most important question is whether he shares the vision that our organization has cultivated after 30 years of leading this industry, which is summarized in the three parts of the Space Frontier Foundation's Credo.

1) The Space Frontier Foundation is an organization of people dedicated to opening the Space Frontier to human settlement as rapidly as possible

Our nation's citizenry is dealing with many issues—recovery after a series of natural disasters, economic uncertainty, and a growing political divide. Last year, NASA's budget was almost $20 Billion. If we are going to continue to spend that much money on spaceflight, we must have a clear vision of what we want from our Federal space investment, and how to actually use space to help our citizenry and the world.

This is why the Space Frontier Foundation strongly believes that the issue of space settlement MUST be the driving vision and force behind our human spaceflight endeavors. In our view, human spaceflight must directly serve the needs of every human in a way that allows individual humans to easily reach for space. It must not be just a political tool to make symbolic gestures. Nor can our activities in space be focused only on scientific discovery. Space is awash in resources and opportunities. And the surest way to access these opportunities is by creating and enabling industrial space development that leads directly to space settlement. Indeed, if we are unwilling to build towards space settlement, then we should reconsider whether we want to continue spending public money to place humans in space at all.

Within Congressman Bridenstine's Space Renaissance Act, he proposed an addition to the organic law that established NASA, which, when combined with existing law, would state:

> *The Aeronautical and space activities of the United States shall be conducted so as to contribute materially to one or more of the following objectives:*
>
> *(1) The expansion of the human sphere of influence throughout the Solar System.*
>
> *(2) To be among those who first arrive at a destination in space and to open it for subsequent use and development by others.*

While that language doesn't explicitly use the word "settlement", it clearly articulates a settlement-aligned vision. Thus, when it comes to the first part of our credo, Congressman Bridenstine seems to share our vision.

2) Our goals include protecting the Earth's fragile biosphere and creating a freer and more prosperous life for each generation by using the unlimited energy and material resources of space.

The Space Frontier Foundation recognizes the uniqueness of planet Earth, and the need to protect and preserve it for future generations. However, we also would like to find options that do not limit our opportunities and quality of life. This is why we see space as so important. If human beings create a society that develops space for the betterment of humanity, where Space and Earth are both helping each other, (as opposed to space as an escape or backup as some have suggested), we'll ensure that humanity's future is bright.

We do acknowledge that, when it comes to the issue of protecting Earth's biosphere, there has been some controversy regarding Congressman Bridenstine's record. However, the Space Frontier Foundation recognizes that NASA's primary job is not focused on issues of climate change, and believe that the checks and balances that are part of our government will ensure that when it comes to these issues, NASA's Earth Science programs will be protected.

Finally, as item #2 of our credo states, part of protecting Earth means pursuing activities to actively use space resources. Congressman Bridenstine co-sponsored the Commercial Space Launch Competitiveness Act, which included the Space Resource Exploration and Utilization Act. Additionally, Congressman Bridenstine's Space Renaissance Act includes as a national objective:

> *(3) To create and prepare infrastructure precursors in support of the future use and development of space by others. . ..*

So here too Mr. Bridenstine seems to align with our vision.

3) Our purpose is to unleash the power of free enterprise and lead a united humanity permanently into the Solar System.

Economic growth and commercial expansion have been key to America's success. By utilizing technology to create economic opportunities for individuals, new jobs, companies, and even industries have been created and grown. Thus, if we wish to tap into the new resources of space, we must encourage commercial expansion into the solar system.

To enable space development and space settlement, the government must encourage economic growth, through a combination of favorable regulations, intelligent investment, and supportive policy. NASA stands at a unique position for this, and its activities going forward should focus on enabling development and space settlement.

When it comes to these issues, Congressman Bridenstine has been on the forefront by proposing positive new ideas and initiatives, and many can be seen in the Space Renaissance Act. Here are two examples where the Congressman's efforts have demonstrated such leadership:

- The International Space Station has provided a good starting point for enabling the commercial development of Low Earth Orbit. However, the ISS does not have an indefinite life, and the Space Frontier Foundation and other organizations have been concerned about how to utilize its remaining operation to enable the development of commercial space stations as soon as possible. Section 204 of The Space Renaissance Act both supported this in policy and proposed a pilot commercial habitation program at ISS.
- Congressman Bridenstine worked with other members of the House Science committee to develop H.R. 2809, the American Space Commerce Free Enterprise Act, which would help grow the commercial remote sensing industry, and also create a supervisory framework for new space activities to ensure that the United States remains in compliance with international treaties.

Given this, we are quite excited at the prospect of Congressman Bridenstine serving as NASA administrator. We believe that if he is able to execute on his space vision, the United States would see the growth of new industries and new sectors of the economy. Similar visions led to the development of the computer industry and the internet, and we believe that if NASA becomes focused on space development and space settlement, in partnership with the business community, we could see similar breakthroughs in the space industry. And so we are optimistic that, if confirmed, Jim Bridenstine would enable NASA to advance U.S. space activities in a very positive direction.

We thank you for providing us this opportunity to provide our thoughts, and we look forward to working with the Congress and the Administration on these and other important space issues.

Sincerely,

JEFF FEIGE,
Chairman of the Board,
Space Frontier Foundation.

AARON OESTERLE,
Policy Director,
Space Frontier Foundation.

PLANETARY RESOURCES
Redmond, WA, October 31, 2017

Hon. JOHN THUNE,
Chairman,
Senate Commerce, Science, and Transportation Committee,
Washington, DC.

Hon. BILL NELSON,
Ranking Member,
Senate Commerce, Science, and Transportation Committee,
Washington, DC.

Hon. TED CRUZ,
Chairman,
Space, Science, and Competitiveness Subcommittee,
Washington, DC.

Hon. EDWARD J. MARKEY,
Ranking Member,
Space, Science, and Competitiveness Subcommittee,
Washington, DC.

Dear Chairmen Thune and Cruz, and Ranking Members Nelson and Markey:

I write to you to express our support for Jim Bridenstine's nomination as NASA Administrator.

Commercial space activities, including our focus on asteroid mining, present an opportunity for the U.S. to create high-value jobs, develop new technologies and markets, and enhance the standard of living for people all over the world. As NASA, other government space agencies, and private space exploration endeavor s move forward they will need the resources and fuel derived from asteroids.

Mr. Bridenstine continues a tradition of nonpartisan approaches to space activities and has worked with Members across the political spectrum on defense, civil/commercial space, and appropriations legislation. I believe as NASA Administrator Mr. Bridenstine will continue his open and non-partisan approaches.

Mr. Bridenstine has taken a leadership role in promoting commercial activities and coordinating these activities to the mutual benefit of government and industry. Mr. Bridenstine has shown that he has a vision for where he wants our Nation to go in space and the leadership role that the government *and* U.S. industry can take on Earth and in the Solar System.

Thank you for taking the time to consider our input. I welcome any questions you have about Planetary Resources' support for Mr. Bridenstine. We look forward to working with you as the confirmation process advances.

Thank you for your leadership on this important issue.

Sincerely,

CHRIS LEWICKI,
CEO,
Planetary Resources.

Majority Leader Mitch McConnell
Majority Whip John Cornyn

October 31, 2017

Hon. JOHN THUNE,
Chairman,
Committee on Commerce, Science, and Transportation,
United States Senate,
Washington, DC.

Hon. BILL NELSON,
Ranking Member,
Committee on Commerce, Science, and Transportation,
United States Senate,
Washington, DC.

Dear Chairman Thune, Ranking Member Nelson:

As leading American commercial satellite operators, we write today to express our support of Representative Jim Bridenstine's nomination to be Administrator of the National Aeronautics and Space Administration (NASA).

NASA is at one of the most critical inflection points it in its history. Yet, NASA has been without a confirmed administrator for the past 284 days. Continued policy uncertainty has the potential to undermine the agency's long-term ability to carry out its mission, which is "to pioneer the future in space exploration, scientific discovery and aeronautics research."

Representative Bridenstine is the leader NASA needs today. He has exhibited a passion for furthering our country's pre-eminent status and global leadership in space. He is an experienced and competent professional who has demonstrated a keen understanding of the complex policy and budgetary challenges NASA faces while also recognizing the role commercial entities can play in an era of surging technological advancements in space-based capabilities.

As Representative Bridenstine has articulated how "traditional and new space companies are both critical to accelerating America's space renaissance." We stand ready to work with NASA to further its mission and we urge the Senate to confirm Representative Bridenstine's nomination to be the agency's next administrator.

Sincerely,

MICHAEL RAPELYEA,
ViaSat, Inc.
MARCY STEINKE,
Maxar Technologies.
MARIAH D. SHUMAN,
OneWeb.
JENNIFER MANNER,
Echostar.

AMERICAN PACIFIC
Cedar City, UT

Hon. JOHN THUNE,
Chairman, Committee on Commerce, Science, and Technology,
United States Senate,
Washington, DC.

Dear Senator Thune,

I write to you today to support Rep. Jim Bridenstine's candidacy to be the next Administrator of the National Aeronautics and Space Administration. Rep. Bridenstine is a hardworking and passionate individual with a deep and abiding interest in space exploration. During his time on Capitol Hill, Rep. Bridenstine has taken the lead on multiple legislative priorities involving space, including the American Space Renaissance Act. Rep. Bridenstine also serves as a U.S. Naval Reserve aviator and previously oversaw the Tulsa Air and Space Museum. In the time that I have known him, I have found Rep. Bridenstine to be a thoughtful and driven member of Congress with regard to issues involving space.

As we look forward to a new frontier of space exploration, one that will involve the rapid development and acquisition of new and revolutionary technologies, additional automation and integration of artificial intelligence, and the return of human spaceflight to NASA, an able administrator with proven relationships on Capitol Hill could be a major asset. I believe that Rep. Bridenstine is the sort of political leader that NASA will need to withstand the budgetary and policy challenges that it is likely to face in the future.

AMPAC is a proud supporter of NASA programs, including the Space Launch System. Though we look forward to working with any Administrator nominated by the President and consented to by the Senate, we encourage you to approve the current nominee, Rep. Jim Bridenstine, who would be an excellent addition to the NASA team.

Thank you,

PAUL HUNTSMAN,
Chairman,
American Pacific Corporation.

February 2, 2018

Hon. MITCH MCCONNELL,
Majority Leader,
United States Senate,
Washington, DC.

Hon. CHARLES SCHUMER,
Minority Leader,
United States Senate,
Washington, DC.

Hon. JOHN THUNE,
Chairman,
Committee on Commerce, Science, and Transportation,
United States Senate,
Washington, DC.

Hon. BILL NELSON,
Ranking Member,
Committee on Commerce, Science, and Transportation,
United States Senate,
Washington, DC.

Dear Senators:

The undersigned organizations congratulate the Senate Committee on Commerce, Science and Transportation for again approving the nominations of Acting Chairman Ann Marie Buerkle to serve as chairman and separately to serve a new term as commissioner on the U.S. Consumer Product Safety Commission (CPSC), as well as for approving the nomination of Dana Baiocco to serve as a CPSC commissioner. We ask that you now move promptly to confirm them in those roles. We believe these two nominees are critically important to restoring the CPSC's ability to act in a balanced and effective way to support consumer safety.

We represent manufacturers of consumer products, their suppliers, retailers, and other parties regulated by the CPSC. Our members are committed to producing and selling safe products, and we support effective regulation and oversight by the CPSC as an important complement to our shared commitment to safety and excellence. Until these nominations are confirmed by the Senate, the Commission will remain in a state of transition, which we believe compromises its ability to effectively regulate and to advance product safety and consumer protection initiatives.

It is vital that the Senate immediately devote the attention necessary to confirm the pending CPSC nominations to ensure the agency is fully functional and protecting consumers. On behalf of our members, and for the benefit of consumers, we respectfully ask you to confirm the nominations of Acting Chairman Buerkle and Dana Baiocco as soon as possible.

Thank you for your consideration.

Sincerely,

American Apparel & Footwear Association
American Association of Exporters and Importers
American Chemistry Council
American Cleaning Institute
American Fiber Manufacturers Association
American Fireworks Standards Laboratory
American Home Furnishings Alliance
American Pyrotechnics Association
Builders Hardware Manufacturers Association
Consumer Healthcare Products Association
Consumer Specialty Products Association
Consumer Technology Association
Cookware Manufacturers Association
Fashion Accessories Shippers Association
Fashion Jewelry & Accessories Trade Association
Gemini Shippers Association
Halloween Industry Association
Home Furnishings Association
INDA, Association of the Nonwoven Fabrics Industry
Information Technology Industry Council
Institute of Scrap Recycling Industries
International Housewares Association
International Light Transportation Vehicle Association
American Sportfishing Association
American Supply Association
Architectural Woodwork Institute
The Art and Creative Materials Institute
Associated Industries of Florida
Association of Home Appliance Manufacturers
Baby Carrier Industry Alliance
Bicycle Product Suppliers Association
North Carolina Chamber
Off-Road Business Association
Outdoor Power Equipment Institute
Pennsylvania Manufacturers' Association
Plastic Shipping Container Institute
Plastics Industry Association
Polyurethane Foam Association
Portable Fuel Container Manufacturers Association
Portable Generator Manufacturers' Association
Power Tool Institute
Recreational Off-Highway Vehicle Association
Resilient Floor Covering Institute
Retail Industry Leaders Association
Security Industry Association
Society of Chemical Manufacturers and Affiliates

IPC—Association Connecting Electronics Industries
Juvenile Products Manufacturers Association
Kitchen Cabinet Manufacturers Association
Lighter Association
Mississippi Manufacturers Association
National Association of Home Builders
National Association of Manufacturers
National Association of Printing Ink Manufacturers
National Candle Association
National Confectioners Association
National Council of Textile Organizations
National Fireworks Association
National Retail Federation
Specialty Equipment Market Association
Specialty Graphic Imaging Association
Specialty Vehicle Institute of America
Sports & Fitness Industry Association
State Chamber of Oklahoma
Synthetic Turf Council
The Toy Association
Travel Goods Association
U.S. Chamber of Commerce
Upholstered Furniture Action Council
The Vinyl Institute
Window Covering Manufacturers Association
Wisconsin Manufacturers & Commerce
Writing Instrument Manufacturers Association

Hon. JOHN THUNE,
Chairman,
Committee on Commerce, Science, and Transportation,
United States Senate,
Washington, DC.

Dear Mr. Chairman:

I would like to add my voice to the chorus of industry, professional, civil, and national security space leaders, affirming my strong support for the confirmation of Congressman Jim Bridenstine as our Nation's next Administrator for the National Aeronautics and Space Administration (NASA). During this tumultuous time, and as the Nation aims to once more leap from low earth orbit and inspire the next generation of future American space travelers, I can think of no better person to guide NASA on that journey than Jim Bridenstine. Let me tell you why.

I first met Jim Bridenstine while I served as the Deputy Assistant Secretary of Defense for Space Policy in the Pentagon from 2013 to 2017. You'll recall this was a tough time for DoD space activities as we tried to come to grips with the three new realities of national security space—a burgeoning but under utilized U.S. entrepreneurial space sector, a rapidly evolving threat from our peer competitors, and a time of budget sequester that stymied our actions on both fronts. Close cooperation between DoD and our overseers in Congress was clearly the only way to make progress in that new and uncertain environment. From my knothole in DoD space policy, that meant finding the kind of leader on the Hill who had the vision to see beyond both the narrow confines of traditional DoD space practices and pure budget numbers, and the initiative to take up the fight.

I found that person in Congressman Jim Bridenstine. What impressed me most about Jim was not only his drive and passion for all things space—a passion that quite frankly made little apparent political sense given its limited impact to his home constituency—but his true interest in hearing the arguments on both sides of any issue. Even more important was his desire to truly understand levels of detail well below the surface so he could judge the issue not only by who yelled the loudest, but rather who supported it with facts, analysis, and good old common sense. For example, he's the first legislator on either side of the aisle to ever (and I've been doing this for over 30 years) ask me to explain how military protected communications worked. The nation's spent 100s of billions of dollars on that technology and never once had any legislator or even staff member ever asked me how it worked-but Jim did! He did, because he knew if he was going to push in one direction or the other, he'd better know what could break; and that required more than inch-deep opinion—it required knowledge.

He did the same thing when he wrote the American Space Renaissance Act. He met with players from across the entire space spectrum, made sure he understood the details, and then put it all together in an aspirational document that is still viewed by many as a guidebook to the problems we must solve, and a way to get there. Again, to my knowledge, no single individual has ever even tried to build as bold a compendium that straddles the divide between civil, national security, and commercial space much less to put it into law—but Jim did.

These examples show precisely the reason why we need Jim Bridenstine at NASA' s helm. NASA is not just a narrow civil space player—it is the Nation's leader in space impacting the civil, national security, international, and commercial divide. It needs a leader who can speak to all sides of space and integrate it together in a cohesive fashion. It needs a leader who will take the time to understand not just the opposing sides to the argument, but the details below from which good decisions spring. It needs a leader who can steer the agency not for political expediency, but for the Nation's good. And it needs a leader who can create an aspirational vision

that will not only drive us deeper into space, but deeper into the hearts and minds of our children and encourage them in the same way that I was encouraged by Mercury, Gemini, and Apollo. To my mind, Jim Bridenstine is that man. I strongly urge you to confirm his nomination for NASA Administrator, so he can put us on that road.

Sincerely,

COL (RET) DOUGLAS L. LOVERRO, USAF,
Former Deputy Assistant Secretary of Defense for Space Policy.

NANORACKS LLC
Webster, TX

Hon. JOHN THUNE,
Chairman,
Senate Commerce, Science, and Transportation Committee,
Washington, DC.

Hon. BILL NELSON,
Ranking Member,
Senate Commerce, Science, and Transportation Committee,
Washington, DC.

Dear Chairman Thune and Ranking Member Nelson:

NanoRacks is an entrepreneurial company that was the first to market its own hardware and services onboard the International Space Station. By providing a commercial pathway to using the Space Station, we have helped usher in a new chapter of the space frontier: making space just another place to do business. As CEO of NanoRacks, I strongly support Congressman Jim Bridenstine's nomination to be the Administrator of NASA.

The United States needs to articulate and execute a clear vision for space. Congressman Bridenstine has established himself as a visionary who gets results—someone who can identify challenges, propose solutions, and build consensus. He takes a balanced approach to NASA's priorities, finding places for each of NASA's objectives within a cohesive whole. Importantly, he also promotes NASA effectively before his congressional colleagues, the Administration, and the public at large.

I am most familiar with Congressman Bridenstine's approach to the commercialization and transition of the International Space Station. He has approached those issues thoughtfully, with the goal of ensuring that our permanent presence in space is not disrupted.

Having gotten to observe Congressman Bridenstine over the years, I can say that I have been impressed with his commitment to inclusion and constructive dialogue. I am confident that he will continue to employ such an approach if confirmed as NASA Administrator.

Thank you for your consideration.

Sincerely,

JEFFREY MANBER,
Chief Executive Officer,
NanoRacks LLC.

AXIOM SPACE
Webster, TX

Hon. JOHN THUNE,
Chairman,
Senate Commerce, Science, and Transportation Committee,
Washington, DC.

Hon. BILL NELSON,
Ranking Member,
Senate Commerce, Science, and Transportation Committee,
Washington, DC.

Dear Chairman Thune and Ranking Member Nelson,

I am writing to you today to convey my full and unwavering support for the appointment of Congressman Jim Bridenstine as the next NASA Administrator.

In my capacity as the Manager of the International Space Station (ISS) Program for ten years, and indeed throughout my 27-year tenure with NASA, I had the unique opportunity to understand firsthand both the incredible complexity of the ISS implementation, as well as the brilliance and passion of the many dedicated scientists and staff on our team who worked tirelessly to make the program a reality and a success. Perhaps more to the subject, I have worked closely with the last four NASA administrators throughout my career and understand the impact of their leadership on the Agency' s missions, industry and indeed governments around the world. As we approach the end of the lifespan of the ISS and its pending retirement, Representative Bridenstine is uniquely positioned to provide the nuanced administrative support and leadership that will be required in the corning years for this key program, and indeed, for so many others under the NASA umbrella. Each of these program's must fulfill the mandate of the U.S. National Space Policy by completing a successful structural transition from the auspices of fully-government-run entities, to a new era that embraces commercialization and entrepreneurship. This newest stage can and must result in the development of a competitive and robust private space sector, one capable of continuing the brilliant historical legacy of U.S. preeminence at the forefront of global innovation and exploration.

Throughout the course of his distinguished flight and combat experience as a naval pilot, his time as a cultural and educational leader as the Director of the Tulsa Air and Space Museum & Planetarium, and his dedicated track record as a U.S. Congressman, Representative Bridenstine has demonstrated a singular combination of service, insight, advocacy, and involvement in the aerospace and aviation fields. Now more than ever our industry needs his commitment to building bipartisan support, to engaging actively in the work to evolve new U.S. legislation to grow the portfolio of opportunities, and to bridging the tension sometimes experienced between traditional space entities, and the budding entrepreneurial landscape.

In my newest role as CEO of Axiom Space, LLC, I have more recently had the inspiring occasion to view the world via this entrepreneurial lens, including many of the commercial challenges now confronting America's growing private space sector, both as they directly impact our organization, as well as for the many companies we seek to partner with in low Earth orbit. From this it has become clear that a key driver of the future success of the industry will be the skill, experience and insights the next NASA Administrator possesses. This understanding must span the business and economic considerations driving not only the space industry, but the broader economy, the flow of investment dollars, the perspectives of the business owners, and the delicate balance between all of these viewpoints and the public interest. With his background in economics, MBA from Cornell University, experience as an aerospace contractor, and his time dedicated to the management and stewardship of a large public entity, Representative Bridenstine is uniquely prepared to understand the landscape and the hard work that lies ahead for the aerospace field, and to meet these challenges head on.

Congressman Bridenstine's clarity of message and track record in support of the growth of the American space sector offers a glimpse into his visionary, yet disciplined approach to the subject. Representative Bridenstine repeatedly demonstrates his understanding of the nuances and complexities of this field, witnessed in his advocacy across multiple branches of the sector in order to bolster the full space ecosystem. Examples of this are evident as he champions not only deep space exploration, but also endeavors nearer to home in support of lunar exploration and even earth observation (including severe weather prediction). All of these furthermore demonstrate his understanding of the incredible value of this critical work and its inherent capacity to stimulate the economy, create jobs, contribute to capital markets, and to provide new innovations and life-saving technologies, all while stimulating the hearts and minds of the public and the next generation of Americans.

For all of these reasons, please accept my gratitude for the opportunity to submit these perspectives in support of Congressman Bridenstine as the next NASA Administrator, and ultimately, in support of the future of American entrepreneurship, innovation and exploration.

Sincerely,

MICHAEL P. SUFFREDINI,
CEO and President,
Axiom Space, LLC.

The Hill

JIM BRIDENSTINE IS THE LEADER NASA NEEDS

By Sean O'Keefe, Opinion Contributor—09/26/17

Rep. Jim Bridenstine (R-Okla.), the president's nominee for NASA administrator, is facing criticism regarding his qualifications for the job. These concerns seem to be rooted in a clear preference instead for a nominee possessing skills or experience as a scientist, engineer or technologist. Perhaps most critically, some have dismissed Bridenstine's experience as inadequate given that he is an elected politician.

But if history is any guide, technical skills are not necessarily requisites for success leading this storied agency. While several previous NASA leaders were credentialed or experienced in such disciplines, this was not a clear determinant for success. And contrary to the critical view, Bridenstine arguably has the best qualifications for success given the challenges ahead.

Of the dozen previous NASA administrators, perhaps the most extraordinary and historically noteworthy of them served during the Apollo era. James Webb possessed a diverse base of experience, but none of the technical skills extolled in some of the current dialogue. Webb earned an undergraduate degree in Education, served in the Marine Corps, earned a law degree and served as a congressional staffer before a brief time in industry.

A registered Democrat and moderately active in politics, Webb served in the Truman administration at the Treasury Department, as the Director of the Bureau of the Budget at the White House—the precursor agency to the modern 0MB—and as an under secretary of State during the contentious McCarthy era. Having served in a Democratic administration, he resigned when Truman left office and moved to Oklahoma to work for the leadership of the Kerr McGhee Oil Company during the Eisenhower years.

He resurfaced in government service after newly elected President Kennedy appointed him to serve as the second NASA administrator. His tenure lasted through the Kennedy and Johnson administrations. The rest, of course, is history. Actually, an incredibly remarkable history that yielded perhaps NASA's greatest achievement so far—landing on the Moon.

Webb's contribution was not his scientific or engineering know how. But he did have a wide breath of experience in finance, business management, the art of negotiating outcomes and making decisions in the very emotionally charged public policy arena.

In short, Webb was, by any standard, a politician and an awfully good one. He successfully marshaled an exceptional team of engineers and scientists, none of which suffered low self-esteem. Choosing among a multitude of diametrically opposite "right answers" advanced by those with technical expertise, it was up to Webb to achieve consensus among them to forge a path forward.

He also needed to secure the president's support for a strategy, devise management plans to achieve the outcomes and somehow convince Congress to appropriate funds to finance the endeavor. To do so required exceptional leadership, management and political skills drawn from an array of experiences and professional training to yield the heralded achievements of the Mercury, Gemini and Apollo programs.

He was a most remarkable public servant. But to listen to the critics today, it seems some might consider Webb to be a marginally qualified nominee.

Consider the pending NASA nominee relative to the qualifications Webb possessed when he was nominated. In that light, Bridenstine may have just the skill set necessary to lead NASA to the next level. He received a Rice undergraduate degree and a Cornell MBA, is a former naval aviator and National Guard pilot who served in Iraq and Afghanistan, managed a non-profit and is a Republican presently serving his third term in Congress.

He's learned the legislative and budgetary processes, exercised oversight of Federal management, worked with varied and diverse constituencies to forge his legislative agenda and understands the art of Washington politics. In short, he's now an elected politician—a public servant with an array of skills that could contribute to effectively leading this Federal agency.

NASA has a rich history derived from multiple professional, academic and technical disciplines. Its centers are spread across the Nation in locations derived from political legacies—many of which originated in the Webb era. NASA's diversity of talent, lineage, pedigrees and cultures are united by strong egos and great dedication to public service. To have any hope of motivating all the talent internal to the agency to turn the institution's oars in the same direction requires a NASA administrator who knows how to lead people and manage things.

Externally, it would be handy if the next NASA leader had the president's confidence, knew the players in the White House, be a colleague of other decision makers in the administration, understands the workings and levers of Congress, could work with a variety of constituencies and just for good measure—possess the patience of Job. I'm not sure if Bridenstine has the last attribute, but arguably he gets more than a passing grade with the others.

It is impossible to tell if Jim Bridenstine will have the kind of success that Webb achieved. But in pursuit of this parallel prospect, it's altogether possible he has exactly the skills and experience to position the agency to make that possible. His policy views, voting record and insights on how he may choose to use skills honed as a politician and elsewhere will surely be revealed in the upcoming confirmation hearing. But if past is prologue, he's qualified to clear the hurdles for Senate confirmation. And I'm willing to bet he'll prove to be a fine choice as the 13th NASA administrator.

Sean O'Keefe served as the 10th NASA administrator in the George W Bush administration, 2001–2005, and is presently a professor of public administration at the Syracuse University Maxwell School.

SPACE . . . THE FINAL FRONTIER

U.S. Rep. Ed Perlmutter

Jim Bridenstine has been nominated to lead the National Aeronautics and Space Administration (NASA) as its 13th Administrator. It is my honor to support his nomination.

NASA's mission is to go where no one has gone before, explore the unknown, and reveal the secrets of the universe for the benefit of America and the world. This iconic agency has been at the forefront of scientific discovery for almost 60 years. Jim Bridenstine is well-equipped to lead NASA as it develops return missions to the moon, sends Astronauts to Mars, explores distant planets and their moons, looks into deep space from the Hubble and soon-to-be launched James Webb Space Telescopes, and assists with understanding the sun and both short and long term weather patterns.

I serve with Jim on the House Science, Space, and Technology Committee. My first real interaction with him occurred a number of years ago when he visited Colorado to meet with scientists, engineers, and technicians from a number of our universities, national laboratories, and aerospace companies. I found him to be a good listener and well adept at understanding a lot of technical jargon. His background as a naval aviator made it easier for him to absorb and understand the concepts being discussed by the scientists and engineers. He was particularly attentive to the representatives of the National Center for Atmospheric Research (NCAR) and their research about the climate and long term weather patterns.

Since that meeting Jim and I have worked on a number of bipartisan measures involving space exploration and scientific research and discovery. He understands the role commercial space companies will play in the ensuing years as well as the national and international effort it will take to send our astronauts to Mars by 2033. Jim has proven time and time again that he will put in the work necessary to understand an issue and reach across the aisle to get things done.

Over the next decade, NASA will be presented with countless opportunities to advance our understanding of Earth and the solar system. Our exploration goals require a leader committed to NASA's diverse directorates supporting technological and scientific development. Jim Bridenstine has a firsthand perspective on the need to better understand our Earth and the behavior of the atmosphere. He has a keen awareness of the important Earth Science missions NASA is undertaking and wants to continue to advance our understanding of the planet.

Despite our different political parties I am convinced Jim will lead the brilliant scientists, engineers, technicians and outstanding personnel at NASA as it embarks on a new era of space exploration and scientific discovery. Jim fought for our country on the battlefield and fought for commonsense space policy in Congress. Now is the time for Jim Bridenstine to take command and grow NASA's capabilities and American leadership in space as NASA Administrator.

SpaceRef

COALITION FOR DEEP SPACE EXPLORATION STATEMENT ON NASA ADMINISTRATOR NOMINATION

Press Release From: Coalition for Deep Space Exploration (http://www.exploredeepspace.com)

Posted: Tuesday, September 5, 2017

The Coalition for Deep Space Exploration (Coalition) welcomes the Trump Administration's continuing commitment to human space exploration, space science, and the economic development of space with the nomination of U.S. Representative Jim Bridenstine for NASA Administrator.

"Together with the establishment of the National Space Council chaired by Vice President Pence, this step advances the framework for U.S. leadership in space," said Dr. Mary Lynne Dittmar, President and CEO of the Coalition. "Rep. Bridenstine has been an active and vocal advocate for space on Capitol Hill. We look forward to working with NASA's new leadership team to support NASA's development of a deep space infrastructure for human spaceflight, beginning with the Space Launch System, Orion crew vehicle and Exploration Ground Systems. Other exciting developments include the launch of the James Webb Space Telescope and Mars Insight in 2018, progress on future deep space exploration and science platforms such as Mars 2020, Europa Clipper and the Wide Field Infrared Space Telescope, and ongoing science, exploration, international cooperation and economic development enabled by the International Space Station, leading to the eventual extension of new ventures and technology into deep space."

"The Coalition-representing thousands of Americans working in the space industry, including many small business suppliers and manufacturers across the country-stands ready to support the new NASA leadership team and looks forward to working together as we embark on this exciting new era of deep space science and human exploration."

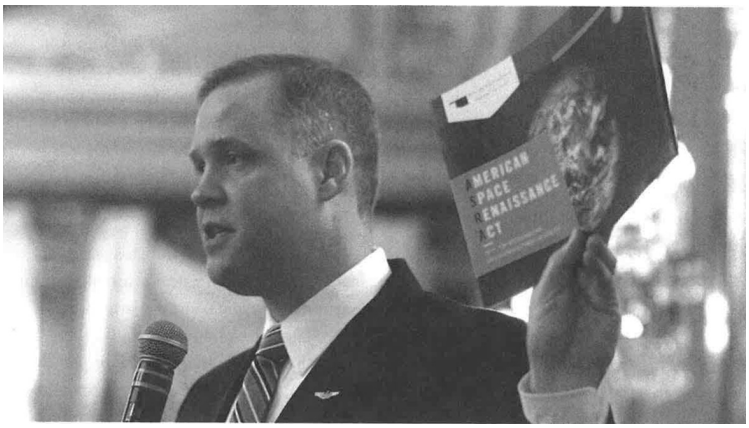
About the Coalition for Deep Space Exploration

The Coalition for Deep Space Exploration is a national organization of more than 70 space industry businesses and advocacy groups focused on ensuring the United States remains a leader in space, science and technology. Based in Washington D.C., the Coalition engages in outreach and education reinforcing the value and benefits of human space exploration and space science with the public and our Nation's leaders, building lasting support for a long-term, sustainable, strategic direction for our Nation's space program.

SpaceNews

BUZZ ALDRIN AND GREG AUTRY: IT DOESN'T TAKE A ROCKET SCIENTIST TO RUN NASA

by Buzz Aldrin and Greg Autry—September 20, 2017



U.S. Rep. James Bridenstine (R-Okla.) discussed his American Space Renaissance Act during an industry breakfast at the 32nd Space Symposium in April 2016. Credit: Tom Kimmell

President Trump called for "unlocking the mysteries of space" in his inaugural address and then envisioned "American footprints on distant worlds" in his speech before a Joint Session of Congress. Addressing a crowd at the Kennedy Space Center this summer, Vice President Pence confidently stated that "our nation will return to the Moon, and we will put American boots on the face of Mars." Such an audacious agenda II require inspired engineering, committed financial support and bold leadership of the kind that Administrator James Webb supplied to NASA during the glory days of Gemini and Apollo.

Finding another Webb was no easy task. The president considered several excellent candidates, some of whom we personally admire, but in the spirit of Webb's leadership, U.S. Rep. Jim Bridenstine is the president's nominee for NASA administrator. Rumors of Mr. Bridenstine's appointment have been swirling in the space community since the spring and during that time, the two of us have come to know him and his record. The more we learned, the happier we've become. We have found that Rep. Bridenstine possesses a remarkable understanding of the science, technology, economics and the policies that surround NASA. He is highly qualified to lead the world's finest scientific and exploratory organization.

Anyone who doubts that should look closely at Mr. Bridenstine's web page for his American Space Renaissance Act (H.R. 4945) at *http://spacerenaissanceact.com/*. The ASRA offers a clear and workable plan to ensure that the benefits of space technology and resources continue to support exploration, science, American national security and economic development. As a space explorer and an academic we both applaud this integrated approach. Criticisms of Mr. Bridenstine's nomination have centered around three themes, each of which are easily refuted.

He's a leader, not a politician

Firstly, it has been suggested that a "politician" shouldn't run NASA. We share a healthy skepticism of politicians and the suggestion of a congressman as administrator initially gave us pause. However, his record revealed that Jim Bridenstine is far from being a character out of House of Cards. He served with distinction as a Naval aviator in Afghanistan and Iraq. He continued to serve his country in the Naval Reserve and then the Air National Guard. He had no political career before launching a surprisingly successful 2012 campaign against an incumbent Republican in Oklahoma's first district. Personally, we can tell you Mr. Bridenstine is an American patriot and a man of integrity who shares our passion for a vibrant NASA.

We'd remind those insisting that only a scientist or astronaut could run a space agency that James Webb was a lawyer by training and spent his entire career in the bowels of governmental bureaucracies. Apollo succeeded, because Webb understood people and practiced effective management.

Jim Bridenstine has a triple major from Rice University that should serve him well in leading NASA: psychology, economics and business. He also holds an MBA from Cornell, an educational tool that former NASA Administrator Mike Griffin applied well when defining the successful Commercial Orbital Transportation Services (COTS) program. Griffin's business school approach to plugging the launch gap NASA faced after the retirement of the space shuttle lead to two new commercial rockets supplying the International Space Station and launched a revived American commercial launch sector. Jim Bridenstine's innovative thinking promises to extend that record of success.

He's an Earth sciences advocate, not a climate change denier

Secondly, there has been a great deal of froth over Mr. Bridenstine's position on climate change. He has always been a strong advocate of Earth sciences, commercial remote imaging, as well as robust weather and climate-data collection. He notes that, "My constituents get killed in tornadoes." Mr. Bridenstine has clearly stated that he believes the climate is changing, that human activities are a contributing factor and that we have a national interest in understanding its causes and outcomes. He has supported several programs to collect additional climate data including championing the Weather Forecasting Improvement Act and support for efforts to launch satellites aimed at measuring atmospheric gasses via occultation (interference) of GPS signals. He also supported the requirement that climate trends be investigated as part of the 2018 Defense Authorization Act. His interests should be great news for firms like California based imaging firm Planet and small launch startups like Virgin Orbit.

He's a peacemaker in the space wars

Finally, some advocates of traditional space programs may be concerned about Jim's intentions toward NASA's contracting model. We are happy to see that Bridenstine offers a uniquely balanced approach. He rejects the either/or battles

over policy and funding that have plagued our space program for the last generation and kept us from going as far as we could. These battles have pitted human spaceflight against robotic missions, astrophysics against Earth Science and positioned traditional exploration programs against emerging entrepreneurial endeavors. The American public celebrates our space agency's success in all these realms and deserves a NASA Administrator who shares their joy.

Jim Bridenstine is deeply interested in innovative engineering and business techniques that can help NASA do more with the public's money. He is committed to continuing the SLS/Orion program and in integrating it into longer-term transportation systems. He also understands that while we must recapture the glory of Apollo we cannot afford another series of disposable missions. He supports public-private partnerships to develop economically sustainable solutions that will support scientific research and commercial development for generations to come. Specifically, we have spoken to Jim Bridenstine about permanent transportation systems to both the Moon and Mars. He understands that such a service, based on the Aldrin Cycler model, would change the economics of space exploration and resource exploitation.

We heartedly support the president's nomination of Mr. Bridenstine as the next NASA administrator wish him Godspeed during the Senate confirmation process. We encourage you to join us in uniting the space community and our Nation behind this nominee so NASA can return to its job of boldly exploring the final frontier.

Buzz Aldrin is an engineer, former U.S. Air Force pilot, former NASA Astronaut, lunar explorer and advocate for Mars exploration.

Greg Autry studies space entrepreneurship at the University of Southern California and former White House Liaison to NASA.

9/7/2017—*The Mars Society*

ROBERT ZUBRIN: NEW NASA ADMINISTRATOR APPOINTEE "A GOOD CHOICE"



Mars Society Founder & President Dr. Robert Zubrin has called for the approval of Congressman Jim Bridenstine (R–OK) as the new NASA administrator.

Bridenstine has focused heavily on space policy during his tenure in Congress, stating "[o]ur very way of life depends on space, the way we communicate, the way we navigate, the way we produce food and energy, the way we conduct banking." In April 2016 at the 32nd Annual Space Symposium, Bridenstine introduced

H.R. 4945, the American Space Renaissance Act, comprehensive reform legislation with provisions affecting national security, civil, and commercial space policy.

In addition, Bridenstine has proposed legislation related to the regulatory process overseeing certain non-traditional space activities, and helped secure funding for the Federal Aviation Administration's Office of Commercial Space Transportation. Recognizing his efforts, in 2015 SpaceNews named Bridenstine as one of five game changers in the world in space.

Commenting on the appointment and the controversy it has aroused, Dr. Zubrin said: "The fracas over the Bridenstine nomination for NASA administrator is unfortunate and unnecessary. Bridenstine is actually a rather good choice for NASA administrator. He is not only a Navy reserve pilot, but a long-time strong space advocate who really wants a space program that is going somewhere, which is exactly what NASA needs. His appointment should be welcomed."

The Bridenstine nomination now goes to Congress for approval. If you wish to have input into the decision, you can reach out to your congressman and Senators through the Capitol Hill switchboard. The number to call is 202–224–3121.

9/13/2017—*Daily Planet—Air & Space Magazine*

AirSpaceMag.com

A Pioneering NASA Administrator

The nominee to head NASA has an exciting vision for the agency.



Rep. Jim Bridenstine outlines his proposed American Space Renaissance Act at a recent Space Foundation Symposium (spacerenaissanceact.com)

By Paul D. Spudis

While celebrated by many segments within the space community, the recent nomination by the White House of Congressman James Bridenstine (R–OK) to become the twelfth administrator of NASA also drew unexpected criticism. Now in his third term in the U.S. House of Representatives, Bridenstine has demonstrated an extraordinary interest in American space programs, both military and civilian. He is the author and sponsor of a bill called the American Space Renaissance Act, an ambitious re imagining of America's space program and a re-writing of the agency's charter around the "Pioneering Doctrine." This doctrine encompasses three principal objectives for the agency: 1) The expansion of the human sphere of influence throughout the Solar System; 2) To be among those who first arrive at a destination in space and to open it for subsequent use and development by others; and 3) To create and prepare infrastructure precursors in support of the future use and development of space by others. I will examine each objective in turn.

The expansion of the human sphere of influence throughout the Solar System. Expanding human "reach" is an activity that I've always believed formed the core of NASA's mission. A human "sphere of influence" encompasses the projection and use of both robotic and human assets, and the presence of one does not obviate the other. This might seem self-evident, but in the past it generally has not been part of the NASA *modus.* The robotic program, as currently configured, exists mostly to address the wants of scientists who produce long wish lists of missions and experiments in "decadal studies"—outlining their desires for the coming ten years. On the human side, some attention is given to developing "precursor" robotic missions that gather scientific and engineering data designed to assure the safety and success of subsequent human missions. But in broad terms, both streams tend to operate separately and independently. What if these two streams were integrated into one?

The question should not be "Robot or human mission?" but, "How shall we best utilize the unique capabilities of each to accomplish our space goals?" One approach might be to tightly integrate robots and humans into mission plans, whereby they work together to accomplish new and previously unreachable objectives. As an example, the architecture that Tony Lavoie and I published in 201 l (and revised in 2016) to explore the potential of resource utilization establishes an outpost on the Moon using both machines and people to create a permanent, sustainable space transportation system. In this architecture, robots set up and begin the initial work on the Moon; people follow later, when the facility is operational and mature. Such a symbiotic relationship between robotic and human spaceflight was utilized and proven during assembly of the International Space Station and should now be applied to missions beyond low Earth orbit.

To be among those who first arrive at a destination in space and to open it for subsequent use and development by others. The second objective encapsulates the imperative of keeping NASA a "cutting edge" entity that pushes the envelope of spaceflight. But more than simply "going where no one has gone before," it also charges the agency with enabling the subsequent exploration and use of new destinations by a variety of users, both public and private. For example, an outpost emplaced at one of the poles of the Moon by NASA would demonstrate that it is possible for such an enterprise to be undertaken and operated, and would serve as the nucleus of a commercial operation through proof-of-concept demonstrations of techniques and technology. Structured like this, NASA's goal is not to "mine the Moon," but to establish that the Moon *can* be mined, and to open the window on what new technology development is needed for such a task. This type of activity reflects one of the classic agency missions of technology transfer—one of the principal reasons for the existence of a civil space program.

To create and prepare infrastructure precursors in support of the future use and development of space by others. The third objective helps to enable and incentivize the second objective. A variety of assets in near-Earth space must be developed and deployed in order for significant commercial activity to occur. As an illustration of this, consider that reliable navigation and communication is required for assets in space, on Earth and on the lunar surface. Because of the highly oblique solar illumination and the extensive local topographic relief at the Moon's poles, it is particularly difficult to know exactly where you are in the polar regions of the Moon. These conditions impede reliable communication between individual surface units and with control centers on Earth. The solution to both these problems is the deployment of a constellation of communication and navigation satellites in lunar orbit. Ideally, these assets would become part of a cislunar GPS system, available for use by any entity to navigate throughout cislunar space and for use in conducting complex surface operations on the lunar surface. The development of this kind of permanent, sustainable spacefaring infrastructure serves both government and societal interests.

These three "Pioneering Doctrines" embrace a bold statement of purpose for NASA: to extend our reach with machines and people beyond low Earth orbit, into deep space and to the objects of the Solar System. Under such a charter, the mission of the agency becomes nothing less than the opening up of the entire space frontier to exploration, use and development. This was one of the original purposes behind the Vision for Space Exploration in 2004, a goal that got lost in bureaucratic makework minutiae of objectives and roadmaps. By maintaining and holding firm to a clear vision of space development beyond low Earth orbit, NASA can push the envelope while at the same time offering practical value for its cost.

Of course, these "doctrines" are part of Jim Bridenstine's proposed legislation, which has not yet been formally adopted as law, and thus is not presently a new code for NASA. However, they do shine a light on his thinking, and they give us some insight into his philosophical preferences for the space program. I contend that the Pioneering Doctrine is exactly what NASA has desperately needed for over a

decade-reachable goals against which progress can be measured, while offering value for expenditure. By pursuing these ends, we can begin to move humanity off the planet and into deep space, surely a worthy goal for any space program.

I think that a NASA administrator who strives for these ends will be an asset to the Nation and just might be able to save a faltering program from collapse. We've had a decade of the fraudulent "Journey to Mars"-spending over $26 billion for no real achievement or new capability. In fact, by discarding the Space Shuttle in favor of "commercial crew transport," we lost capability and saved nothing. This ongoing chaos stems from strategic confusion over what the NASA mission is, where it is going, and how it is executing its programs. An administrator with a clear vision oriented toward the creation of new capabilities is a good first step toward fixing NASA's problems. Jim Bridenstine needs to be rapidly confirmed by the Senate. The sooner he gets on the job, the better for America's future in space.

About Paul D. Spudis

Paul D. Spudis is a senior staff scientist at the Lunar and Planetary Institute in Houston, Texas. His website can be found at. The opinions expressed here are his own and do not reflect the views of the Smithsonian Institution or his employer.

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25 October 2017

Hon. JOHN THUNE,
Chairman,
United States Senate Committee on Commerce, Science, and Transportation.

Hon. BILL NELSON,
Ranking Member,
United States Senate Committee on Commerce, Science, and Transportation.

Subject: Support for Congressman Jim Bridenstine to be next NASA Administrator

Dear Chairman Thune and Ranking Member Nelson:

I have been in the Space business for 49 years. Over these years I have met and worked with many superb leaders in the Air Force, NASA, and the NERO. I am proud to have met and had the chance to work with Congressmen Jim Bridenstine. During my interface with Congressman Bridenstine, I have been impressed with his ability to grasp complex problems and issues, calmly assess options, and then have the will and courage to make a decision and not let a problem get worse.

- He is a *passionate advocate for Space,* and what Space can do for our Nation and our economy.
- He is a *realistic and pragmatic decision maker,* and *strategic thinker* who makes decisions based on facts and by soliciting a wide array of advice before formulating an informed decision.
- He is a *strong manager* who understands that resources are the most valuable commodity and matches goals and solutions to available resources.
- He is a *charismatic leader* that is focused on creating more resilient space architecture to support the United States National Security and Economic imperatives.
- He is a *team player and coalition builder.* This is obviously going to be essential as the costs of what we should do in space outpace the resources we have available. He can build and encourage international partnerships.
- He is an *innovative thinker* who introduced the American Space Renaissance Act to jump start our commercial and national security space enterprise. It's one of the most significant pieces of legislation I've seen in my lifetime and will help secure the United States as the preeminent nation for the peaceful use of space.

Finally, he is simply the right person at the right time for NASA. He is a class act, and a true professional. As we face an expanding set of goals and objectives, in a shrinking resource environment, he can help make quality decisions that are in the best interest of our Nation. His knowledge of space is unrivaled in the Washington DC arena. This knowledge, coupled with his natural leadership skills and abilities, position him well to become the next NASA Administrator.

THOMAS D. TAVERNEY,
Major General USAF ret.

Sep 06, 2017—*Space Florida News*

SPACE FLORIDA STATEMENT ON NASA ADMINISTRATOR NOMINATION

Space Florida is pleased that after many months and consideration of a many candidates, the Administration has nominated Congressman Jim Bridenstine to lead the National Aeronautics and Space Administration (NASA).

Space Florida CEO Frank DiBello said, "*I have had the great pleasure of working with Congressman Bridenstine throughout his tenure in the US. Congress. I have found Jim to be a dedicated student of the industry and a passionate champion in Congress for the maturation of the space economy. He will no doubt apply the same knowledge, dedication. and passion to the leadership of NASA, for the benefit of all space stakeholders New leadership at NASA, combined with the regeneration of the National Space Council and passage of the NASA Transition Authorization Act of 2017, will provide the guidance and stability necessary for NASA to continue to explore new frontiers. advance technology and sustain U.S. leadership in space We look forward to his timely confirmation and working with him in the future.*"

ALASKA AEROSPACE CORPORATION
Anchorage, AK, September 5, 2017

Hon. JIM BRIDENSTINE,
United States House of Representatives,
Washington, DC.

Dear Congressman Bridenstine,

Congratulations on your appointment to serve as the next administrator for the National Aeronautics and Space Administration (NASA). Outstanding choice! Your strong support for commercial development in our Nation's space industry bodes we11 for the United States to regain leadership in space exploration and development.

You may recall that we first met at the 2016 FAA Commercial Space Transportation Symposium in DC. I am the retired Alaska Air National Guard General Officer, who also served as Alaska's tenth Lieutenant Governor, graduated from TU in 1974, and earned a Master Degree at the Naval War College in 1999.

At the time we met, I mentioned my enthusiastic support for your efforts with the *American Space Renaissance Act.* Your new role will provide you the opportunity to advance NASA into the twenty-first century with this bold vision. So I am writing to offer my services as you prepare for your confirmation hearings. Specifically, I would appreciate the time to talk with you, or your staff, about the importance of non-federal commercial spaceports to our Nation and your vision of American leadership in space based, in part, on low cost, reliable, and responsive launch capabilities.

Our Pacific Spaceport Complex—Alaska (PSCA) is the Nation's only high latitude full service spaceport. It features all indoor, all weather, processing and was designed specifically to provide optimal support for space launches to low earth orbit, sun synchronous orbit, polar orbit, and highly elliptical orbits. Operating without Federal or state sustainment funding, PSCA is a proven example of how commercial spaceports can provide tremendous flexibility for U.S. access to space. What we are already doing is important to NASA and future efforts to increase U.S. space exploration and pursuits.

I am attaching copies of letters I sent last November to our Alaska Senate delegation in support of your nomination. If there is anything I may be able to offer to support your confirmation and advancement of NASA in the coming years, please do not hesitate to contact me direct.

Sincerely,

CRAIG E. CAMPBELL,
President and Chief Executive Officer.
Alaska Aerospace Corporation.

ALASKA AEROSPACE CORPORATION
November 23, 2016

Hon. DAN SULLIVAN,
United States Senate,
Washington, DC.

SUBJECT: Letter of Recommendation—Representative Jim Bridenstine

Dear Senator Sullivan:

The election of Donald Trump as the 45th President of the United States presents our nation with a tremendous opportunity to reverse the policies and programs of the past decade that have stifled commercial space development and caused the U.S. to lose market share in space exploration.

I am writing to strongly endorse the appointment of Representative Jim Bridenstine (R–OK) for the position of Administrator of the National Aeronautics and Space Administration (NASA). Rep. Bridenstine has been a steadfast supporter of increasing opportunities for commercial development of the U.S. space industry and is sponsor of the *American Space Renaissance Act,* which includes a specific provision to establish within the Office of Commercial Space Transportation, an Office of Spaceports. We believe that Rep. Bridenstine's initiative presents a positive boost for the U.S. commercial space industry. He is exactly the type person this nation needs to reenergize NASA and lead America's resurgence into space.

Your solid support of our business development efforts for the Pacific Spaceport Complex—Alaska (PSCA) resulted in our securing the multi-year contract with the Missile Defense Agency (DA). I am firmly convinced that part of the reason MDA has selected the PSCA for their future mission is our ability to operate as a commercial spaceport, with the agility to meet their specific price and scheduling requirements. Expanding commercial space and regaining leadership in space exploration are cornerstone goals of Rep. Bridenstine which will be good for both our state and nation.

I trust you concur with me that Rep. Bridenstine is exactly what this nation needs at this time to bring leadership back to NASA, so I request you support the appointment of Rep. Bridenstine as the next NASA Administrator and advise the Trump transition team of your support and my specific endorsement. Please do not hesitate to contact me direct should you need any additional information concerning my support for this very important appointment.

Respectfully submitted,

CRAIG E. CAMPBELL,
President and CEO.

COMMERCIAL SPACEFLIGHT FEDERATION
Washington, DC, 19 September 2017

Hon. JOHN THUNE,
Chairman,
Senate Commerce, Science, and Transportation Committee,
Washington, DC.

Hon. BILL NELSON,
Ranking Member,
Senate Commerce, Science, and Transportation Committee,
Washington, DC.

Hon. TED CRUZ,
Chairman,
Space, Science, and Competitiveness Subcommittee,
Washington, DC.

Hon. EDWARD J. MARKEY,
Ranking Member,
Space, Science, and Competitiveness Subcommittee,
Washington, DC.

Dear Chairmen Thune and Cruz, and Ranking Members Nelson and Markey:

I write to you on behalf of the Commercial Spaceflight Federation (CSF), which represents more than 70 commercial spaceflight companies and organizations across the United States, to express our strong support for Representative Jim Bridenstine's nomination as NASA Administrator. As NASA and American industry continue to work together to ensure that the United States remains the leader of space exploration and the global space economy, NASA needs the effective leadership that Mr. Bridenstine has already shown in so many endeavors.

CSF appreciates this Committee's longstanding support for America's space enterprise and NASA since the Agency was established. As part of your confirmation proceedings, we are pleased to share the commercial spaceflight industry's views regarding this nomination.

Mr. Bridenstine's service as naval aviator and decorated combat veteran demonstrates his commitment to public service and his leadership. Since arriving in Congress, Mr. Bridenstine has taken on many of the challenging policy issues facing the U.S. space industry. A true champion of American leadership in space, his service on the House Committee of Science, Space, and Technology as well as the Committee on Armed Services reflects his numerous contributions to space-related legislation and oversight, often working across the aisle to achieve bipartisan change.

As the former chairman of the House Science Committee's Subcommittee on the Environment, Mr. Bridenstine spent much of his time in Congress seeking to dramatically improve U.S. weather research and forecasting, ultimately enacting a significant piece of legislation.

Finally, Mr. Bridenstine has a clear vision of America's future in space. Mr. Bridenstine knows that expanding our civilization into space requires the innovation and economic engine of American free enterprise, as well as the resources and expertise of the U.S. Government.

Thank you for taking the time to consider our input. We look forward to working with you as the confirmation process advances.

Thank you for your leadership on this important issue.

Sincerely,

ERIC W. STALLMER,
President,
Commercial Spaceflight Federation.

cc: Majority Leader Mitch McConnell
Majority Whip John Cornyn

MOON EXPRESS INC.
Cape Canaveral, FL, October 23, 2017

Senator BILL NELSON,
Ranking Member,
Senate Committee on Commerce, Science, and Transportation,
Washington, DC.

Dear Senator Nelson,

There were many factors that motivated me to move Moon Express to the Space Coast from California and Alabama in 20 l 5: a good business climate, the opportunity to partner more closely with NASA and the Air Force, support from Space Florida, and the chance to come to work every day at a historic Cape Canaveral Launch Complex. But another benefit of moving to Florida was knowing that our senior Senator would not only be one of the strongest advocates in Congress for U.S. economic and scientific leadership in space, but arguably the "conscience of the Senate" on space policy issues. I knew that we would have a champion in the Senate, and at the helm of the Commerce Committee, who knows that America's future in space requires a strong civil agency in NASA and a strong commercial sector to develop the economic opportunities NASA has made possible.

It is with that knowledge of and appreciation for your unique role in space policy that I write to you in strong support of Jim Bridenstine's nomination as NASA Administrator.

During his five years in Congress, Rep. Bridenstine has been a thoughtful advocate of improvements in America's military, commercial, and civil space enterprises. He has championed new ideas without bashing traditional institutions. He has helped coalesce a new generation of bipartisan space supporters in Congress to promote a multi-mission NASA that does everything from improving aviation safety to monitoring the environment to leading the world in human and robotic space exploration. He has supported Defense Department studies on the effects of climate change on military installations and operations. And as a museum director and space entrepreneur, he has worked to inspire young people in his state and investors in new rocket planes.

Jim radiates the same youthful passion for space that you have shown since your early days on the House Science Committee. Of course, his patriotic service as a naval aviator has also given him a warfighter's appreciation for the space products and services that have been essential to American national security since the first Gulf War.

I have had the pleasure of working closely with Mr. Bridenstine as we seek to return America to the surface of the Moon next year. Although he has no constituent interest in Moon Express, he has helped us find solutions to our policy challenges and has advocated for our Federal authorization to fly the first commercial

mission to the Moon, which opens new realms of commercial space activity that can support NASA's exploration and science programs.

In short, Jim has indispensable qualities that are rarely found together: a personal passion and vision for America's future in space; the ability to lead peers as well as team members to achieve a goal; a proven track record of policy innovation; and the trust and support of a U.S. President.

You have raised important concerns since the White House announced Jim's nomination. As a new Florida business and personal resident, and lifelong space advocate, I am glad you want the best for NASA, and for our Nation's space enterprise. I sincerely believe Jim Bridenstine could be one of the greatest leaders of the U.S. space program. I believe that if you give Jim every consideration, you will come to appreciate why I and so many long-time leaders in the U.S. space community have been inspired by his knowledge, enthusiasm and vision for space over the past five years, and the immense contribution he could make to our national interests and space leadership as NASA Administrator.

Sincerely,

ROBERT (BOB) RICHARDS,
Founder and CEO.

ROCKET CRATERS, INC.
Titusville, FL

TO WHOM IT MAY CONCERN

As a former astronaut and current CEO, I have had the privilege of working in the Space industry for over three decades. During those years, I have had the opportunity to meet a number of impressive leaders, but none more so than Congressman Jim Bridenstine. In our first meeting, we talked extensively about our Country's need for new rocket technology to launch satellites more economically and safely to space. I found the Congressman's depth of knowledge on this topic to be impressive.

During my tenure with the Air Force, NASA, and our National Laboratories, I have had the privilege of meeting some amazing people, but Congressman Bridenstine stood out for a number of reasons. His depth of understanding of commercial and defense space, rocket propulsion, and satellites was remarkable. He has a passion for the continuation of America's mission into space and our Country's important role globally as its leader. He understands that for the United States' to maintain its preeminent role in space research and exploration, NASA is critical to this mission.

As the CEO of a launch services company developing new, advanced rocket technology, I have briefed many impressive people on our approach and technology, but our meeting with the Congressman was different. He understood the science, peppered us with questions and offered valuable suggestions. It was a discussion, not a presentation. He was a Congressman from Oklahoma and we were a small aerospace company from Florida; but he was eager to engage us in his effort to move the Country forward in Space.

Congressman Bridenstine is an exciting and outstanding choice to be the next NASA Administrator. His vision and passion for everything Space is exactly what this country and NASA needs as we move forward. With Congressman Bridenstine as NASA's next Administrator, I am convinced the partnership between NASA and the growing U.S. Commercial Space industry will accelerate and flourish—collectively bringing the benefits that Space offers to America and the world.

Sincerely,

SID GUTIERREZ,
CEO,
Rocket Crafters, Inc.

The CHAIRMAN. And then, I also have four letters of support for the nomination of Dr. Neil Jacobs, including a letter of support from Dr. Elizabeth Weatherhead, a senior scientist at the University of Colorado.

So I will enter those without objection.

[The information referred to follows:]

DATA-ANALYSIS-SOLUTIONS, LLC
October 30, 2017

Hon. JOHN THUNE, Chairman,
Hon. BILL NELSON, Ranking Member,
Committee on Commerce, Science, and Transportation,
United States Senate,
Washington, DC.

Dear Senators Thune, Nelson and Members of the Committee:

It is with the utmost of pleasure that I send this letter of endorsement in support of the nomination of Dr. Neil Jacobs for Assistant Secretary of Commerce for Environmental Observation and Prediction and Deputy Assistant Administrator of NOAA. I am highly confident that Dr. Jacobs possesses the scientific knowledge, business management and leadership skills to help strengthen the National Oceanic & Atmospheric Administration (NOAA) in working to improve NOAA's critical services to the safety and economic well-being of the Nation.

As the former Chair of the NOAA Science Advisory Board (8 years on the FACA Board, with 6 as the Chair, during the Bush Administration), I can speak, from in-depth knowledge of NOAA, that Dr. Jacobs is an absolutely superb choice to help provide NOAA with industry's perspectives on the further enhancement of its observational networks and its prognostic capabilities. Moreover, as the former Commissioner of the American Meteorological Society's (AMS) Weather, Climate and Water Enterprise, which brought together Private Industry, Federal Agencies and Academia, I again can attest to Neil's involvement in the Commission activities and to his commitment to the enterprise of engaging the three communities to work together to improve weather and water related safety from natural hazards and to improving the delivery of NOAA's vital services to the Nation.

During the period when I served as the Head of the Department of Marine, Earth & Atmospheric sciences at North Carolina State University, I also served as the Chair of Dr. Jacob's Master's and Doctoral graduate research and education committees. Over a several year period, I came to know Neil very well and to know that he possesses a deep knowledge and understanding of the interactive coupling of observations, data and modeling of environmental systems; which were the topics of both his M.S. thesis and his PhD dissertation. Both studies were related to measuring and modeling atmospheric storms, both from the atmospheric and oceanographic perspectives. Neil possesses the knowledge base and qualifications to see the value of observations and modeling from both sides of the air-sea interfaces and has a very probing mind, always pushing for the facts as well as they could be revealed via observations and modeling. At that time, Neil also became intrigued with the possibility of making weather observations from aircraft and of the next possibility of using those data to be assimilated into prognostic weather forecast models in real-time. We discussed this possibility at length. This interest served him well in his professional career and endeavors following his graduation from NC State.

In his employment with the Panasonic Avionics Corporation, Dr. Jacobs has directed the underlying research and the subsequent development of both the airborne meteorological data reporting system (known as TAMDAR), as well as the numerical models run by Panasonic. Neil introduced that capability to the NOAA National Weather Service (NWS) which now includes those data and model outputs as part of the NWS portfolio. I worked with Neil on brokering that relationship with the Office of the Director of the NWS.

Presently Neil is the chair of the AMS's Forecast Improvement Group (FIG), and also serves on the World Meteorological Organization's (WMO) aircraft based observing systems expert team. Prior to joining Panasonic Inc., Dr. Jacobs worked on various analyses and modeling projects including the National Aeronautics & Space Administration's (NASA) Earth Systems Science Program, the NOAA GOES satellite imagery, the Department of Energy's (DOE) Ocean Margins Program (in which I was the PI), and the NWS's Atlantic Surface Cyclone Intensification Index. Obviously Neil has developed cross-cutting multiple Federal agency and international experience and interactions as well.

In closing I can only say that this is a unique opportunity for the Department of Commerce, for NOAA and for the Nation to have a scientist of Dr. Jacob's caliber

in this important position. Neil is collegial, thoughtful, and a team player and will be an outstanding leader for NOAA. I urge his confirmation.

Respectfully,

DR. LEONARD J. PIETRAFESA, PHD,
Professor Emeritus,
North Carolina State University.
Burroughs & Chapin Scholar,
Coastal Carolina University.

2nd Chair, NOAA Science Advisory Board (FACA)
3rd Commissioner, AMS Weather & Climate Enterprise
1st Chair, American Geophysical Union Focus Group on Science & Society
1st Chair, Association of Public & Land-grant University's Board on Oceans & Atmosphere
CEO of Data-Analysis-Solutions (DAS) LLC

October 30, 2017

Hon. JOHN THUNE, Chairman,
Hon. BILL NELSON, Ranking Member,
Committee on Commerce, Science, and Transportation,
United States Senate,
Washington, DC.

Dear Senators Thune, Nelson and Members of the Committee,

It is my great pleasure to endorse the nomination of Neil Jacobs for Assistant Secretary of Commerce for Environmental Observation and Prediction and Deputy Assistant Administrator of NOAA.

I believe that Neil possesses the scientific knowledge, curiosity, interpersonal and communication skills, business management, and leadership to help strengthen NOAA and improve its critical services to the Nation.

As a former Senior Partner at The Parthenon Group, a strategic consulting company in Boston, for six years I worked closely with Neil, who was Chief Meteorologist at Airdat. This was a breakthrough weather forecasting company with a unique technology in which he was instrumental in developing. This work was highly recognized by his peers at the National Meteorological Society.

In my position at Parthenon, I worked with Neil on the commercialization of the technology, involving presentations to high-level executives in a variety of industries: power generation and transmission; financial services; logistics companies; insurance companies, etc. Neil is not only a true scientist, but is an unusually proficient communicator, creating great demand for his verbal presentations and discussions.

It is my opinion that a scientist of his caliber is not only very smart, but will contribute at a high level befitting a post such as this, serving the United States Government, as well as for NOAA. It is for these reasons that I highly recommend Neil for this assignment.

Sincerely,

FRANK J. O'CONNELL.

SMARTSKY NETWORKS LLC
Charlotte, NC, October 30, 2017

Hon. JOHN THUNE, Chairman,
Hon. BILL NELSON, Ranking Member,
Committee on Commerce, Science, and Transportation,
United States Senate,
Washington, DC.

Dear Senators Thune, Nelson and Members of the Committee,

It is my great pleasure to endorse the nomination of Neil Jacobs for Assistant Secretary of Commerce for Environmental Observation and Prediction and Deputy Assistant Administrator of NOAA. I believe that he possesses the scientific knowledge, business management and leadership skills to help strengthen NOAA and improve its critical services to the Nation.

My relationship with Neil dates to 2004, when acting as CEO of AirDat LLC, I hired Neil for the role of Chief Scientist. I have worked closely with Neil over the

past 13 years, developing advanced weather systems to benefit both the public and private sectors of the global weather enterprise. While historically interests of public and private sectors can diverge, Neil always found solutions that enabled both to benefit and progress forward; this ability to merge diverse interests into a common goal is a rare skill that would benefit NOAA with its current need to advance its capabilities while reducing expenditures.

I founded and served as CEO of AirDat LLC from 2003–2013, at which point AirDat became part of Panasonic and now operates as Panasonic Weather Solutions. AirDat developed and deployed sophisticated aircraft based atmospheric sensors to help supplement the observational deficiencies in our current global data stream. As Chief Scientist at AirDat (and now Panasonic Weather Solutions), Neil is responsible for creating quality standards and performance verification of this important supplemental data stream and all related operating systems.

This is a unique opportunity for the country for NOAA to have a scientist of his caliber. Neil will be an outstanding leader for NOAA. I urge his confirmation.

Sincerely,

JAMES E. LADD,
Senior Vice President,
SmartSky Networks LLC.

October 30, 2017

Hon. JOHN THUNE, Chairman,
Hon. BILL NELSON, Ranking Member,
Committee on Commerce, Science, and Transportation,
United States Senate,
Washington, DC.

RE: Dr. Neil Jacob's nomination as Assistant Secretary of Commerce for Environmental Observation and Prediction

Dear Senators Thune, Nelson and Members of the Committee,

I have known Dr. Neil Jacobs as a professional colleague for almost ten years. He has demonstrated extreme intelligence, innovation, work ethic and leader in the extremely difficult fields of weather forecasting and environmental monitoring. Dr. Jacobs is respected across the community for his ability to work constructively between the private and public sector to promote a healthy collaboration.

Dr. Jacobs has the intelligence, motivation, and skills to work with high-level NOAA leadership, including the National Weather Service, to lead the U.S. to significant improvements in weather forecasting. Dr. Jacobs has demonstrated this ability within his role as chief scientist of Panasonic Avionics, creating arguably the best weather forecasts in the world, including forecasts for extreme events.

With a formidable record of success by creating innovative approaches to difficult challenges, Dr. Jacobs has demonstrated this capability through his work within the academic community including his term as a professor at UNC. His business experience has allowed him to lead complicated teams of researchers to successful collaborations.

He can work across a variety of communities to address the most important challenges for environmental monitoring and prediction services. Dr. Jacobs has demonstrated his outstanding ability to work with public, private and academic sectors on a number of individual projects with the National Weather Service and Department of Defense. He has consistently shown his ability to work with the public, private and academic sectors in his leadership as the head of the American Meteorological Society's Forecast Improvement Group, working with over 200 community leaders to identify paths for the U.S. to achieve the highest possible prediction capabilities.

Dr. Jacob's expertise extends far beyond numerical weather prediction. As a joint recipient of the 2007 Nobel Peace Prize for climate change, I have interacted with Dr. Jacobs on observations that are needed to address climate research and climate impacts, including coastal flooding and severe weather. He is well respected internationally for his intelligence, hard work and foresight on important issue related to weather forecasting and environmental observations.

I have great confidence that Dr. Jacobs is prepared for the breadth of the responsibilities he will face in his future role as Assistant Secretary of Commerce for Environmental Observation and Prediction.

I fully support his nomination and I urge his confirmation.

ELIZABETH C. WEATHERHEAD, PH.D.,
Senior Scientist,
U. Colorado at Boulder.

Co-recipient of the 2007 Nobel Peace Prize

GEOOPTICS, INC.
Pasadena, CA, October 30, 2017

Hon. JOHN THUNE, Chairman,
Hon. BILL NELSON, Ranking Member,
Committee on Commerce, Science, and Transportation,
United States Senate,
Washington, DC.

Dear Senators Thune, Nelson and Members of the Committee,

It is my great pleasure to endorse the nomination of Neil Jacobs for Assistant Secretary of Commerce for Environmental Observation and Prediction and Deputy Assistant Administrator of NOAA. I believe that he possesses the scientific knowledge, business management and leadership skills to help strengthen NOAA and improve its critical services to the Nation.

Over the past 8 years I have had many conversations with Neil within the American Meteorological Society and in regard to mutual business interests. He is one of today's most intelligent and accomplished scientists. In addition to his keen understanding of meteorology, model building and high-performance computing, he is well acquainted with Federal Government operations and priorities and will be an excellent addition to the Commerce and NOAA leadership team.

As a former NOAA Administrator from 2001–2008, and now involved in leading an environmental data enterprise, I view Neil as a perfect fit for this assignment. Neil will be an outstanding leader for NOAA. I urge his confirmation.

Sincerely,

CONRAD C. LAUTENBACHER, JR.
VADM, USN ret, CEO,
GeoOptics, Inc.

UNIVERSITY OF COLORADO AT BOULDER
Boulder, CO, October 31, 2017

Hon. JOHN THUNE, Chairman,
Hon. BILL NELSON, Ranking Member,
Committee on Commerce, Science, and Transportation,
United States Senate,
Washington, DC.

RE: Dr. Neil Jacob's nomination as Assistant Secretary of Commerce for Environmental Observation and Prediction

Dear Senators Thune, Nelson and Members of the Committee,

I have known Dr. Neil Jacobs as a professional colleague for almost ten years. He has demonstrated extreme intelligence, innovation, work ethic and leader in the extremely difficult fields of weather forecasting and environmental monitoring. Dr. Jacobs is respected across the community for his ability to work constructively between the private and public sector to promote a healthy collaboration.

Dr. Jacobs has the intelligence, motivation, and skills to work with high-level NOAA leadership, including the National Weather Service, to lead the U.S. to significant improvements in weather forecasting. Dr. Jacobs has demonstrated this ability within his role as chief scientist of Panasonic Avionics, creating arguably the best weather forecasts in the world, including forecasts for extreme events.

With a formidable record of success by creating innovative approaches to difficult challenges, Dr. Jacobs has demonstrated this capability through his work within the academic community including his term as a professor at North Carolina State University. His business experience has allowed him to lead complicated teams of researchers to successful collaborations.

He can work across a variety of communities to address the most important challenges for environmental monitoring and prediction services. Dr. Jacobs has demonstrated his outstanding business acumen and ability to work with public, private and academic sectors on a number of individual projects with the National Weather Service and Department of Defense. He has consistently shown his ability to work with the public, private and academic sectors in his leadership as the head of the American Meteorological Society's Forecast Improvement Group, working with over 200 community leaders to identify paths for the U.S. to achieve the highest possible prediction capabilities.

Dr. Jacob's expertise extends far beyond numerical weather prediction. As a joint recipient of the 2007 Nobel Peace Prize for climate change, I have interacted with Dr. Jacobs on observations that are needed to address climate research and climate impacts, including coastal flooding and severe weather. He is well respected internationally for his intelligence, hard work and foresight on important issue related to weather forecasting and environmental observations.

I have great confidence that Dr. Jacobs is prepared for the breadth of the responsibilities he will face in his future role as Assistant Secretary of Commerce for Environmental Observation and Prediction.

I fully support his nomination and I urge his confirmation.

ELIZABETH C. WEATHERHEAD, PHD,
Senior Scientist,
U. Colorado at Boulder,
Co-recipient of the 2007 Nobel Peace Prize.

The CHAIRMAN. Senator Schatz is up next.

STATEMENT OF HON. BRIAN SCHATZ,
U.S. SENATOR FROM HAWAII

Senator SCHATZ. Thank you, Mr. Chairman.

Thank you to all of you for your willingness to serve.

Congressman Bridenstine, I want to read to you a short statement, and you can let me know if you agree or disagree. "Climate warming trends over the past century are extremely likely due to human activities."

Rep. BRIDENSTINE. Yes.

Senator SCHATZ. I want to read to you a short statement. I want to see whether you agree with it. "Global warming theories should not drive national energy policy without clear evidence."

Rep. BRIDENSTINE. So I do believe, and I do not know what the context of that.

Senator SCHATZ. This is you.

Rep. BRIDENSTINE. OK.

Senator SCHATZ. Just so you know.

Rep. BRIDENSTINE. Sure. So I will tell you what I believe. I believe carbon dioxide is a greenhouse gas. I believe that humans have contributed to carbon dioxide in the atmosphere.

Senator SCHATZ. To what extent?

Rep. BRIDENSTINE. That is a question I do not have an answer to, but I do know that humans have absolutely contributed to global warming.

Senator SCHATZ. Right. But just because I only have 5 minutes here, I want to just be clear about what happens now.

The testifiers have been essentially given permission to say, "Climate change is real. Carbon dioxide is a greenhouse gas," and then they get into, "It is really impossible to decipher how much of these are natural and cyclical, and how much of this is man-caused." But only in the halls of Congress is this is a live debate.

And what concerns me the most, in addition to everything that Senator Nelson said, is that this is a science agency. And I get that you do not have a scientific background, and I do not begrudge you that, although it is true that previous Administrators had extraordinary scientific backgrounds.

But I do not begrudge you that because I do not have a scientific background. But you know what I do is I defer to scientists. I rely on the scientific consensus. And the scientific consensus is not that it is really difficult to tell how much of climate change is attributable to human activity. The scientific consensus is that climate change is primarily caused by human activity.

Do you agree with the scientific consensus?

Rep. BRIDENSTINE. If that is the scientific consensus that it is primarily driven by human activity, what I will tell you is that human——

Senator SCHATZ. You do not know that that is the scientific consensus?

Rep. BRIDENSTINE. Sir, I would say human activity absolutely is a contributor to the climate change that we are currently seeing.

Senator SCHATZ. What is the scientific consensus about climate change?

Rep. BRIDENSTINE. I think right now, we are just scratching the surface as to the entire system of the Earth, and one of the great missions of NASA is the Earth Science Division of the Science Mission Directorate. And with your help and support, we want to make sure that we are getting the absolute best science.

Senator SCHATZ. Right.

Rep. BRIDENSTINE. NASA is the only agency in the world that can do this kind of science, and really the best agency in the world, and we need to make sure that we are understanding it better every day.

Senator SCHATZ. I just want to get clear. Are you disagreeing with the scientific consensus, or are you saying that you do not know what the scientific consensus is, or are you saying that the scientific consensus does not exist yet? Which is it?

Rep. BRIDENSTINE. I believe that the scientific consensus is that humans are contributing and have contributed to the climate change that we have seen.

Senator SCHATZ. Are they the primary cause?

Rep. BRIDENSTINE. Well, it is going to depend on a whole lot of factors and we are still learning more about that every day.

Senator SCHATZ. OK.

Rep. BRIDENSTINE. In some years, you could say absolutely, and other years during sun cycles and other things, there are other contributing factors that would have maybe more of an impact.

Senator SCHATZ. OK. I got my answer. Thank you.

To NASA's main three goals under the statute, earth science, space exploration, and aeronautical research, as you know, on April 14, 2016 you introduced legislation, your American Space Renaissance Act actually had some pretty good things in it.

But one of the things in it is that you eliminated one of the three statutory goals earth science.

Why?

Rep. BRIDENSTINE. That was not what I did in the bill. Some have construed that to be the case, but it is absolutely not the case. And, in fact, there are provisions in there to help us get even better Earth science.

That provision, I think, you are talking about is——

Senator SCHATZ. Where you struck the goal?

Rep. BRIDENSTINE. No, in fact I said in there, there is another line that specifically says that we absolutely must get the best science that NASA can get. And that line is in there as well.

And so, what I would say is at the time when I was drafting that bill, the objective was to basically create a pioneering doctrine for NASA for Deep Space. And ultimately, that was what I was working on in that bill.

We did not address in that bill aeronautics in any way. We did not address Earth science in that bill, although, we did talk about the importance of NASA acquiring science.

So that was not my intent, if that was the way it was read.

Senator SCHATZ. Well, it is not just the way it was read. It is the way it reads.

Here is the line, "The expansion of human knowledge of the Earth and the phenomena in the atmosphere and space," that is the Earth science statutory role for NASA and that line was struck.

The CHAIRMAN. Thank you, Senator Schatz.

Senator Udall.

STATEMENT OF HON. TOM UDALL,
U.S. SENATOR FROM NEW MEXICO

Senator UDALL. Thank you, very much, Mr. Chairman and the Ranking Member for holding this hearing and, I think, a very important hearing with important nominees here.

During our meeting, and this question is to Congressman Bridenstine, during our meeting, you discussed the importance of scientific research being free from political interference and the need for the NASA Administrator to allow scientists to pursue research that may run counter to the Administration's views on climate change.

Scientific integrity is embedded in the rules and requirements that govern NASA's professional behavior across all technical disciplines and should be a high priority for the agency.

While we had constructive dialogues about the need for scientists to be unencumbered by politics, I am, nonetheless, concerned with some of your previous statements and I think they have been examined already; previous statements on climate change.

I am asking you here, I think these can be pretty simple yes or no answers.

Will you commit to ensure that the research and science-based activities by NASA employees are protected from political interference including science related to climate change?

Rep. BRIDENSTINE. Yes, sir.

Senator UDALL. And will you commit to maintaining a culture at the agency that does not compromise the integrity of rigorously researched or tested scientific findings?

Rep. BRIDENSTINE. Yes, sir.

Senator UDALL. Thank you for that commitment.

How will you ensure that NASA's agency scientists maintain the highest standards of scientific integrity?

Rep. BRIDENSTINE. Thank you, sir, for that question.

When we think about the various Science Mission Directorate divisions, each one of them is guided by a decadal survey that comes from the National Academy of Sciences.

That decadal survey ultimately is what enables us to prevent the science from becoming partisan. It prevents it from becoming impassioned. It keeps it, in my estimation, it keeps it just consensus-driven. That is the objective.

And when we follow the guidance of those decadal surveys, whether it is the Earth Science Division, the Planetary Science Division, Heliophysics, or Astrophysics, it is incumbent upon us as leaders, you and me both, to follow this guidance of the decadal survey.

When it comes to Earth science, in particular, sir, and this is important to me. I am a guy from Oklahoma and I have constituents every year that die in tornadoes. The challenge we have with——

It is not a challenge with the decadals. My point is we need to follow the decadals.

The decadal survey from 2007 came up with a number of objectives that we needed to accomplish.

Number one, we needed to understand the composition of the atmosphere.

Number two, and this is important to the guy from Oklahoma, we have to better understand weather.

Number three, we have to understand the climate.

We also need to follow the carbon cycle and how it affects ecosystems.

We also need to understand the water cycle.

And finally, the surface and subsurface of the Earth.

Now, from that decadal survey of 2007, NASA has created an architecture of satellites. I am thinking about a system of systems that is a constellation of satellites ultimately that feed the data so that we, as policymakers, can make good decisions. When I say "we," I mean all of us.

By following those decadal surveys that is how we keep it so that the previous administration followed it. The next administration follows it, and the next administration. That would be my objective.

Senator UDALL. You are going to follow it?

Rep. BRIDENSTINE. Yes, sir.

Senator UDALL. Now, I am going to just ask the same question that Senator Schatz asked in a little different way.

I have summarized here what I think the scientists are saying about climate change, and I want to see if you agree or disagree.

Ninety-seven percent of the scientists with articles in peer reviewed journals have concluded that climate change is real, is caused by human activity, and is already causing devastating problems in our country and around the world.

Do you agree or disagree?

Rep. BRIDENSTINE. I agree with that.

Senator UDALL. Yes.

How would you address the arguments of outside entities, and those serving in the current Administration, who refute NASA's scientific research on climate change?

Rep. BRIDENSTINE. So I think, sir, what we have to do is make sure as leaders that we keep the debate dispassionate. That it is driven by the science.

And should I be confirmed as the NASA Administrator, it would be my highest ambition that science would drive the direction of NASA and the Science Mission Directorate.

Senator UDALL. Yes.

And my question, see, is you are working in an Administration. You have a lot of people who disagree with what you just agreed climate change is all about.

And if they come to you to try to influence the scientists within your agency, what are you going to do?

Rep. BRIDENSTINE. I would tell them the same thing that I am going to tell you right now. That carbon dioxide is, in fact, a greenhouse gas and because of that greenhouse gas, there is more water vapor in the atmosphere than we have ever seen in the past. And that water vapor ultimately has to release its energy and it does so through cloud formation and rain, and we are seeing precipitation effects from it. And all of that is very real and happening.

I am happy to say that to you. I am happy to say that to anybody else because it is the truth.

Senator UDALL. Thank you, Mr. Chairman.

The CHAIRMAN. Thank you, Senator Udall.

Senator Lee.

STATEMENT OF HON. MIKE LEE,
U.S. SENATOR FROM UTAH

Senator LEE. Thank you, Congressman Bridenstine. It is good to have you here and it is great to have your family here as well.

Rep. BRIDENSTINE. Thank you.

Senator LEE. I want to begin by noting that there was a discussion a moment ago about climate change and whether or not you regard climate change as being primarily caused by human activity.

It is my understanding that it is not even the position of NASA at this point, that there is a consensus on that point. And so, I think it was entirely appropriate for you to defer and acknowledge your viewpoint that it is an issue. It is a factor, but defer to answer the question as to whether or not it is the primary driver of it.

I would like to address some of the comments that have been made with regard to your nomination and your qualifications.

The Ranking Democrat on the Committee has suggested that you are somehow unqualified to serve as the Administrator of NASA because you have taken a number of positions that he deems controversial.

If that were the standard, then anyone who has served in public life, certainly anyone who has served in the U.S. Senate or House of Representatives could, arguably, be disqualified.

Among those things that the Ranking Democrat on the Committee has raised is the fact that you cut a television ad, or a series thereof, in a Presidential campaign. One in which there were sev-

eral other Republicans running and one, in which, you endorsed one particular Republican.

One, in which, you criticized positions taken by a sitting incumbent Republican Senator who was, at the time himself, running for President of the United States.

I consider wildly inappropriate the suggestion that this somehow disqualifies you. And with all due respect to my colleague, I cannot, for the life of me, understand why that would be something that would disqualify you.

We have had other Presidential candidates run from the United States Senate in the past. We have had other members of the Senate criticize them.

Senator Nelson, himself, was heavily involved in the Hilary Clinton for president campaign. And at that same time, Hilary Clinton as a presidential candidate was criticizing Bernie Sanders, a member of the United States Senate from the same party. She criticized him quite aggressively.

And yet, I do not think Senator Nelson would have suggested that Hilary Clinton was unfit to be President as a result of the fact that she criticized a Member of the United States Senate from her own party.

Nor do I think it would be appropriate for us—if the tables were turned and we were considering Senator Nelson to head NASA—for us to raise the fact that he had supported Senator Clinton in her bid for the presidency, even though Senator Clinton attacked Senator Sanders.

As to your support for the Senate Conservatives Fund, your criticism of other Republican officials on a variety of issues, I think it is important to point out here that these are the words of a brave person who does not simply follow the flow.

These are the words of someone who came to Washington to make a difference and to not simply do whatever everybody else told them to do.

The fact that he has been willing to stand out is a reason I support this nominee. Not a reason anyone should consider doubting his qualifications for that office.

As to your suggestion that there is often bipartisan collusion in Congress, I could not agree more. In fact, much of what masquerades as compromise in this town is, in fact, collusion and there is a difference.

Compromise occurs when two or more people get together and come to a mutually agreeable solution that enters into everyone's benefit.

Collusion is what happens when two or more people get together and come up with something that is good for them that makes them look good or feel good at the moment, but harms many, many others.

And I applaud you, sir, for willing to call out collusion for what it is.

You have also been criticized for your refusal to vote for the so-called Gang of Eight amnesty bill in 2013. And yet, this too is an indication of the fact that you are wiling to be a free thinker. Not everyone has to share your view.

And how on earth your position on matters of immigration policy would relate to, or have any significant negative bearing on, your ability to head NASA is beyond my ability to understand.

Finally, we have the fact your contribution to, and support of, a particular United States Senate candidate should somehow tie you to anything and everything that that Senate candidate had ever previously said or might subsequently say. I simply do not know what to do with this accusation. This is wildly inappropriate and I respectfully suggest that my colleague withdraw that as a criticism because it is not one.

I want to make very clear to my colleagues, Jim Bridenstine is one of the most heroic people I have ever known. He is a military leader. He is someone who has bravely fought, and worked to defend, and protect our country in a way that very few others I have ever known have done.

He is exactly the kind of person you would want in your neighborhood. He is a Scout Master and an Eagle Scout. He is trustworthy, loyal, helpful, friendly, courteous, kind, obedient, cheerful, thrifty, brave, clean, and reverent.

I cannot imagine a better person to head this or any other agency.

Thank you. I see my time has expired.

The CHAIRMAN. Thank you, Senator Lee.

Senator Wicker.

Senator WICKER. Well, I was going to ask Mr. Bridenstine about issues such as the Stennis Space Center. So I guess I will ask you to do that on the record, Mr. Bridenstine. And the future of rocket propulsion and the in-kind contributions that we make there, and also the space launch system, and the Orion system. So I guess I will just ask you to comment on the record about that.

I appreciate Senator Lee engaging on this issue. Let me just say, this is what I believe about climate change, and I will not even ask you if you agree with it, Mr. Bridenstine.

Climate change has been occurring for millions and millions of years. And anyone who disputes that is simply not looking at the evidence. And only in the last few decades has it been suggested that it is human activity that is causing climate change.

Now, you have acknowledged that human activity may be contributing to climate change. But there have been wild swings in the climate for millions of years, and only recently have we had the audacity to think that we are so important that we are causing that climate change, and some other reason has just vanished from the universe.

Let me say this about scientific consensus. It has not always been right. So now, scientific consensus is unassailable. As a matter of fact, Galileo challenged scientific consensus. Copernicus challenged scientific consensus at their peril, and it turns out, they were right. But they were alone for a while.

Here is where there is not scientific consensus. If we do everything the Left has advocated with regard to climate, combating climate change, if we outlaw coal, and if we make people cold in their homes, and raise their power bills 300 percent, what will the effect be? Will sea level be any different?

At the end of 100 years, if we do everything the Left has advocated and there is a scientific difference, there is a scientific debate about whether that will actually occur.

I think, and Senator Udall is my good friend, I think your answer, Mr. Bridenstine, to Senator Udall's question is the operative matter.

Will you make sure that politics and your own personal philosophy is not injected into the scientific work being done by NASA? And you have solemnly assured this Committee that you will see that politics is not inserted.

And to me, we can continue to have this debate, and Senator Udall and I have had it all over the country and all over the world, and we will continue to on a friendly basis.

But you have said, and I am satisfied with that answer, that politics will not be part of the scientific decisions in NASA.

So thank you and I will ask you to reiterate on the record your great support for the Stennis Space Center and the fact that it is a vital part going forward in the mission of NASA.

I yield back.

The CHAIRMAN. Thank you, Senator Wicker. I think we all assume that is just a given.

Senator WICKER. I will await his answer.

The CHAIRMAN. OK.

Next up is Senator Peters.

STATEMENT OF HON. GARY PETERS,
U.S. SENATOR FROM MICHIGAN

Senator PETERS. Thank you, Mr. Chairman.

And thank you to all of you for your willingness to serve the public in these positions. We appreciate all of you being here today.

Congressman Bridenstine, you have had a few questions here today. You seem to be getting all of the action, and I am going to join in, and ask you some questions as well.

One statement that you made, in fact, a proposal that, I think, you put forward was to advocate removing the NASA Administrator from the Presidential political cycle. Proposing a 5-year term instead of what is currently the case where the Administrator comes in with a President and leaves with a President. And I believe your motivation was to try to depoliticize this position.

Is that correct?

Rep. BRIDENSTINE. Yes, sir.

Senator PETERS. So basically we should depoliticize the Administrator of NASA. You would agree with that?

Rep. BRIDENSTINE. I think that the NASA Administrator should not be driven by political influence. I would say that——

Senator PETERS. I appreciate that. So I guess the question is, you would agree that we need to depoliticize it.

But would you also agree with the statement that actually appointing an actual politician who has been actively in the political process, who has taken some pretty active political positions, reference Senator Lee?

I do think it is appropriate to be looking at political positions when you have said yourself, we should depoliticize this office. It is what we have always done with NASA, the folks who have been

NASA Administrators have been scientists. They have been astronauts. They have been folks with incredible credentials in the scientific community that have that gravitas to do it, so that we do not get into this give and take, and back and forth of politics.

How do you reconcile that with an appointment of a politician who has been as active as you have, and you are right to have your positions? I take those positions as well. We both have our positions. That is fine. But that is different than what this position has always had in the past.

Rep. BRIDENSTINE. Sir, I would say that serving in a political capacity does not disqualify somebody from serving as the NASA Administrator.

I would say in some cases, while NASA should not be driven by politics, we have seen people from the political arena do very well at NASA.

One of the people that, I think, most recognized as maybe the best NASA Administrator ever would be James Webb, who led the effort to get to the Moon in the 1960s. Of course, he served as a staffer in the Senate, and then at OMB, at the time, it was the Bureau of the Budget, and then he spent a time at Treasury as well.

He spent 5 years in my home state of Oklahoma. We are very proud of him. But he certainly did great work on behalf of this country coming from a political environment. And I think he did it honorably without politicizing or making it partisan. And that would be my model.

I want to be clear. I am not comparing myself to James Webb. But I will say that I think it can be done and I do not think that service in Congress is disqualifying.

Senator PETERS. Well, again, we have been able to avoid that kind of debate because of the folks in recent years that we have put into this position.

And I think part of the reason why NASA is, without question, and you have mentioned it yourself, one of the preeminent scientific organizations in the world.

And that integrity, that reputation is so important, I think, for the future of this country that we want to make sure that it is depoliticized, which gives me some pause when we appoint a politician to this position.

But it is also a position where you have to manage a very large budget and this is a very complex budget. NASA has a $19.5 billion budget with many, many employees. From looking at your background, you have not had that kind of management experience. I think there are more offices at NASA than there are folks in your congressional office, for example.

I also wanted to just get your reaction in reviewing some of the circumstances surrounding your tenure as Executive Director of the Tulsa Air and Space Museum.

At the Museum, you had four employees, which is much different than the 18,000 employees and 80,000 contractors that you will oversee if confirmed as the NASA Administrator.

And at the Museum—and this is the information that I have and would love to have your comments—at the Museum, you started your term as the Executive Director with a $70,000 annual spend-

ing surplus in the bank. You left a short 21 months later with more than a $300,000 annual deficit.

As a guy who spent a lot of time in private business and managing budgets, that is a concerning trend from a $70,000 surplus to a $300,000 deficit.

What is more, I know we have a quote here from a board member of the Museum that has recounted your tenure as a time, and I quote the member, "Member numbers were down. Employee and volunteer morale was very low, and the finances, and certainly the financial reporting, were arguably the worst that they have been in recent years." This is a board member that served.

Would you please tell me a little bit about your time at the Tulsa Air and Space Museum, and how that prepares you for this job?

Rep. BRIDENSTINE. Well, sir, I enjoyed my time very much at the Tulsa Air and Space Museum as its Executive Director.

The comments that you are referring to were from a very hotly contested political campaign in 2012 and those accusations were widely refuted by the Board of Directors, which was, at the time, not going to get involved in the campaign. But when these accusations came out, they did get involved. Their attorney got involved and wrote these statements. I can provide this for the record, Mr. Chairman, if you would like.

Senator PETERS. Well, if those were part of the campaign, I will take that for what that is worth. I appreciate that.

Please explain how you started with a $70,000 annual operating surplus and ended with $300,000 in debt.

Rep. BRIDENSTINE. It is not true.

Senator PETERS. Those are not accurate numbers?

Rep. BRIDENSTINE. That is not true. What that was from in the campaign, there was a, I am trying to remember, there was a noncash loss from the depreciation of capital assets. And from a document based on that, they tried to accuse me of having lost money for the Museum, which is absolutely not the case.

The Museum is in great shape and, in fact, I had my 40th Birthday Party a couple of years ago at the Museum. Senator Ted Cruz actually came to it. Senator Inhofe flew in the air show that we had at the Museum.

Those accusations are not accurate.

The CHAIRMAN. Thank you, Senator Peters.

Senator Inhofe.

Senator INHOFE. Thank you, Mr. Chairman.

Well, I think some of the things I was going to say have been articulated in a more effective way, I think, by my friend, Senator Lee, and I agree with all of his comments.

I also would say, it seems like, and I have served for many years as Chairman of the Environment and Public Works Committee, you cannot have a hearing anymore without everyone bringing up global warming. I mean, that is the issue they like to bring up.

I have to say this because I do not have a better friend on the other side of the aisle than Senator Udall, but this 97 percent stuff has been debunked completely, and everybody knows that.

So I like to listen to when you talked about this consensus.

Richard Lindzen from MIT is one of the most knowledgeable people in this area. He is a scientist and in characterizing the prob-

lem, he said, "Controlling carbon is a bureaucrat's dream. If you control carbon, you control people."

So we can have that debate anytime you want to and we have had it over and over again. It is interesting, though, the people of America have caught on.

I can remember back when they had the polling. It used to be back in about 2002 and 2003, it was the Number 1 or Number 2 issue on the Gallup Poll, the March Poll that they would have. That has dropped down to Number 15 now. And so, the people have caught on.

I think there are some things I would like to get back to that, I think, are significant having to do with your pursuit of this position.

When they talk about the Members of Congress, it is easy to be an asset to have, I think, someone who has been a Member of Congress.

You have to keep in mind, NASA has to come to Congress to get their funding, to get their appropriation, to get their authorization. And I would think that all of us here, the common thread is, we are all very excited about the future of NASA and what we could do.

I am concerned. I want to be ahead of some of these other countries out there that, I believe, have passed us up in many areas. That is the passion that I have.

So I think that—and we have talked about James Webb and, of course, what he did—and I think we all understand that.

But I will just say this. I think it is a positive particularly when you are trying to get the attention of Congress to support NASA, to have been a Member of Congress.

What do you think?

Rep. BRIDENSTINE. Well, I think that is accurate, sir.

I think one of the benefits that I could bring to the agency is the fact that I have worked in these halls with many Members of Congress on both sides of the aisle to accomplish very important strategic objectives for our country.

And when you think about what the NASA Administrator's role will be in the coming years, working with the National Space Council and working with the Office of Management and Budget, and working with the White House, and of course, working to build a consensus agenda with Members of Congress on both sides, the Senate and the House. I think that my experience has prepared me well to be able to accomplish those things.

And certainly, it would be a high honor if I were to be confirmed to do that.

Senator INHOFE. Yes.

We both served, you served on the House Armed Services Committee. I have served on and have been the Ranking Member of the Senate Armed Services Committee.

I really believe, and I have heard in statements even from you that looking at the threats that we face today, we are in the most threatened position, I believe, in the history of our country.

You look back at the days of the Cold War, two superpowers. We knew what they had. They knew what we had. It is not that way anymore.

And so I look at one of the functions of NASA to be concerned with and working on the fact that we have a real threat out there.

Do you have any ideas on what you, as an Administrator, should you be confirmed, could draw upon your experience as a member of the House Armed Services Committee that would be helpful in working on our national security?

Rep. BRIDENSTINE. Yes, sir. And not just from my time on the Armed Services Committee, but also as a Navy pilot.

I can tell you one of the greatest risks we have in the world today, from an aircraft carrier perspective, is hypersonics. Basically, what we call anti-access/aerial-denial weapons that can reach our assets at far distances, and at velocities that are very dangerous.

So where NASA plays, and I want to be really clear, NASA is not a military agency. It is an agency that is necessary for the peaceful uses of outer space. But the research that NASA has done can lead to capabilities that can be used by the Department of Defense.

Hypersonics in my view, sir, is probably the most important right now and the Aeronautics Research Mission Directorate at NASA is responsible for that. If I could ask you for anything, sir, it would be that we need to make sure that that is adequately funded.

Basic research is what NASA does for its own purposes, but there are national security implications from hypersonics.

Senator INHOFE. Good.

Rep. BRIDENSTINE. I would also say one of the areas I have had a lot of focus on in the House of Representatives is the challenge we have with space debris.

There are a lot of threats in space, but it is not just hostile threats. It is not just co-orbital anti-satellite devices or direct assent anti-satellite missiles. It also includes just debris that was launched in the 1960s.

And so what we have to do is we have to create a situational awareness domain to where we can mitigate the effects of that debris.

Right now, and this is a big piece for the Armed Services Committee, it is all done by the JSpOC, the Joint Space Operations Center and Vandenberg Air Force Base, and it is done by them, our Air Force. I should say it is a joint command because it's under Strategic Command. So it is joint, but it is predominantly Air Force.

The challenge that we have is that the Air Force is providing space situational awareness to the entire world for absolutely free. And that includes our foreign partners, but also countries that are sometimes not friendly to the United States and all of the commercial assets.

In essence, the Air Force right now is acting as the FAA for space. I want to be clear. The Air Force must continue to do space situational awareness, but as far as providing conjunction analysis and reporting, that should be done by a civilian agency that has international support, primarily because it is not the job of the American taxpayer to protect the assets of countries that are often hostile to the United States.

Senator INHOFE. Yes. I know my time has expired; just one comment.

There has been a lot of talk about Jim Bridenstine from people who do not really know him very well. I have the distinction of knowing him better than anyone else at this table.

And let me just say to my friends on both sides of the aisle, I support him because I believe he is going to be the very best Administrator that we will have. I think we will look back at this time someday.

And I would just say to you that if you knew him as I know him, you would be very supportive.

Thank you, Mr. Chairman.

The CHAIRMAN. Thank you, Senator Inhofe.

I know the other three nominees are sitting there today going, "Wow, these confirmation hearings are a breeze."

[Laughter.]

The CHAIRMAN. I have Senator Gardner, but Senator Hassan has returned and she is up next.

Senator Hassan.

STATEMENT OF HON. MAGGIE HASSAN,
U.S. SENATOR FROM NEW HAMPSHIRE

Senator HASSAN. Thank you, Mr. Chair, and Ranking Member Nelson.

And thank you to the witnesses. Congratulations on your nominations, and thank you to your families as well because this is a family affair, and we appreciate their willingness to help you serve.

I want to start, Mr. Bridenstine, with you, please.

From our research, it appears that you are a big fan of transparency, and so am I.

On numerous occasions, you have called on Federal agencies, including the EPA, and Health and Human Services to be more transparent.

Yet, in the period leading up to your nomination hearing, you went through your public records and scrubbed them clean of your most controversial statements—interviews, press releases, and other materials—that would show this panel, and the American public, who you are. In total, it appears that at least 575 items were deleted.

So please briefly explain for us why these materials were deleted.

Rep. BRIDENSTINE. I am not certain which materials you might be referring to, but I will tell you this. We have not scrubbed anything. That was an accusation, but it has not happened.

What I will tell you as a Member of Congress, I said that I am not going to run again, and I said that many, in fact, I said it the day that I announced for my first race that I was going to serve three terms and no more.

All of my campaign material did come down and that was from many, many, many months ago. I do not know how many months.

Senator HASSAN. Well, let me then turn to your Committee questionnaire, where you left off several op-eds, political donations, and memberships that you hold.

So what happened here, it really does appear to many of us, that you were trying to hide information from yourself, about yourself from the American public.

So what happened on your questionnaire?

Rep. BRIDENSTINE. I do not know what op-eds. We scrubbed everything we could to deliver everything that we had available. And, of course, we searched the Internet and did other things to try to make sure we delivered everything that the Senate has asked for. And as far as I know, we have done that.

Senator HASSAN. Well, I just want to let you know that it does not appear to some of us that you have, and you are asking the American people to trust you with the operation of NASA in a transparent way that complies with all existing Government ethics rules.

How can we trust you to do that?

Rep. BRIDENSTINE. If there are any op-eds or public statements that I did not deliver, certainly, I would like to know what those are so that I can deliver them. But it sounds like you might already have them.

Senator HASSAN. It is my understanding we have them, but not because you shared them with us.

Rep. BRIDENSTINE. OK.

Senator HASSAN. So let me move onto another question.

As you know, there have been troubling reports and allegations about widespread sexual assault and sexual harassment. This issue particularly plagues the scientific community as well.

In fact, a 2017 study published in the "Journal of Geophysical Research" found that 54 percent of female scientists surveyed were subject to sexual remarks and harassment.

Eighteen percent of women of color and 12 percent of white women skipped professional events because they did not feel safe attending, identifying a significant loss of career opportunities due to a hostile environment.

Last year, you defended Donald Trump's remarks in the leaked *Access Hollywood* tape about assaulting women.

You also voted against the Violence Against Women Act in the past, while stating that this bill, and its programs, misallocate "scarce Federal resources." That really concerns me.

As NASA's leader, you will set an example for the entire agency and the larger scientific community. You will manage thousands of employees.

So do you stand by your assessment, and I am quoting from the *Access Hollywood* tapes here, that grabbing women or talking about doing so is defensible?

Rep. BRIDENSTINE. I do not think that is defensible.

Senator HASSAN. And what steps will you take to better address sexual harassment issues in the scientific community, and ensure that your employees feel safe?

Rep. BRIDENSTINE. Thank you for that question.

It is a big deal across the Government at whole. It is a big deal in the House of Representatives. I am sure it is a big deal in the Senate.

I currently serve in the Oklahoma Air National Guard. We get training on this regularly as well.

I think the number one thing that a NASA Administrator could do in relation to that is make sure that everybody is educated and aware as to what is sexual harassment, and to not even get close

to it, and let everybody know that there will be zero tolerance for that.

Senator HASSAN. So because I am just about out of time, I just want to, I appreciate that answer.

But I do have to say to you that when you make statements defending somebody who has bragged about harassing and assaulting women, that it does not give people, particularly women, confidence that you are going to protect them, stand up for a fair and equal workplace.

It is good that you said that you do not defend those comments here today, but that is not what you said at the height of the campaign. We do need to have leaders who are consistent and do not change their positions from time to time.

So I am concerned about your record in that regard.

I thank you, Mr. Chair.

I see I am over. I will submit my questions for Dr. Jacobs for the record.

The CHAIRMAN. Thank you, Senator Hassan.

Senator Cortez Masto.

STATEMENT OF HON. CATHERINE CORTEZ MASTO, U.S. SENATOR FROM NEVADA

Senator CORTEZ MASTO. Thank you, Mr. Chair.

Thank you all for your willingness to serve and welcome to your family members. I appreciate that.

Let me just start with you, Congressman Bridenstine. And thank you so much for taking the time to visit with me. I appreciate that.

Rep. BRIDENSTINE. Yes, ma'am.

Senator CORTEZ MASTO. And I think my colleague may have touched on this, comments that you have made regarding the LGBTQ community. And I just have a question. And can you just follow up for me?

How is it that NASA employees who are LGBTQ or have children in gay marriages, how should they feel about your leadership when you have taken these positions?

Rep. BRIDENSTINE. Thank you for that question, ma'am.

And what I would share with you is that I do believe, from my heart, that every human being has dignity and worth, and that each person needs to be treated as though they are a valued member of the team. And certainly, equal opportunity would be my highest objective as the leader of NASA.

And when it comes to standards, they need to be uniform, and people need to know what those standards are, and be held to it in a uniform way. And that is how I would conduct myself.

The Defense of Marriage Act has been overturned by the Supreme Court. The law is now different and I will absolutely follow the law, should I be confirmed, ma'am.

Senator CORTEZ MASTO. Thank you.

And I think we talked a little bit about this when we met.

I am a lead sponsor on the Safe Drone Act, which among other things, requires the FAA to develop an implementation plan to achieve full operational capabilities of unmanned aircraft systems, traffic management, ensure the safety and security of all aircraft.

The plan must include a timeline, certification criterion, establish industry and Government rules, and include an assessment of various necessary components.

NASA is taking a joint lead in UAS traffic management systems.

Can you commit to continued progress and timely pursuit of UAS air traffic management technologies, which include utilizing the important UAS test site, like the one in Nevada?

Rep. BRIDENSTINE. Without question and, in fact, I have been to Stead Field, the Reno Air Races. I used to be stationed at Naval Air Station in Fallon, Nevada. I flew there at the Naval Strike and Air Warfare Center.

I can tell you that the UAS, enabling UAS to integrate into the national airspace system is absolutely a critical part of America's, not only national security, but economic development. We have to be better at that than anybody else in the world, and I am absolutely committed to that.

NASA is a technology provider for that, which a lot of that technology is being developed and tested at Stead Field. And you have my commitment that I will absolutely, that will be a high priority for me, for the interest of our country, not just for NASA, but for the economy.

Senator CORTEZ MASTO. OK. Thank you.

And then is it Baiocco?

Ms. BAIOCCO. Baiocco.

Senator CORTEZ MASTO. Baiocco. Thank you very much.

I know the CPSC is focused on many things that create more of an immediate physical risk of serious injury or death like cribs and power tools. But in your statement, you mentioned technology and new products.

Do you think we are prepared on the consumer protection side of the Internet of Things? And what can we do, and what can you do in your role to really address that new technology, and what it means for consumer safety as well as when we are talking about the Internet of Things?

Ms. BAIOCCO. Thank you, Senator, for that question.

I do not know if we are prepared for those things. I think that type of, the Internet of Things, and the products that are coming onto the market every day—I have a teenage daughter—I do not know anything about them.

And it seems like every time you look at a product on the market, it is new. It is faster. It is doing things that we do not understand in a day-to-day basis.

So I think that we are going to have to, as an agency, make sure that we are working with staff to make sure that they are getting ahead of the curve understanding these products, how they work, and how they interact with each other. I think those are things that we have not looked at close enough as a society.

But as far as the agency goes and, of course, I am not inside yet, so I cannot comment on what they may or may not have done, but I think one of the things that, if confirmed, once I get there, I think that is something that we need to move a little quickly on.

Senator CORTEZ MASTO. Thank you.

I appreciate that because we are in the Technological Age and, I think, everything we do, when it comes to consumer safety, is an

important component or guiderail when it comes to embracing this new technology as well. So I appreciate your comments.

I know my time is almost up. I will submit the rest of my questions for the record.

Again, thank you all for your willingness to serve. Really appreciate it. Thank you.

The CHAIRMAN. Thank you, Senator Cortez Masto.

Senator Moran.

STATEMENT OF HON. JERRY MORAN,
U.S. SENATOR FROM KANSAS

Senator MORAN. Mr. Chairman, thank you very much.

Let me address my comments or questions to Ms. Baiocco. But first, let me thank all of the potential, let me say, the nominees for their willingness to serve, if confirmed.

I appreciate your interest in public service and want to see that we have highly qualified, motivated individuals to fill the jobs that you are willing to assume. So I wish you well.

Ms. Baiocco, thank you for our conversation recently.

In your testimony, you mentioned the important issue of recall effectiveness. I chair the Subcommittee on Consumer Protection of this Committee. We all believe that the Commission has an important role in spotting emerging hazards and removing dangerous products from the marketplace, and to do so as quickly as possible.

I chaired a hearing on the effectiveness of voluntary recalls with panels from both CPSC and industry stakeholders in the last Congress. I think the message that we largely received during that hearing was that the Commission needed to strengthen its efforts to engage and communicate with stakeholders to improve the speed and efficacy of recalls.

I wanted to give you a moment to speak as the importance of voluntary recalls, in particular, but voluntary versus mandatory. The Commission has the opportunity to do both.

And how important is it, in your view, for the agency to have engagement with stakeholders when it comes to improving the value of those recalls?

Ms. BAIOCCO. Thank you, Senator, for asking me that. And I also enjoyed our conversation yesterday.

As far as voluntary recalls go, I think that is one of the most effective programs that the CPSC has. In my experience in private practice, I have come across situations where companies have said, "Look. We have identified something here, and so, let us let the consumers know."

Reaching the consumers and having a program where they can reach the consumers without having to go through a whole series of regulations, and hoops, and so forth is very important to get that message out there to the people. And it is what the goal of the CPSC is to begin with.

Second, I think that we still do not have a complete handle on why consumers, when they learn of a recall or they learn of a product flaw, if you will, do not take advantage of it.

We have so many ways to communicate. I mean, we are all on our phones and doing a ton of things. But what is it that we are

missing, that we are not reaching consumers and getting them to respond?

So I think those are all important things that we have to study. There has got to be more information out there that we can be more effective.

As far as working with the CPSC and making it move in a quicker manner, not getting bogged down, for example, in the details of the written message sometimes could benefit the speed of which a voluntary recall gets out on the market. That would be something that comes to mind.

But I think that that program is very valuable. I would certainly encourage the continuation of that program. I would like to see the CPSC work with stakeholders in that regard and make sure that we focus on how to even make it stronger.

Senator MORAN. Do you have the understanding that statutorily, it is the initial responsibility of the, I want to say, the initial effort at a recall should be voluntary as compared to mandatory at the CPSC? Is that the preferred way?

Ms. BAIOCCO. Well, I believe that it is the preferred way. It is also, there is a complicated statutory framework that directs the CPSC to follow. And when, in the very beginning, we are supposed to work with stakeholders to make sure that we can come to a voluntary consensus to make products safer or to get the message out there.

And it is only when those voluntary situations fail that the CPSC should engage in some type of mandatory rulemaking.

But that brings us full circle back to the effectiveness and the speed of things, because that does take time.

Senator MORAN. Let me change the topic just a bit.

It has often been said, I have heard Commissioners say that they are, the CPSC is a data-driven agency.

In my experience, I have seen instances, at least in my view, where that is seemingly avoided or underdeveloped in rulemakings with the goal of, at least seeming to me, that in the rulemaking process the data did not fit the desired outcome and therefore the data became less important.

Would you speak as to your willingness to let data drive your decisions?

Ms. BAIOCCO. The data must drive the decision, Senator.

In any type of, when you are dealing with any type of product that has been designed and manufactured, for example, there has to be a concern that there is a product hazard. There has to be some type of data. There has to be data, science, statistics, and a real basis before you engage in some type of decisionmaking process.

You cannot jump to the end simply because it seems like this is something that we want to promote or it happens to be something that, perhaps, you are getting pressure from outside advocacy groups.

You have to understand what you are dealing with. My philosophy always has been to put the product in my hand, touch it, tear it apart, bring it together. Find out what it does, what it can do, and what it cannot do.

So I am a big supporter of understanding all of the aspects, particularly the supportable aspects.

Senator MORAN. Thank you. I look forward to working with you.

The CHAIRMAN. Thank you, Senator Moran, for following through on that.

I have Senator Markey. I have five people left to ask questions. We have a vote at noon. It is two votes, a series of votes, so we might be able to get everybody in, if we proceed in a fairly expeditious way.

So Senator Markey is up next.

STATEMENT OF HON. EDWARD MARKEY,
U.S. SENATOR FROM MASSACHUSETTS

Senator MARKEY. Thank you, Mr. Chairman, very much.

Congressman Bridenstine, in an interview with the Family Research Council in 2013, which has been designated as a hate group by the Southern Poverty Law Center, you said that, "People should be tolerant of the fact that I believe that sex is between one man and one woman, between the institution of marriage, and that marriage should be for a lifetime. I think that the idea, that concept, our culture, our Nation would be better off if we commended organizations that had that philosophy."

Well, NASA has actually officially stated that diversity and inclusion are integral to mission success. And of the 18,000 people who work at NASA, they identify as gay, as lesbian, as transgender, as queer. And they are wondering with some fear in their heart, what does it mean that you could be confirmed here by the United States Senate?

What are the assurances that you are going to give to them that they do not have to worry for a second?

Rep. BRIDENSTINE. Sir, I will give the assurance to you and, of course, to them as well.

I absolutely believe that every human being has value and every person has worth. And it is my commitment to you, and to the Senate, and to those employees that they will be treated fairly and equally.

That standards will be, everybody will know what the standards are for the work that they do, and they will be judged according to equal standards, and they will be given equal opportunity.

NASA has a history, sir, of attracting the absolute best and the brightest. It has a history of being the best place to work in the U.S. Government. And it would be my highest ambition to make sure that those qualities all remain.

And so, I would commit that to you, sir.

Senator MARKEY. All right.

Well, I think that is important because, obviously, they would see your earlier comments and they would be worrying about their own personal life, their own ability to be who God created them to be.

And I think that is absolutely imperative that we ensure that they understand that they are going to be fully protected.

And you guarantee they will be fully protected?

Rep. BRIDENSTINE. Yes, sir.

Senator MARKEY. OK.

Now, I want to continue with an additional conversation that is important, the subject of climate change.

In 2016, you said, "I would say that climate is changing. It has always changed." So that is kind of an explicit casting of doubt upon the role of human beings.

Now, in response to Senator Schatz's question, you responded that, in your opinion, that humans play some role in the warming of the planet.

Here is the problem again for the employees at NASA. These are our top scientists in doing the climate modeling for our country, and preparing us for the future, and preparing the planet for the future.

And I know, because I have been told by scientists that fear is rampant amongst our Government's scientists that they are going to be punished if they speak publicly about their work on climate change science.

Will you pledge that you will not in any way punish any NASA climate scientist for speaking publicly about their own views, their own science in terms of how they view climate science?

Rep. BRIDENSTINE. Without question.

Senator MARKEY. You will not punish them?

Rep. BRIDENSTINE. I will not punish them.

Senator MARKEY. OK. And will you promise that you will not reassign any NASA scientists working on climate change?

Rep. BRIDENSTINE. Well, they might want to be reassigned.

Senator MARKEY. No, I am saying involuntary reassignment.

Rep. BRIDENSTINE. If that is deemed as punishment for based on what they might have said about climate change, I can commit to you that I am not going to reassign anybody based on that because that would be punishment.

So yes, sir, I would agree to that.

Senator MARKEY. OK. And again, I want to assure you, that fear is rampant. That people are worried that they are going to be punished.

Rep. BRIDENSTINE. Sir.

Senator MARKEY. That is just a fact of the matter and the world depends upon, we are the supreme court of climate modeling and these people are the people who we are all relying upon to get these scientific facts correct.

Thank you.

Thank you, Mr. Chairman.

The CHAIRMAN. Thank you, Senator Markey.

Senator Blumenthal.

STATEMENT OF HON. RICHARD BLUMENTHAL, U.S. SENATOR FROM CONNECTICUT

Senator BLUMENTHAL. Thank you, Mr. Chairman.

Ms. Baiocco, I understand that you have signed an agreement with the ethics authorities and agreed to reserve the right to seek a waiver as to companies that you have represented in the past after one year.

Is that correct?

Ms. BAIOCCO. I have signed an agreement with the Office of Government Ethics that they actually asked me to do. I did not affirmatively seek that.

Senator BLUMENTHAL. Would you agree to recuse yourself for as long as you serve in any matters representing Mattel, Yamaha, or R.J. Reynolds?

Ms. BAIOCCO. Senator, I will follow the agreement that I have signed.

Senator BLUMENTHAL. So you will not agree to recuse yourself?

Ms. BAIOCCO. I did not say that either. I think that before I can make that type of decision, I need to know what it is that is before the Commission, whether or not I have any conflict on those issues. I will seek the guidance of the designated ethics officer, and I will follow that guidance.

Senator BLUMENTHAL. Let me ask you whether I am correct in this statement. You represented Mattel involving lead containing toys, Yamaha for deadly all terrain vehicles, and R.J. Reynolds.

Are you not of the view that you should recuse yourself in matters involving those companies after representing them in these types of matters?

It is a fairly simple thing to do and one that would remove any taint that will follow you for as long as you are a Commissioner if you fail to recuse yourself, and if you fail now to commit yourself to doing so?

Ms. BAIOCCO. Well, thank you for asking me, Senator, because I think that the public confidence here on this issue is very important.

First of all, with regard to R.J. Reynolds, I do not see that being an issue because cigarettes are not within the jurisdiction of the CPSC.

With regard to Mattel, I was part of a very large team that worked on Mattel and it was a very narrow issue that dealt with some experts. So I do not have in my head information that is necessarily information that was before the CPSC.

But I do believe the American public is entitled to have five Commissioners who actively post and participate. And where there is a situation where I need not recuse, and I am told that——

Senator BLUMENTHAL. Well, the American people are entitled to Commissioners who avoid any perception, as well as reality, of conflict of interest.

By the way, R.J. Reynolds is among the tobacco industry representatives that have been instrumental in encouraging the extensive use of flame retardant chemicals in un-upholstered furniture to deflect pressure on cigarette makers to make a fire-safe cigarette. Smoldering cigarettes, as you well know, often cause fires and kill people.

So R.J. Reynolds is very relevant to the CPSC. R.J. Reynolds also owns companies that make e-cigarettes and liquid nicotine is very relevant to the CPSC.

So I strongly suggest that as a threshold matter, you take the very simple, straightforward step—assuming that you will not be beholden to R.J. Reynolds, or Mattel, or Yamaha—of recusing yourself and committing to do so in any matters involving it, and thereby removing any potential taint or conflict of interest.

Let me ask you, Mr. Bridenstine, about a statement that was made to you in a town hall that you hosted in 2014. You are familiar with this statement, I am sure.

Rep. BRIDENSTINE. I am.

Senator BLUMENTHAL. A member of the audience loudly exclaimed to you that President Obama should be, "Executed as an enemy combatant." The video is available online, as you know.

Your response was, "Look. Everybody knows the lawlessness of this President. He picks and chooses which laws he is going to enforce," and then you went on.

Do you regret your failure to disagree with that member of the audience?

Rep. BRIDENSTINE. If I had to do it again, I would have interrupted immediately. I did not.

At the time, my best judgment was to just let her vent, and she went on for a number of minutes, and then ultimately I focused my comments on the last piece, the last part of what she said.

But I would do it differently next time.

Senator BLUMENTHAL. So you do regret your decision not to interrupt?

Rep. BRIDENSTINE. I should have interrupted.

Senator BLUMENTHAL. Thank you.

Thank you, Mr. Chairman.

The CHAIRMAN. Senator Gardner.

STATEMENT OF HON. CORY GARDNER, U.S. SENATOR FROM COLORADO

Senator GARDNER. Thank you, Mr. Chairman. Thank you very much for this.

Thanks to the witnesses for your willingness to serve our country today and to participate in this process.

Dr. Jacobs, I would suggest, whether or not people are scientists has been a regular theme this morning. I am not a scientist, but I would suggest if you are looking to escape hurricanes, Colorado Springs still remains a very good place to escape hurricanes.

[Laughter.]

Senator GARDNER. Thank you for your service and for being here today as a Coloradan as well, thank you.

To Congressman Bridenstine, I would ask you, are you or have you ever been a Republican?

[Laughter.]

Senator GARDNER. Are you, or have you ever had an opinion different than other Republicans?

Rep. BRIDENSTINE. Yes.

Senator GARDNER. Have you ever criticized Marco Rubio for his choice in music?

Look. This, I think, hearing at times has gone into places where it is a little bit disgusting throughout this nomination hearing this morning, as well as previous nomination hearings this Congress has held this year.

We have had nominees questioned over their Catholic faith. We have had nominees questioned over their Christian faith. In fact, one Senator said of a Christian nominee that this nominee is really

not someone who is what this country is supposed to be about because they adhered to their Christian faith.

Now, that did not come up in this hearing this morning. I am a little surprised it did not, though, based on some of the things that I have heard today.

Your children are here. Your family is here. Thank you to them for their service as well. Thanks to all of you for your service.

What I heard Ms. Baiocco say was that if the law requires you to do so, that you will do so. If the agreements you have signed require you to do so, you will do so. No doubt about it. You are not going to try to wiggle out of that, try to avoid the law.

Is that correct?

Ms. BAIOCCO. That is correct, sir.

Senator GARDNER. Thank you.

Mr. Bridenstine, a couple of questions for you on what I had hoped would be the focus of this Committee hearing and that is a little bit of work that we are doing in Colorado on things like the Orion Project.

Before I do that, I actually was reminded of an editorial op-ed that was put in the record by Chairman Thune earlier today, but I will just read the headline of this op-ed. "Bridenstine Wins a Democrat's Support for NASA's Top Job." That is the headline of this.

Ed Perlmutter, my colleague from Colorado, said, "I serve with Bridenstine on the House Science, Space, and Technology Committee. My first real interaction with him occurred a number of years ago when he visited Colorado to meet with scientists."

Did you meet with only Republican scientists?

Rep. BRIDENSTINE. No, sir.

Senator GARDNER. You probably did not ask that. Right?

Rep. BRIDENSTINE. I have no idea what their——

Senator GARDNER. Thank you, thank you. "His background as a Naval aviator made it easier for him to absorb and understand the concepts being discussed by scientists and engineers. Despite our political differences, our parties, different parties, I am convinced Bridenstine will lead the brilliant scientists, engineers, technicians, and outstanding personnel at NASA as it embarks on a new era of space exploration and scientific discovery."

That was not Senator Lee. That was not Senator Cruz. That was not Donald Trump. That was a Democrat Congressman from Colorado who said that, who has your support.

You and I had the pleasure of meeting when you got elected to Congress. We served together in the House of Representatives for a couple of years, but we also had a chance to meet while you were in the House. I was in the Senate.

You came over to my office. You talked about space policy. You did not come over to my office to talk about space policy from the standpoint, "Boy, we can really get rid of Democrat scientists if we do this." You did not talk about how we can pursue this policy or that policy in a partisan purpose.

What you came to my office to talk about was a plan that you had put together for reaching greater distances in space; a plan to embolden the mission of NASA. To actually give an agency that has probably wandered far too long without a mission some sub-

stantive mission to get to back to what it is supposed to be doing. That is exploration. That is science.

You did not come at it and try to say, "This is how we are going to extinguish scientific research, values, and exploration." You came and you talked about how you are going to expand it and further that reach.

Not everybody agreed with your approach, but I commend you for having a vision that, unfortunately, far too long this administration, the previous administration did not have and other administrations did not have either when it comes to NASA.

So I will ask you about Orion, Mr. Bridenstine. Are you able to say today whether you support the Orion project moving forward?

Rep. BRIDENSTINE. Yes, sir, one hundred percent.

Senator GARDNER. Thank you, Mr. Bridenstine.

I have a meeting that is in the lobby. They have waited for 10 minutes so that I could let this opportunity occur. So I do not want to go any further without messing their schedule up.

So thank you very much, the nominees, for being here, and I am sorry if I seemed a little irritated. It is because I am just sorry that you have gone through what you have gone through today.

Rep. BRIDENSTINE. Thank you, sir.

The CHAIRMAN. Thank you, Senator Gardner.

Senator Booker.

STATEMENT OF HON. CORY BOOKER, U.S. SENATOR FROM NEW JERSEY

Senator BOOKER. Thank you very much, Mr. Chairman.

There was some discussion as to the factual nature of Senator Peters' questions about the Tulsa Air and Space Museum. I was given the records here for the Museum that was the basis for Senator Peters' questions. I was asked to see if I could enter them into the record.

I would like to ask that they be entered into the record.

[The information referred to follows:]

THE COLPITTS LAW FIRM
Tulsa, OK, June 20, 2012

Re: Tulsa Air and Space Museum
Subject: Statements and Allegations Made by John Sullivan

TO WHOM IT MAY CONCERN:

I am a board member and member of the Operating Committee of the Tulsa Air and Space Museum. I am also the legal counsel for the Tulsa Air and Space Museum, and as such, I have been requested to respond to certain recklessly false allegations made by John Sullivan for Congress about the Tulsa Air and Space Museum.

The Official Statement of the Tulsa Air and Space Museum is attached, and the Tulsa Air and Space Museum stands by that statement. In a mass mailing made by John Sullivan for Congress in support of John Sullivan's bid to seek reelection as the Congressman for the 1st District of Oklahoma, certain statements were made which the Tulsa Air and Space Museum adamantly denies and require correction. Neither John Sullivan nor Sullivan for Congress has contacted the Tulsa Air and Space Museum Board of Directors or the Board Chair for comment on or validation of these allegations, and these allegations are categorically false:

1. TASM adamantly denies that "right after [Jim Bridenstine] began managing the museum, things started falling apart".
2. TASM adamantly denies that "museum attendance declined 44 percent" during Jim Bridenstine's tenure. In fact, attendance at the museum increased.

3. TASM adamantly denies that the "finances [of TASM] were a disaster" before, during or after Jim Bridenstine's tenure.
4. TASM adamantly denies that the museum was "nearly ruined" by Jim Bridenstine or anyone else.

The Tulsa Air and Space Museum always has been under the management of a sound and active Board of Directors to which each executive director reports. With its feet firmly planted in the present and an eye to the future, the Board of Directors of TASM has always taken steps to ensure the sound management of the Tulsa Air and Space Museum. The Tulsa Air and Space Museum will be here for years to come.

The allegations made by John Sullivan for Congress regarding the Tulsa Air and Space Museum were a reckless denial of the facts, and the Tulsa Air and Space Museum demands that Sullivan for Congress publicly withdraw the allegations made by it.

Respectfully,

GREGORY J. COLPITTS.

TULSA AIR AND SPACE MUSEUM OFFICIAL STATEMENT

The Tulsa Air and Space Museum is neither for nor against any candidate in any election. Certain statements have been made by others outside of the Tulsa Air and Space Museum and the Tulsa Air and Space Museum wishes to clarify certain facts: Jim Bridenstine was employed at the Tulsa Air and Space Museum as its Executive Director from December 2008 through August 20, 2010. While at the Tulsa Air and Space Museum, Jim Bridenstine developed the QuikTrip Air and Rocket Racing Show and the Land the Shuttle Campaign, both of which garnered tremendous visibility for the Tulsa Air and Space Museum. While Mr. Bridenstine was executive director attendance increased at the museum. In August 2010 Mr. Bridenstine voluntarily resigned from bis position as Executive Director at the Tulsa Air and Space Museum in order to follow bis orders in the Navy Reserves. Mr. Bridenstine was not terminated from the Tulsa Air and Space Museum.

BARBARA SMALLWOOD,
Chairman of the Board of Directors,
Tulsa Air and Space Museum.

Form **990**

Return of Organization Exempt From Income Tax

Under section 501(c), 527, or 4947(a)(1) of the Internal Revenue Code (except black lung benefit trust or private foundation)

► The organization may have to use a copy of this return to satisfy state reporting requirements.

OMB No 1545-0047

2008

Open to Public Inspection

Department of the Treasury
Internal Revenue Service

A For the 2008 calendar year, or tax year beginning , 2008, and ending , 20

B Check if applicable
☐ Address change
☐ Name change
☐ Initial return
☐ Termination
☐ Amended return
☐ Application pending

Please use IRS label or print or type. See Specific Instructions

C Name of organization **Tulsa Air & Space Museum, Inc.**
Doing Business As **Tulsa Air & Space Museum and Planetarium**
Number and street (or P O. box if mail is not delivered to street address) **3624 N 74th East Ave** Room/suite
City or town, state or country, and ZIP + 4 **Tulsa OK 74115-3622**

D Employer identification number **73 1452965**
E Telephone number **(918) 834-9900**
G Gross receipts $

F Name and address of principal officer: **James Bridenstine, 3624 N 74th Ave Tulsa OK**

H(a) Is this a group return for affiliates? ☐ Yes ☑ No
H(b) Are all affiliates included? ☐ Yes ☐ No
If "No," attach a list (see instructions)
H(c) Group exemption number ►

I Tax-exempt status ☑ 501(c) (3)◄ (insert no) ☐ 4947(a)(1) or ☐ 527

J Website: ► **www.tulsaairandspacemuseum.com**

K Type of organization ☑ Corporation ☐ Trust ☐ Association ☐ Other ► L Year of formation **1996** M State of legal domicile **OK**

Part I Summary

1 Briefly describe the organization's mission or most significant activities: **TASM is a quasi-educational institution promoting awareness of aeronautical science among young students and other interested parties. It supports it's activities through membership dues, admissions, memberships, merchandise sales and facility rentals. Additionally it solicits corporate, foundation and private grants in order to maintain and expand operations**

2 Check this box ► ☐ if the organization discontinued its operations or disposed of more than 25% of its assets.

3	Number of voting members of the governing body (Part VI, line 1a)	3	34
4	Number of independent voting members of the governing body (Part VI, line 1b)	4	
5	Total number of employees (Part V, line 2a)	5	13
6	Total number of volunteers (estimate if necessary)	6	35
7a	Total gross unrelated business revenue from Part VIII, line 12, column (C)	7a	
b	Net unrelated business taxable income from Form 990-T, line 34	7b	

Activities & Governance

		Prior Year	Current Year
8	Contributions and grants (Part VIII, line 1h)	977,124	812,748
9	Program service revenue (Part VIII, line 2g)	653,550	320,458
10	Investment income (Part VIII, column (A), lines 3, 4, and 7d)	8,735	(628)
11	Other revenue (Part VIII, column (A), lines 5, 6d, 8c, 9c, 10c, and 11e)	0	67,980
12	Total revenue—add lines 8 through 11 (must equal Part VIII, column (A), line 12)	1,639,409	1,200,557

Revenue

13	Grants and similar amounts paid (Part IX, column (A), lines 1–3)		
14	Benefits paid to or for members (Part IX, column (A), line 4)		
15	Salaries, other compensation, employee benefits (Part IX, column (A), lines 5–10)	499,047	582,677
16a	Professional fundraising fees (Part IX, column (A), line 11e)		3,000
b	Total fundraising expenses (Part IX, column (D), line 25) ►		
17	Other expenses (Part IX, column (A), lines 11a–11d, 11f–24f)	521,645	541,592
18	Total expenses. Add lines 13–17 (must equal Part IX, column (A), line 25)	1,020,692	1,127,269
19	Revenue less expenses. Subtract line 18 from line 12	618,717	73,288

Expenses

		Beginning of Year	End of Year
20	Total assets (Part X, line 16)	4,657,293	4,715,013
21	Total liabilities (Part X, line 26)	71,132	29,045
22	Net assets or fund balances. Subtract line 21 from line 20	4,586,161	4,685,968

Net Assets or Fund Balances

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IRS-OSC

SCANNED NOV 02 2009

Part II Signature Block

Under penalties of perjury, I declare that I have examined this return, including accompanying schedules and statements, and to the best of my knowledge and belief, it is true, correct, and complete. Declaration of preparer (other than officer) is based on all information of which preparer has any knowledge

Sign Here

Signature of officer — Date: 10-15-2009

Type or print name and title: Daniel C. Howard, CPA

Paid Preparer's Use Only

Preparer's signature | Date | Check if self-employed ► ☐ | Preparer's identifying number (see instructions)

Firm's name (or yours if self-employed), address, and ZIP + 4 | EIN ► | Phone no. ► ( )

May the IRS discuss this return with the preparer shown above? (see instructions) ☐ Yes ☐ No

For Privacy Act and Paperwork Reduction Act Notice, see the separate instructions. Cat No. 11282Y Form **990** (2008)

726

Form **990**

Department of the Treasury
Internal Revenue Service

Return of Organization Exempt From Income Tax

Under section 501(c), 527, or 4947(a)(1) of the Internal Revenue Code (except black lung benefit trust or private foundation)

▶ The organization may have to use a copy of this return to satisfy state reporting requirements.

OMB No 1545-0047

2009

Open to Public Inspection

A For the 2009 calendar year, or tax year beginning January 1 , 2009, and ending December 31 , 20 09

B Check if applicable
☐ Address change
☐ Name change
☐ Initial return
☐ Terminated
☐ Amended return
☐ Application pending

Please use IRS label or print or type. See Specific Instructions.

C Name of organization **Tulsa Air and Space Museum, Inc**
Doing Business As **Tulsa Air and Space Museum and Planetarium**
Number and street (or P O box if mail is not delivered to street address) Room/suite
3624 N 74th East Ave
City or town, state or country, and ZIP + 4
Tulsa, OK 74115-3622

D Employer identification number **73 : 1452965**

E Telephone number **(918) 834-9900**

G Gross receipts $

F Name and address of principal officer **Diana Edens**
624 N 74th East Ave

H(a) Is this a group return for affiliates? ☐ Yes ☑ No
H(b) Are all affiliates included? ☐ Yes ☐ No
If "No," attach a list (see instructions)
H(c) Group exemption number ▶

I Tax-exempt status ☑ 501(c) (3) ◀ (insert no) ☐ 4947(a)(1) or ☐ 527

J Website: ▶ **www.tulsaairandspacemuseum.com**

K Form of organization ☑ Corporation ☐ Trust ☐ Association ☐ Other ▶ L Year of formation M State of legal domicile **OK**

Part I Summary

1 Briefly describe the organization's mission or most significant activities. **TASM is a quasi-educational institution promoting awareness of aeronautical science among young students and other interested parties. It supports it's activities through membership dues, admissions, memberships, merchandise sales and facility rentals. Additionally it solicits corporate, foundation and private grants in order to maintain and expand operations.**

2 Check this box ▶ ☐ if the organization discontinued its operations or disposed of more than 25% of its net assets

3	Number of voting members of the governing body (Part VI, line 1a)	3	34
4	Number of independent voting members of the governing body (Part VI, line 1b)	4	
5	Total number of employees (Part V, line 2a)	5	18
6	Total number of volunteers (estimate if necessary)	6	35
7a	Total gross unrelated business revenue from Part VIII, column (C), line 12	7a	
b	Net unrelated business taxable income from Form 990-T, line 34	7b	

		Prior Year	Current Year
8	Contributions and grants (Part VIII, line 1h)	812,748	569,375
9	Program service revenue (Part VIII, line 2g)	320,458	452,617
10	Investment income (Part VIII, column (A), lines 3, 4, and 7d)	(628)	16084
11	Other revenue (Part VIII, column (A), lines 5, 6d, 8c, 9c, 10c, and 11e)	67980	39422
12	Total revenue—add lines 8 through 11 (must equal Part VIII, column (A), line 12)	1,200,557	977,498
13	Grants and similar amounts paid (Part IX, column (A), lines 1–3)		6,350
14	Benefits paid to or for members (Part IX, column (A), line 4)		
15	Salaries, other compensation, employee benefits (Part IX, column (A), lines 5–10)	582,677	637,472
16a	Professional fundraising fees (Part IX, column (A), line 11e)	3000	
b	Total fundraising expenses (Part IX, column (D), line 25) ▶		
17	Other expenses (Part IX, column (A), lines 11a–11d, 11f–24f)	541,592	745,331
18	Total expenses. Add lines 13–17 (must equal Part IX, column (A), line 25)	1,127,269	1,389,153
19	Revenue less expenses. Subtract line 18 from line 12	73,288	(311,655)

		Beginning of Current Year	End of Year
20	Total assets (Part X, line 16)	4,715,013	4,282,245
21	Total liabilities (Part X, line 26)	29,045	56,850
22	Net assets or fund balances. Subtract line 21 from line 20	4,685,968	4,225,395

SCANNED DEC 15 2010

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NOV 19 2010
OGDEN, UT
IRS-OSC
E1-642

Part II Signature Block

Under penalties of perjury, I declare that I have examined this return, including accompanying schedules and statements, and to the best of my knowledge and belief, it is true, correct, and complete Declaration of preparer (other than officer) is based on all information of which preparer has any knowledge

Sign Here

Signature of officer Date **11-15-10**

Type or print name and title **KIM JONES ACTING EXECUTIVE DIRECTOR**

Paid Preparer's Use Only

Preparer's signature Date Check if self-employed ▶ ☐ Preparer's identifying number (see instructions)

Firm's name (or yours if self-employed), address, and ZIP + 4 EIN ▶ Phone no ▶ ( )

May the IRS discuss this return with the preparer shown above? (see instructions) ☐ Yes ☐ No

Form **990** — **Return of Organization Exempt From Income Tax**

Under section 501(c), 527, or 4947(a)(1) of the Internal Revenue Code (except black lung benefit trust or private foundation)

▶ The organization may have to use a copy of this return to satisfy state reporting requirements.

Department of the Treasury, Internal Revenue Service

OMB No 1545-0047

2010

Open to Public Inspection

A For the 2010 calendar year, or tax year beginning January 1, 2010, and ending December 31, 20 10

B Check if applicable: ☐ Address change ☐ Name change ☐ Initial return ☐ Terminated ☐ Amended return ☐ Application pending

C Name of organization: Tulsa Air and Space Museum, Inc

Doing Business As: Tulsa Air and Space Museum and Planetarium

Number and street (or P O box if mail is not delivered to street address): 3624 N 74th E Ave

Room/suite:

City or town, state or country, and ZIP + 4: Tulsa, OK 74115-3622

D Employer identification number: 73-1452965

E Telephone number: 918-834-9900

G Gross receipts $

F Name and address of principal officer: Glenn Wright, 3624 N 74th E Ave

H(a) Is this a group return for affiliates? ☐ Yes ☑ No

H(b) Are all affiliates included? ☐ Yes ☐ No

If "No," attach a list (see instructions)

I Tax-exempt status: ☑ 501(c)(3) ☐ 501(c) ( ) ◀ (insert no) ☐ 4947(a)(1) or ☐ 527

J Website: ▶

H(c) Group exemption number ▶

K Form of organization: ☑ Corporation ☐ Trust ☐ Association ☐ Other ▶

L Year of formation:

M State of legal domicile: OK

Part I Summary

1 Briefly describe the organization's mission or most significant activities: TASM is a quasi-educational institution promoting awareness of aeronautical science among young students and other interested parties. Activities are supported through membership dues, admissions, merchandise sales and facility rentals. Additionally, TASM solicits corporate, foundation and private grants and donations in order to maintain and expand operations.

2 Check this box ▶ ☐ if the organization discontinued its operations or disposed of more than 25% of its net assets.

3	Number of voting members of the governing body (Part VI, line 1a)	3	32
4	Number of independent voting members of the governing body (Part VI, line 1b)	4	32
5	Total number of individuals employed in calendar year 2010 (Part V, line 2a)	5	29
6	Total number of volunteers (estimate if necessary)	6	35
7a	Total unrelated business revenue from Part VIII, column (C), line 12	7a	0
b	Net unrelated business taxable income from Form 990-T, line 34	7b	0

		Prior Year	Current Year
8	Contributions and grants (Part VIII, line 1h)	451,709	903,093
9	Program service revenue (Part VIII, line 2g)	478,358	346,592
10	Investment income (Part VIII, column (A), lines 3, 4, and 7d)	23,845	11,355
11	Other revenue (Part VIII, column (A), lines 5, 6d, 8c, 9c, 10c, and 11e)	39,422	14,980
12	Total revenue—add lines 8 through 11 (must equal Part VIII, column (A), line 12)	993,335	1,276,361
13	Grants and similar amounts paid (Part IX, column (A), lines 1–3)	6,350	8,948
14	Benefits paid to or for members (Part IX, column (A), line 4)		
15	Salaries, other compensation, employee benefits (Part IX, column (A), lines 5–10)	637,472	438,346
16a	Professional fundraising fees (Part IX, column (A), line 11e)		
b	Total fundraising expenses (Part IX, column (D), line 25) ▶		
17	Other expenses (Part IX, column (A), lines 11a–11d, 11f–24f)	745,331	1,137,372
18	Total expenses. Add lines 13–17 (must equal Part IX, column (A), line 25)	1,389,153	1,584,666
19	Revenue less expenses. Subtract line 18 from line 12	(395,818)	(308,305)

		Beginning of Current Year	End of Year
20	Total assets (Part X, line 16)	4,108,606	3,780,419
21	Total liabilities (Part X, line 26)	62,710	42,819
22	Net assets or fund balances. Subtract line 21 from line 20	4,045,906	3,737,600

Part II Signature Block

Under penalties of perjury, I declare that I have examined this return, including accompanying schedules and statements, and to the best of my knowledge and belief, it is true, correct, and complete. Declaration of preparer (other than officer) is based on all information of which preparer has any knowledge

Sign Here

Signature of officer — Date 11/15/11

Type or print name and title

Paid Preparer Use Only

Print/Type preparer's name | Preparer's signature | Date | Check ☐ if self-employed | PTIN

Firm's name ▶ | Firm's EIN ▶

Firm's address ▶ | Phone no

May the IRS discuss this return with the preparer shown above? (see instructions) ☐ Yes ☐ No

For Paperwork Reduction Act Notice, see the separate instructions. Cat No 11282Y Form **990** (2010)

SCANNED DEC 22 2011

RECEIVED NOV 23 2011 062 IRS-OSC OGDEN

9/16 C

Form **990** — Department of the Treasury, Internal Revenue Service

Return of Organization Exempt From Income Tax

Under section 501(c), 527, or 4947(a)(1) of the Internal Revenue Code (except black lung benefit trust or private foundation)

▶ The organization may have to use a copy of this return to satisfy state reporting requirements.

OMB No. 1545-0047 — **2011** — Open to Public Inspection

A For the 2011 calendar year, or tax year beginning _____ and ending _____

B Check if applicable: ☐ Address change ☐ Name change ☐ Initial return ☐ Termin-ated ☒ Amended return ☐ Applica-tion pending

C Name of organization: TULSA AIR AND SPACE MUSEUM, INC

Doing Business As:

Number and street (or P.O. box if mail is not delivered to street address): 3624 N 74TH E AVE — Room/suite:

City or town, state or country, and ZIP + 4: TULSA, OK 74115-3622

F Name and address of principal officer: GLENN WRIGHT SAME AS C ABOVE

D Employer identification number: 73-1452965

E Telephone number: 918-834-9900

G Gross receipts $: 839,268.

H(a) Is this a group return for affiliates? ☐ Yes ☒ No

H(b) Are all affiliates included? ☐ Yes ☐ No

If "No," attach a list. (see instructions)

H(c) Group exemption number ▶

I Tax-exempt status: ☒ 501(c)(3) ☐ 501(c) ( ) ◀ (insert no.) ☐ 4947(a)(1) or ☐ 527

J Website: ▶ TULSAAIRANDSPACEMUSEUM.ORG

K Form of organization: ☒ Corporation ☐ Trust ☐ Association ☐ Other ▶

L Year of formation: 1999 M State of legal domicile: OK

Part I Summary

1 Briefly describe the organization's mission or most significant activities: TASM IS A QUASI-EDUCATIONAL INSTITUTION PROMOTING AWARENESS OF AERONAUTICAL SCIENCE AMONG YOUNG

2 Check this box ▶ ☐ if the organization discontinued its operations or disposed of more than 25% of its net assets.

AS AMENDED

3	Number of voting members of the governing body (Part VI, line 1a)	3	32
4	Number of independent voting members of the governing body (Part VI, line 1b)	4	32
5	Total number of individuals employed in calendar year 2011 (Part V, line 2a)	5	29
6	Total number of volunteers (estimate if necessary)	6	35
7a	Total unrelated business revenue from Part VIII, column (C), line 12	7a	0.
b	Net unrelated business taxable income from Form 990T, line 34	7b	0.

		Prior Year	Current Year
8	Contributions and grants (Part VIII, line 1h)	903,093.	409,702.
9	Program service revenue (Part VIII, line 2g)	346,592.	384,192.
10	Investment income (Part VIII, column (A), lines 3, 4, and 7d)	11,335.	3,621.
11	Other revenue (Part VIII, column (A), lines 5, 6d, 8c, 9c, 10c, and 11e)	15,341.	-40,574.
12	Total revenue - add lines 8 through 11 (must equal Part VIII, column (A), line 12)	1,276,361.	756,941.
13	Grants and similar amounts paid (Part IX, column (A), lines 1-3)	8,948.	0.
14	Benefits paid to or for members (Part IX, column (A), line 4)	0.	0.
15	Salaries, other compensation, employee benefits (Part IX, column (A), lines 5-10)	438,346.	466,059.
16a	Professional fundraising fees (Part IX, column (A), line 11e)	0.	0.
b	Total fundraising expenses (Part IX, column (D), line 25) ▶ 143,385.		
17	Other expenses (Part IX, column (A), lines 11a-11d, 11f-24e)	1,137,372.	570,437.
18	Total expenses. Add lines 13-17 (must equal Part IX, column (A), line 25)	1,584,666.	1,036,496.
19	Revenue less expenses. Subtract line 18 from line 12	-308,305.	-279,555.

		Beginning of Current Year	End of Year
20	Total assets (Part X, line 16)	3,780,419.	3,828,661.
21	Total liabilities (Part X, line 26)	42,819.	91,214.
22	Net assets or fund balances. Subtract line 21 from line 20	3,737,600.	3,737,447.

RECEIVED OCT 08 2013 OGDEN, UT

SCANNED OCT 30 2013

Part II Signature Block

Under penalties of perjury, I declare that I have examined this return, including accompanying schedules and statements, and to the best of my knowledge and belief, it is true, correct, and complete. Declaration of preparer (other than officer) is based on all information of which preparer has any knowledge.

Sign Here — Signature of officer — GLENN WRIGHT, EXECUTIVE DIRECTO — Type or print name and title

Paid Preparer Use Only — Print/Type preparer's name: O. BRENT CURRY, CPA — Preparer's signature: O. BRENT — Firm's name ▶ REGIER CARR & MONROE, LLP — Firm's address ▶ 8023 EAST 63RD PLACE, SUI TULSA, OK 74133

May the IRS discuss this return with the preparer shown above? (see instructio

132001 01-23-12 LHA For Paperwork Reduction Act Notice, see the separa

Form **990**

Department of the Treasury
Internal Revenue Service

Return of Organization Exempt From Income Tax

Under section 501(c), 527, or 4947(a)(1) of the Internal Revenue Code (except black lung benefit trust or private foundation)

▶ The organization may have to use a copy of this return to satisfy state reporting requirements.

OMB No. 1545-0047

2012

Open to Public Inspection

A For the 2012 calendar year, or tax year beginning _____ and ending _____

B Check if applicable:
- ☐ Address change
- ☐ Name change
- ☐ Initial return
- ☐ Termin-ated
- ☐ Amended return
- ☐ Applica-tion pend-ing

C Name of organization
TULSA AIR AND SPACE MUSEUM, INC

Doing Business As

Number and street (or P.O. box if mail is not delivered to street address) 3624 N 74TH E AVE

Room/suite

City, town, or post office, state, and ZIP code TULSA, OK 74115-3622

F Name and address of principal officer: MARY SMITH
SAME AS C ABOVE

D Employer identification number 73-1452965

E Telephone number 918-834-9900

G Gross receipts $ 1,197,163.

H(a) Is this a group return for affiliates? ☐ Yes ☒ No

H(b) Are all affiliates included? ☐ Yes ☐ No

If "No," attach a list. (see instructions)

H(c) Group exemption number ▶

I Tax-exempt status: ☒ 501(c)(3) ☐ 501(c) ( ) ◀ (insert no.) ☐ 4947(a)(1) or ☐ 527

J Website: ▶ TULSAAIRANDSPACEMUSEUM.ORG

K Form of organization: ☒ Corporation ☐ Trust ☐ Association ☐ Other ▶

L Year of formation: 1999 M State of legal domicile: OK

Part I Summary

1 Briefly describe the organization's mission or most significant activities: TASM IS A QUASI-EDUCATIONAL INSTITUTION PROMOTING AWARENESS OF AERONAUTICAL SCIENCE AMONG YOUNG

2 Check this box ▶ ☐ if the organization discontinued its operations or disposed of more than 25% of its net assets.

Activities & Governance	3 Number of voting members of the governing body (Part VI, line 1a)	3	33
	4 Number of independent voting members of the governing body (Part VI, line 1b)	4	33
	5 Total number of individuals employed in calendar year 2012 (Part V, line 2a)	5	36
	6 Total number of volunteers (estimate if necessary)	6	35
	7a Total unrelated business revenue from Part VIII, column (C), line 12	7a	0.
	b Net unrelated business taxable income from Form 990-T, line 34	7b	0.

		Prior Year	Current Year
Revenue	8 Contributions and grants (Part VIII, line 1h)	409,702.	639,539.
	9 Program service revenue (Part VIII, line 2g)	384,192.	469,473.
	10 Investment income (Part VIII, column (A), lines 3, 4, and 7d)	3,621.	4,349.
	11 Other revenue (Part VIII, column (A), lines 5, 6d, 8c, 9c, 10c, and 11e)	-40,574.	-18,965.
	12 Total revenue - add lines 8 through 11 (must equal Part VIII, column (A), line 12)	756,941.	1,094,396.
Expenses	13 Grants and similar amounts paid (Part IX, column (A), lines 1-3)	0.	0.
	14 Benefits paid to or for members (Part IX, column (A), line 4)	0.	0.
	15 Salaries, other compensation, employee benefits (Part IX, column (A), lines 5-10)	466,059.	532,142.
	16a Professional fundraising fees (Part IX, column (A), line 11e)	0.	550.
	b Total fundraising expenses (Part IX, column (D), line 25) ▶ 108,617.		
	17 Other expenses (Part IX, column (A), lines 11a-11d, 11f-24e)	570,437.	660,072.
	18 Total expenses. Add lines 13-17 (must equal Part IX, column (A), line 25)	1,036,496.	1,192,764.
	19 Revenue less expenses. Subtract line 18 from line 12	-279,555.	-98,368.

		Beginning of Current Year	End of Year
Net Assets or Fund Balances	20 Total assets (Part X, line 16)	3,828,661.	3,727,907.
	21 Total liabilities (Part X, line 26)	91,214.	82,000.
	22 Net assets or fund balances. Subtract line 21 from line 20	3,737,447.	3,645,907.

RECEIVED
NOV 20 2013
OGDEN, UT

Part II Signature Block

Under penalties of perjury, I declare that I have examined this return, including accompanying schedules and statements, and to the best of my knowledge and belief, it is true, correct, and complete. Declaration of preparer (other than officer) is based on all information of which preparer has any knowledge.

Sign Here	Signature of officer	Date
	CARMINE ROMANO, CHAIRMAN Type or print name and title	

Paid Preparer Use Only	Print/Type preparer's name: O. BRENT CURRY, CPA	Preparer's signature: O. BRENT C
	Firm's name ▶ REGIER CARR & MONROE, LLP	
	Firm's address ▶ 8023 EAST 63RD PLACE, SUIT TULSA, OK 74133	

May the IRS discuss this return with the preparer shown above? (see instruction

[redacted]

SEE SCHEDULE O FOR ORGANIZATION MISS

Form **990**

Department of the Treasury
Internal Revenue Service

Return of Organization Exempt From Income Tax

Under section 501(c), 527, or 4947(a)(1) of the Internal Revenue Code (except private foundations)
► Do not enter Social Security numbers on this form as it may be made public
► Information about Form 990 and its instructions is at *www.irs.gov/form990.*

OMB No 1545-0047
2013
Open to Public Inspection

A For the 2013 calendar year, or tax year beginning , 2013, and ending

B Check if applicable:
☐ Address change
☐ Name change
☐ Initial return
☐ Terminated
☐ Amended return
☐ Application pending

C
TULSA AIR AND SPACE MUSEUM, INC.
3624 N 74TH E AVE
TULSA, OK 74115-3622

D Employer identification number: 73-1452965

E Telephone number: 918-834-9900

G Gross receipts $ 1,987,483.

F Name and address of principal officer: CARMINE ROMANO
SAME AS C ABOVE

H(a) Is this a group return for subordinates? ☐ Yes ☒ No
H(b) Are all subordinates included? ☐ Yes ☐ No
If "No," attach a list (see instructions)

I Tax-exempt status: ☒ 501(c)(3) ☐ 501(c) ( ) ► (insert no) ☐ 4947(a)(1) or ☐ 527

J Website: ► TULSAAIRANDSPACEMUSEUM.ORG

H(c) Group exemption number ►

K Form of organization: ☒ Corporation ☐ Trust ☐ Association ☐ Other ► L Year of formation: 1999 M State of legal domicile: OK

Part I Summary

1 Briefly describe the organization's mission or most significant activities: TULSA AIR AND SPACE MUSEUM IS A QUASI-EDUCATIONAL INSTITUTION PROMOTING AWARENESS OF AERONAUTICAL SCIENCE AMONG YOUNG STUDENTS AND OTHER INTERESTED PARTIES.

2 Check this box ► ☐ if the organization discontinued its operations or disposed of more than 25% of its net assets

3	Number of voting members of the governing body (Part VI, line 1a)	3	29
4	Number of independent voting members of the governing body (Part VI, line 1b)	4	29
5	Total number of individuals employed in calendar year 2013 (Part V, line 2a)	5	31
6	Total number of volunteers (estimate if necessary)	6	30
7a	Total unrelated business revenue from Part VIII, column (C), line 12	7a	0.
b	Net unrelated business taxable income from Form 990-T, line 34	7b	0.

		Prior Year	Current Year
8	Contributions and grants (Part VIII, line 1h)	639,539.	1,428,895.
9	Program service revenue (Part VIII, line 2g)	469,473.	467,279.
10	Investment income (Part VIII, column (A), lines 3, 4, and 7d)	4,349.	7,911.
11	Other revenue (Part VIII, column (A), lines 5, 6d, 8c, 9c, 10c, and 11e)	-18,965.	-64,834.
12	Total revenue – add lines 8 through 11 (must equal Part VIII, column (A), line 12)	1,094,396.	1,839,251.
13	Grants and similar amounts paid (Part IX, column (A), lines 1-3)		
14	Benefits paid to or for members (Part IX, column (A), line 4)		
15	Salaries, other compensation, employee benefits (Part IX, column (A), lines 5-10)	532,142.	540,458.
16a	Professional fundraising fees (Part IX, column (A), line 11e)	550.	35,000.
b	Total fundraising expenses (Part IX, column (D), line 25) ► 122,020.		
17	Other expenses (Part IX, column (A), lines 11a-11d, 11f-24e)	660,072.	608,578.
18	Total expenses. Add lines 13-17 (must equal Part IX, column (A), line 25)	1,192,764.	1,184,036.
19	Revenue less expenses. Subtract line 18 from line 12	-98,368.	655,215.

		Beginning of Current Year	End of Year
20	Total assets (Part X, line 16)	3,727,907.	4,558,898.
21	Total liabilities (Part X, line 26)	82,000.	108,878.
22	Net assets or fund balances. Subtract line 21 from line 20	3,645,907.	4,450,020.

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Part II Signature Block

Under penalties of perjury, I declare that I have examined this return, including accompanying schedules and statements, and to the best of my knowledge and belief, it is true, correct, and complete. Declaration of preparer (other than officer) is based on all information of which preparer has any knowledge

Sign Here

Signature of officer — Date: 11-17-14

SHERYL ST. GEORGE — EXECUTIVE DIRECTOR
Type or print name and title

Paid Preparer Use Only

Print/Type preparer's name: PRESTON B. SMITH, CPA	Preparer's signature: Preston Smith CPA	Date: 11/14/14	Check ☐ if self-employed	PTIN: P00357271
Firm's name ► PRESTON SMITH, PLLC			Firm's EIN ► 45-3944293	
Firm's address ► 8118 E 63RD ST TULSA, OK 74133			Phone no (918) 250-1040	

May the IRS discuss this return with the preparer shown above? (see instructions) ☒ Yes ☐ No

BAA For Paperwork Reduction Act Notice, see the separate instructions. TEEA0113L 11/08/13 Form 990 (2013)

19 917

Form **990**

Department of the Treasury
Internal Revenue Service

Return of Organization Exempt From Income Tax

Under section 501(c), 527, or 4947(a)(1) of the Internal Revenue Code (except private foundations)
► Do not enter social security numbers on this form as it may be made public
► Information about Form 990 and its instructions is at *www.irs.gov/form990.*

OMB No 1545-0047
2014
Open to Public Inspection

A For the 2014 calendar year, or tax year beginning , 2014, and ending

B Check if applicable:
☐ Address change
☐ Name change
☐ Initial return
☐ Final return/terminated
☐ Amended return
☐ Application pending

C
TULSA AIR AND SPACE MUSEUM, INC.
3624 N 74TH E AVE
TULSA, OK 74115-3622

D Employer identification number: 73-1452965
E Telephone number: 918-834-9900
G Gross receipts $ 1,285,86

F Name and address of principal officer: SHERYL ST. GEORGE
SAME AS C ABOVE

H(a) Is this a group return for subordinates? ☐ Yes ☒ No
H(b) Are all subordinates included? ☐ Yes
If "No," attach a list (see instructions)

I Tax-exempt status: ☒ 501(c)(3) ☐ 501(c) ( ) ◄ (insert no) ☐ 4947(a)(1) or ☐ 527

J Website: ► TULSAAIRANDSPACEMUSEUM.ORG

H(c) Group exemption number ►

K Form of organization: ☒ Corporation ☐ Trust ☐ Association ☐ Other ► L Year of formation: 1999 M State of legal domicile: OK

Part I Summary

1 Briefly describe the organization's mission or most significant activities: TULSA AIR AND SPACE MUSEUM'S MISSION IS PRESERVING OKLAHOMA AEROSPACE HERITAGE TO INSPIRE SCIENCE-BASED LEARNING THROUGH DISCOVERY.

2 Check this box ► ☐ if the organization discontinued its operations or disposed of more than 25% of its net assets

Activities & Governance	3	Number of voting members of the governing body (Part VI, line 1a)	3
	4	Number of independent voting members of the governing body (Part VI, line 1b)	4
	5	Total number of individuals employed in calendar year 2014 (Part V, line 2a)	5
	6	Total number of volunteers (estimate if necessary)	6
	7a	Total unrelated business revenue from Part VIII, column (C), line 12	7a
	b	Net unrelated business taxable income from Form 990-T, line 34	7b

			Prior Year	Current Year
Revenue	8	Contributions and grants (Part VIII, line 1h)	1,428,895.	899,42
	9	Program service revenue (Part VIII, line 2g)	467,279.	340,55
	10	Investment income (Part VIII, column (A), lines 3, 4, and 7d)	7,911.	-26,60
	11	Other revenue (Part VIII, column (A), lines 5, 6d, 8c, 9c, 10c, and 11e)	-64,834.	-24,77
	12	Total revenue – add lines 8 through 11 (must equal Part VIII, column (A), line 12)	1,839,251.	1,188,60
Expenses	13	Grants and similar amounts paid (Part IX, column (A), lines 1-3)		
	14	Benefits paid to or for members (Part IX, column (A), line 4)		
	15	Salaries, other compensation, employee benefits (Part IX, column (A), lines 5-10)	540,458.	349,50
	16a	Professional fundraising fees (Part IX, column (A), line 11e)	35,000.	35,16
	b	Total fundraising expenses (Part IX, column (D), line 25) ► 59,008.		
	17	Other expenses (Part IX, column (A), lines 11a-11d, 11f-24e)	608,578.	471,63
	18	Total expenses. Add lines 13-17 (must equal Part IX, column (A), line 25)	1,184,036.	856,30
	19	Revenue less expenses. Subtract line 18 from line 12	655,215.	332,30

			Beginning of Current Year	End of Year
Net Assets or Fund Balances	20	Total assets (Part X, line 16)	4,558,898.	4,892,80
	21	Total liabilities (Part X, line 26)	108,878.	95,25
	22	Net assets or fund balances. Subtract line 21 from line 20	4,450,020.	4,797,54

Part II Signature Block

Under penalties of perjury, I declare that I have examined this return, including accompanying schedules and statements, and to the best of my knowledge and belief, it is true, correct, and complete. Declaration of preparer (other than officer) is based on all information of which preparer has any knowledge.

Sign Here

► Signature of officer — Date: 11-5-15

► SHERYL ST. GEORGE — Type or print name and title: EXECUTIVE DIRECTOR

Paid Preparer Use Only

Print/Type preparer's name	Preparer's signature	Date	Check ☐ if self-employed	PTIN
PRESTON B. SMITH, CPA	PRESTON B. SMITH, CPA	10/30/2015		P00357271

Firm's name ► PRESTON SMITH, PLLC
Firm's address ► 8118 E 63RD ST, TULSA, OK 74133
Firm's EIN ► 45-3944293
Phone no (918) 250-1040

May the IRS discuss this return with the preparer shown above? (see instructions) ☒ Yes ☐ No

BAA For Paperwork Reduction Act Notice, see the separate instructions. TEEA0113L 05/28/14 Form **990** (20

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efile Public Visual Render | ObjectId: 201613199349300041 - Submission: 2016-11-14 | TIN: 73-1452965

Form **990**

Department of the Treasury
Internal Revenue Service

Return of Organization Exempt From Income Tax

Under section 501(c), 527, or 4947(a)(1) of the Internal Revenue Code (except private foundations)

▶ Do not enter social security numbers on this form as it may be made public.
▶ Information about Form 990 and its instructions is at www.IRS.gov/form990.

OMB No. 1545-0047

2015

Open to Public Inspection

A For the 2015 calendar year, or tax year beginning 01-01-2015 , and ending 12-31-2015

B Check if applicable:
- ☐ Address change
- ☐ Name change
- ☐ Initial return
- ☐ Final return/terminated
- ☐ Amended return
- ☐ Application pending

C Name of organization
Tulsa Air and Space Museum Inc

Doing business as

Number and street (or P.O. box if mail is not delivered to street address) | Room/suite
3624 N 74th E Ave

City or town, state or province, country, and ZIP or foreign postal code
Tulsa, OK 74115

D Employer identification number
73-1452965

E Telephone number
(918) 834-9900

G Gross receipts $ 1,102,266

F Name and address of principal officer:
Sheryl St George

H(a) Is this a group return for subordinates? ☐ Yes ☑ No

H(b) Are all subordinates included? ☐ Yes ☑ No
If "No," attach a list. (see instructions)

H(c) Group exemption number ▶

I Tax-exempt status: ☑ 501(c)(3) ☐ 501(c) ( ) ◀ (insert no.) ☐ 4947(a)(1) or ☐ 527

J Website: ▶ tulsaairandspacemuseum.org

K Form of organization: ☑ Corporation ☐ Trust ☐ Association ☐ Other ▶

L Year of formation: 1999

M State of legal domicile: OK

Part I Summary

1 Briefly describe the organization's mission or most significant activities:
Tulsa Air and Space Museum's mission is preserving Oklahoma aerospace heritage to inspire science-based learning through discovery.

Activities & Governance	**2** Check this box ▶ ☐		
	3 Number of voting members of the governing body (Part VI, line 1a)	3	32
	4 Number of independent voting members of the governing body (Part VI, line 1b)	4	32
	5 Total number of individuals employed in calendar year 2015 (Part V, line 2a)	5	18
	6 Total number of volunteers (estimate if necessary)	6	36
	7a Total unrelated business revenue from Part VIII, column (C), line 12	7a	0
	b Net unrelated business taxable income from Form 990-T, line 34	7b	

		Prior Year	Current Year
Revenue	**8** Contributions and grants (Part VIII, line 1h)	899,427	670,466
	9 Program service revenue (Part VIII, line 2g)	340,556	383,370
	10 Investment income (Part VIII, column (A), lines 3, 4, and 7d)	-26,602	-133,876
	11 Other revenue (Part VIII, column (A), lines 5, 6d, 8c, 9c, 10c, and 11e)	-24,774	-10,615
	12 Total revenue—add lines 8 through 11 (must equal Part VIII, column (A), line 12)	1,188,607	909,345
Expenses	**13** Grants and similar amounts paid (Part IX, column (A), lines 1–3)		0
	14 Benefits paid to or for members (Part IX, column (A), line 4)		0
	15 Salaries, other compensation, employee benefits (Part IX, column (A), lines 5–10)	349,505	304,504
	16a Professional fundraising fees (Part IX, column (A), line 11e)	35,164	0
	b Total fundraising expenses (Part IX, column (D), line 25) ▶16,717		
	17 Other expenses (Part IX, column (A), lines 11a–11d, 11f–24e)	471,632	467,718
	18 Total expenses. Add lines 13–17 (must equal Part IX, column (A), line 25)	856,301	772,222
	19 Revenue less expenses. Subtract line 18 from line 12	332,306	137,123

		Beginning of Current Year	End of Year
Net Assets or Fund Balances	**20** Total assets (Part X, line 16)	4,892,800	4,993,454
	21 Total liabilities (Part X, line 26)	95,254	20,536
	22 Net assets or fund balances. Subtract line 21 from line 20	4,797,546	4,972,918

Part II Signature Block

Under penalties of perjury, I declare that I have examined this return, including accompanying schedules and statements, and to the best of my knowledge and belief, it is true, correct, and complete. Declaration of preparer (other than officer) is based on all information of which preparer has any knowledge.

Sign

Signature of officer — Date: 2016-11-14

Senator BOOKER. And perhaps, just a question for the record, you do not have to answer it now, but could you address these concerns? I did not know about them before the hearing and I think that it would be valuable to hear your discussions. This is a very large budget.

As a guy who went from just being a legislator to running a billion dollar operation, I could write a book about all the mistakes I made in the first year, but learned to be a really good manager. And I think that this is a valid question and a line of questioning, and you should explain this before folks vote.

Will you do that for us?

Rep. BRIDENSTINE. I would be happy to.

Senator BOOKER. Thank you very much.

Senator Lee is a friend of mine. He claimed that you were clean. I have no evidence to that or not. He said that you were thrifty, but he also said that you were brave. And clearly, sitting here through all this questioning, you are brave in putting yourself up, and I appreciate it.

And I really want to note to you how much I appreciate your visit with me. You came with humility and just a real earnest sense and desire to serve your country, which I think is valid and very true. Clearly, you are an American that seeks to serve and try to make our Nation better.

I do not have that much in terms of questioning and some of it is just repeating because I thought it was interesting, the questions from two of my colleagues about LGBT issues. And again, I think you were very sincere when you said you are going to follow the letter of the law. And obviously, as a manager, you know that there are laws regarding the treatment, and the honor of folks.

But I guess what I want to hear from you is coming from a family who, stories around the dinner table, about how difficult it was to see people in positions of power who did not see and believe in their worth, how hurtful that is.

And you are going to be in a position, not just managing people, but you are one of the more, at least in my eyes, one of the more inspire, you are up for an office to be one of the more inspiring leaders in the United States of America where children will look to you.

I am just wondering to read things saying that homosexuality is immoral. Same sex couples are ill-suited for raising children. These are comments you have made.

Correct?

Rep. BRIDENSTINE. Not that I remember.

Senator BOOKER. OK. So I have quotes here that I would like to enter for the record that the nominee has made regarding gays and lesbians. I think it is important.

May I enter them for the record?

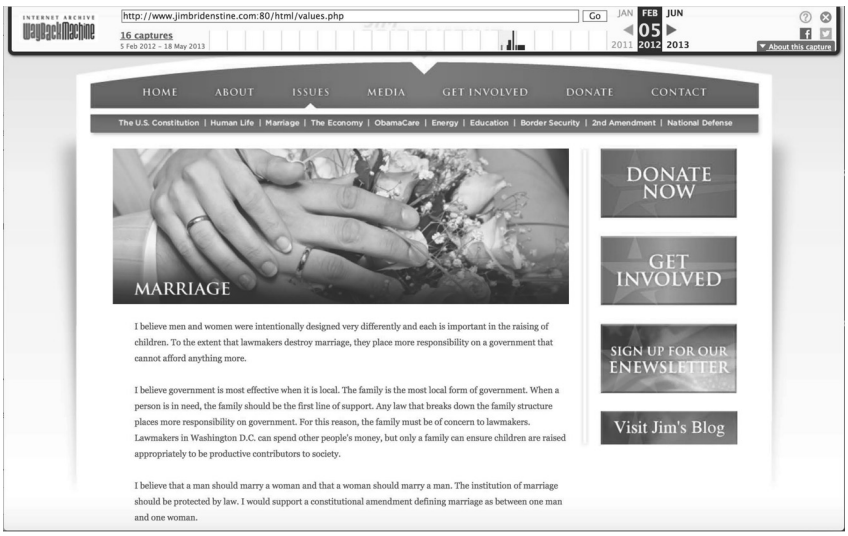
The CHAIRMAN. In what form?

Senator BOOKER. Just quotes from various articles and interviews.

The CHAIRMAN. If you submit the whole article, without objection.

Senator BOOKER. Thank you very much.

[The information referred to follows:]





H2778 CONGRESSIONAL RECORD — HOUSE May 20, 2013

In conclusion, God bless our troops, and we will never forget September the 11th in the global war on terrorism.

SEQUESTRATION EFFECTS

(Mr. COURTNEY asked and was given permission to address the House for 1 minute and to revise and extend his remarks.)

Mr. COURTNEY. Mr. Speaker, last week, the Secretary of Defense, Chuck Hagel, announced that the furloughs of civilian DOD employees will be 11 days for the balance of this fiscal year. This decision, driven by sequestration, is damaging and degrading the military readiness of our country. These are individuals who provide critical services for the men and women in uniform who serve all across America and all across the world.

Sequestration is acting like a slow-acting poison, which is now affecting the economy. Moody's Investor Services announced last week that it will take a full point off of GDP growth this year and will result in, over time, the loss of 700,000 jobs.

It is time for this institution to focus on this self-inflicted damage that Congress caused by not turning off sequester as previous Congresses back in the eighties and nineties did when sequestration was in effect.

We should stop wasting our time on repeal debates for health care—37 times as of last week—and focus on what's

BOY SCOUTS OF AMERICA

(Mr. BRIDENSTINE asked and was given permission to address the House for 1 minute.)

Mr. BRIDENSTINE. I rise today as an Eagle Scout and one who has a stake in the future of our scouting programs.

Some of us in America still believe in the concept of sexual morality, that sex is intended for one man and one woman within the institution of marriage. Organizations that hold this philosophy and promote it among our youth should be commended—or at least, you would think, tolerated.

Unfortunately, the intolerant left bullies and browbeats private organizations like the Boy Scouts into accepting their philosophy. Notice, they didn't start their own organization; they went after the Boy Scouts of America.

The left's agenda is not about tolerance and it's not about diversity of thought. It's about promoting a world view of relativism, where there is no right and wrong, then using the full force of the government to silence opposition and reshape organizations like the Boy Scouts into instruments for social change.

To my friends on the left, this is not tolerance.

But here's the good news about true tolerance: the most tolerant One of all has the ability to redeem us all.

Agency's Web site find that May is National Asthma Month. Many people might be surprised to know that starting January 1, 2012, the Environmental Protection Agency has prevented the sale of the only over-the-counter asthma inhaler upon which millions of Americans have relied for emergency asthma treatment.

What is most alarming is that this inhaler was taken off the market not because it was unsafe or ineffective for treating asthma—it had been around for 50 years safely and effectively treating acute asthma attacks—but the Environmental Protection Agency claimed that the miniscule amount of chlorofluorocarbon contained was creating a hole in the ozone. Mr. Speaker, I respectfully submit that the Nation's asthmatics are not causing a hole in the ozone layer.

When these inhalers were taken offline, we were told that the Food and Drug Administration would quickly approve a substitute inhaler; but here we are months and months and months later with no inhaler in sight.

What has been the response of the EPA? They've been dismissive of Congress' concerns.

I urge people to contact their Member of Congress to bring back these inhalers that have served so many people so well for so long.

Senator BOOKER. And so, I am wondering if you are a child and you have quotes, some of us in America still believe in the concept of sexual morality.

Tell me how you think a child will view a leader who thinks that they are immoral or engaging in immoral acts? Can you just tell me how you think a child will view your leadership? Really, it is in terms of their dreams, and aspirations, and perhaps even one day be an astronaut.

Rep. BRIDENSTINE. Sir, I will tell you this. I believe that every person has dignity and worth, and every person has value. The personal views I have on sexual morality are my personal views.

As leader, should I be confirmed to be the NASA Administrator, certainly I can tell you NASA is unique in its ability to inspire and educate young folks. And you and I had this conversation in your office.

Senator BOOKER. And forgive me for interrupting you, I have limited time and there is a vote that has been called.

So if you are NASA Administrator, let us picture you there, and someone asks you questions about sexual morality, you are going to stay consistent with your past statements in how you view same sex couples raising children, and the hundreds of thousands of children in America that are being raised in that way. You are going to stick to your past statements?

Rep. BRIDENSTINE. Sir, I will tell you this. I believe every person has value and worth, and I absolutely believe that. And I will be committed to making sure that there is equal opportunity and standards will be uniform. And that absolutely is my position and will continue to be my position.

I want to see everybody who works at NASA be able to excel based on the merits of their work exclusively.

Senator BOOKER. Well, my time is running out and I just want to say you and I are both Christians. We both believe in the radical love of Christ.

Rep. BRIDENSTINE. Yes, sir.

Senator BOOKER. But I just want you to know that I am a big believer that before someone tells me about their religion, I want to see it in how they treat other people, how they talk about other people, how they talk about the despised or the hated. Do they visit people in prison? Do they care about those people who are put down in society?

And it is coming from one of the cultures in America where you see people sometimes in power and the way they talk about groups. It is very hurtful and it is very discouraging.

And I just want you to know because I am not sure whether you will be confirmed or not, but this is a beautiful country, and I am glad that you affirmed the dignity and worth of all folks. But it is critically important, should you have the privilege of serving in this position that it is about inspiration. It is about elevating the potential and possibility of all human beings.

It is very, very important that you are not seen as someone who stands in judgment of people because of who they are. And that, in fact, can speak to the aspirations of all folks whether they are gay, straight, black or white, or what have you.

I am grateful for your willingness to put yourself forward for this, but I am really hoping, in my opinion, that you can give some more assurances to all those people that you will be responsible for not just managing, but inspiring.

Thank you very much.

The CHAIRMAN. Senator Duckworth.

STATEMENT OF HON. TAMMY DUCKWORTH,
U.S. SENATOR FROM ILLINOIS

Senator DUCKWORTH. Thank you, and I thank my colleague from New Jersey for his very moving remarks.

Mr. Bridenstine, NASA is a diverse institution of scientists, engineers, and mathematicians from all backgrounds and walks of life who come together to achieve the agency's very unique mission.

And Americans rightfully take pride in NASA's achievements and NASA's scientific progress is indeed intertwined with the progress of becoming more inclusive and more diverse within NASA itself. Not less.

It is incumbent on the NASA Administrator to foster an environment where our brightest, our very best are valued for their innovative ideas no matter their gender, race, or sexual orientation.

Yet, Mr. Bridenstine, you have appeared on Frank Gaffney's radio show, not once, not twice, but seven times. This is a man who called for one of your House colleagues, Congressman Andre Carson, to be removed from the House Intelligence Committee because of his religious faith.

What is your relationship with Mr. Gaffney and were you aware that his organization has been identified as extremist by the Anti-Defamation League and as a hate group by the Southern Poverty Law Center?

Rep. BRIDENSTINE. Ma'am, I am not aware of that. I have seen Frank Gaffney around the House of Representatives. He gets involved in national security issues and I have gone on his radio program, as you have said.

Senator DUCKWORTH. OK. So yes or no, do you believe that Congressman Carson represents a national security risk to the United States because of his religion?

Rep. BRIDENSTINE. Not at all. I know him and I think he is a good man.

Senator DUCKWORTH. OK. Did you dispute Mr. Gaffney's calling for him being removed from the Committee because of his religion at any time in the seven interviews you gave or in any of the times that you have met him in the halls of Congress?

Rep. BRIDENSTINE. I did not know that he had ever made those comments. If I did know that, I would have refuted it.

Senator DUCKWORTH. OK. Thank you.

In November 2014 and December 2016, you spoke at the Restoration Weekend Conference at the David Horowitz Freedom Center in Palm Beach, Florida where you praised the work of Mr. Horowitz and the Center. So that is twice, 2014 and 2016.

Are you aware that the Southern Poverty Law Center has identified David Horowitz's Freedom Center as a hate group, and Mr. Horowitz himself as a hate group leader for their anti-immigrant and anti-Muslim far right rhetoric?

Rep. BRIDENSTINE. I am not aware of that.

Senator DUCKWORTH. So, OK.

It is troubling to me that you would have associations, not casual, but multiple meetings and multiple events, and attend things like seven radio shows, two major events with people that you do not know that they have been identified by multiple groups as being hate groups. That is troubling.

There are dedicated NASA employees who are, or may be, deeply concerned about their futures at the agency given your history of offensive statements against LGBTQ Americans and seeming com-

fortable with hate groups, or at least willful ignorance is what it sounds like to me now, about hate groups.

To begin addressing these concerns, yes or no, if confirmed as NASA Administrator, would you treat discrimination against a NASA employee on the basis of sexual orientation, or gender identity, or religion as a prohibited personnel practice?

Rep. BRIDENSTINE. Discrimination based on that, prohibited, absolutely. It should be prohibited.

Senator DUCKWORTH. So gender identity, sexual orientation, as well as religious affiliation?

Rep. BRIDENSTINE. Absolutely, yes, ma'am.

Senator DUCKWORTH. OK.

When we met to discuss your nomination, you had not yet read the Rogers Commission Report, which was published after the *Challenger* disaster. In my opinion, this would be mandatory and basic reading for anyone seeking a management job at NASA, let alone becoming the NASA Administrator.

So I was quite taken aback that not only did you know about it, had not read it, you did not even know about it, and I suggested that you read it before you came today.

Have you read the Report since our meeting?

Rep. BRIDENSTINE. Yes, ma'am, I have read it a number of times since our meeting.

Senator DUCKWORTH. OK.

Rep. BRIDENSTINE. And I did not identify it as the name, the Rogers Commission Report, but when I read it, I recognized that when I did my MBA at Cornell, I had read it before.

Senator DUCKWORTH. But did not remember the lessons from it, which is a great concern for someone who is looking to lead NASA.

The Report indicates that not only were there technical failures that led to the disaster, but there were also contributing management failures because of political motivations.

I hope you will consider, as you said, rereading the report multiple times and thank you for your service to this Nation, both in uniform and in Congress.

But I truly do not think you are ready to be Administrator for NASA. Thank you.

I yield back.

The CHAIRMAN. Thank you, Senator Duckworth.

Senator Klobuchar just wants to say something.

STATEMENT OF HON. AMY KLOBUCHAR,
U.S. SENATOR FROM MINNESOTA

Senator KLOBUCHAR. Yes, thank you. I am just going to put my questions on the record because we have the vote.

But I had some questions, Mr. Bridenstine, for you about the work that Senators Capito, Scott, and I have done on Diversifying Tech and, of course, that relates to NASA and how important that is.

And then we had a good meeting, Ms. Baiocco, yesterday, which I appreciated.

And I will put some more questions on the record about the various consumer issues that we discussed including the importance of the pool safety law, and the CPSC's continuing involvement.

And then I will put the other questions on the record.

So I just want to thank you for being before us today.

Thank you.

Ms. BAIOCCO. Thank you, Senator.

The CHAIRMAN. Thank you, Senator Klobuchar.

And let me just say that if associating with organizations like the Family Research Council disqualifies you for serving any public position, I think every Republican senator, and some Democrat senators, would be disqualified.

Senator Cruz.

STATEMENT OF HON. TED CRUZ,
U.S. SENATOR FROM TEXAS

Senator CRUZ. Thank you, Mr. Chairman.

Congratulations to each of the nominees for your nominations. To the three folks on the right, I congratulate you for the good judgment of joining Representative Bridenstine and letting him play the role of a blocking back.

[Laughter.]

Senator CRUZ. Let me say, as Chairman of the Space Subcommittee, I am proud and deeply gratified that President Trump has nominated Representative Bridenstine to lead NASA.

And I will say, this Committee's sorry performance during the confirmation hearing may not be surprising in the current environment, but it is disappointing nonetheless.

Senator Booker said a few minutes ago that the leader of NASA should be inspirational. I agree with that. And I can think of very few people I have known who are more inspirational than Jim Bridenstine.

We have seen, sadly, Democrats attempting to malign your character. And yet, you have spent your entire adult life in public service.

You are a War hero. Now, you are too modest to say that yourself, but I am perfectly happy to say that. Your record of defending this Nation is remarkable including flying combat missions in Iraq and Afghanistan, earning the Air Medal, and Navy and Marine Corps Commendation Medal with Combat "V" for your heroic achievements.

Your combat missions included Airborne Battlefield Command and Control, and tactical air control flights in support of the liberation of Iraq, controlling over 180 kill box interdiction and close air support missions resulting in the destruction of countless tanks, armored vehicles, and time sensitive and fixed targets.

You later transitioned to the F–18 Hornet, while on active duty serving at the Naval Strike and Air Warfare Center, Top Gun Command, where you flew both the E–2 and F–28. There receiving fitness reports from your Commanding Officers which rated you as, quote, "The Number One Hawkeye pilot, and weapons and tactic instructors." And, quote, "The most tactically skilled pilot in the E–2 community."

That is a remarkable record and then you have had an honorable service in the U.S. Congress. You are friend, a personal friend, and I will tell you, and I want to tell this Committee that Jim Bridenstine is a man of deep character and integrity.

I will also note, and I met this morning with an astronaut who had spent over 100 days on the Space Station. Quite a number of the astronauts at NASA have backgrounds very much like yours.

In terms of someone who can lead NASA, who can look in the eyes of an astronaut and understand what they are being asked to do, I think you bring exceptional fitness to this job.

Now, some of my colleagues on this Committee seem to be putting forward the notion, essentially, that a Member of Congress cannot be expected to lead NASA, especially not a Member of Congress who was actually, God forbid, a Republican and even a conservative Republican.

I would like to ask you, Representative Bridenstine, in your view, what is the difference between the job of a Member of Congress and the job of Administrator of NASA?

Rep. BRIDENSTINE. Well, thank you for the question, Senator.

I see it as the same as the difference between my job, as you mentioned, as a Navy pilot and my job as a Member of Congress.

As a Navy pilot, politics really did not come into it. In fact, we were a very diverse group of people trying to accomplish a very specific mission at various times. And it was apolitical.

I know what it is to serve as a Member of Congress, and I know what it is to serve in the Executive Branch. I understand how the two are very different and, should I be confirmed as NASA Administrator, I would conduct myself in a very nonpartisan way doing what is in the best interest of the United States of America exclusively.

Senator CRUZ. I will note the Ranking Member of this Committee has a deep and abiding interest in space going back a long time, and he and I have worked together very closely.

This Committee has managed to avoid some of the partisan wrangling that other committees get drawn into. And one of the reasons why we have been able to pass in the last couple of years, two major pieces of space legislation is because of the bipartisan cooperation on space, both NASA and commercial space.

I believe you are going to get confirmed, but I would say to my Democratic friends on this Committee that if the confirmation ends up going down as a party line vote, I think that would be deeply unfortunate for NASA and for the space community.

I understand the political pressures Democratic members of this Committee feel and Democratic members of the Senate feel, but I believe the bipartisan cooperation we have had has been integral to space, and I hope it continues.

And I hope we see Democrats courageous enough to recognize your extraordinary record of service and personal integrity, and can come together.

I enthusiastically support your nomination and look forward to voting to confirm you.

Thank you, Mr. Chairman.

The CHAIRMAN. Thank you, Senator Cruz.

I think, Senator Nelson, you have a couple of follow-up questions.

Senator NELSON. A couple of questions on safety, Congressman. The dragon spacecraft and the Starliner commercial crew capsules are nearing their first test flight.

It was originally stated in NASA's authorization of 2010 and recently affirmed in NASA's transition authorization of 2017, the NASA bills 2010 and 2017. The NASA Administrator in those two bills, now law, is responsible for ensuring the safety of NASA's astronauts aboard these vehicles.

This Senator has lived through the loss of two space shuttles in which, in the case of one, the final go was by an Acting Administrator who was not technically up to date. It was an Acting Administrator. Interestingly, the Administrator, Jim Beggs, was in his office having stepped aside because he had been indicted for something that he did not do, and later proved that.

And he is on the phone to the Kennedy Space Center begging them, when he is seeing on his NASA TV in his office, which he had not vacated because he knew he would vindicate himself of the charges, but nevertheless, he was out of the decisionmaking loop.

And he is on the phone. He is seeing the icicles and he is calling the Cape, and he knows what rubberized gaskets called O-rings are, and he is begging the Space Center not to proceed with the launch.

And yet, it went right down to the final decision made by the then Acting Administrator. And the launch was made and 10 miles high in the Florida sky the space shuttle *Challenger* exploded because of the cold weather.

Now, since you do not have an engineering or scientific background, and as NASA Administrator you would make that final decision, how do you think that you can fulfill that responsibility?

Rep. BRIDENSTINE. Thank you for that question, sir.

When we think about the organizational structure of NASA, there are independent technical authorities that have responsibility over various areas of safety. And I want to be clear before I even start, sir.

I understand that the NASA Administrator is responsible for human safety, and I understand that those decisions ultimately will be mine and that I will be accountable. I understand that.

These independent technical authorities, whether it is safety or engineering, there is another one that is health and medicine, those independent technical authorities provide independent guidance to the NASA Administrator, and they are on the same level within the organization as the programs.

It would be my goal, should I be confirmed as the NASA Administrator to, of course, have those independent technical authorities remain independent. And what I mean by that is that they are not funded by the programs themselves, which sometimes has been the case. But they need to remain independent.

And ultimately if there is some kind of technical discrepancy, there will absolutely be a decision made on the ninth floor of the NASA building, and it would include myself as the NASA Administrator, but it would also include the COO of the organization, the associate administrator, and the associate administrator for human exploration and operations.

And people, like Robert Lightfoot and Bill Gerstenmaier, will continue at the organization. And I know that there is no way of knowing how long or what their life ambitions are beyond NASA.

But people like that will be very involved in informing the decisions going forward.

Senator NELSON. Those independent technical authorities that you mention, such as the NASA Chief Engineer and the Chief Safety Officer.

Rep. BRIDENSTINE. Yes, sir.

Senator NELSON. You may ponder what, if you received advice, that was in conflict from both of them, and thus a NASA Administrator has to make that judgment.

Right as we are on the cusp of major decisions of going back into space with humans on American rockets and, of course, the launching of the Mars program.

I wanted you to see what Senator Booker had early referred to and had entered into the record in response to your previous statement.

If you will look, this is the income tax return of the Tulsa Air and Space Museum and what it shows in 2009, the prior year, it had a total revenue of $1.2 million and in the current year, it had, meaning the current year of 2009, $977,000 revenue.

But when you subtract the expenses, the revenue less expenses, it was exactly what you were asked earlier that the income in the prior year was $73,000 and the income in the year 2009 was a negative $311,000.

And so do you want to comment on that?

Rep. BRIDENSTINE. Sure.

Senator NELSON. Instead of a statement later, but if you want to do it in writing, that is OK.

Rep. BRIDENSTINE. So just to be clear, this is an income tax return from 2009. The last time I would have seen this would have been 2010, and I am seeing it right now again for the first time in 7 years.

I am just going to recall, to the best of my ability, what the Tulsa Air and Space Museum was up to back then.

We had a number of big, big projects that we were investing in. And yes, we had cash reserves to do that. And working with the Tulsa Air and Space Museum Board of Directors, we did big projects.

Now, some of those projects include an effort to acquire a retiring space shuttle for the City of Tulsa that would be at the Tulsa Air and Space Museum. And in that effort, working with the City of Tulsa, and the Tulsa Air and Space Museum, and the Board of Directors, we made an intentional investment to try to make that happen.

At the time, we also had an air show that attracted 40,000 people and that was an investment. The goal here was to increase, at the time, the attendance at the Tulsa Air and Space Museum.

But I want to be really clear. I was making these decisions with a Board of Directors that was very involved in all of these decisions.

As far as the cash loss, these were intentional at the time and I presume all of this is accurate. I trust that it is all accurate. We were making those investments.

I will tell you that when this came up as an attack piece in the campaign, which I am not new to this kind of activity. The Tulsa

Air and Space Museum got involved, and the Board of Directors, and they rejected this notion that somehow I did something wrong entirely.

And because they were willing to do that, quite frankly, sir, it backfired on my opponent in a way that got me elected to the House of Representatives, which is why I am here before you today.

So that is to the best of my recollection what occurred. I will tell you this, the Tulsa Air and Space Museum is an absolute jewel for the City of Tulsa. It continues to educate and inspire young folks.

The folks there that run the Museum are exceptional, exceptional people. Like I said, when I turned 40 years old two and a half years ago, I had my birthday party at the Tulsa Air and Space Museum. Senator Cruz actually came to it.

And so I am very proud of my service there. In fact, I had lunch with one of the Board Directors just last week. It is an exceptional organization.

And I will tell you this, and I think this is important as well. Museums like this are all across the country and they serve NASA very well. NASA is an organization that does inspire young people and these kinds of institutions that are nonprofits.

Remember, the goal here was not to make a business. This is a nonprofit institution. We were investing in the education and inspiration of young people. And yes, we had donors that were enabling us to do this.

It is a great organization. NASA should be encouraging this kind of activity all across the country because they are among NASA's greatest promoters.

I will also tell you that the Tulsa Air and Space Museum just recently invited me to be the Honorary Chairman of their big event every year called "The Aviator Ball."

So this is kind of an attack piece from many years ago and it does not accurately represent my tenure there at all.

Senator NELSON. OK. I will submit additional questions for the other members of the panel, of which you have not had a lot of questions. I will submit those questions for your consideration.

Thank you, Mr. Chairman.

The CHAIRMAN. Thank you, Senator Nelson.

And I want to thank, again, our panelists for being here today. We respect your public service.

Congressman, you are a combat veteran. We respect your service to our country and the sacrifices that you, and your family, have made in that regard, and your public service since.

And all of you who have had stints in public service, we appreciate that and your willingness to continue to serve. These are tough jobs and these confirmation hearings probably are not real fun but nevertheless, it is a part of the process. And so, thank you for your responses to our questions.

My guess is that the other three of you may get more questions for the record, probably, than perhaps you got here.

But I would ask our members to submit those questions as quickly as possible. And, if possible, for you to get those responses to us because we are trying to close out the record of this hearing by Friday, which will be, I know, a little challenging.

But if Senators get their questions in, get their written answers to the Committee, we will try and do that by November 6, which would be, I guess, Monday next and then we will try and move forward with all of your nominations here at the Committee level.

Again, thank you for being here; appreciate you all coming.

And with that, I'll adjourn the hearing.

[Whereupon, at 12:40 p.m., the hearing was adjourned.]

A P P E N D I X

UNITED STATES SENATE
Washington, DC, October 26, 2017

Hon. JOHN THUNE,
Chairman,
Committee on Commerce, Science, and Transportation,
United States Senate,
Washington, DC.

Hon. BILL NELSON,
Ranking Member,
Committee on Commerce, Science, and Transportation,
United States Senate,
Washington, DC.

Dear Chairman Thune and Ranking Member Nelson,

I write today to express my deep concern over Representative Jim Bridenstine's nomination to be Administrator of the National Aeronautics and Space Administration (NASA). Rep. Bridenstine's background makes him an extremely concerning choice to lead this critical agency and its 19,000 diverse employees. Rep. Bridenstine's denial of climate science and consistent opposition to equal rights for women, immigrants, and gay, lesbian, bisexual, transgender, and queer (LGBTQ) individuals should disqualify him from consideration. Given his very public statements and positions, it is clear Rep. Bridenstine would move us backwards not forwards, and I urge you to vote against his nomination.

Rep. Bridenstine has repeatedly rejected the overwhelming scientific consensus on climate change. In a June 2013 speech delivered on the floor of the House of Representatives, Rep. Bridenstine repeated the debunked claim [1] that "global temperatures stopped rising 10 years ago." [2] A March 2013 tweet from Rep. Bridenstine failed to recognize the difference between local weather conditions and the broader planetary climate, a basic scientific concept: "Today's House Science Committee Hearing On Global Warming Was Cancelled Because Of Snow!" [3]

Given that NASA's Fiscal Year 2018 budget requested $1.8 billion for Earth-observing and climate science missions,[4] Rep. Bridenstine's failure to accept fundamental scientific truths about Earth's climate make him an ill-suited and dangerous choice to lead the agency.

Rep. Bridenstine is an outspoken opponent to the rights of LGBTQ individuals, immigrants, and women. In a May 2013 speech, Rep. Bridenstine suggested that LGBTQ individuals were sexually immoral, stating, "Some of us in America still believe in the concept of sexual morality, that sex is intended for one man and one woman within the institution of marriage." [5] In response to the Supreme Court's marriage equality ruling in 2013, Rep. Bridenstine stated that "the court's decision was a disappointment" and that he would "continue to fight for traditional mar-

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[1] Mark Fischetti, "No Pause in Global Warming," *Scientific American,* Jan. 4, 2017, *https://www.scientificamerican.com/article/no-pause-in-ocean-warming/*.

[2] *US. House of Representatives Floor Speech,* C–SPAN, June 11, 2013, retrieved from *YouTube, https://www.youtube.com/watch?v=GUcsAFnwC7k.*

[3] Jim Bridenstine, @RepJBridenstine, "Today's Science Committee hearing on global warming was cancelled because of snow!" *Twitter,* Mar. 6, 2013, *https://twitter.com/RepJBridenstine/status/309370680489672704.*

[4] NASA FYI 8 Budget Request, *https://www.nasa.gov/news/budget/index.html.*

[5] Zack Ford, "Oklahoma Congressman: The Left is 'Intolerant' for Wanting Gay Boy Scouts," *Think Progress,* May 23, 2013, *https://thinkprogress.org/oklahoma-congressman-the-left-is-intolerant-for-wanting-gay-boy-scouts-3bb9c4931144/*.

riage."[6] Bridenstine has also been a guest on 16 separate occasions and twice co-hosted *Washington Watch with Tony Perkins,* a daily radio show published by the Family Research Council (FRC), which has been designated by the Southern Poverty Law Center (SPLC) as a hate group for its anti-LGBTQ remarks. FRC has stated, "homosexual conduct is harmful to the persons who engage in it and to society at large, and can never be affirmed. It is by definition unnatural, and as such is associated with negative physical and psychological health effects."[7] Tony Perkins, FRC's President, has declared that gay activists are "intolerant, hateful, vile, spiteful pawns of the Devil."[8]

Rep. Bridenstine has a history of supporting anti-Muslim groups and has consistently defended a number of President Trump's discriminatory and unconstitutional policies on immigration, including the thrice-struck down Muslim Travel Ban.[9] On seven separate occasions, Bridenstine has appeared on Secure Freedom Radio with Frank Gaffney, the founder of the Center for Security Policy (CSP), a far-right think tank that advocates anti-Muslim views. SPLC considers Gaffney "one of America's most notorious Islamaophobes."[10] CSP has promoted conspiracy theories related to Islam, including suggesting that Representative Andre Carson and Huma Abedin and her family have ties to the Muslim Brotherhood. Bridenstine has also spoken at conferences at the David Horowitz Freedom Center (DHFC), a far-right, anti-Islam group that, in their own words, "combats the efforts of the radical left and its Islamist allies to destroy American values and disarm this country as it attempts to defend itself in a time of terror."[11]

In 2013, Rep. Bridenstine voted against the reauthorization of the Violence Against Women Act (VAWA), while claiming that VAWA and its key anti-domestic violence programs "[misallocate] scarce Federal resources."[12] Additionally, after then-candidate Donald Trump's comments about sexual assault became public in October 2016, Rep. Bridenstine actively downplayed the comments and criticized individuals who condemned them.[13] On multiple occasions when provided with the opportunity to reject President Trump's comments, Rep. Bridenstine instead said they amounted to nothing more than "locker room talk."[14]

Since its creation, NASA has played a singular role in American life. The agency has inspired countless young people to pursue careers in science, technology, engineering, and math, and has stirred curiosity in billions of individuals across the world. Rep. Bridenstine's denial of fundamental scientific facts and long record of bigoted and hateful statements run counter to this legacy. I urge you and your colleagues on the Senate Committee on Commerce, Science, and Transportation to oppose his nomination.

Sincerely,

PATTY MURRAY,
United States Senator.

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[6] "In Support of Traditional Marriage," JIM'S BLOG, *Office of Rep. Jim Bridenstine,* July 3, 2013, accessed Oct. 25, 2017, *https://bridenstine.house.gov/media-center/blog-posts/in-support-of-traditional-marriage.*

[7] "Homosexuality," *Family Research Council,* accessed Oct. 25, 2017, *http://www.frc.org/homosexuality.*

[8] Kyle Mantyla, "Perkins: Gay Activists Are Intolerant, Hateful, Vile, Spiteful, Pawns of the Devil," *Right Wing Watch,* May 3, 2011, *http://www.rightwingwatch.org/post/perkins-gay-activists-are-intolerant-hateful-vile-spiteful-pawns-of-the-devil/.*

[9] Aaron Blake, "Whip Count: Here's where Republicans stand on Trump's controversial travel ban," *Washington Post,* Jan. 31, 2017, *https://www.washingtonpost.com/news/the-fix/wp/2017/01/29/heres-where-republicans-stand-on-president-trumps-controversial-travel-ban/?utm_term=.81901b71a504.*

[10] "Frank Gaffney Jr." *Southern Poverty Law Center,* accessed Oct. 25, 2017, *https://www.splcenter.org/fighting-hate/extremist-files/individual/frank-gaffney-jr.*

[11] "About David Horowitz Freedom Center," *David Horowitz Freedom Center,* accessed Oct. 25, 2017, *http://www.horowitzfreedomcenter.org/about.*

[12] Jim Bridenstine, @RepJBridenstine, "Today's Science Committee hearing on global warming was cancelled because of snow!" *Twitter,* Feb. 28, 2013, *https://twitter.com/RepJBridenstine/status/307212538129567744.*

[13] Randy Krehbiel, "Rep. Jim Bridenstine would consider Federal appointment if offered by Trump," *Tulsa World,* Nov. 11, 2016, *http://www.tulsaworld.com/news/elections/rep-jim-bridenstine-would-consider-federal-appointment if-offered-by/article_91615f2f-38da-515e-a97b-c614e2822c37.html.*

[14] *The Lead With Jake Tapper,* CNN, Oct. 12, 2017.

CLIMATE HAWKS VOTE, HIP HOP CAUCUS, LEAGUE OF CONSERVATION VOTERS, NATURAL RESOURCES DEFENSE COUNCIL, NEXTGEN AMERICA, PUBLIC CITIZEN, SIERRA CLUB, STUDENTS FOR A JUST AND STABLE FUTURE

October 31, 2017

Dear Senator,

On behalf of our millions of members, we write to urge you to oppose the nomination of Representative Jim Bridenstine (OK–01) to be Administrator of the National Aeronautics and Space Administration (NASA). Rep. Bridenstine lacks the historical qualifications to lead NASA, has spoken against some of its core activities, and has a voting record at odds with parts of NASA's scientific mission.

Due to the scope and importance of the agency's mission, nominees to lead NASA historically have come from scientific backgrounds and have not previously held elected office. Rep. Bridenstine not only lacks a scientific background, but has been worked against sound science, denied the human contribution to climate change, consistently voted against environmental progress, and sought to cut climate research funding. Bridenstine also holds inconsistent views on earth science funding, a core part of NASA's mission. Although he recently expressed support for continued earth science funding, Bridenstine earlier this year expressed an openness to "rebalance" NASA by moving earth science work to another agency. This is in line with the current Trump administration budget proposal that cuts over $100 million from earth science missions, including ending the Radiation Budget Instrument (RBI), which measures sunlight and emitted radiation; the PACE mission, which monitors clouds and interactions between the atmosphere and oceans; the OCO–3 program, which monitors atmospheric carbon levels; the CLARREO Pathfinder mission, which measures atmospheric heat; and earth-viewing instruments on the Deep Space Climate Observatory (DSCOVR) satellite.

Rep. Bridenstine's voting record demonstrates a dangerously skewed view of science. Bridenstine has opposed numerous science-based environmental and health standards, supported weakening the ability of agencies to rely on science to inform decision-making, and supported numerous appropriations bills and budget proposals that would eviscerate basic science programs.

NASA's mission is too important to entrust to a nominee who lacks the requisite scientific qualifications. The research produced by NASA's earth science mission is critical to the continuance of scientific progress to understand the planet we live on, particularly as we grapple with the consequences of a changing climate. Representative Bridenstine's record casts doubt on his ability to lead NASA in the fulfillment of the full scope of its mission. We request that you vote to oppose his nomination.

Sincerely,

Climate Hawks Vote
Hip Hop Caucus
League of Conservation Voters
Natural Resources Defense Council
NextGen America
Public Citizen
Sierra Club
Students for a Just and Stable Future

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. ROGER F. WICKER TO HON. JAMES BRIDENSTINE

Question 1. At Stennis Space Center in Mississippi, NASA and its industry partners are testing the next generation rocket engines for space exploration and national security space. They have already completed final test and assembly for the 4 RS–25s that will launch the first mission of SLS and Orion, known as Exploration Mission-1. And as of October 19, they have already begun final assembly and testing for the RS–25s to be flown on the second launch of SLS and Orion.

Are you committed to continuing these efforts at Stennis to ensure we don't once again fall behind other nations when it comes to space launch and exploration?

Answer. Yes. Not only is Stennis Space Center NASA's primary rocket testing facility, but it is also in high demand for rocket testing by NASA's commercial partners. I am looking forward to the full-scale test of the SLS first stage, with the RS–25s integrated, at Stennis, expected late next year.

Question 2. What do you see as the long-term role of SLS and Orion within NASA's strategic vision for deep space human exploration?

Answer. SLS and Orion will serve as the backbone to our country's Deep Space exploration architecture. In order to go back into Deep Space, we need the ability

to throw tens of metric tons of mass to trans-lunar injection as well as carry wide pieces of hardware, which the SLS will be uniquely suited to do.

Additionally, in order to travel to Deep Space, we need the Orion Multi-Purpose Crew Vehicle. Among other features, the Orion is designed with ECLSS to support astronauts for longer missions, is more hardened against radiation, and is designed to withstand the heat of re-entry from trajectories that accompany missions to Deep Space.

Question 3. Do you agree that long-term, consistent funding for these programs is essential to achieving our Nation's deep space exploration goals?

Answer. Yes, I do. When it comes to NASA's biggest science and exploration missions we are discussing timelines of decades. Without long-term, consistent funding and support, progress and discovery could be prevented, taxpayer dollars wasted, and agency morale eroded. This is why it is crucial that NASA maintain its broad bipartisan support, and if confirmed I intend to work with Congress, the Administration, industry, scientists, academia and non-profits to develop a consensus agenda that is sustainable.

Question 4. Stennis Space Center was a vital element to our deep space exploration goals during the Mercury, Gemini, Apollo and Shuttle programs. It continues to provide critical rocket propulsion testing for the SLS program. Do you agree that Stennis is the premiere Rocket Propulsion Test (RPT) center in the country? Do you also agree that keeping Stennis at that level of capability is vital to our national and long-term space exploration interests?

Answer. There is no question that Stennis the premier Rocket Propulsion Test center in the nation, and if I am confirmed as Administrator I will work to make sure that it stays the premier Rocket Propulsion Test center in the Nation.

Question 5. I am concerned of reports that NASA is prioritizing funding to the maintenance and upgrades of other space centers while the rocket testing facilities at Stennis are in serious need of upgrades. What are your plans to fix this disparity and ensure Stennis remains at the forefront of our Nation's propulsion testing capability?

Answer. For NASA to remain an agency on the cutting edge of technology and engineering development, it must be constantly reinventing itself and finding new efficiencies. To do this, NASA must do a careful accounting of its resources to determine what new acquisitions are needed, which old facilities can be mothballed or converted, and which aging facilities need upgrade investments. Should I be confirmed as Administrator, I will be my intention to make sure that every NASA center, including Stennis, has the resources it needs to accomplish the mission.

Question 6. With the presence of more than 20 private sector entities, the Stennis Space Center is an excellent example of a successful public-private venture. Space centers across the country are benefiting from co-location with commercial companies. However, NASA currently has limited authority to lease its property, and this authority will expire at the end of 2018.

Long-term leasing authority will allow NASA to enter into more cost-effective agreements. Expanding NASA's current leasing authority to include in-kind contributions will also allow space centers greater flexibility to pursue these public-private partnerships.

Do you see value in granting NASA's space centers this long-term, enhanced use leasing authority? Please explain.

Answer. If confirmed as Administrator, I will seek to utilize public-private partnerships that are in the best interests of NASA. Tools such as enhanced use leasing have been a valuable for NASA, and I look forward to working with Congress to determine how these tools might be improved or enhanced.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. DEB FISCHER TO HON. JAMES BRIDENSTINE

Question 1. Representative Bridenstine, you have been strong proponent of the Commercial Space Launch Competitiveness Act and other measures to support commercial space exploration. Commercial space exploration will likely be what takes us back to the Moon and ultimately to Mars. I am encouraged by measures the House and Senate have taken to spur these innovations. Going back to the moon in a meaningful way and manned travel to Mars will require the realization of innovations currently in their early stages, such as asteroid mining to produce fuel in space, with support from both the private sector and NASA.

As such, the use of water and fuel in space, harvested from asteroids, has the potential to greatly reduce the cost and complexity of lunar and Mars missions. Will

the use of commercially provided asteroid resources be part of NASA's exploration plans?

Answer. In order to move sustainably into Deep Space, in-situ resource utilization will be required. We must exploit the vast resources that are available throughout the Solar System. For instance, water ice on the Moon, could be split into oxygen and hydrogen for spacecraft fuel and life support. Water ice is available in large quantities throughout the Solar System. Should I be confirmed, NASA will look to study and characterize the amount and nature of the water ice on the Moon, as well as other celestial bodies. The capabilities needed to extract and utilize this resource would be a focus of the space technology program I plan to lead, if confirmed.

We must also recognize the private sector entities with stated objectives to harvest resources from asteroids and other celestial bodies. In the future, they could play a role in NASA's exploration plans. If confirmed, NASA will examine and consider opportunities for partnership with these commercial entities.

Question 2. Earlier this year, the President signed into law the NASA Transition Authorization Act. This law seeks continuity in NASA's core programs, such as the Space Launch System and Orion spacecraft. Do you intend to continue NASA's work on SLS and Orion?

Answer. Yes, I am absolutely committed to continuing NASA's valuable work developing SLS and Orion, which will serve as the backbone of our architecture to return humans to the Moon, on to Mars, and further into Deep Space.

RESPONSE TO WRITTEN QUESTION SUBMITTED BY HON. DEAN HELLER TO HON. JAMES BRIDENSTINE

Question. Ensuring continued U.S. access to critical materials used to support both NASA and the DOD is important for our national security. Among those materials is ammonium perchlorate, which is used as a propellant for rockets, missiles, and manned spaceflight. What is your view on ensuring ammonium perchlorate is domestically sourced so that the U.S. continues to have a steady supply of this chemical?

Answer. Our contractor for the rocket boosters is Orbital ATK. Although the agency does not have a requirement to purchase ammonium perchlorate, NASA does have a requirement that our prime contractor ask for consent to subcontract in amounts greater than $750,000. NASA only consents to the request and does not approve or consent to which company the subcontract is issued.

Ammonium perchlorate is a crucial material for NASA's human exploration plans. Each SLS launch will feature two solid rocket boosters which use ammonium perchlorate as their oxidizer. Each SLS launch will use close to two million pounds of ammonium perchlorate. That said, it would be inappropriate for NASA to directly intervene between a contractor and a sub-contractor. However, I am committed to ensuring our Nation has a robust domestic industrial base, and should I be confirmed I look forward to working with Congress to achieve this objective.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. JIM INHOFE TO HON. JAMES BRIDENSTINE

Question 1. Some have expressed opposition to your nomination because Members of Congress are too political. It would be an asset to have an Administrator of NASA who can articulate a vision to Members of Congress responsible for authorizing and funding that agency. James Webb, was political—he was also a military pilot and worked in Oklahoma—and he successfully lead NASA during the Gemini and Apollo Missions from 1961–1968. How do you believe your service as a Member of Congress will help you as the next Administrator of NASA?

Answer. While in Congress, my committee assignments have allowed me to be involved in a wide array of space policy on a bipartisan basis. On the House Science, Space and Technology Committee, I served on the Space Subcommittee which oversees NASA as well as commercial space policy. I also served as the Chairman of the Environment Subcommittee during the 114th Congress, where we oversaw NOAA and did a lot of work on NOAA's satellite programs. Additionally, I was a member of the House Armed Services Committee, subcommittee on Strategic Forces, where we focus on the country's national security space enterprise. My time on these committees allowed me to develop an expertise and understanding of the United States' space program.

My time as a member has given me firsthand knowledge of the legislative and budget processes. The next Administrator will be required to work with Congress,

the National Space Council, the Office of Management and Budget, the White House, and international partners. An understanding of these entities, and relationships with those leading them, will be critical to maintaining America's preeminence in space.

Question 2. As the Senator for Oklahoma, I serve on the Senate Armed Services Committee. I know that we face threats today that we have never faced before, something you know as a Member of House Armed Services Committee. What do you see as NASA's role in national security and how will you work with the Department of Defense as NASA Administrator?

Answer. NASA is an agency dedicated to the peaceful exploration of space, technology development, and utilization of science. It is also a wonderful tool of foreign policy and diplomacy for the United States. When relationships with certain countries become strained, NASA is able to maintain partnerships between civil space programs. It is important we continue and strengthen those partnerships, and this would be a priority of mine should I be confirmed. NASA is uniquely suited to enable partnerships in space that can decrease misperceptions and prevent catastrophic kinetic warfare in space.

It is also true that the Department of Defense can benefit from technology development that NASA has undertaken for civilian purposes. For instance, NASA is currently pursuing the development of hypersonic technology. This will be a paradigm shifting proposition for our national security. Additionally, a partnership between NASA, the Air Force, and industry delivered the Automatic Ground-Collision Avoidance System to reduce the incidence of distracted or incapacitated pilots colliding with nearby terrain. This technology also has the potential to reduce collision threats to vehicles on land, at sea, or in space.

Question 3. In March, the President signed into law the NASA Transition Act. This legislation passed Congress without a single no vote. It outlined a roadmap for NASA's core missions: space science, space technology, aeronautics, human space flight and exploration, and education. Would you agree that these are NASA's core missions? How will you work to advance these core missions as Administrator?

Answer. Yes, I agree. I was involved, with many members of the Senate Commerce Committee as well as the House Science Committee, in the crafting of the NASA Transition Authorization Act of 2017. I fully support the core missions of NASA that it identified.

In order to advance these core missions, we cannot look at NASA's various mission directorates and divisions as siloed or mutually exclusive. NASA's programs often serve multiple purposes. Take the International Space Station as an example. It is operated under the Human Exploration and Operations directorate, and important research on long term spaceflight is being done to inform explorations deeper into space. Synergistically, the ISS also has science payloads that observe both the Earth and the cosmos. And of course, ISS astronauts often do downlinks with school children, a unique educational experience that excites like no other.

There are many synergies within NASA's mission directorates. We can make resources go farther if we do not view missions and programs as a zero sum game. Should I be confirmed, I will seek to maximize those synergies in order to advance NASA's core missions.

Question 4. President Trump reestablished the National Space Council, to ensure all aspects of our Nation's space power—national security, commerce, foreign relations, exploration, science—are coordinated and aligned at the highest levels of government. What role do you see for National Space Council in the development of America space policy?

Answer. Multiple agencies are involved in space either as policymakers, regulators, or operators. If the United States is to remain the preeminent spacefaring nation, we must take a whole of government approach to the space enterprise with a formal method of interaction. This warrants an entity that can facilitate a discussion at the principals' level, which is the most important role the National Space Council (NSpC) can play. I am encouraged by what we saw at the first meeting of the NSpC in October of 2017. Should I be confirmed, I look forward to actively participating as a member of the NSpC.

Question 5. Our nation's investment in NASA has spurred innovation across our industrial base and the wider economy. In fact the "Aeronautics" part of NASA has helped drive research leading to more fuel efficient and streamlined airframe and wing designs. Today, NASA is working to develop the X–57 Maxwell, an all-electric powered airplane. I know you are familiar with the X–57 Maxwell program, do you believe it represents how Congressional investment in NASA can pay dividends in the private sector and throughout the economy?

Answer. Yes I do. NASA has a long history of advancing aeronautics. These advancements have allowed the United States to become the world leader in aircraft and aerospace manufacturing. As technology continues to progress, NASA's research in this area will play a key role in maintaining our industry's lead. This will be a priority of mine should I be confirmed.

Question 6. December 14, 1972 was the last time someone walked on the surface of the Moon, almost 45 years ago. Since then, we have seen major investments by NASA to build launch the Hubble Telescope and the International Space Station. More recently, the private sector has made major investments in research and development in support of low-earth orbit launches. As NASA Administrator, will you work as to promote a "unity of effort" across all space stakeholders to leverage public and private sector resources to support NASA's core missions?

Answer. In order to promote a unity of effort, NASA must start with guidance from Congress, the Administration, and science decadal surveys, then design the architectures to meet our national interests. Should I be confirmed NASA will determine how to fill out those architectures through a combination of government backbone, commercial partnerships, and international partnerships. Flexibility in the architectures that allows for the greatest use of resources will be my goal, should I be confirmed.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. MIKE LEE TO HON. JAMES BRIDENSTINE

Question 1. Mr. Bridenstine, in the documents you presented to the Committee, you stated that you believe that one of NASA's top challenges is "Bringing together traditional space companies and new space entrepreneurs into a comprehensive NASA vision to maximize resources and efficiencies." What role do you envision the private sector playing in helping NASA fulfill its mission? How will continued private sector involvement make NASA more efficient and allow it to fully maximize resources?

Answer. We must recognize that NASA currently has more mission than it has budget. The days when NASA's budget represented 3 to 4 percent of the Federal budget are not likely to return. Nor would we want to necessarily replicate that model, as it proved to ultimately be unsustainable.

Fortunately, times have changed and great advancements have been made. The American space industry is more capable than ever before. A lot of this is due to advancements in research and technology development made by NASA decades ago that entrepreneurial Americans have taken and advanced further.

Should I be confirmed, NASA will develop exploration and science architectures that leverage everything the United States has to offer. This includes the private sector. This way, we will maximize resources and ensure NASA can carry out its mission.

Question 2. As you know, our current strategy for deep space exploration includes the development of the Space Launch System (SLS) and Orion space capsule. I'm proud to say that many Utahns have worked on several of the components for these projects.

A. What is your view on the SLS and Orion Programs?

B. How do you anticipate using the SLS and Orion in the National Space Council's call for a plan to refocus our human spaceflight efforts on a return to the Moon?

C. What are your thoughts on the establishment of a Deep Space Gateway as part of the exploration architecture?

Answer.

A. SLS and Orion will serve as the backbone of our country's Deep Space exploration architecture.

B. SLS and Orion have the ability to deliver large payloads and humans further out into space than any other operating rocket and spacecraft. As such, they will be the backbone of any plan to return humans back to the Moon.

C. The idea of a platform beyond LEO and in cislunar space provides a lot of opportunities for the United States. These opportunities include: partnerships with both the international community and commercial industry, staging area for lunar surface and Martian missions, testing life support systems outside of the Van Allen Belt, and more. Should I be confirmed, I look forward to working with Congress to determine if the Deep Space Gateway or other Deep Space architectures enable sustainable deep space exploration.

Question 3. What criteria would you recommend using in determining whether to extend United States support of the ISS beyond 2024 and when should that determination be made?

Answer. I believe continued presence in low Earth orbit (LEO) is in our national interest, and should I be confirmed, the decisions NASA makes will be influenced by this objective. The International Space Station has been a crowning achievement of diplomacy in space, and has facilitated great advancements in science and research as well as the development of the LEO economy.

The decision of whether to extend United States support of the ISS beyond 2024 is a complicated challenge. We must weigh several key factors. For one, we must consider what the LEO research needs are of NASA and its partners like CASIS. Second, we must weigh NASA's needs for astronaut activities and training in LEO. Third, we must weigh whether the market exists for a profitable commercial LEO platform. Fourth, we must weigh how we can best maintain the international partnerships which are so crucial to our current ISS program. Fifth, we must weigh how much money we can afford to continue spending on a human platform in LEO, and how we can make sure that we have a sustainable budget wedge for Deep Space Exploration.

If I am confirmed as NASA Administrator, I intend to work with Congress to weigh the options and to determine the best path forward for the ISS.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. SHELLEY MOORE CAPITO TO HON. JAMES BRIDENSTINE

Question 1. Our nation's civil, military, and commercial satellites are more vulnerable than ever before to interference from potential adversaries around the world. The ability to engage with and refuel our satellites adds years to their lives, which means our orbital assets are more robust. I am proud that the West Virginia Robotic Technology Center (WVRTC) at West Virginia University is leading the effort in developing this capability as part of NASA's Restore-L mission. I am deeply concerned by efforts to re-scope the mission to a ground demonstration, which will likely end the program and deprive us of a critical capability. Unfortunately, the Administration wanted to eliminate this mission and I am glad that we were able to continue funding the mission in CJS FY'18 appropriations bill. NASA and the WVRTC can utilize robotics for on-orbit assembly, orbital debris removal, planetary resource utilization, and habitat construction for Moon or Mars exploration. Do you see robotics and astronaut-robot collaboration as critical capabilities for NASA's exploration objectives?

Answer. Yes. Robotics, both for satellite servicing and in-space robotic assembly, will be critical to sustain and advance satellite architectures, decrease costs, and mitigate space debris. Satellite servicing missions have the ability to upgrade existing satellite infrastructure and extend crucial science missions for years. If confirmed, working with Congress, I plan to continue NASA technology development for satellite grappling, rendezvous and proximity operations, transferring propellant, and robotic modification and replacement of satellite payloads.

Deep Space exploration also requires robotic technology to conduct sample return operations from distant planets. West Virginia University recently won NASA's Sample Return Robot Centennial Challenge. This was a five-year competition among citizen inventors that will inform NASA as it develops a new generation of autonomous rovers.

Question 2. NASA's Independent Verification and Validation (IV&V) Program is a world leader in systems and software engineering. IV&V provides the NASA's highest achievable levels of safety and cost-effectiveness for mission critical software. Other government agencies are seeking and purchasing their services because of their quality and the value they add. Do you support an appropriate and stable budget for NASA's IV&V Program and will you work with me to help save government resources by maximizing IV&V's capabilities across other government agencies?

Answer. Yes. As a former Navy pilot and current Air Force pilot, I am keenly aware that software is essential to safety and mission assurance. Software is also often on the critical path for systems development, so delays result in disproportional cost increases. NASA's IV&V facility has proven itself capable of improving safety, keeping projects on track, enhancing system development, and even providing valuable research opportunities and training for young STEM students. It serves a critical role within the Office of Safety & Mission Assurance, providing independent safety oversight for NASA Headquarters. If confirmed as Adminis-

trator, I will work with Congress to make sure that the IV&V program retains an adequate and stable budget, and to exploit its capabilities wherever possible.

RESPONSE TO WRITTEN QUESTION SUBMITTED BY HON. TODD YOUNG TO HON. JAMES BRIDENSTINE

Question. Representative Bridenstine, though it doesn't receive as much public attention as NASA's exploration missions, the agency's Earth Science mission provides data critical for both scientific research and practical application. In fact, Indiana companies contribute to these missions by building sophisticated instruments to measure certain properties and conditions in the atmosphere. In turn, this data in part feeds into weather forecasting models to help create longer term and seasonal forecasts utilized by a variety of industries, such as agriculture and energy. I'm focused on making sure we retain the capability to perform these science missions that have a significant real-world application. Would you explain your view of NASA's Earth Science mission and whether you intend to prioritize it in future NASA budget submissions?

Answer. I support NASA's Earth Science mission. As a Representative from and resident of the state of Oklahoma, I have a keen appreciation for the role space plays in helping us save lives, protect property, and produce energy and food. NASA's Earth Science mission is critical to facilitating these activities, both through the programs that NASA operates itself as well as acting as the procurement agent for NOAA's weather satellites.

If confirmed, NASA will continue to follow the guidance of the Earth Science decadal surveys and I will advocate within the Administration and with Congress to see that the agency is able to carry out the recommendations of those decadal surveys.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. BILL NELSON TO HON. JAMES BRIDENSTINE

Contracting. NASA has used a range of traditional and non-traditional contracting approaches in the past.

Question 1. To what extent, and under what circumstances, do you believe NASA should use Space Act Agreements, fixed price contracts, and cost plus contracts for advancing the agency's human exploration objectives?

Answer. For NASA to best utilize its limited resources, it must be creative and flexible with regards to acquisition and procurement. If confirmed as Administrator, I will be focused on delivering projects on time and under budget and will pursue whichever forms of contracting work best for each particular acquisition.

Cost plus contracts are appropriate when significant changes are anticipated or there is no government baseline. This type of vehicle is often used for research and development contracts with universities or labs. It is also appropriate on a project when cost and schedule are unknown. NASA will always have a need for cost plus contracts as it pushes exploration beyond where it has gone before.

Fixed price contracts expose the financial risk to the contractor and provide the maximum incentive for the contractor to control costs and deliver on time. This contracting mechanism is appropriate when purchasing supplies, services, or capabilities for which the technology is mature and has a low risk on delivery. As the burgeoning commercial space industry grows, there will be more opportunities for fixed price contracts for human exploration.

Space Act Agreements provide flexibility for the Agency and can advantage both sides of the agreement.

If confirmed as Administrator, I will work to pursue acquisition strategies appropriate to each particular need and will be certain to follow all FAR regulations and NASA policy directives, in concert with NASA's procurement officers and the Office of General Counsel.

Question 2. Similarly, under what circumstances should contracts and partnership opportunities be competed and under what circumstances is it acceptable or preferable to not openly compete a contract or partnership opportunity (for example, employ a sole-source contract)?

Answer. In most cases, it is preferable for partnership opportunities to be competed in order to allow NASA to choose the partner that best meets its needs for the most appropriate price. However, there are some cases where NASA will use sole source contracting. These could include but are not limited to: (1) only one contractor offers a viable option, (2) immediate urgency, or (3) international agreement.

If confirmed as Administrator, I will be certain to follow all FAR regulations and NASA policy directives in concert with NASA's procurement officers and the Office of General Counsel.

Question 3. Describe the causes and contributing factors common to both the *Challenger* and *Columbia* accidents. If confirmed, what you would do as NASA Administrator to make sure these are not repeated?

Answer. The *Challenger* and *Columbia* accidents both resulted from accepting known, systemic risks outside the scope of specifications. The *Challenger* accident occurred as NASA continued to fly with known O-ring erosion problems. Similarly, the *Columbia* accident occurred as NASA continued to fly with known foam debris strike problems. In both cases, these technical deviations were accepted despite the concerns of engineers.

From the Columbia Accident Investigation Board, common contributing factors to both accidents include: Original design compromises necessary to gain Shuttle Program approval, years of constrained resources, changing priorities, schedule pressure, lack of a consensus national vision, reliance on past successes, organizational barriers preventing communication of critical safety information, lack of integrated management across program elements, and an informal chain-of-command and decision-making processes that operated outside the Agency's rules.

If confirmed, I will advocate tirelessly for the necessary resources to conduct a human spaceflight program characterized by consensus and safety. I will work to ensure that the technical authorities responsible for safety, engineering, and health and medical remain independent of the program authorities responsible for cost and schedule. The Flight Readiness Review process will have clear "go/no go" communications from the various program elements and be required to review technical problems arising during previous missions. Independent technical authorities will establish requirements and exclusively grant waivers if necessary.

Independent Technical Authorities. In the wake of the *Columbia* accident, one of the key recommendations was that so-called "Independent Technical Authorities"—that is, NASA's Chief Engineer and Chief Safety Officer—report directly to you.

Question 4. What will you do when, in following the post-*Columbia* protocol, these technical authorities raise differing opinions to you on safety of flight matters?

Answer. The NASA Administrator is responsible and accountable for safety of flight. The process to resolve such a conflict will include a review by the Administrator, the Associate Administrator, the Associate Administrator for Human Exploration and Operations, the program manager, and the technical authorities. The objective would be to resolve the conflict by mitigating the risk through modification, procedure, testing, or another process to arrive at a consensus decision. The final responsibility rests with the Administrator.

Question 5. How will you come to resolution when these technical experts do not agree on whether it is safe to fly?

Answer. Should I be confirmed, I will promote a culture where the Mission Management Team knows that the only factors they need to consider for a "go/no go" decision are technical risks. It will be my responsibility as Administrator to shield them from schedule and cost pressures. Should disagreements arise after the Flight Readiness Review, the Mission Management Team will have my full support in placing a hold on a launch until disagreements are resolved.

China. For years NASA has been considerably restricted from cooperating with China in space.

Question 6. Do you believe these restrictions are appropriate and should continue?

Answer. It is time to reexamine if this policy is still benefitting the United States. In the past, it was to our benefit to exclude China from our spaceflight endeavors, given the Chinese government's history of irresponsible behavior in space, flouting of international law, theft of intellectual property, and human rights violations.

Despite this exclusion, China has made advancements in spaceflight and expanded partnerships with the international community. Our policy is not stopping their progress and in some cases is shifting the balance away from our interests on the international stage.

Whether the restriction remains in place will ultimately be up to Congress to determine. Congress places the restriction on NASA in annual appropriations legislation. If confirmed as NASA Administrator, I will follow the law.

Question 7. Do you believe there could be advantages of expanded cooperation with China in space, particularly in the area of human space flight?

Answer. There could be. The International Space Station has been a crowning achievement of diplomacy in space. Even when relationships with certain countries become strained, NASA has been able to maintain partnerships between civil space programs.

Were NASA to be given the flexibility by Congress to work more with China, larger foreign policy interests would need to be considered at levels above the NASA Administrator. But partnership with China in human spaceflight could be a piece of a larger policy consideration.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. MARIA CANTWELL TO HON. JAMES BRIDENSTINE

Climate Change. Just last week, the GAO released a study that found that Climate Change will cost American taxpayers more than $1 trillion by 2039. The report reviewed Federal costs in response to extreme weather, decreased agricultural yields, damage to public utilities and infrastructure. Taxpayers will be on the hook for trillions of dollars in climate related costs if we do not act.

Question 1. What is the state of the science on climate change?

Answer. On November 3, 2017, the U.S. Global Change Research Program released its latest Climate Change Special Report. This report stated that it is extremely likely that human activities are the dominant cause of the global warming of one degree Celsius over the last 115 years. If I am confirmed as Administrator of NASA, the world class experts in NASA's Earth Science Division will continue contributing to important reports such as this.

Question 2. What are NASA's climate related missions, and how will you work to bolster them to reduce the cost of climate on taxpayers?

Answer. In order to properly study the Earth's climate, we must do integrative science. Scientists cannot understand or model the atmosphere if they cannot understand and model the oceans, ice sheets, cloud formation, precipitation, soil, biological life, the sun, and more. As such, every Earth Science mission that NASA operates contributes to our understanding of the Earth's climate. Even NASA's Heliophysics and Planetary Science missions, by helping us better understand the sun and other atmospheres in our Solar System, help us to better understand the Earth's climate.

The growth of the smallsat and cubesat economy has opened up tremendous opportunities for NASA to do more Earth Science for less money. I look forward to the upcoming National Academies Decadal Survey for Earth Science and Applications from Space (ESAS 2017), which will help guide NASA's Earth Science Division in this new era.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. RICHARD BLUMENTHAL TO HON. JAMES BRIDENSTINE

Climate Change.

Question 1. Do you agree with the scientific community that the Earth is warming?

Answer. Yes.

Question 2. Do you agree with the scientific community that human activity contributes to the warming of the planet?

Answer. Yes.

Question 3. Do you agree that the human activity is primarily responsible for the warming of the planet?

Answer. On November 3, 2017, the U.S. Global Change Research Program released its latest Climate Change Special Report. This report stated that it is extremely likely that human activities are the dominant cause of the global warming of one degree Celsius over the last 115 years. If I am confirmed as Administrator of NASA, the world class experts in NASA's Earth Science Division will continue contributing to important reports such as this.

Question 4. Did you ever state on the House floor that hurricanes have "been on a slow decline"?

Answer. Yes, in June 2013.

*Question 5.*What did you mean by your statement regarding hurricanes?

Answer. In May 2013, 25 Oklahomans died in a tornado in Moore, Oklahoma. I was speaking to advocate for increased funding for tornado forecasting and research. In the end, we passed the bipartisan Lucas/Bridenstine/Bonamici Weather Research and Forecasting Innovation Act, which increased funding for research for both hurricanes and tornadoes.

Question 6. In light of recent events—Hurricanes Harvey, Irma and Maria—do you stand by your statement on the House floor regarding hurricanes?

Answer. NOAA noted that as of June 2017 there had been 140 straight months without a major hurricane (Category 3+) making landfall in the United States. This was the longest stretch in recorded history, and my speech in 2013 was observing this fact. The previous longest stretch was 96 months from 1860–1869.

NASA contributes directly and importantly to weather research. I believe that improved weather research and forecasting will save lives.

Question 7. In a speech on the House floor in 2013, did you state that President Obama "spends 30 times as much money on global warming research as he does on weather forecasting and warning"?

Answer. Yes.

Question 8. Did Congress play any role in authorizing and appropriating the funds your reference in your 2013 statement on the floor regarding global warming research?

Answer. Congress authorizes and appropriates the funds spent by Federal agencies.

Question 9. Did Politifact review the 2013 statement referenced above?

Answer. Yes.

Question 10. How did Politifact characterize the statement referenced above?

Answer. Politifact concluded: "Bridenstine does have a point that climate change research exceeds weather forecasting expenditures, but he's overstated the discrepancy. We rate his statement Mostly False."

Question 11. How much should be spent annually on "global warming research"?

Answer. The United States should allocate an amount necessary to accomplish the objectives of the Earth Science Decadal Survey.

Question 12. How much should be spent annually on "weather forecasting and warning"?

Answer. NOAA and the NWS should be allocated the amount needed to ensure the mission of protecting lives and property of the public is met.

Question 13. Is there a difference between weather forecasting and warning and weather forecasting and warning research?

Answer. Yes. There is a difference between research and operations for weather forecasting and warning. Research involves improving data collection and modeling, which then aids the operational organizations that put those data and models into action to provide the timely weather forecasting and warnings which are crucial not just for the safety of humans and infrastructure but also to aid commerce.

Question 14. Does NASA have a role to play in climate research?

Answer. Yes. NASA is the premiere agency in the world studying our climate.

Question 15. Do you agree that climate change could lead to more tornadoes in your district?

Answer. It could. NASA's research could help us learn more. According to the Climate Science Special Report released on November 3, 2017, "[tornadoes] are exhibiting changes that have been linked to climate change, although the current state of the science does not yet permit detailed understanding."

Experience.

Question 16. What is largest number of employees you have ever overseen and where, and how does it compare numbers-wise to the number of employees at NASA?

Answer. As a Navy pilot and instructor, I have been responsible for training, evaluating, and certifying large force exercises that include hundreds of Naval Aviators and Naval Flight Officers. As a Command and Control pilot in Iraq and Afghanistan, I have been responsible for hundreds of airplanes in theater, constituting billions of dollars of airborne hardware, as well as thousands of lives on the ground in addition to tanks and armored personnel carriers. Prior to that, I was the Division Officer of my squadron's Airframes Division. I had approximately 30 aircraft maintenance personnel reporting to me. In the same squadron, I was the Naval Air Training and Operations Procedures Standardization (NATOPS) Officer. In this capacity, I was responsible for the management of training for 25 Naval Aviators and Naval Flight Officers. I recognize that this experience is different from overseeing the day to day operations of a large Federal agency. If confirmed as NASA Administrator, I will be the head of a highly capable leadership team.

Question 17. What is the largest budget you have ever managed and how does it compare percentage-wise to the budget at NASA?

Answer. As a Member of Congress, I have been involved in developing and passing budgets for the United States of America. NASA's budget is about 0.5 percent of the Federal Budget.

Question 18. What formal training do you have in safety?

Answer. Safety is embedded in the culture and training of United States Naval Aviation. I have completed the following courses that focus on safety: U.S. Navy Primary Flight Training; U.S. Navy Intermediate Flight Training; U.S. Navy Advanced Flight Training; E–2C Fleet Replacement Squadron (FRS) training; F–18 Fleet Replacement Squadron (FRS) training; Crew Resource Management Facilitator (CRM) training; Naval Air Training and Operations Procedures Standardization (NATOPS) instructor training; Advanced Mission Commander (AMC) Course; Weapons and Tactics Instructor (WTI) Course.

Question 19. What formal training do you have in science?

Answer. My undergraduate majors at Rice University include economics, business, and psychology. While at Rice, I took courses in chemistry, calculus, physics, and statistics. I also earned an MBA at Cornell University which included economics and statistics. Naval Aviation ground school courses I took include aerodynamics, propulsion, physiology, weather, and navigation.

Question 20. What assurance can you give to families of astronauts that you are qualified to ensure the safety of their loved one?

Answer. As a Naval Aviator, I have been personally responsible for making life and death decisions in the most challenging and time sensitive situations. I have been trained to establish processes that manage risk, empower people working at all levels to call out unsafe practices and innovate to keep people safe. If confirmed, I intend to bring this safety culture to NASA and build on NASA's already established processes.

Astronauts and their families are treasured by the people of the United States of America and are heroes to the world. When we lose an astronaut, the entire world stops. The President of the United States addresses the Nation. International partners do the same. The gravity of such an event burdens the entire country unlike anything else and is destructive to the NASA family and its mission. I will do everything possible to protect NASA astronauts and other Agency personnel.

Judicial oversight.

Question 21. In March 2013, you stated the following: "Just because the Supreme Court rules on something doesn't necessarily mean that that's constitutional." What did you mean by this statement?

Answer. The Supreme Court has often overruled itself throughout our country's history. We've also amended the Constitution to counter Supreme Court decisions. A court ruling on constitutionality is not necessarily permanent. If confirmed, I will always follow the laws passed by Congress and upheld by the Supreme Court.

Question 22. Do you agree that the Supreme Court decides the constitutionality of laws?

Answer. Yes.

Associations.

Question 23. Are you familiar with the Family Research Council?

Answer. Yes.

Question 24. Have you ever spoken before the Family Research Council?

Answer. Yes.

Question 25. Are you familiar with Tony Perkins?

Answer. Yes.

Question 26. What due diligence did you perform into Tony Perkins and the Family Research Council before appearing publicly before the organization?

Answer. I am familiar with some of their work. As a Member of Congress, I have done hundreds of interviews and spoken at many events. I do not speak only to people who agree with me.

Question 27. Tony Perkins has called gay people "intolerant, hateful, vile, spiteful pawns of the Devil"? Do you condemn this statement?

Answer. I am not aware of nor do I take on responsibility for everything said by people who interview me. As NASA Administrator, if confirmed, I will treat all people with dignity and respect and fully uphold the law. Standards will be uniform and opportunities will be equal.

Question 28. Tony Perkins has equated homosexuality with pedophilia. Do you condemn that point of view?

Answer. I do not believe the two can be equated. I am not aware of nor do I take on responsibility for everything said by people who interview me.

Question 29. The Family Research Council claims homosexuality is a choice. Do you condemn that point of view?

Answer. I am not aware of nor do I take on responsibility for everything said by people who interview me. As NASA Administrator, if confirmed, I will treat all people with dignity and respect and fully uphold the law. Standards will be uniform and opportunities will be equal.

Question 30. Is the Southern Poverty Law Center wrong in calling the Family Research Council a hate group?

Answer. I don't believe derogatory labeling contributes positively to political discourse. Should I be confirmed as NASA Administrator, I intend to promote and maintain a nonpartisan, inclusive work environment.

Question 31. If you're confirmed, what message would that send to members of the scientific community—who happen to be members of the LGBTQ community—who want to start careers at NASA?

Answer. As NASA Administrator, should I be confirmed, I intend to promote and maintain an inclusive work environment. I commit to follow the law, to encourage and empower employee effectiveness, and to maintain NASA's reputation of being the best place to work within the Federal Government.

Question 32. Should it be legal for employees of NASA to be fired for no other reason than their sexual orientation?

Answer. No.

Question 33. Are you familiar with Frank Gaffney?

Answer. Yes.

Question 34. Have you ever appeared on a radio show hosted by Frank Gaffney?

Answer. Yes.

Question 35. Are you aware that the Anti-Defamation League considers Frank Gaffney's group, the Center for Security Policy, an extremist group?

Answer. No.

Question 36. What due diligence on the Center for Security Policy did you undertake before working with the group?

Answer. I did not undertake formal due diligence. As a Member of Congress, I have done hundreds of interviews and spoken at many events. I do not speak only to people who agree with me. I do not take on responsibility for everything said by people who interview me.

Question 37. Are you aware that the Southern Poverty Law Center considers the Center for Security Policy a hate group?

Answer. No.

Transparency.

Question 38. Have you or your staff deleted any links to floor speeches from your House website since you were nominated?

Answer. No.

Question 39. Have you or your staff deleted any of your press releases from your House website since you were nominated?

Answer. No.

Question 40. Have you or your staff deleted any links to any videos from your House website since you were nominated?

Answer. No.

Question 41. Have you or your staff deleted any tweets from any of your personal or professional Twitter accounts since you were nominated?

Answer. No.

Question 42. For questions 38 through 41, please provide all content that you deleted.

Answer. Not applicable.

2014 Town Hall.

Question 43. As I mentioned during your hearing, at a town hall you hosted in 2014, a member of the audience loudly exclaimed in a question that President Obama should be "executed as an enemy combatant." You stated at the hearing you would have handled the situation differently and would have interrupted the constituent. If you had interrupted her, what would you have said?

Answer. I would have said: "Your statement is wholly inappropriate. No one should threaten violence against the President of the United States."

NASA priorities.

Question 44. Employers in my state are working with NASA to develop the next-generation space suit that could serve astronauts for decades to come. The current

design will be obsolete by 2024. There is no program in place yet for replacement. How will you prioritize this effort?

Answer. NASA's Enhanced Mobility Units (EMU) are aging and limited, and have long outlasted their original design life. While there are options to refurbish existing EMUs, there is certainly a need for a robust plan to develop the next generation of space suits—for EVA, launch, landing, and also for surface exploration of celestial bodies. As we develop a roadmap for Deep Space exploration, it is essential that our spacesuit development plans line up with exploration schedules. If confirmed as Administrator, I will work to see that NASA develops a sustainable long-term plan for spacesuit development.

Question 45. Employers in my state are dependent on work with NASA on aeronautics, the science behind making aircraft fly more efficiently. Have you ever proposed legislation that would eliminate NASA's involvement in aeronautics?

Answer. No. As a pilot, I am looking forward to leading NASA through its next generation of X-Planes if confirmed as Administrator.

Question 46. What role should NASA play in aeronautics?

Answer. Aeronautics has always been, and must remain, a key piece of NASA's portfolio. NASA's fundamental aeronautics research has led to technologies which have made commercial aviation significantly safer, quieter, cleaner, and more fuel efficient. Aviation is a rapidly growing, multi-trillion dollar per year global industry. NASA innovation in aeronautics will help fuel the American economy. If confirmed as Administrator, I look forward to helping lead NASA through its next era of X-planes, beginning with a low-boom supersonic demonstrator and the X–57 Maxwell.

Question 47. At what level should Congress annually fund aeronautics efforts at NASA?

Answer. It is crucial for NASA's mission that its Aeronautics Mission Directorate receive adequate funding to achieve the goals set out for it by Congress. If confirmed as NASA Administrator, I pledge to work with Congress on finding the right level of funding for each directorate. Working with Congress, I would support additional funding for aeronautics.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. AMY KLOBUCHAR TO HON. JAMES BRIDENSTINE

INSPIRE Women Act. I worked with Senator Heller on the Inspiring the Next Space Pioneers, Innovators, Researchers, and Explorers (INSPIRE) Women Act to authorize the NASA Administrator to encourage women to study in STEM fields and the Promoting Women in Entrepreneurship Act to support women researchers looking to take their ideas into the commercial world. Both bills were signed into law by the President in February.

Question 1. Representative Bridenstine, how would you plan to increase the recruitment and retention of women and minorities at NASA?

Answer. NASA's most valuable resource is its personnel. In order for the agency to meet its goals as effectively as possible, it must tap into the smartest, most creative, and hardest working Americans. This simply is not possible if NASA is struggling to recruit and retain women and minorities. If confirmed as Administrator, I will work to find new and creative ways to attract women and minority talent, and I will do everything in my power to make all NASA employees feel welcome and valued. If there are legislative pathways to achieve these goals, such as the INSPIRE Act, then I will look forward to working with Congress on this very important issue.

STEM. As a co-chair of the Senate Diversifying Tech Caucus (with Senators Capito and Scott) and Women's High-Tech Coalition (with Senator Fischer), I have been working to increase traditionally underrepresented minorities in STEM careers. Women make up nearly half the national workforce, but less than 25 percent of STEM workers. NASA's Office of Education is doing important work to inspire students to pursue STEM careers.

Question 2. Representative Bridenstine, are you committed to supporting NASA's Office of Education?

Answer. As the former Executive Director of the Tulsa Air and Space Museum, I have seen firsthand the exceptionally unique capability NASA has to inspire and educate the next generation of scientists and engineers. As such, I am committed to supporting NASA's Office of Education if confirmed as Administrator.

Every single division and directorate of NASA must work together with the Office of Education to increase women in STEM as well as increase the representation of

women within NASA's workforce. If confirmed as Administrator, I will support NASA's Office of Education.

Question 3. What role do you believe the office can play in increasing the amount of students going into STEM fields?

Answer. The most valuable way that NASA can increase the number of students in STEM is to have a vibrant and inspiring set of NASA missions. The Apollo missions to the Moon inspired millions of Americans to enter STEM fields, and most of them ended up working for employers other than NASA. In addition to the programs themselves, if confirmed as NASA Administrator, I will look to increase outreach to Americans, and young Americans in particular.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. TOM UDALL TO HON. JAMES BRIDENSTINE

Question 1. Many commercial companies are preparing to offer spaceflight services not only for tourism, but also for science and technology development. As we discussed in our meeting, New Mexico's Spaceport America is one of the best places for this kind of activity. How do you see these platforms—many of which have already manifested payloads—fitting into NASA's overall mission? And could these vehicles be a viable opportunity to expand the agency's science and human spaceflight opportunities?

Answer. A vibrant and growing commercial space industry will help NASA maximize its own resources. Commercial spaceports have the potential to be major commercial hubs of the future. Commercial space vehicles can provide flight opportunities for astronauts in the future and also fly scientific payloads for NASA. If confirmed as NASA Administrator, I will look forward to working with commercial space businesses which can help NASA achieve its objectives, including those businesses which launch from commercial spaceports.

Question 2. During our discussion in Committee, I stated the following "97 percent of the scientists with articles in peer-reviewed journals have concluded that climate change is real, is caused by human activity, and is already causing devastating problems in our country and around the world." The data I cited is from NASA's own website, found here—*https://climate.nasa.gov/scientific-consensus/*. A copy of the landing page is attached as well. As you can tell, the information on this site is a robust discussion about the amount of consensus around climate change. Will you commit to keeping this section of the website up-to-date and reflective of the scientific discussion?

Answer. Yes.

Question 3. Congressman, in the summary of your American Space Renaissance Act, you state that, "NASA must not be a jack-of-all-trades, but committed to a space pioneering doctrine with a purpose to retire risk and commercialize programs. Landing humans on Mars in not possible with NASA's current priorities, strategies, and missions." What exactly do you mean by this statement? Were you suggesting that landing humans on Mars should be the priority—even at the expense of National Academy-endorsed science missions and next generation hypersonic research? What of NASA's current programs are you proposing to "commercialize" in order to refocus NASA on Mars?

Answer. The NASA Transition Authorization Act of 2017 identified space science, space technology, aeronautics, human spaceflight and exploration, and education as NASA's core missions. I enthusiastically supported this legislation and fully support the core missions of NASA that it identified.

The intention of the civil space title of the American Space Renaissance Act was to propose ideas to ensure continuity in NASA's priorities and funding when administrations change, particularly when it comes to human spaceflight. I drew the inspiration, and in some cases direct language, from the Space Foundation's Pioneering Report. This report calls for NASA to arrive first at locations in space, lowering barriers to access and leaving behind infrastructure that can be utilized by other actors. This was what was meant by "commercialize." This is similar to how NASA's use of low Earth orbit has facilitated the growth of markets.

In the bill, I was seeking to primarily focus on the human spaceflight facet of NASA. That said, I did have several references to some of NASA's critical science missions in the bill. I did not intend to suggest that landing humans on Mars should be the priority at the expense of National Academy-endorsed science missions and next generation hypersonic research.

After introducing the bill, I received feedback and constructive criticism. Before being nominated for this position, I had planned to introduce an updated version of the legislation addressing concerns similar to yours.

Further, the NASA Transition Authorization Act of 2017 addressed constancy of purpose for human spaceflight in an appropriate manner. I enthusiastically supported this legislation.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. GARY PETERS TO HON. JAMES BRIDENSTINE

Question 1. NASA scientists were among the first to raise awareness of global warming as a result of greenhouse gases and NASA Earth Science programs have played a major role in bettering our understanding of the climate and climate change. Alarmingly, you deleted ALL references to science from NASA's founding objectives in your 2016 American Space Renaissance Act. You are now publicly expressing support for NASA's science mission, but this flip-flop has me concerned. How will you handle pressure and criticism from your former colleagues in the House, and particularly in the Freedom Caucus, as well as pressure from the President, who don't share your current view of how important NASA's scientific research is, especially the agency's study of the Earth?

Answer. In authoring and introducing the American Space Renaissance Act, I was seeking to primarily focus on the human spaceflight facet of NASA. That said, I did have several references to some of NASA's critical science missions in the bill. I have crafted and voted for other legislation, including the NASA Transition Authorization Act of 2017, which included NASA's science mission. I have been supportive of NASA's science mission during my time in Congress.

As a Member of Congress, I have stood up to members of my own party on many occasions, including members of the Freedom Caucus. Should I be confirmed, I will have no issue passionately advocating for NASA's mission with policymakers who might disagree with the mission.

Question 2. As I'm certain you are aware, the NASA Reauthorization of 2017 passed with strong bi-partisan support. While there were certain similar provisions in the NASA Reauthorization and your American Space Renaissance Act, there were also glaring differences between the two bills. Of concern for me, is a provision included in your bill that was left out of the NASA Reauthorization that directs NASA to streamline its programs and efforts so it is focused on one thing—getting to Mars. Your bill's website says "NASA must not be a jack-of-all-trades, but committed to a space pioneering doctrine" and says that "landing humans on Mars is not possible with NASA's current priorities, strategies, and missions." The role of the NASA Administrator is to advocate for all of NASA's missions and directives, and indeed many of your statements since your nomination seem to do so. Can you tell the Committee what caused you to change your opinion? If confirmed as NASA Administrator, will you follow the NASA Reauthorization Act of 2017 and advocate with equal voice for all NASA missions, or will you pursue reorganization, refocusing, and elimination of, as you call them, extraneous activities?

Answer. The NASA Transition Authorization Act of 2017 identified space science, space technology, aeronautics, human spaceflight and exploration, and education as NASA's core missions. I enthusiastically supported this legislation and fully support the core missions of NASA that it identified. Should I be confirmed, I will advocate for them.

The intention of the civil space title of the American Space Renaissance Act was to propose ideas to ensure continuity in NASA's priorities and funding when administrations change, particularly when it comes to human spaceflight. I drew the inspiration, and in some cases direct language, from the Space Foundation's Pioneering Report.

In the bill, I was seeking to primarily focus on the human spaceflight facet of NASA. That said, I did have several references to some of NASA's critical science missions in the bill. I did not intend to suggest that landing humans on Mars should be the priority at the expense of National Academy-endorsed science missions.

After introducing the bill, I received feedback and constructive criticism. Before being nominated for this position, I had planned to introduce an updated version of the legislation addressing concerns similar to yours.

Further, the NASA Transition Authorization Act of 2017 addressed constancy of purpose for human spaceflight in an appropriate manner. I enthusiastically supported this legislation.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. CORY BOOKER TO HON. JAMES BRIDENSTINE

Question 1. What is the most important thing that we, in Congress, should do right now to start tackling the issue of space debris? Outside of Congressional action, what should our Federal agencies be prioritizing?

Answer. I would recommend Congress work with the National Space Council, which can bring together FAA, FCC, NOAA, Commerce, DoD, State, NASA and others to create a comprehensive legal framework that can become the international norm of behavior. The legal and regulatory frameworks governing spacecraft delivery, on-orbit management, and disposal need to be examined as we prepare for many large constellations of Low Earth Orbit satellites. Responsibilities of agencies that currently have roles (assumed by default) in regulating space objects should be reconsidered.

Question 2. Do you have any plans to address the issue of space debris?

Answer. The issue of space debris requires three separate areas of focus:

1. Mitigation—preventing additional space debris from being created
2. Remediation—removing space debris that already exists
3. Space Situational Awareness and Traffic Management—preventing space debris from interfering in missions

NASA technology development can support space debris remediation efforts. There are already hundreds of thousands of objects in space, many dating from eras when responsible end of life and debris mitigation practices were not the norm among spacefaring nations. These continue to pose a danger to activity in space. The cost and difficulty of removing space debris is significant and will require a government-wide effort.

While NASA excels at technology development, it is not a regulatory agency and should not become the "FAA for Space." If confirmed, I would like to leverage the resources of NASA and work with Congress and the National Space Council in devising a solution to this problem.

Question 3. Managing the space environment to limit space debris could mean we have to devise ways to limit or control access to space—we could eventually run out of room. If this turns out to be the case, how can we address issues of equitable use of the space environment by interested parties—both in the U.S., and internationally?

Answer. The goal should be to improve technology and space situational awareness so that access will not be limited. As a Member of Congress, I have suggested we need to change how we conduct space situational awareness. Currently, the U.S. Department of Defense, through the Joint Space Operations Center (JSpOC), provides space situational awareness and conjunction analyses to foreign governments and the commercial sector as a byproduct of its mission to monitor national security assets in space. Given the unique capabilities of the JSpOC, this was the right approach in times past.

However, as more nations and commercial operators have entered the market, providing this data, information, and services to commercial, civil, and foreign actors is distracting JSpOC from its core national security mission at a time when threats are proliferating. The JSpOC needs to use its resources for national security. I have heard time and time again from DoD leadership that they do not want to be the "FAA for Space."

Instead, a civil agency should provide information and certain services to commercial, civil, and foreign space actors. I have proposed that the FAA's Office of Commercial Space Transportation should be that agency. We should create a conjunction analysis and warning center with a single integrated space picture that fuses unclassified data from the DoD, international, and commercial sensors, as well as data emitted from satellites. This conjunction analysis and warning center should heavily utilize commercial sensor networks as well as commercial software and programming, and be subject to the FAA/AST's oversight.

The United States should lead this effort since it has the preponderance of assets in space and the technology to implement such a program. In the long run, the effort should be international with partners contributing data and financial resources. This paradigm will engender greater partnerships between various private companies and various governments.

I believe setting up a regulatory regime is important lest we lose our ability to access space, but we have to get it right so that it is not overly burdensome for our industry. If confirmed, I intend to work closely with the National Space Council, Congress and the wider stakeholder community in order to reach consensus.

Question 4. You have stated that the Federal Government should have no role in education. Do you agree with the President's FY18 budget request, which would defund NASA education programs like EPSCoR [1], space grant, and the Minority University Research and Education program?

Answer. As the former Executive Director of the Tulsa Air and Space Museum, I have seen firsthand the exceptionally unique capabilities of NASA to inspire and educate children. I support funding for NASA education programs like EPSCoR, Space Grant, and the Minority University Research and Education Program.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. TAMMY DUCKWORTH TO HON. JAMES BRIDENSTINE

Question 1. During your confirmation hearing, I asked whether you would treat discrimination on the basis of sexual orientation or gender identity as a prohibited personnel practice:

"To begin addressing these concerns, yes or no, if confirmed as NASA administrator, would you treat discrimination against a NASA employee on the basis of sexual orientation or gender identity or religion as a prohibited personnel practice?"

You responded to my question by stating:

"Discrimination based on that, prohibited, absolutely. It should be prohibited."

Please clarify your response on how, if confirmed to be NASA Administrator, you would treat discrimination against a NASA employee on the basis of sexual orientation or gender identity. Did you mean that if confirmed, you would follow existing guidance ("Addressing Sexual Orientation and Gender Identity Discrimination in Federal Civilian Employment") that was jointly issued by the U.S. Office of Personnel Management, U.S. Equal Employment Opportunity Commission (EEOC), U.S. Office of Special Counsel and the U.S. Merit Systems Protection Board to provide Federal agencies with guidance on employment rights, protections and responsibilities under the law?

Answer. If confirmed, I will follow the guidance in "Addressing Sexual Orientation and Gender Identity Discrimination in Federal Civilian Employment" and in accordance with that guidance will treat discrimination on the basis of sexual orientation or gender identity as a prohibited personnel practice.

Question 2. If confirmed as NASA Administrator, would you follow EEOC's legal interpretation that the prohibition on sex discrimination included in Title VII of the Civil Rights Act of 1964 provides protections for persons who have been discriminated against based on sexual orientation and gender identity?

Answer. If confirmed, I will follow the guidance in "Addressing Sexual Orientation and Gender Identity Discrimination in Federal Civilian Employment" and in accordance with that guidance will treat discrimination on the basis of sexual orientation or gender identity as a prohibited personnel practice.

Question 3. If you would *not* treat discrimination on the basis of sexual orientation or gender identity as a prohibited personnel practice pursuant to section 2302(b)(1) of title 5 of the United States Code, please clarify your response that "It should be prohibited."

Did you mean that if confirmed as NASA Administrator, you would publicly support amending section 2302(b)(1) of title 5 of the United States Code to explicitly clarify that discrimination on the basis of sexual orientation or gender identity is prohibited by the first prohibited personnel practice?

Answer. If confirmed, I will follow the guidance in "Addressing Sexual Orientation and Gender Identity Discrimination in Federal Civilian Employment" and in accordance with that guidance will treat discrimination on the basis of sexual orientation or gender identity as a prohibited personnel practice.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. MAGGIE HASSAN TO HON. JAMES BRIDENSTINE

Question 1. To follow up from our hearing questions, you noted you were not aware of materials being deleted or removed from your online sources prior to your nomination and confirmation hearing. However, CNN has reported on this topic and it appears items were deleted from your campaign website and campaign social

[1] EPSCoR enhances research competitiveness of targeted jurisdictions (states, territories, commonwealths) by strengthening STEM capacity and capability.

media accounts (Facebook, Twitter, and YouTube), Congressional website blog posts and releases, and official Facebook posts, SoundCloud tracks, and YouTube videos.

Items deleted include floor speeches opposing President Obama and denying climate change, radio interviews with conservative media personalities, and blog posts from your official House website detailing conservative views. It appears at least 575 items were deleted. Please describe why these items were removed. Please provide a list of any deleted materials for the Committee record.

Answer. My Digital Director managed my social media accounts. When a reporter inquired about the management of my political and official digital accounts, my Digital Director let him know that my campaign Facebook, Twitter, and YouTube were deleted because our office was getting questions about my term limits pledge. Because I was no longer a candidate, he took down the accounts. This was prior to and unconnected to my eventual nomination.

My Digital Director also informed the reporter that the videos referenced were publicly available in many places including the committees I sit on.

Question 2. As discussed in your confirmation hearing, several items were not disclosed on your questionnaire. This includes three op-eds, ten donations to political campaigns and organizations, and eleven organization memberships. Please provide this information to the Committee along with an explanation of why it was excluded from your questionnaire initially.

Answer. Some political contributions made by my campaign were categorized differently at the time of the contribution by my Campaign Treasurer. They were unintentionally left out of the initial report. After further review, my Campaign Treasurer identified additional contributions and these are provided as an attachment.

Some additional memberships were listed under my campaign, Friends of Jim Bridenstine, Inc., as opposed to me personally. These are provided as an attachment. The Wagoner County Disabled American Veterans and National Federation of Independent Businesses were simply overlooked.

I am not certain which op-eds might be missing. I have provided all I can locate.

Question 3. Universities are a critical part of NASA's scientific ecosystem. By working with NASA through competitively selected, Principal-Investigator driven missions in Explorer, Venture, New Frontiers, and Discovery programs, universities lead robotic space exploration efforts, design and build instruments for satellites and probes, analyze the data that these missions yield, and develop the scientific workforce that sustains NASA's vitality. Researchers in my home state at the University of New Hampshire play a central role in this ecosystem by expanding our knowledge of both solar physics and Earth systems. With support from NASA's Heliophysics Division, their investigations have yielded profound insights into the inner workings of our sun. The knowledge gained helps NASA protect astronauts from solar radiation, informs the design of more resilient spacecraft, and will lead to improvements in our energy infrastructure. University of New Hampshire researchers are also helping to advance Earth Science as well. By using NASA's Earth-facing remote sensing missions, UNH researchers have been studying the evolution of the Arctic. These investigations have implications for commerce, navigation, and national security.

If confirmed, what do you see as the role of universities under your leadership in these and other important NASA science missions; and do you believe there are ways NASA can better leverage the unique capabilities of these institutions?

Answer. It is crucial to the future of NASA that it has a healthy supply of universities leading and building science missions. This is not just because universities have skilled scientists, engineers, and students who can do great work, but also because these missions help teach a new generation of students how to design and build spacecraft and also how to perform science in space. Without university-led missions, the well of STEM talent could run dry. It is certainly possible that NASA can leverage universities even more than it already is. If confirmed as NASA Administrator, I would like to work with you on this issue.

Question 4. The NASA Transition Authorization Act of 2017 supports missions for SLS and Orion over the long term. The Act states that the Administrator "shall manage human space flight programs, including the Space Launch System and Orion, to enable humans to explore Mars and other Destinations." The Act also directs the Administrator to develop a sustainable stream of missions, beginning with the Exploration Missions for SLS and Orion, in order to extend human exploration from the Moon to the surface of Mars. The SLS and Orion program are supplied by over 20 different companies in New Hampshire, which support a vibrant high-tech manufacturing sector that creates good, high paying jobs.

Do you support a long term program of Orion, SLS, and associated efforts for human deep space exploration; and do you support manned missions to Mars as required by the NASA Transition Authorization Act of 2017?

Answer. Yes. I supported the NASA Transition Authorization Act of 2017. I support crewed missions to Mars and using the Moon as a proving ground to get there. I believe that Orion and SLS will be the backbone of our Deep Space exploration architecture.

Question 5. What is your view of past attempts to cancel authorized programs that enjoyed bipartisan and bicameral support from Congress, such as the Constellation Program?

Answer. It is crucial for NASA to have consistent long-term plans for major programs. Inconsistent program funding and support leads to budget overruns, schedule slips, and cancellations that are costly and erode morale. If confirmed as NASA Administrator, I pledge to work with Congress on a bipartisan plan for NASA's budget which will ensure continuity and be able to maintain steady bipartisan and bicameral support well into the future.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. CATHERINE CORTEZ MASTO TO HON. JAMES BRIDENSTINE

Foreign-Sourced Propellant. Rep. Bridenstine, I'd like a written response from you on the source of our solid rocket propellant. As I'm sure you're aware, foreign solid rocket propellant may be used to power NASA's Next-Gen Space Launch System; however, the costs to test and otherwise qualify the foreign propellant will certainly be costly, possibly as much as a billion dollars. Meanwhile, domestic producers that supplied the Space Shuttle are available to support not only the SLS but also DoD's strategic rockets, but without the costly testing.

Question 1. As Administrator, would you favor moving to domestic sources of fuel and halt this expensive and unnecessary requalification for foreign sourced propellant?

Answer. Ammonium perchlorate is a crucial material for NASA's human exploration plans. Each SLS launch will feature two solid rocket boosters which use ammonium perchlorate as their oxidizer. Each SLS launch will use close to two million pounds of ammonium perchlorate. That said, it would be inappropriate for NASA to directly intervene between a contractor and a sub-contractor. However, I am committed to ensuring our Nation has a robust domestic industrial base, and should I be confirmed I look forward to working with Congress to achieve this objective.

Potential Conflict of Interest. Rep. Bridenstine, in pre-hearing questions, you admitted to asking numerous organizations in the space industry for letters of recommendation or support. Presumably, these companies will be competing for NASA contracts under your supervision as administrator.

Question 2. Given this, can you explain how these requests don't represent an inherent conflict of interest?

Answer. During my time in Congress as a member of two committees with oversight over our country's space enterprise, I have come to know and work with a many space policy experts and a great number of industry, academic, tribal, association, and NGO representatives. Many expressed support for my nomination and I requested letters from those supporters.

Question 3. Do you believe you should recuse yourself from decisions regarding the companies that have lobbied on behalf of your nomination?

Answer. The letters were provided as a matter of courtesy without any expectation of future consideration. I will follow the guidance of NASA's Office of General Counsel and any applicable laws and regulations.

Friends of Jim Bridenstine, Inc.

DONATIONS

Date	Amount	Entity
10/13/2012	1,000.00	Mullin for Congress
4/1/2014	5,000.00	Oklahoma GOP
4/3/2014	150.00	Oklahoma GOP
5/12/2014	1,000.00	Loudermilk for Congress
5/12/2014	1,000.00	Mooney for Congress
6/16/2014	2,000.00	Friends of Harvey Sparks
7/22/2014	2,000.00	Steve Daines for Montana
8/13/2014	2,000.00	Steve Russell for Congress
8/15/2014	1,000.00	Oklahoma First Ladies
10/24/2014	500.00	Tulsa 9.12
4/9/2015	250.00	Oklahoma GOP
4/23/2015	1,250.00	Southern Republicans Leadership Conference
9/29/2015	2,000.00	Ron Desantis
4/14/2016	400.00	Oklahoma Young Republicans
2/24/2017	5,000.00	Oklahoma GOP
6/22/2017	500.00	Oklahoma Young Republicans
	25,050.00	

Friends of Jim Bridenstine, Inc.

MEMBERSHIPS

Entity	Term
National Federation of Independent Businesses	01/2013 to Present
Tulsa Chamber of Commerce	02/2012 to Present
Bixby Chamber of Commerce	12/2011 to Present
Sand Springs Chamber of Commerce	04/2013 to Present
Bartlesville Chamber of Commerce	12/2011 to Present
Broken Arrow Chamber of Commerce	12/2011 to Present
Marine Corps League	10/2014 to 10/2016
Brookside Business Association	10/2012 to 10/2013
Glenpool Chamber of Commerce	02/2015 to Present
Wagoner County DAV	10/2014 to Present

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. BILL NELSON TO DANA BAIOCCO

Portable Generator Safety. As you know, carbon monoxide poisoning from portable generators is a very serious problem. In the wake of Hurricane Irma, we saw at least 11 deaths and numerous injuries in Florida due to carbon monoxide poisoning from generators.

For years, I have asked the CPSC to take a tougher stance and adopt a mandatory safety standard that will either reduce the carbon monoxide output from generators or turn them off when carbon monoxide concentrations get too high.

Last November, the CPSC voted 4 to 1 to adopt a proposed rule that would limit carbon monoxide emissions from generators—and save lives.

Question 1. If confirmed, will you support adoption of this final rule?

Answer. Thank you for your question regarding portable generators. Given the recent hurricanes and their impact on Florida, I recognize that you are particularly engaged on this matter. As you know, the CPSC published a proposed rule to set a safety standard regarding carbon monoxide (CO) emissions rates for portable generators in an effort to reduce the risk of injury or death from using a generator in an indoor or confined space. If confirmed, I will work hard to learn the details surrounding this proposed rule as well as the related issues and concerns so that I will be as well informed as possible. I look forward to working with you, the other CPSC Commissioners, industry stakeholders, and consumers on this important issue.

Ethics. Ms. Baiocco, you have spent part of your career defending consumer product companies from lawsuits and investigations. If confirmed, you will now be representing the American people—and protecting them from unsafe products.

To do this effectively, I believe you must be free of all ethical conflicts and the public should know the identity of all current and former clients that manufacture consumer products.

Question 2. Please provide this committee with a list of all consumer product manufacturers you have represented, including in an advisory role or in actions before the CPSC, other state or Federal agencies, or in any civil or criminal action in any local, state, or Federal court.

Answer. As a lawyer, I am duty-bound to maintain the confidential nature of legal advice sought by or provided to any client. The clients that my firm represented in litigation are a matter of public record and have been provided in accordance with the disclosure requirements that govern my nomination. If confirmed, I will effectively and zealously execute my duties as a Commissioner on behalf of the American people, and consistent with the statutory duties under the CPSA and other applicable statutes. Further, and in connection with my nomination, I have consulted with the Office of Government Ethics and the CPSC's Designated Agency Ethics Officer to identify potential conflicts of interest. I have signed an ethics agreement that will govern the potential conflicts that have already been identified and I will recuse myself in those instances, in accordance with Federal ethics laws. If faced with any other potential conflict of interest, I will seek the advice and counsel of the CPSC's Designated Agency Ethics Officer and follow that advice.

Recusals. Your profile on the Jones Day website notes that you have represented, among other clients, Mattel in activities related to toy recalls for high levels of lead paint, Yamaha against product liability claims involving its Rhino off-road vehicles (ROVs), and Vibram for claims involving its footwear products.

Question 3. Do you agree to recuse yourself from Commission actions involving these former clients, including votes on civil penalties, corrective action plans (CAPs), or rulemakings, during your term on the Commission? If not, why not?

Answer. I am not aware of what issues are currently before the CPSC or that may be before the CPSC at any point during my term, if confirmed. In connection with my nomination, I have consulted with the Office of Government Ethics and the CPSC's Designated Agency Ethics Officer to identify potential conflicts of interest. I have signed an ethics agreement that will govern the potential conflicts that have already been identified and I will recuse myself in those instances, in accordance with Federal ethics laws. If faced with any other potential conflict of interest, I will seek the advice and counsel of the CPSC's Designated Agency Ethics Officer and follow that advice.

Recusals. Various media reports have indicated that your husband, Mr. Andrew Susko, has defended Ikea in a product liability lawsuit concerning dresser tip-overs. Former Republican Commissioner Ann Northup agreed to recuse herself from all Commission matters involving all-terrain vehicles (ATVs) and ROVs because of her husband's past work in that industry.

Question 4. If confirmed, do you intend to follow former Commissioner Northup's lead by recusing yourself from all Commission matters involving furniture tip-overs during the term of your service on the Commission? If not, why not?

Answer. I am not familiar with the facts and circumstances regarding former Commission Northup or her spouse. In connection with my nomination, however, I have consulted with the Office of Government Ethics and the CPSC's Designated Agency Ethics Officer to identify potential conflicts of interest. I have signed an ethics agreement that will govern the potential conflicts that have already been identified and I will recuse myself in those instances, in accordance with Federal ethics laws. The agreement also addresses my spouse. If faced with any other potential conflict of interest, I will seek the advice and counsel of the CPSC's Designated Agency Ethics Officer and follow that advice.

Response to Written Questions Submitted by Hon. Maria Cantwell to Dana Baiocco

Phthalates. Phthalates are chemicals used to soften materials such as plastic and are used in a wide array of consumer products including toys. Phthalates have well documented associations with significant adverse health effects. The Consumer Product Safety Improvement Act (CPSIA) passed in 2008, banned three specific phthalates and required the CPSC to form an expert panel to evaluate additional phthalates. The CPSC just finalized a rule, based on the expert panel's recommendation, to ban children's toys and child care articles that contain concentrations of more than 0.1 percent of 5 additional phthalates (diisononyl phthalate,

diisobutyl phthalate, di-n-pentyl phthalate, di-n-hexyl phthalate, and dicyclohexyl phthalate.

Question 1. Do you support this phthalate rule? How else would you address childhood exposure to known toxic chemicals?

Answer. Thank you for your question regarding phthalates. I am not fully aware or privy to the steps taken internally by the CPSC and I look forward to getting fully up to speed on all issues. If confirmed, I plan to follow the duties and requirements set forth in the Consumer Product Safety Improvement Act (CPSIA) and other relevant statutes applicable to the Commission. I do know that the Commission voted to issue a final rule prohibiting the use of specified phthalates (a class of plasticizing chemicals found in virtually all soft plastics) in children's toys and child care articles. I look forward to learning more about this rule and the consideration that went into the Commission's adoption of it. With regard to addressing other exposures, I will evaluate the issues that come before the CPSC, consistent with the applicable science, data and applicable rules, regulations and laws, and work collaboratively with stakeholders and the other Commissioners to find best practices to protect America's children. If confirmed, I look forward to working with you, the other CPSC Commissioners, industry stakeholders, and consumers on this important issue.

Question 2. At Jones Day, you have been involved in high-profile cases where you defended major companies against accusations of selling faulty or dangerous products, wrongful death suits, and fraud. Given this history, how can the public rest assured that you are fit to serve at an agency charged with protecting consumers?

Answer. If confirmed, I will effectively and zealously execute my duties as Commissioner on behalf of the American public, and consistent with the statutory duties under the CPSA and all other applicable statutes. I see my role, if confirmed, as one on behalf of the American people and not on behalf of any particular sector or stakeholder.

Hazardous Substances. As you know, one of the key statues the CPSC is charged with implementing is the Federal Hazardous Substances Act or FHSA. Under the FHSA, a "hazardous substance" must be labeled with a warning, but if it is a children's product, or if a warning would not be effective, a "hazardous substance" must be banned. Toxicity is one of the characteristics that can lead a product to be "hazardous." Under the FHSA, a product is a hazardous substance based on toxicity if it meets two criteria. 1. It must have the capacity to produce illness or injury through ingestion, inhalation, or absorption through any body surface. And 2. It "may cause" substantial illness as a result of customary use.

Question 3. Are you committed to regulating consumer products based on their capacity to produce illness or injury as a result of customary use?

Answer. Thank you for your question regarding the regulation of hazardous substances in consumer products. I am committed to following the mandates of the Federal Hazardous Substances Act, and all relevant laws, regulations, and rules that govern the issues over which the CPSC has jurisdiction. The issues that come before the CPSC are often complicated and require the study and analysis of laws, regulations, science, and the application of common sense. If I am confirmed, I look forward to working with you, the other CPSC Commissioners, industry stakeholders, and consumers on this important issue.

Response to Written Questions Submitted by Hon. Amy Klobuchar to Dana Baiocco

Product Recalls. After Ted McGee, a 22-month old from Apple Valley was killed by a falling Malm dresser, I worked with the Consumer Product Safety Commission (CPSC) and IKEA to recall these dangerous products. A previous repair program had not been effective, and I called on Ikea to issue a full recall, stop selling the dressers and offer full refunds for consumers. In June 2016, IKEA stopped selling the dressers and issued a recall of 29 million chests and dressers making it the largest furniture safety recall in history. Despite the recall, a two-year-old California boy was recently killed by a falling Malm dresser.

Question 1. Ms. Baiocco, As Commissioner, what tools would you like to see used to assure an effective response to recall announcements—both from the agency and the recalling company? Do you believe that the CPSC has been successful at achieving acceptable recall return and repair rates on children's products?

Answer. Thank you for these questions about recalls. I know that CPSC experts have been analyzing these issues and I would like to study their findings regarding how to more effectively use the tools available to the CPSC and to the recalling company to assure the highest response to any recall announcement. I will continue to

work with stakeholders to find ways to reach consumers, not just in terms of notice, but in terms of encouraging those who receive notice to take steps to participate in the recall. If confirmed, I look forward to learning more about CPSC's successes and challenges with regard to return and repair rates. This would include working with the Commission's enforcement staff to review and evaluate the relevant recall effectiveness data. This is certainly an area worthy of attention and, if confirmed, I look forward to studying this issue in depth.

Pool Safety. After six-year old Abagail Taylor from Edina, Minnesota was killed by a drain in a public pool, I worked with former Senators Allen, Pryor and Stevens and former Secretary of State James Baker on the Virginia Graeme Baker Pool and Spa Safety Act. In committee, I added an amendment to make the safety requirements for public pools retroactive, so new, safer drain covers had to be installed at all public pools. Not a single child has died from drain entrapment in a public pool since the bill went into effect.

Question 2. Ms. Baiocco, the CPSC has also played an important role in the success of pool safety efforts. Are there elements of this campaign that could be applied to other areas of the CPSC's work?

Answer. This has been a successful campaign and I would like the opportunity to learn more about it. The successful elements of this campaign can be and should be examined so that the CPSC can draw upon the lessons learned here and use them and/or variations on them to benefit consumers in other safety related circumstances. I will commit to discussing this issue with the other Commissioners and CPSC staff, if confirmed. Given your leadership on VGBA, and the issue of pool safety in general, I would also welcome the opportunity to discuss this further with you and to hear your thoughts on how best to apply elements of the pool safety campaign to other areas of the CPSC's work.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. RICHARD BLUMENTHAL TO DANA BAIOCCO

General.

Question 1. What is your interest in serving as a CPSC Commissioner?

Answer. The mission of the CPSC is a very important one that touches every American family. The CPSC has jurisdiction over 15,000+ types of products, and many of the issues that come before the CPSC are complicated in terms of sciences and the related legal aspects that govern them. I have been asked by the President of the United States to use my skills as a lawyer on behalf of the American people. I am honored to have such an opportunity and accept it with enthusiasm and commitment. I am committed to work on behalf of the American public and to use my abilities to promote safety and protection for them.

Question 2. There appears to be some gaps in your resume. Please provide information regarding any and all employment between when you graduated from college in 1988 and when you began the four-year evening program at Duquesne University School of Law (presumably in 1993)? Please provide information regarding any and all employment while you were in the part-time evening program at Duquesne University School of Law.

Answer. My resume shows my legal experiences and employment over the last 20 years, beginning with my Federal clerkship. From late 1988 through 1993 when I began the four-year evening program at Duquesne University School of Law in 1993, I worked in sales and promotions for American Modeling, Inc., in Monroeville, Pennsylvania, and also taught modeling, make-up, and photography courses at its affiliated modeling school. I worked on a part-time basis for a short while after starting law school in the same capacity. In approximately 1994, I began working as an unpaid intern in Federal district court in Pittsburgh, Pennsylvania. I worked as a Summer Associate at the law firm of Eckert, Seamans Cherin & Mellott in Pittsburgh during the Summer of 1995. I was hired as a law clerk to the Honorable Gustave Diamond in the District Court for the Western District of Pennsylvania in 1996 and served in that role until I accepted a position as an associate with Jones Day in 1998.

Ethics. You have extensive experience working with companies seeking to escape liability from allegations of product safety violations. They may believe that you will be an advocate for them on the Commission, even though your role as a Commissioner will be very different from your role as an advocate.

Question 3. Please list all of your current or former clients who have had matters involving the CPSC or in front of the CPSC. In your Ethics Agreement, you agree that the interests of your spouse are imputed to you. Accordingly, please list all of

your husband's current or former clients who have had matters involving the CPSC or in front of the CPSC. Will you commit to recuse yourself from all matters involving any of your and your husband's former or current clients for the entire duration of your service as Commissioner? Will you voluntarily commit to not seek, or accept, any waivers? If you answered "No" to the previous question, under what circumstances would you seek a waiver to participate in matters at the CPSC where you or your husband have a previous or current interest? How can you assure Members of Congress and the public that you will uphold the mission of the agency and not the interests of your previous clients? What will you do to go above and beyond your ethics agreement as it relates to contacts with your current employer and former clients to ensure that there is no conflict or appearance of conflicts well beyond the one year prohibition?

Answer. As a lawyer, I am duty-bound to maintain the confidential nature of legal advice sought by or provided to any client. The clients that my firm represented in litigation are a matter of public record and have been provided in accordance with the disclosure requirements that govern my nomination. If confirmed, I will effectively and zealously execute my duties as Commissioner on behalf of the American people. Further, and in connection with my nomination, I have consulted with the Office of Government Ethics and the CPSC's Designated Agency Ethics Officer to identify potential conflicts of interest. I have signed an ethics agreement that will govern the potential conflicts that have already been identified and I will recuse myself in those instances, in accordance with Federal ethics laws. The agreement also addresses my spouse. If faced with any other potential conflict of interest, I will seek the advice and counsel of the CPSC's Designated Agency Ethics Officer and follow that advice.

If confirmed, my job as a Commissioner will not be to represent a particular sector or stakeholder. Rather, it will be to hear and work on behalf of the entire American public. I have been asked by the President of the United States to use my skills as a lawyer on behalf of the American people. I am honored to have such an opportunity and accept it with enthusiasm and commitment. I am aware of my obligations to the American public and intend to carry out those obligations with integrity and consistent with the high standards that the American people, and this Committee, expect from their public servants.

Portable Generators. Consumer education and warning labels have not proven effective at reducing the 70 deaths per year on average from CO poisoning from portable generators.

Question 4. Shouldn't CPSC require the product to be redesigned? The technology necessary to reduce CO emissions and save lives is readily available. Do you agree that the CPSC can require portable generator manufacturers to lower CO emission rates to prevent death and serious injuries from CO poisoning? Do you agree there should be a rule to require all companies incorporate this life saving technologies?

Answer. Thank you for your questions about portable generators. I am not familiar with the details of the technologies you reference, or the available or proposed options regarding portable generators, but I am committed to getting fully up to speed. The CPSC is, of course, an independent agency created by Congress in 1972 by the Consumer Product Safety Act. Its authority is governed by this Act, and it is bound by a complex set of rules and regulations that Congress promulgated and Courts have interpreted in some instances. The statutory framework provides direction on how to address issues such as those referenced in your series of questions relating to portable generators and requires the CPSC to employ voluntary standards first and, if unsuccessful, then the Agency can call for mandatory standards. The statute requires that if voluntary standards can address a hazard and if they are substantially complied with, the Agency may not proceed with mandatory rule making. If confirmed, I will protect consumers in accordance with these directives. I can also commit to being responsive to you and your office on this or any other issue that you want to discuss and/or on any ideas or new ways to promote the goals of the CPSC or the statute.

Flame Retardants. The Consumer Product Safety Commission recently voted to grant a Petition requesting the CPSC initiate rulemaking to ban toxic flame retardants in children's products, upholstered furniture, electronic casings, and mattresses. Organohalogen flame retardants have well-documented associations with significant adverse child health effects. These chemicals are known to leech from those products, resulting in widespread human exposure.

Question 5. Do you or do you not support the CPSC moving forward to develop a proposed rule to ban this chemical class in children's products, upholstered furniture, mattresses, and electronics casings? Given your work for R.J. Reynolds, if you are confirmed, do you commit to recusing yourself from matters at the CPSC

relating to flame retardant chemicals in consumer products for the entire duration of your service as CPSC Commissioner?

Answer. Thank you for your questions regarding flame retardants. I am not currently in a position to comment on the petition or any plans regarding the initiation of any rulemaking procedure because I am not part of the Commission, and I am neither aware of nor privy to the steps or analyses taken internally by the CPSC. I do, however, look forward to getting fully up to speed on the issues. If confirmed, I intend to follow the duties and requirements set forth under the Consumer Product Safety Act and all other applicable statutes. I am committed to evaluating these issues, if confirmed, based on the science, data, and after hearing the relevant information and I will work collaboratively with stakeholders and the other Commissioners, in accordance with the governing rules, regulations, and applicable laws to reach a conclusion.

In private practice, I have never worked on issues relating to flame retardants. However, in connection with my nomination, I have consulted with the Office of Government Ethics and the CPSC's Designated Agency Ethics Officer to identify potential conflicts of interest. I have signed an ethics agreement that will govern the potential conflicts that have already been identified and I will recuse myself in those instances, in accordance with Federal ethics laws. If faced with any other potential conflict of interest, I will seek the advice and counsel of the CPSC's Designated Agency Ethics Officer and follow that advice.

Window Coverings. In your questionnaire, you state that one of the top three challenges for the CPSC is: "Protecting the American public from unreasonable risks of harm while balancing the American public's right to have access to a range of affordable product choices and recreational activities." In fact, if CPSC were to institute mandatory minimum safety standards, simple economies of scale informs us that this would bring down the cost of safe products for all consumers—allowing for their more widespread adoption in all homes. Today, safe products—like cordless window coverings—are often only available at a premium. For the past two decades and nearly every month, a child has died from dangerous window covering cords.

Question 6. Don't you agree that establishing mandatory minimum safety standards for products would help make safe products more affordable for the American public—and not keep them out of reach for only those who can afford it?

Answer. Thank you for your question regarding cordless window coverings. You correctly note that I believe in protecting the American public from unreasonable risks of harm while balancing the American public's right to have access to a range of affordable product choices and recreational activities. If confirmed, I intend to follow the duties and requirements set forth under the Consumer Product Safety Act and all other applicable statutes. At this time, it would be inappropriate for me to comment on whether mandatory standards would be appropriate, as I do not want to prejudge a matter on which I may be required to vote, if confirmed. I do, however, look forward to working with you, the other CPSC Commissioners, industry stakeholders, and consumers on this important issue.

Views on Standards. One of the most effective tools CPSC has is to issue mandatory safety standards.

Question 7. What is your view of regulation? When are safety regulations necessary? Where do you draw the line for the need for mandatory safety standards to protect children?

Answer. Congress set forth a statutory framework that governs when a mandatory safety standard should be invoked. This statutory framework provides direction on how to address issues such as those referenced in your series of questions and requires the CPSC to employ voluntary standards first and if unsuccessful, then the Agency can call for mandatory rule making. That is what Congress directs and, if confirmed to the Commission, I will follow these directives. I also commit to being responsive to you and your office on this or any other issue that you want to discuss and/or on any ideas or new ways to promote the goals of the CPSC or the statute.

Civil Penalties. The Consumer Product Safety Commission can issue civil penalties against companies that violate section 15(b) of the Consumer Product Safety Act.

Question 8. In your view, what is the purpose of civil penalties? If civil penalties represent just a drop in the bucket for companies, what good are they? Do you believe that it is appropriate for the CPSC to assess civil penalties up to the permissible cap? Under what circumstances do you believe the Commission should seek the maximum penalty? If confirmed, what factors or principles would guide you when you are voting on civil penalties? Will you recuse yourself from voting on any civil penalty item where you have previously represented the company involved?

Answer. Congress passed the Consumer Product Safety Improvement Act (CPSIA) to, among other things, "provide the CPSC with better enforcement tools, including the power to impose higher penalties" as a deterrent. (See H. Rep. 110–501—Consumer Product Safety Modernization Act). If confirmed, I will execute my duties as Commissioner consistent with the framework provided in this statute and as interpreted by courts. I look forward to learning more about the Commission's experience in assessing civil penalties, including the extent to which such penalties have worked as a deterrent. With respect to recusals, in connection with my nomination, I have consulted with the Office of Government Ethics and the CPSC's Designated Agency Ethics Officer to identify potential conflicts of interest. I have signed an ethics agreement that will govern the potential conflicts that have already been identified and I will recuse myself in those instances, in accordance with Federal ethics laws. If faced with any other potential conflict of interest, I will seek the advice and counsel of the CPSC's Designated Agency Ethics Officer and follow that advice.

Crumb Rubber. The CPSC is a part of the multi-agency task force known as the Federal Research Action Plan on Recycled Tire Crumb Used on Playing Fields and Playgrounds, which is charged with answering concerns by the public regarding the safety of crumb rubber used in synthetic turf fields and playgrounds.

Question 9. If confirmed, would you support CPSC's role in this task force and seek for CPSC's research on this issue to be fully funded and allocated sufficient resources (in terms of both funding and personnel)?

Answer. Thank you for your question regarding crumb rubber in consumer products. The Consumer Product Safety Commission plays an important role in the safety of our Nation's consumers. This issue, like so many others that have come before the agency, is complicated and requires the study and analysis of laws, regulations, and the science. The issue of crumb rubber is no exception and, if confirmed, I look forward to working with you, the other CPSC Commissioners, industry stakeholders, and consumers on this important issue to ensure it receives the attention it deserves.

Recall Effectiveness.

Question 10. Do you believe that the CPSC has been successful at achieving acceptable recall return and repair rates on children's products? What tools would you like to see used to assure a robust response to recall announcements—both from the agency and the recalling company?

Answer. Thank you for this important questions regarding recall effectiveness. I know that CPSC experts have been analyzing these issues and I would like to study their findings regarding how to use more effectively the tools available to the CPSC and to the recalling company to assure the highest response to a recall announcement. I will continue to work with stakeholders to find ways to reach consumers, not just in terms of notice, but in terms of encouraging those who receive notice to take steps to participate in the recall. If confirmed, I look forward to learning more about CPSC's successes and challenges with regard to return and repair rates. This would include working with the Commission's enforcement staff to review and evaluate the relevant recall effectiveness data. This is certainly an area worthy of attention and, if confirmed, I look forward to studying this issue in depth.

Section 6(b). Under Section 6(b) of the Consumer Product Safety Act, the CPSC is limited in its ability to share product specific safety information with consumers without express permission from the company in question. It is often felt that this delays consumer getting vital information they could use to keep their families safe.

Question 11. What do you think of Section 6(b) and how will you seek to lessen its negative impact on safety?

Answer. Section 6(b) of the Consumer Product Safety Act (CPSA), 15 U.S.C. § 2055(b), establishes procedures for and restrictions on the Commission's public disclosure of information. Section 6(b) prohibits the Commission from disclosing information about a consumer product that identifies a manufacturer or private labeler unless the Commission has taken "reasonable steps" to assure: 1) that the information is accurate; 2) that disclosure of the information is fair in the circumstances; and 3) that disclosure of the information is reasonably related to effectuating the purposes of the CPSA and of the other laws administered by the Commission. Before disclosing such information, the Commission must provide the manufacturer or private labeler with the opportunity to comment on the accuracy of the information. The Commission may not disclose the information for at least 15 days after sending it to the company for comment. Congress codified these procedures and restrictions into the statute, in part, because it recognized that "the Commission has a responsibility to assure that the information which it disseminates is truthful and accurate." (See H.R. Rep. No. 1192, 92 Cong., 2nd Sess. 31, 32 (1972)). That is what Congress

directs and, if confirmed, I will protect consumers in accordance with these directives.

SaferProducts.gov. Saferproducts.gov is a consumer incident database that CPSC implemented in 2011. It has been a useful tool for consumers who are researching products and an important mechanism for consumers and health care professionals to report incidents of harm.

Question 12. What do you see as the role of this database and how would you make it even more effective?

Answer. This database is a very important tool for consumers and good place for a consumer to start. To make it most effective, the agency needs to ensure that it is up to date and contains useful information that is easily accessible. I look forward to learning more about the database and how it is managed by the agency in order to assess its overall effectiveness.

All-Terrain Vehicles. The issue of All-Terrain Vehicle (ATV) safety is currently before the commission. Deaths and injuries have been rising and the voluntary standard that requires education and warning labels is failing to prevent the deaths and injuries. The CPSC has also engaged in a rulemaking to address the stability and safety of ROVs. Congress passed a rider to prevent the CPSC from moving forward on that rulemaking. You have previously represented Yamaha in several lawsuits over its two-person Rhino ATV.

Question 13. Given your previous representation of Yamaha, would you recuse yourself from consideration for these rulemaking proceedings? Would you recuse yourself from involvement in recall or civil penalty discussions involving Yamaha or any other ROV or ATV manufacturers?

Answer. In connection with my nomination, I have consulted with the Office of Government Ethics and the CPSC's Designated Agency Ethics Officer to identify potential conflicts of interest. I have signed an ethics agreement that will govern the potential conflicts that have already been identified and I will recuse myself in those instances, in accordance with Federal ethics laws. If faced with any other potential conflict of interest, I will seek the advice and counsel of the CPSC's Designated Agency Ethics Officer and follow that advice.

Furniture Tip-Over. As you know, Ikea is facing multiple lawsuits against the company based on dressers that topple over and that have killed or injured multiple children. Recently, we just learned of an eighth death related to these defective dressers. The vast majority of recalled IKEA dressers are still in people's homes, posing potential risks to consumers. Your husband, Andrew Susko, represents IKEA in these cases—raising serious conflict of interest concerns.

Question 14. Will you recuse yourself from any CPSC work to address the tip-over hazard posed by Ikea dressers or unstable dressers in general?

Answer. In connection with my nomination, I have consulted with the Office of Government Ethics and the CPSC's Designated Agency Ethics Officer to identify potential conflicts of interest. I have signed an ethics agreement that will govern the potential conflicts that have already been identified and I will recuse myself in those instances, in accordance with Federal ethics laws. The agreement also addresses my spouse. If faced with any other potential conflict of interest, I will seek the advice and counsel of the CPSC's Designated Agency Ethics Officer and follow that advice.

Safe Sleep. While much progress was made on sudden unexplained infant death, or SUID, in the 1990s, we have seen very little progress in reducing SUID in a decade or more, and in some high-risk groups the rates are going in the wrong direction. The CPSC is in a unique position to help address the public health problem of SUID through its jurisdiction over infant products and opportunities to communicate with families, caregivers, and health care providers.

Question 15. What will you do to push CPSC to use its mandatory rulemaking authority to increase safe sleep among high-risk families, and to reduce the hazard posed by certain infant sleep products such as crib bumpers and other untested products?

Answer. Thank you for your question regarding the serious issue of sudden unexplained infant death. In the CPSA, Congress set forth a statutory framework that governs when a mandatory safety standard should be invoked. This statutory framework provides direction on when the Commission may use its mandatory rulemaking authority. Congress directs the CPSC to employ voluntary standards first and if unsuccessful, then the Agency can call for mandatory rule making. That is what Congress directs and, if confirmed, I will follow this framework. I will commit to being responsive to you and your office on this issues or any other issue you want to discuss and/or on ideas or new ways to promote the goals of the CPSC or the statute.

Phthalates. Phthalates are chemicals used to soften materials such as plastic and are used in a wide array of consumer products including toys. Phthalates have well documented associations with significant adverse health effects. The Consumer Product Safety Improvement Act (CPSIA) passed in 2008, banned three specific phthalates and required the CPSC to form an expert panel to evaluate additional phthalates. The CPSC just finalized a rule, based on the expert panel's recommendation, to ban children's toys and child care articles that contain concentrations of more than 0.1 percent of 5 additional phthalates (diisononyl phthalate (DINP), diisobutyl phthalate (DIBP), di-n-pentyl phthalate (DPENP), di-n-hexyl phthalate (DHEXP), and dicyclohexyl phthalate (DCHP).

Question 16. Do you support this phthalate rule and how else would you address childhood exposure to known toxic chemicals?

Answer. Thank you for your question regarding phthalates. I am not fully aware of or privy to the steps taken internally by the CPSC and I look forward to getting fully up to speed on all issues. If confirmed, I plan to follow the duties and requirements set forth in the Consumer Product Safety Improvement Act (CPSIA) and all other relevant statutes applicable to the Commission. I know that the Commission voted to issue a final rule prohibiting the use of specified phthalates (a class of plasticizing chemicals found in virtually all soft plastics) in children's toys and child care articles. I look forward to learning more about this rule and the considerations that went into the Commission's adoption of it. With regard to addressing other exposures, I will evaluate the issues that come before the CPSC, consistent with the applicable science, data, and applicable rules, regulations, and laws and work collaboratively with stakeholders and the other Commissioners to find best practices to protect America's children. If confirmed, I look forward to working with you, the other CPSC Commissioners, industry stakeholders, and consumers on this important issue.

Organohalogen Flame Retardants. On September 20, 2017, the Commission voted to grant a Petition regarding the use of additive, non-polymeric organohaogen flame retardants (OFRs) in certain consumer products that directed staff to convene a Chronic Hazard Advisory Panel (CHAP) to assess OFRs and issue a report on the possible risk to consumer health and safety from the use of OFRs.

Question 17. Do you support the Commission's action to convene a CHAP to study and assess the possible risk of OFRs to consumer health and safety?

Answer. I am not fully aware of or privy to the steps taken internally by the CPSC on this issue and I look forward to getting fully up to speed on all issues, if confirmed. I support the study of science, data, and viewpoints from as many experts as possible so that the agency can be as well informed as possible.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. EDWARD MARKEY TO DANA BAIOCCO

Tobacco Cases. It was the practice at some large law firms that represented cigarette companies in tobacco litigation to give associates the choice whether or not to work on those cases.

Question 1. Were you afforded that choice at Jones Day? If no: If you had been provided that choice would you have still chosen to represent R.J. Reynolds Tobacco? If yes: Why did you choose to represent big Tobacco as a defense counsel when you could have declined to do so? Did you not have any moral or ethical concerns about representing a cigarette company?

Answer. I have represented all clients and worked on all matters with equal commitment and zeal and carried out my obligations to the best of my ability. I will continue to carry out my duties to the best of my ability on behalf of the American people, if confirmed.

Product Design v. Consumer Misuse. Scientific research has found that the most effective way to reduce product-related injuries is to change product design, not to try to change human behavior. In fact, CPSC laws are not concerned with "individual responsibility" or whether consumers have acted responsibly. Instead the key question posed to CPSC is whether a "reasonably foreseeable" use of a product has resulted in death or injury. This is a very different mindset than that of a product defense lawyer.

Question 2. Assuming costs and disruption to consumers is minimal, will you personally make a commitment to take action against companies that make dangerous products even where consumer misuse is a contributing factor?

Answer. If confirmed, my job as a Commissioner will not be to represent a particular sector or stakeholder. Rather, it will be to hear from and work on behalf of the entire American public. In addition, as a Commissioner, I will be required to

follow a particular set of rules promulgated by Congress to set safety standards and I will follow those rules and statutory directives. If confirmed, I will be guided by the rule of law, I will promote transparency between the Commission and stakeholders, and I will encourage an open-door policy between the Commission and advocacy groups. I am aware of my obligations to the American public and intend to carry out those obligations with integrity and consistent with the high standards that the American people, and this Committee, expect from their public servants.

IKEA Dressers. An ongoing recall that CPSC is in the midst of overseeing is the IKEA dresser recall that involved almost 30 million dressers that posed risks to children due to their instability. Just recently we found out about an 8th death of a child caused by a tip over of one of these dressers. Your husband has defended IKEA against claims that the company is responsible for those deaths.

Question 3. How could the CPSC work to make this recall more effective to prevent other children from being injured or killed from these unstable dressers? Will you recuse yourself from any issues before the Commission related to IKEA given your husband's work for this company?

Answer. If confirmed, I look forward to learning more about CPSC's successes and challenges with respect to return and repair rates, including working with the Commission's enforcement staff to review and evaluate the relevant recall effectiveness data. This is certainly an area worthy of attention and, if confirmed, I look forward to studying this issue in depth. In connection with my nomination, I have consulted with the Office of Government Ethics and the CPSC's Designated Agency Ethics Officer to identify potential conflicts of interest. I have signed an ethics agreement that will govern these potential conflicts that have already been identified and I will recuse myself in those instances, in accordance with Federal ethics laws. The agreement also addresses my spouse. If faced with any other potential conflict of interest, I will seek the advice and counsel of the CPSC's Designated Agency Ethics Officer and follow that advice.

Phthalates. After nearly a decade, the CPSC has finally finalized a rule on the use of phthalates in certain children's products.

Question 4. What is your perspective on this rule? Would you support CPSC vigorously defending the rule if it is challenged in Court? Would you oppose efforts to withdraw or reopen rule or other efforts to overturn it?

Answer. Thank you for your question regarding phthalates. I am not in a position to comment on any future actions that may come before the Commission. I have no pre-determined thoughts or perspectives on this issue and I do not see my role as a Commissioner, if confirmed, as promoting a particular viewpoint. I do, however, look forward to getting fully up to speed on the issues, if confirmed. Further, the Consumer Product Safety Act sets forth a complex set of regulations that, if confirmed, I will follow. I will evaluate these issues, if confirmed, based on the science, data, and after hearing the relevant information, and work collaboratively with stakeholders and the other Commissioners, in accordance with the governing rules, regulations, and applicable laws to reach a conclusion.

Government Organization. There have been discussions and legislative proposals that would eliminate CPSC's independent nature and instead be put under the authority of OMB.

Question 5. What is your view on this proposed arrangement?

Answer. Thank you for your question. As we discussed during our meeting prior to my confirmation hearing, I believe that independence is beneficial. That said, it will be up to Congress to decide how the Commission is structured and whether or not there will be a change in how the Commission conducts its business. I will commit to you that I will review any proposed legislation and work with my fellow Commissioners, if confirmed, to find a consensus position on any such proposals, if required.

Flame Retardants. Recently the CPSC issued a new warning on a class of flame retardants that have been linked to a list of serious health issues including learning deficits and hyperactivity and has taken initial steps to ban these flame retardants in certain products. The CPSC has voted to convene a CHAP (Chronic Hazard Advisory Panel) to advise on a ban.

Question 6. What are your views on this issue? Do you or do you not support the CPSC moving forward to develop a proposed rule to ban this chemical class in children's products, upholstered furniture, mattresses, and electronics casings? Do you or do you not support the establishment of a Chronic Hazard Advisory Panel? If such a panel is established, will you follow its recommendations?

Answer. Thank you for your questions regarding flame retardants. I am not fully aware of or privy to the steps taken internally by the CPSC and I look forward to getting fully up to speed on the issues, if confirmed. The Consumer Product Safety

Improvement Act (CPSIA) sets forth a complex set of regulations that, if confirmed, I will follow. With regard to CHAP, the Commission voted to convene a CHAP to study this issue. I support the study of science, data, and viewpoints from as many experts as possible so that the agency can be as well-informed as possible.

Portable Generators. Despite the importance and harm caused by portable generators, the CPSC has yet to finalize a mandatory standard for these products. I appreciate the work that the Commission has done to educate consumers and to require warning labels on portable generators. However, as the devastating impact of Hurricane Irma in Florida, Puerto Rico and the Virgin Islands has shown people are still dying from CO poisoning from the use of portable generators that are critical to providing a sense of normalcy after wide spread devastation. The CPSC can step in and require a mandatory standard for a product when the voluntary standard is not sufficient. It is clear from the average of about 70 deaths and several thousand injuries annually that the voluntary standard is not sufficient.

Question 7. What are your views on this issue? Why hasn't the CPSC acted sooner to promulgate a mandatory safety standard for portable generators? How much of a priority do you think this should be for the commission? If confirmed as Commissioner, what will you do to ensure that people who survive hurricanes and other natural disasters aren't killed by the very product they are using the rebuild their homes and lives?

Answer. Thank you for your questions regarding portable generators. I am not familiar with the reasoning used by the current Commissioners regarding the decisions about portable generators, or the available or proposed options regarding portable generators, but I am committed to getting fully up to speed on these important issues. The CPSC's authority is governed by the Consumer Product Safety Act and it is bound by a complex set of rules and regulations that Congress promulgated and the courts interpreted in some instances. The statutory framework provides direction on how to address issues such as those referenced in your series of questions relating to portable generators and requires the CPSC to employ voluntary standards first and, if unsuccessful, then the Agency can call for mandatory standards. The statute requires that if voluntary standards can address a hazard and they are substantially complied with, the Agency may not proceed with mandatory rule making. That is what Congress directs and I will follow these directives. I will also commit to being responsive to you and your office on this or any other issue that you want to discuss and/or on ideas or new ways to promote the goals of the CPSC or the statute. I have some ideas regarding educational initiatives that might help those who are suffering through a hurricane or other natural disaster and I will discuss with my fellow Commissioners, if confirmed, to determine their feasibility.

Recalls. One important role of the CPSC is to ensure compliance with corrective action plans as part of recalls, as well as compliance with CPSC rules and laws, including reporting requirements.

Question 8. What do you see at CPSC's biggest compliance challenges and how would you address them? If confirmed as Commissioner, what tools would you like to see used by both the Commission and the recalling company to assure a more robust consumer response to recall announcements?

Answer. I know that the CPSC's experts have been analyzing these issues and I would like to study the CPSC's staff's findings on how to use more effectively the tools available to the CPSC and to the recalling company to assure the highest response to any recall announcement. I will continue to work with stakeholders to find ways to reach consumers, not just in terms of notice, but in terms of encouraging those who receive notice to take steps to participate in the recall. If confirmed, I look forward to learning more about CPSC's successes and challenges with regard to return and repair rates. This would including working with the Commission's enforcement staff to review and evaluate the relevant recall effectiveness data. This is certainly an area worthy of attention and, if confirmed, I look forward to studying this issue in depth.

Section 6(b). Section 6(b) of the Consumer Product Safety Act that prevents CPSC from sharing product specific safety information with consumers without express permission from the company in question. Many have argued that this delays consumers getting vital information they could use to keep their families safe.

Question 9. What do you think of Section 6(b)? What can you do as commissioner to lessen its impact on safety?

Answer. Section 6(b) of the Consumer Product Safety Act (CPSA), 15 U.S.C. § 2055(b), establishes procedures for and restrictions on the Commission's public disclosure of information. Section 6(b) prohibits the Commission from disclosing information about a consumer product that identifies a manufacturer or private labeler unless the Commission has taken "reasonable steps" to assure: (1) that the informa-

tion is accurate; (2) that disclosure of the information is fair in the circumstances; and (3) that disclosure of the information is reasonably related to effectuating the purposes of the CPSA and of the other laws administered by the Commission. Before disclosing such information, the Commission must provide the manufacturer or private labeler with the opportunity to comment on the accuracy of the information. The Commission may not disclose the information for at least 15 days after sending it to the company for comment. Congress codified these procedures and restrictions into the statute, in part, because it recognized that "the Commission has a responsibility to assure that the information which it disseminates is truthful and accurate." (See H.R. Rep. No. 1192, 92 Cong., 2nd Sess. 31, 32 (1972)). That is what Congress directs and, if confirmed, I will follow these directives.

SaferProducts.gov. Saferproducts.gov is a consumer incident database that CPSC implemented in 2011. It has been a useful tool for consumers who are researching products and an important mechanism for consumers and health care professionals to report incidents of harm.

Question 10. If confirmed as Commissioner, what steps would you want to take to make this website even more effective?

Answer. The CPSA directs the Commission to develop a database of publicly-available information on incidents involving injury or death. This database is an important tool for consumers and a good place for consumers to start their research. If confirmed, I commit to following the requirements set forth in statute, including those relating to the database. I also look forward to learning more about how the database is managed by the agency in order to assess its effectiveness and learning more about the Commission's experience with *saferproducts.gov*.

Question 11. What do you think is the best way to protect vulnerable consumers as new products enter the market without standards—such as some infant sleep products or connected products?

Answer. The CPSC plays an important role in the safety of our Nation's consumers. A central challenge for the Commission is to remain vigilant about emerging hazards from new products, including those you note here. I am aware of the "Emerging Threats and Hazards" tool that the Commission has its disposal and, if confirmed, I will want to see if there are ways to strengthen or update the existing program. It is important that the Commission work closely with U.S. retailers in this regard as they often are the first to identify potential hazards.

China. At least 2/3 of all product recalls are manufactured in China. The CPSC has signed a memorandum of understanding with China.

Question 12. Do you think that this MOU has been effective? What role should American manufacturers play in ensuring that their products, no matter where they are made, meet safety standards?

Answer. I am not privy to the internal agreements that the Commission has pursued with China. However, as more products manufactured in China enter our market, we must ensure that they are meeting U.S. safety standards. If confirmed, I commit to working with manufacturers to ensure products are meeting the high expectations of the American consumer. Additionally, I commit to reviewing the MOU to see how it may be used to put a greater emphasis on safety.

Conflicts of Interest. Your entire professional career has been spent representing companies seeking to escape liability from allegations of product safety violations. These same companies may believe that you will be an advocate for them on the Commission, even though your role as a Commissioner will be very different from your role as an advocate. As a Commissioner, your client will be the American people and their continued safety.

Question 13. What will you do to go above and beyond your ethics agreement as it relates to contacts with your current employer and former clients to ensure that there is no conflict or appearance of conflicts well beyond the one year prohibition you have outlined in your September 2017 ethics agreement?

Answer. If confirmed, my job as a Commissioner will not be to represent a particular sector or stakeholder. Rather, it will be to hear and work on behalf of the entire American public. I have been asked by the President of the United States to use my skills as a lawyer to work for the American people. I am honored to have such an opportunity and accept it with enthusiasm and commitment. If confirmed, I will effectively and zealously execute my duties as a Commissioner on behalf of the American people. In addition, as a Commissioner, I will be required to follow a particular set of rules promulgated by Congress to set safety standards and I will follow those rules and statutory directives. If confirmed, I will be guided by the rule of law, I will promote transparency between the Commission and its stakeholders, and I will encourage an open-door policy between the Commission and advocacy groups. I am aware of my obligations to the American public and intend to carry

out those obligations with integrity and consistent with the high standards that the American people, and this Committee, expect from their public servants.

Safe Sleep. Much progress was made on sudden unexplained infant death (SUID) in the 1990s, however that progress has largely stalled over the last decade and for certain high-risk groups the trend is increasing. The U.S. Centers for Disease Control and Prevention (CDC) estimate that in 2015 there were about 3,700 SUID cases. The FDA has warned against sleep positioners and baby nests and the American Academy of Pediatrics and other safe sleep advocates warn against the use of crib bumper pads. Unbeknownst to many consumers, many of these products meet no mandatory or voluntary standard. The CPSC is in a unique position to help address the public health problem of SUID through its jurisdiction over infant products and opportunities to communicate with families, caregivers, and health care providers.

Question 14. If confirmed as commissioner, what will you do to use CPSC authority to increase safe sleep among high-risk families, and to reduce the hazard posed by certain infant sleep products such as crib bumpers and other untested products?

Answer. Thank you for your question regarding the serious issue of sudden unexplained infant death. SUID is incredibly tragic and impacts many families across the United States. If confirmed, I will immerse myself fully in this issue and will work collaboratively with stakeholders and my fellow Commissioners, in accordance with the governing rules, regulations and applicable law, to protect our Nation's children. I want to explore how to use most effectively technology, social media, and the Commission's public relations capabilities to reach families. I look forward to getting fully up to speed on these issues and understanding the extent of the current safety standards. If confirmed, I am committed to studying the issues and concerns expressed by this question and discussing with my fellow Commissioners their thoughts and plans in this area.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. TOM UDALL TO DANA BAIOCCO

Question 1. Your questionnaire and opening statement state that you hope to balance protecting the American Public from "the unreasonable risks of harms" while balancing the American public's right to have access to a range of affordable product choices and recreational activities. However, are you aware that under the Federal Hazardous Substances Act, products are hazardous, and therefore must be regulated, based on the POTENTIAL or CAPACITY to cause harm, not based on "unreasonable risks of harm"—as your questionnaire and opening statement suggest? Are you committed to regulating consumer products based on their capacity to produce illness or injury if they may cause substantial illness or injury as a result of customary use? Do you believe the current CPSC rulemaking process does not give Americans sufficient access to a "range of affordable product choices and recreational activities?

Answer. Thank you for allowing me to clarify this point. My opening statement was not intended to adopt, expand, or exclude any applicable legal or statutory language. I am committed to following the Federal Hazardous Substances Act, and all relevant laws, regulations and rules that govern the issues over which the CPSC has jurisdiction.

The statutory framework that governs the CPSC provides direction on how to address issues that come before the agency. As you know, that framework requires the CPSC to employ voluntary standards first and if unsuccessful, then the Agency can call for mandatory standards. The statute requires that if voluntary standards can address a hazard and they are substantially complied with, the Agency may not proceed with mandatory rule making. That is what Congress directs and I will follow those directives. I am also committed to listening to all points of view and working with you and my fellow Commissioners and staff, if confirmed, to make sure that the goals of the applicable statutes are promoted.

Question 2. Organohalogen flame retardants have well-documented associations with significant adverse child health effects. These chemicals are known to leach from products, resulting in widespread human exposure. Given the demonstrated hazard of these chemicals to children and their prevalence in these product categories, CPSC is positioned to act on this public health threat through its FHSA authority. However, I am concerned that you may seek to overturn or slow down the Commission's recent work on organohalogens. Do you support the CPSC moving forward to develop a proposed rule to ban this chemical class in children's products, upholstered furniture, mattresses, and electronics casings?

Answer. Thank you for your question regarding flame retardants. At this juncture, I am not in a position to comment on the Commission's plans regarding its rulemaking procedure because I am not part of the Commission, and I am neither aware of nor privy to the steps or analyses taken internally by the CPSC. I do, however, look forward to getting fully up to speed on the issues. If confirmed, I intend to follow the duties and requirements set forth under the Consumer Product Safety Improvement Act (CPSIA) and all other applicable statutes. I support the study of science, data, and viewpoints from as many experts as possible so that the agency can be as well informed as possible. I will evaluate the issues that come before the CPSC, consistent with the applicable science, data and applicable rules, regulations and laws, and work collaboratively with stakeholders and the other Commissioners to find best practices to protect the American public.

Question 3. I have been working for years to bring attention to the problem of concussions in youth sports. While we have made progress, I am still concerned about the prevalence of equipment falsely labeled to prevent concussions. Will you commit to doing everything within your authority to clamp down on products that fail to meet the necessary standards—including establishing mandatory standards?

Answer. Thank you for raising the issue of concussions in youth sports. Youth concussions are a very serious topic and there needs to be more awareness on this issue for families who have children who play sports. I played many sports growing up and I have a daughter who plays sports. My family and I have had our own experiences with this serious issue. If confirmed, I look forward to learning more about the sports equipment you mention as well as the existing standards. I am interested in these issues and will commit to being responsive to you and your office on these matters.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. CATHERINE CORTEZ MASTO TO DANA BAIOCCO

Recalls.

Question 1. Ms. Baiocco, do you believe that the CPSC has been successful at achieving acceptable recall return and repair rates on children's products? As Commissioner, what tools would you like to see used to assure a robust response to recall announcements—both from the agency and the recalling company?

Answer. Thank you for your questions regarding recalls. I would like to answer these two questions together because I believe they are related. First, I know that CPSC experts have been analyzing these issues and I would like to study their findings regarding how to use more effectively the tools available to the CPSC and to the recalling company to assure the highest response to any recall announcement. I will continue to work with stakeholders to find ways to reach consumers, not just in terms of notice, but in terms of encouraging those who receive notice to take steps to participate in the recall. Second, if confirmed, I look forward to learning more about CPSC's successes and challenges with regard to return and repair rates. This would include working with the Commission's enforcement staff to review and evaluate the relevant recall effectiveness data. This is certainly an area worthy of attention and, if confirmed, I look forward to studying this issue in depth.

Question 2. Do you believe it is appropriate to criticize a firm conducting a recall as uncooperative?

Answer. Positive interaction and cooperation are generally more effective than criticism for the sake of criticism. It should be the goal of the Commission to work cooperatively with and to assist stakeholders to ensure the safety of the American public. A firm that makes a commitment to the agency should be held to its commitment. I would be my duty as a Commissioner to use all tools available to ensure that a recall is as productive and effective for the consumers as possible.

Toxic Chemical Flame Retardants. Ms. Baiocco, organohalogen flame retardants have well-documented associations with significant adverse child health effects. These chemicals are known to leech from those products, resulting in widespread human exposure. Given the demonstrated hazard of these chemicals to children and their prevalence in these product categories, CPSC is well-positioned to act on this public health threat through its FHSA authority.

Question 3. Do you or do you not support the CPSC moving forward to develop a proposed rule to ban this chemical class in children's products, upholstered furniture, mattresses, and electronics casings?

Answer. Thank you for your question. I am not in a position to comment on the petition or any plans regarding the initiation of any rulemaking procedure because I am not part of the Commission, and I am neither aware of nor privy to the steps

or analyses taken internally by the CPSC. I do, however, look forward to getting fully up to speed on the issues. There is a complex set of statutory regulations that, if confirmed, I will follow. I will evaluate these issues, if confirmed, based on the science, data, and after hearing the relevant information, and work collaboratively with stakeholders and the other Commissioners, in accordance with the governing rules, regulations and applicable laws to reach a conclusion.

Phthalates. Ms. Baiocco, phthalates are chemicals used to soften materials such as plastic and are used in a wide array of consumer products including toys. Phthalates have well documented associations with significant adverse health effects. The Consumer Product Safety Improvement Act (CPSIA) passed in 2008, banned three specific phthalates and required the CPSC to form an expert panel to evaluate additional phthalates. The CPSC just finalized a rule, based on the expert panel's recommendation, to ban children's toys and child care articles that contain concentrations of more than 0.1 percent of 5 additional forms of phthalate.

Question 4. Do you support this phthalate rule and how else would you address childhood exposure to known toxic chemicals?

Answer. Thank you for your question regarding phthalates. I am not fully aware or privy to the steps taken internally by the CPSC and I look forward to getting fully up to speed on all issues. If confirmed, I plan to follow the duties and requirements set forth in the governing statute and other relevant statutes applicable to the Commission. I know that the Commission voted to issue a final rule prohibiting the use of specified phthalates (a class of plasticizing chemicals found in virtually all soft plastics) in children's toys and child care articles. I look forward to learning more about this rule and the considerations that went into the Commission's adoption of it. With regard to addressing other exposures, I will evaluate the issues that come before the CPSC, consistent with the applicable science, data, and applicable rules, regulations and laws and work collaboratively with stakeholders and the other Commissioners to find best practices to protect America's children. If confirmed, I look forward to working with you, the other CPSC Commissioners, industry stakeholders, and consumers on this important issue.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. BILL NELSON TO NEIL JACOBS, JR.

Hurricane Hunters. By flying into and above storms, hurricane hunter aircraft collect critical data for NOAA's forecasts. Although these aircraft are critical to NOAA's forecasting capabilities, they are growing old and there is no backup capability. That is why, this year, I worked with colleagues in the Senate and the House to pass a law to require a backup for the hurricane hunters. There have been multiple emergency repairs this season. In September, I learned that the main cabin door on the Gulfstream started leaking at forty-five thousand feet, and the aircraft had to make an emergency landing during reconnaissance for Hurricane Maria. Despite all this, NOAA has still not come up with the statutorily required backup plan.

Question 1. Will you commit to providing this plan by the end of the year?

Answer. Coming from the aviation industry, I can assure you how deeply concerning events like cabin depressurization, or any other mechanical issue that jeopardizes crew safety, are to me. The Weather Research and Forecasting Innovation Act requires this, and I do commit to providing this plan as fast as possible if confirmed—certainly well in advance of the 2018 hurricane season.

Climate and Weather Satellites (NOAA). When a hurricane like Irma strikes, we need satellite data to accurately predict the hurricane track, effects, intensity, and to conduct search and rescue efforts. However, several of our satellite systems are aging and must be replaced. In the administration's budget, they propose severely reducing funding for many of our satellite systems.

Question 2. What will you do as Assistant Secretary of Commerce for Oceans and Atmosphere to ensure that we maintain a fully operational weather satellite system for future generations?

Answer. Satellite data is critical to maintaining and improving forecast skill. When it comes to the satellite programs, if confirmed, the following would be my plan of action:

(1) I would examine NOAA's planning and budget processes to ensure every penny NOAA programs for satellites is effectively and efficiently used. Former NOAA Administrator Dr. Conrad C. Lautenbacher, Jr., VADM USN (ret.) did this with considerable success.

(2) Explore public-private partnerships for acquiring satellite data of equal quality for less cost. A cost-benefit analysis that involves all three sectors should be performed.

(3) Continue and strengthen partnerships to share satellite data, such as those with DoD, NASA, and EUMETSAT, and identify new partners, including commercial satellite data providers, if possible.

(4) Work with the Commerce Department, Congress, and the Office of Management and Budget to follow recommendations from the Government Accountability Office to request sufficient funding for NOAA satellite systems in future budget submissions.

Polar Follow-on. In 2017, the NESDIS Independent Review Team found that without accelerating the launches of JPSS–3/4 (the Polar Follow-On program) there is a high probability of a gap in coverage from our Polar-orbiting operational environmental satellite constellation. However, the administration has proposed reducing funds for the Polar Follow-on program.

Question 3. In light of this, how will you work to ensure we do not have a gap in coverage?

Answer. It is critical that there not be a gap in coverage in data from the polar-orbiting satellite constellation, and I intend to manage this situation closely to minimize the risk of a gap. I understand from the President's FY18 Budget that NOAA is developing PFO/JPSS–3 and JPSS–4 instruments and spacecraft buses as copies of JPSS–2. This allows NOAA to take advantage of JPSS–2 instrument development to reduce cost and risk. In addition, NOAA has exercised simultaneous instrument block buys for PFO/JPSS–3 and JPSS–4 instruments on the current contracts for the most efficient acquisition strategy. The PFO/JPSS–3 and JPSS–4 spacecraft buses can be procured as options on the JPSS–2 spacecraft contract, thereby reducing risk and cost.

National Weather Service Workforce. In order to save lives and property, we must have good forecasts so that people can take action to protect themselves. This is the core function of the National Weather Service. As of July, however, the National Weather Service had over six hundred vacant positions, out of a workforce of over four thousand.

Question 4. Will you commit to addressing the employment vacancies and exempting weather service public safety employees from any hiring delay or freeze?

Answer. If I am confirmed, I will take into account the recent National Weather Service Operations Workforce Analysis (OWA) performed by McKinsey & Co. to recruit, hire, train, and retain a robust and highly skilled workforce that can most effectively accomplish the NWS mission to protect lives and property and enhance the national economy.

Question 5. What actions will you take to address these vacancies?

Answer. If confirmed, I would first consult with NWS Director Dr. Louis Uccellini and his staff for their feedback on this important issue, and would work to develop a plan.

Climate Change and Scientific Integrity. Two weeks ago the EPA prevented three of its scientists from speaking at a conference about a report that mentioned climate change's effects on the health of Narragansett Bay, and the agency has begun to remove climate change language from its websites. We have also heard concerns from NOAA employees about feeling censored, especially in regard to climate change research.

Question 6. What will you do to ensure scientific integrity and protect NOAA's researchers from being muzzled?

Answer. I believe that federally funded scientific research should be transparent, defendable, and reproducible, as should all research. Research that follows scientific standards and uses the classic peer-review process should be made publicly available. I will support the Office of Management and Budget's Guidelines for Ensuring and Maximizing the Quality, Objectivity, Utility, and Integrity of Information Disseminated by Federal Agencies (2001), Peer Review Bulletin (M–05–03), NOAA Administrative Order on Scientific Integrity (NAO 202–735D), and related information policies

Question 7. What should NOAA's role be in researching and disseminating climate change data?

Answer. All climate-related data collected and produced by NOAA should be made public. NOAA should maintain a leading role in producing and disseminating both the historical observations, as well as the predictions. In addition to this, NOAA should quantify and disclose the degree of uncertainty associated with these observations and predictions.

Question 8. Do you agree that human activity is the main driver of climate change?

Answer. In the absence of various short-term natural forcings that can often dominate the surface and lower-tropospheric temperature measurements (*e.g.,* El Niño, volcanic activity, etc.), humans do have a significant impact through non-sustainable deforestation, development, and increased greenhouse gas emissions.

Weather Privatization. In your capacity as Chief Atmospheric Scientist for Panasonic Weather Solutions, you testified twice in front of the House Science Committee. At these hearings, you advocated for a larger private sector role in our national weather program.

Question 9. Please list and describe specific services that the National Weather Service currently provides that you believe would benefit from a larger private sector role.

Answer. The primary components are observations and modeling. There are many new weather observing systems being deployed by the private sector that would add value to the NWS mission. There are also many advancements in modeling that would add great value. These relate to both model code, as well as high performance computing and computational efficiency. Additionally, many of these are not actually "private sector", but are currently being developed within the academic sector (with private sector investment). It would be extremely beneficial to harness these private-academic innovations.

Question 10. Please list and describe National Weather Service products that you believe should not be provided by commercial companies.

Answer. The NWS has an obligation to the taxpayers to provide essential products and services to protect life and property. It would be beyond the scope of my position, if confirmed, to determine what commercial companies should not provide to their customers.

Question 11. If NOAA elects to buy a greater percentage of data from the private sector to supplement the agency's weather data as you have advocated for in the past, how do you suggest balancing private companies' propriety concerns with NOAA's ultimate goal of providing the American public with the best available information to protect life and property?

Answer. This will need to be addressed during the contracting/acquisition process on a case by case basis. Each company may have different and unique concerns regarding their intellectual property (IP). To meet NOAA's goal of providing the American public with the best possible forecast information to protect life and property, NOAA would need to acquire the most data possible within its budget. If addressing the IP concerns of commercial data providers results in NOAA being able to obtain more data for less money, thereby advancing its mission through improved forecasting, then it would be a win for NOAA, the taxpayers, and the private sector.

Question 12. How would you ensure that Panasonic Weather Solutions does not unduly benefit from your position as Assistant Secretary, especially in the context of an increased private sector role in the national weather program?

Answer. I have consulted with the Office of Government Ethics and Department of Commerce ethics officials to identify conflicts of interest. I have signed an ethics agreement and conflicts of interest will be avoided in accordance with my ethics agreement. I understand that my ethics agreement has been provided to the Committee.

Question 13. In a House Science Committee hearing in July, you discussed how private companies like Panasonic can move more quickly than NOAA in improving their models and processes because they do not have to go through the years of quality and reliability testing that NOAA requires when implementing major model upgrades. Unlike private companies, NOAA bares ultimate responsibility and liability for protecting U.S. citizens' lives and property. How would you balance streamlining the implementation of major weather model upgrades with the need for robust quality and reliability testing?

Answer. Under no circumstances should corners be cut when it comes to robust debugging, parallel monitoring, and reliability and stability testing. There are many areas that can be improved when it comes to the research to operations (R2O) process from initial development work on similar compute architecture to unifying the model suite. These are upstream of final pre-production testing. Much of this is inherently part of the new NOAA Environmental Modeling System (NEMS), which is a shared, portable, high performance software superstructure and infrastructure underlying a coupled modeling system that supports predictions of Earth's environment at a range of time scales. The Weather Research and Forecasting Innovation Act requires an R2O plan to be defined, and in addition to this, O2R should also be considered. Several of the suggested efficiency improvements and community

model outreach are outlined in the University Corporation for Atmospheric Research Community Advisory Committee for NCEP (UCACN) Model Advisory Committee (UMAC) report.

RESPONSE TO WRITTEN QUESTION SUBMITTED BY HON. MARIA CANTWELL TO NEIL JACOBS, JR.

Question. This year the United States is enduring one of its most costly years for extreme weather—a near-record of 16 billion-dollars in weather disasters have ravaged the Nation. Reliable, accurate, and publically available weather modeling and forecasts are critical in saving lives and protecting our country's infrastructure. I am concerned that we continue to rely on the European model during extreme forecasts. Even the nightly news compares the "U.S. model" to the European one. What can we do to bring U.S. weather prediction and forecasting up to the level it needs to be to protect Americans?

Answer. Over the years, NWS numerical weather prediction (NWP) has made significant improvements; however, it is true that the U.S. lags behind the European Centre for Medium-Range Weather Forecasts (ECMWF) model in general forecast skill. At a high level, implementation of a strategic plan and roadmap to reach the skill goals is already being rolled out. This hinges on the community-based unified global modeling system, which can be managed similarly to how the Developmental Testbed Center (DTC) managed the WRF model code. The point of this is to have a fully integrated framework for coupled, ensemble-based modeling and data assimilation.

All NWP begins with observations, which can be divided into satellite and conventional. There are many existing feeds that power the global modeling system including ATOVS, AQUA/TERRA, Suomi NPP (VIIRS), HIMAWARI–8, Megha-Tropiques (SAPHIR), ISSRAPIDSCAT, GCOM–W (Advanced Microwave Scanning Radiometer 2), MODIS, etc., which are still being refined and optimized. There are also many new feeds that will be available soon, such as GOES–R atmospheric motion vectors and radiances, JPSS–1 (ATMS, CrIS, VIIRS), COSMIC2 and commercial GPS–RO (conventional). In-situ observational data feeds are growing as well, such as more aircraft data, land surface, as well as radar.

How these observations are assimilated is critical, and this has largely been where ECMWF has held a lead. ECMWF uses a true 4D-Var technique versus our present 4DEnVar and previous 3DEnVar and 3D-Var. The next-generation data assimilation (DA) system, which will be integrated into the unified modeling package is the Joint Effort for Data assimilation Integration (JEDI). This is a more efficient way to manage the code, and the modular structure allow for use across different models, grids, and can employ different DA solvers.

Of similar importance is the new dynamic core: Finite-Volume Cubed-Sphere Dynamical Core (FV3), which is highly scalable and flexible, and can be run as non-hydrostatic (the current GFS is hydrostatic). This will allow the global modeling system to run at very high spatial resolutions that are capable of resolving convective activity. It also has the capability of moving nests, which is very useful for tropical modeling. In addition to the horizontal resolution, shifting to 128 vertical levels, which ECMWF runs now, will also be a large leap forward. At these resolutions, it is also critical to have improved physics, and the new Common Community Physics Package allows for stochastic, scale-aware convection and PBL, and double-moment cloud microphysics.

I am barely scratching the surface of these upcoming advancements. ECMWF is a moving target, and they are constantly upgrading their modeling system too. Much of what needs to happen is already mapped out in the Weather Research and Forecasting Innovation Act of 2017. Among the various components are the need for streamlined R2O, an O2R plan, community outreach to harness the innovations occurring at universities and private industry, and a much needed visiting scientist program at NCEP. ECMWF has had a long-standing visiting scientist program to bring in outside expertise to help develop different aspects of their program. Many U.S. scientists have been part of ECMWF's visiting scientist program including myself, and the Weather Research and Forecasting Innovation Act (section 404) makes this possible for NCEP.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. RICHARD BLUMENTHAL TO NEIL JACOBS, JR.

Conflicts of Interest.

Question 1. As you know, Panasonic Avionics Corporation sells its data and model outputs to NOAA. You have been the chief atmospheric scientist at Panasonic for the past four years. How will you ensure that your connections to the industry will not influence your procurement of Panasonic byproducts?

Answer. I have consulted with the Office of Government Ethics and Department of Commerce ethics officials to identify conflicts of interest. I have signed an ethics agreement and conflicts of interest will be avoided/resolved in accordance with my ethics agreement. I understand that my ethics agreement has been provided to the Committee.

Question 2. In a 2016 House hearing on private sector weather forecasting, you testified in support of strengthening relationships between the private and government sectors in the field. What did you mean by that?

Answer. There is rapid innovation in private industry in the areas of observing systems, modeling, analytics, and high performance computing. Some of these advancements are occurring at many universities as well, but are funded with private sector investment. If NOAA can harness these advancements through public-private partnerships, there is potential to greatly advance NOAA's mission of protection of life and property, as well as enhancing the national economy through incentivizing additional private investment and growth of the entire Weather Enterprise. This concept is also stated in the Weather Research and Forecasting Innovation Act of 2017.

Question 3. Do you believe in privatizing our Federal weather forecasting programs?

Answer. Public-private partnerships and "privatization" are two very different business models. I have always advocated for public-private partnerships.

Climate Change.

Question 4. Nighty-seven percent of scientists agree that climate change is real. If confirmed, you will have to deal with issues directly related to climate change. Do you believe that our Earth is warming?

Answer. Yes.

Question 5. Do you believe that human activity is responsible for climate change?

Answer. Humans do have a significant impact through non-sustainable deforestation, development, and increased greenhouse gas emissions. There are other forcings that factor in as well, such as El Niño Southern Oscillation, Pacific Decadal Oscillation, volcanic activity, and solar irradiation.

Question 6. Do you commit to ensuring that decisions at NOAA are executed based upon scientific evidence and not politics?

Answer. Yes.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. BRIAN SCHATZ TO NEIL JACOBS, JR.

Question 1. What are your views on climate change and climate research?

Answer. The observational data show steady warming, rising sea level, reduced ice coverage, and increasing CO_2 over time. Deforestation and greenhouse gas emissions are contributing to the increase of CO_2 in the atmosphere. While water vapor, which is the most abundant greenhouse gas, is naturally occurring, the Clausius–Clapeyron equation shows that CO_2-driven warming can have an indirect role in increasing water vapor. There are also many natural sources for these gasses, as well as many other natural terrestrial forcing mechanisms influencing the temperature (*e.g.,* volcanic activity, El Niño Southern Oscillation, Pacific Decadal Oscillation, etc.). In addition to direct forcings, there are also many positive and negative feedbacks, most of which are nonlinear in nature.

Dozens of papers have been published in peer-reviewed journals over the last 18 months showing that solar irradiance might have a greater influence than originally thought. The continuous emergence of new findings related to our knowledge of climate change show that while we do have a solid understanding of certain aspects, there are many aspects that are still not well understood. Thus, climate research in NOAA must be continued to better understand these processes, and to isolate anthropogenic influence from natural variability.

To further advance all aspects of the research, a more climate-specific observing system should be a focus, as NOAA's role is to produce reliable and accurate envi-

ronmental observations and predictions. Additionally, the level of uncertainty associated with the historical data and predictions of the future should be quantified and shared, so that policy makers will have the best available information, and associated confidence in them, on which to base their decisions.

Question 2. What are your views on the roles of NOAA and the private sector in the weather enterprise? In your opinion, what is the ideal relationship between them?

Answer. There is rapid innovation in private industry in the areas of observing systems, modeling, analytics, and high performance computing. Some of these advancements are occurring at many universities as well, and many are funded with private sector investment. If NOAA can harness these advancements through public-private partnerships, there is potential to greatly advance NOAA's mission of protection of life and property, as well as to enhance the national economy through incentivizing additional private investment and growth of the entire Weather Enterprise. This concept is also affirmed in the Weather Research and Forecasting Innovation Act of 2017.

Question 3. What are your views on the free and public availability of NOAA weather data—in particular any data that NOAA purchases.

Answer. This will need to be addressed during the contracting/acquisition/licensing process on a case by case basis. Each company may have different and unique concerns regarding their intellectual property (IP). If addressing the IP concerns of commercial data providers results in NOAA being able to obtain more data for less money, thereby advancing their mission of protecting life and property through improved forecasting, then it would be a win for NOAA, the taxpayers, and the private sector. As for free and public redistribution of commercial data to taxpayers, if we can do that without driving up the cost to the taxpayers, I am in full support. If additional costs are involved, then we will need to weigh that expense against the reduced potential forecast skill improvement. In either case, "research only" licenses agreements that would allow for free and open access for universities should be encouraged.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. EDWARD MARKEY TO NEIL JACOBS, JR.

Question 1. The Assistant Secretary of Commerce, Environmental Observation and Prediction has played a major role in driving the administration's priorities related to climate science. Will you commit to maintaining NOAA's current critical role in climate change research?

Answer. Yes.

Question 2. In your questionnaire, you outline the top three challenges you see NOAA facing as improving weather forecasting and modeling, increasing observational and predictive resource capabilities, and managing satellite costs. Do you foresee any challenges for maintaining the robust climate science work done at NOAA in the current administration?

Answer. All branches of NOAA will face unique challenges; however, climate research in NOAA must be continued to better understand the fundamental processes, and to isolate anthropogenic influence from natural variability. To further advance all aspects of the research, a more climate-specific observing system should be a focus, as NOAA's role is to produce reliable and accurate environmental observations and predictions. Additionally, the level of uncertainty associated with the historical data and predictions of the future should be quantified and shared, so that policy makers will have the best available information, and associated confidence in them, on which to base their decisions.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. TOM UDALL TO NEIL JACOBS, JR.

Question 1. Dr. Jacobs, in June of this year you testified before the House Science Committee that "the quickest way to advance NOAA's mission is to harness the capabilities in the private sector and let the private sector probably drive the pace." At that hearing you testified in your capacity as Chief Atmospheric Scientists for Panasonic Weather Solutions, a private weather company. If you are confirmed as the Assistant Secretary of Commerce for Environmental Observation and Prediction, you will be in a position to increase the private industry's participation in NOAA's national weather program. How do you plan to ensure that Panasonic Weather Solu-

tions will not unduly benefit from the increased influence of the private sector on NOAA's weather program?

Answer. I have consulted with the Office of Government Ethics and Department of Commerce ethics officials to identify conflicts of interest. I have signed an ethics agreement and conflicts of interest will be avoided in accordance with my ethics agreement. I understand that my ethics agreement has been provided to the Committee.

Question 2. Dr. Jacobs, the airline industry collects important weather data using instruments called TAMDAR systems. These systems can capture vertical atmospheric profiles, critical to weather forecasts. Your company, Panasonic Weather Solutions owns the data collected by the TAMDAR systems, which you then sell to NOAA. From your experience partnering with NOAA, can you discuss balancing private companies' concerns with NOAA's ultimate goal of providing the American public with the best available information to protect life and property?

Answer. This will need to be addressed during the contracting/acquisition/licensing process on a case by case basis. Each company may have different and unique concerns regarding their intellectual property (IP). To meet NOAA's goal of providing the American public with the best possible forecast information to protect life and property, NOAA would need to acquire the most data they can within a given budget. If addressing the IP concerns of commercial data providers results in NOAA being able to obtain more data for less money, thereby advancing their mission of protecting life and property through improved forecasting, then it would be a win for NOAA, the taxpayers, and the private sector.

Question 3. And, can you list and describe essential National Weather Service products that should not be provided by commercial companies?

Answer. The NWS has an obligation to the taxpayers to provide essential products and services to protect life and property. It would be beyond the scope of my position, if confirmed, to determine what commercial companies should not provide to their customers.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. GARY PETERS TO NEIL JACOBS, JR.

Question 1. Dr. Jacobs: Your most recent employer, Panasonic, is a company that generates and sells weather data and forecasts to the public. In certain respects, it's a private company that competes with NOAA. Congress has fended off corporate interest in moving certain roles and responsibilities of NOAA to the private sector—including, for example, NOAA's issuing of weather warnings. It is my belief that it is in the American taxpayer's best interest for NOAA to continue to communicate this information directly to the public.

Many are fearful that your past experience could influence your decision making at NOAA and that you could advocate for restricting public access to NOAA weather data and forecasts. What is your response to these concerns?

Answer. All data, both observations and forecast products, that are not subject to lawful redistribution restrictions, should be accessible to the U.S. taxpayers.

Question 2. What are you going to do to mitigate these concerns and ensure impartiality in your decision making?

Answer. I intend to work closely with both Congress and U.S. weather enterprise stakeholders.

Question 3. Dr. Jacobs: According to NOAA, for the past four years, we have experienced the warmest years on record with each year breaking the proceeding year's record. We are on track for 2017 to be just as warm. Previous assistant secretaries in this position have played a major role in driving the administration's priorities related to climate science. What do you believe is NOAA's role in measuring and addressing the impacts of climate change?

Answer. Climate research in NOAA must be continued to better understand the fundamental processes, and to isolate anthropogenic influence from natural variability. To further advance all aspects of the research, a more climate-specific observing system should be a focus, as NOAA's role is to produce reliable and accurate environmental observations and predictions. Additionally, the level of uncertainty associated with the historical data and predictions of the future should be quantified and shared, so that policy makers will have the best available information, and associated confidence in them, on which to base their decisions.

Question 4. Dr. Jacobs: The President's Fiscal Year 2018 Budget Request for NOAA included major cuts to the agency's satellite program, including NOAA's new generation of polar orbiting satellites. These satellites provide critical data and in-

formation to a number of users in both the public and private sector. Do you support these cuts? How will you ensure that this important program will continue providing the data that many people rely on to reduce the potential loss of human life and property?

Answer. It is critical that there not be a gap in coverage in data from the polar-orbiting satellite constellation, and I intend to manage this situation closely to ensure any risk of a gap is minimized. I understand from the President's FY18 Budget that NOAA is developing PFO/JPSS–3 and JPSS–4 instruments and spacecraft buses as copies of JPSS–2. This allows NOAA to take advantage of JPSS–2 instrument development to reduce cost and risk. In addition, NOAA has exercised simultaneous instrument block buys for PFO/JPSS–3 and JPSS–4 instruments on the current contracts for the most efficient acquisition strategy. The PFO/JPSS–3 and JPSS–4 spacecraft buses can be procured as options on the JPSS–2 spacecraft contract, thereby reducing risk and cost.

Question 5. Dr. Jacobs: The United States weather models have led the world for decades, but recently, improvements to European weather models have given them an edge in performance over those produced by the United States and NOAA. What will you do and how will you work to improve NOAA's weather models so that we again lead the world in weather modeling capabilities?

Answer. Over the years, NWS numerical weather prediction (NWP) has made significant improvements; however, it is true that the U.S. lags the European Centre for Medium-Range Weather Forecasts (ECMWF) model in general forecast skill. At a high level, implementation of a strategic plan and roadmap to reach the skill goals is already being rolled out. This hinges on the community-based unified global modeling system, which can be managed similarly to how the Developmental Testbed Center (DTC) managed the WRF model code. The point of this is to have a fully integrated framework for coupled, ensemble-based modeling and data assimilation.

All NWP begins with observations, which can be divided into satellite and conventional. There are many existing feeds that power the global modeling system including ATOVS, AQUA/TERRA, Suomi NPP (VIIRS), HIMAWARI–8, Megha-Tropiques (SAPHIR), ISSRAPIDSCAT, GCOM–W (Advanced Microwave Scanning Radiometer 2), MODIS, etc., which are still being refined and optimized. There are also many new feeds that will be available soon, such as GOES–R atmospheric motion vectors and radiances, JPSS–1 (ATMS, CrIS, VIIRS), COSMIC2 and commercial GPS–RO (conventional). In-situ observational data feeds are growing as well, such as more aircraft data, land surface, as well as radar.

How these observations are assimilated is critical, and this has largely been where ECMWF has held a lead. ECMWF uses a true 4D-Var technique versus our present 4DEnVar and previous 3DEnVar and 3D-Var. The next-generation data assimilation (DA) system, which will be integrated into the unified modeling package is the Joint Effort for Data assimilation Integration (JEDI). This is a more efficient way to manage the code, and the modular structure allow for use across different models, grids, and can employ different DA solvers.

Of similar importance is the new dynamic core: Finite-Volume Cubed-Sphere Dynamical Core (FV3), which is highly scalable and flexible, and can be run as non-hydrostatic (the current GFS is hydrostatic). This will allow the global modeling system to run at very high spatial resolutions that are capable of resolving convective activity. It also has the capability of moving nests, which is very useful for tropical modeling. In addition to the horizontal resolution, shifting to 128 vertical levels, which ECMWF runs now, will also be a large leap forward. At these resolutions, it is also critical to have improved physics, and the new Common Community Physics Package allows for stochastic, scale-aware convection and PBL, and double-moment cloud microphysics.

I am barely scratching the surface of these upcoming advancements. ECMWF is a moving target, and they are constantly upgrading their modeling system too. Much of what needs to happen is already mapped out in the Weather Research and Forecasting Innovation Act of 2017. Among the various components are the need for streamlined R2O, an O2R plan, community outreach to harness the innovations occurring at universities and private industry, and also a much-needed visiting scientist program at NCEP. ECMWF has had a long-standing visiting scientist program to bring in outside expertise to help develop different aspect of their program. Many U.S. scientists have been part of ECMWF's visiting scientist program including myself, and the Weather Research and Forecasting Innovation Act (section 404) makes this possible for NCEP.

Question 6. Dr. Jacobs: The National Weather Service employs thousands of people to process data, run models, and produce weather forecasts that are critical to keeping Americans prepared and safe. The staff of the National Weather Service are

dedicated to providing critical information to emergency managers and the public, often working around the clock during natural disasters like the recent string of hurricanes. Recent reporting by the Government Accountability Office shows 11 percent of positions at NOAA are unfilled. According to media reports, this thread-bare staffing has lowered morale across the agency. What will you do to increase hiring at NOAA and the National Weather Service and ensure it is properly staffed?

Answer. If confirmed, I will take into account the recent National Weather Service Operations Workforce Analysis (OWA) performed by McKinsey & Co. to recruit, hire, train, and retain a robust and highly skilled workforce that can most effectively accomplish the NWS mission to protect lives and property and enhance the national economy. I will also consult with NWS Director Dr. Louis Uccellini and his staff for their feedback on this important issue and work to develop a plan.

Question 7. How will you improve morale?

Answer. Having a strategic plan and leading by example are two important tools for improving morale. If confirmed, I will make it a priority to visit as many facilities as possible to meet and discuss the issues of concern with the staff. A byproduct of public-private partnerships will be helping unify the U.S. weather enterprise. NOAA can tap into these innovations and resources versus competing against them. Working together, we can regain the position as the global leader in weather modeling. I have found that a little friendly competition is always helpful to unite the team and boost morale, and achieving the skill of the European Centre is not out of reach.

Question 8. Dr. Jacobs: Our ability to observe and forecast weather continues to improve, but there are still nearly 6,000 people killed and over 400,000 injured every year in weather-related incidents. Having improved physical science alone will not be a panacea for reducing fatalities and injuries when extreme weather strikes. Studies have shown a need to integrate social and behavioral sciences into weather-related incident response in order to improve communication amongst meteorologists, emergency managers and the public. How will you build capacity throughout NOAA and the National Weather Service to better integrate social and behavioral sciences into response plans, improve the communication of scientific information, and increase our understanding of the social dynamics and needs of vulnerable subpopulations to help prevent weather-related injuries, fatalities, and damage?

Answer. If confirmed, I will support further development of the National Weather Service's Impact-Based Decision Support Services (IDSS), which is an interpretative service provided to help core partners, such as emergency personnel and public safety officials, make decisions when weather, water and climate impacts the lives and livelihoods of the American people. This is part of the NWS Weather Ready Nation (WRN), and has well over 4,000 ambassadors (*i.e.,* weather enterprise partners).

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. CORY BOOKER TO NEIL JACOBS, JR.

Question 1. Do you agree there is a link between climate and weather?

Answer. Yes.

Question 2. Do you believe that a warmer climate is causing more extreme weather events?

Answer. Many peer-reviewed studies have been published simulating present-day "extreme" weather events under pre-industrial revolution thermodynamic climatological conditions, and the results show weaker, but not statistically significant differences. However, those same present-day "extreme" events were also simulated under future projected (yr~2100) warming scenarios using the IPCC Fifth Assessment Report (AR5) representative concentration pathway 8.5 (RCP8.5; the most extreme greenhouse gas scenario), and the resulting storms were notably stronger.

Question 3. Based on its own research and the research of thousands of other climate scientists, NOAA states that climate data patterns reveal that the planet's global surface temperature is rising. Do you agree with this statement?

Answer. Yes.

Question 4. NOAA further states that this change is linked to, and I quote, "the dramatic increase in greenhouse gases in the atmosphere that has occurred over the past two centuries." Do you agree with this statement?

Answer. The warming is linked to greenhouse gas (GHG) concentration, yes; however, there are many additional forcings and nonlinear feedbacks contributing to an extremely complex system.

Question 5. Do you believe that humans are primarily responsible for this observed recent climate change?

Answer. In the absence of various short-term natural forcings that can often dominate the surface and lower-tropospheric temperature measurements (*e.g.,* El Niño, volcanic activity, etc.), humans do have a significant impact through non-sustainable deforestation, development, and increased GHG emissions.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. MAGGIE HASSAN TO NEIL JACOBS, JR.

Question 1. NOAA is a very diverse, science-based agency, with many professionals aiding the day-to-day operations of the agency and its goals. Recently, there seems to be an unfortunate pattern of stifling the concerns of professional staff within agencies of the Trump Administration. For example, on March 29, 2017, EPA Administrator Scott Pruitt announced that his agency would decline to ban chlorpyrifos, despite years of scientific study and deliberation indicating that the pesticide poses a clear risk to children, farmworkers, and users of rural drinking water. This was a 180-degree turn from the science-based conclusion reached just a few months earlier by the EPA Office of Chemical Safety and Pollution Prevention, which found that chlorpyrifos have harmful effects on children's brain development. Both EPA scientists and the American Academy of Pediatrics have urged the EPA to ban the insecticide.

Can you please explain how you view the professional staff at NOAA, and do you commit to take seriously the recommendations of individuals who have dedicated years of work to their specialty?

Answer. Yes. As I said in my opening statement: "If confirmed, it would be a tremendous honor to help lead such a distinguished organization of scientists, engineers, forecasters and uniformed officers. I can assure the Committee that I will do my absolute best to ensure this team of 12,000 professionals have the resources and leadership needed to produce transparent, objective and defendable science, so that decisions based on this weather and climate information can be made with confidence.

Question 2. It is well documented that you have continuously advocated for the private sector to take the lead in atmospheric modeling and similar processes. Should you be confirmed to this position, how will you ensure that NOAA utilizes the best available science without having to rely on outside information from private industry?

Answer. I have advocated for NOAA to improve its utilization of data and modeling produced by the private sector; however, it is essential for NOAA to retain a core expertise in atmospheric modeling. NOAA should not have to completely depend on outside sources for this function.

Question 3. NOAA's core mission is "to understand and predict changes in climate, weather, oceans, and coasts, to share that knowledge and information with others, and to conserve and manage coastal and marine ecosystems and resources." With this mission in mind, do you believe that human activity is the primary cause for global climate change? And what is your opinion of how global warming has affected severe weather?

Answer. In the absence of various short-term natural forcings that can often dominate the surface and lower-tropospheric temperature measurements (*e.g.,* El Niño, volcanic activity, etc.), humans do have a significant impact through non-sustainable deforestation, development, and increased greenhouse gas emissions. Many peer-reviewed studies have been published simulating present day "extreme" weather events under pre-industrial revolution thermodynamic climatological conditions, and the results show weaker, but not statistically significant differences. However, those same present-day "extreme" events were also simulated under future projected (yr~2100) warming scenarios using the IPCC Fifth Assessment Report (AR5) representative concentration pathway 8.5 (RCP8.5; the most extreme greenhouse gas scenario), and the resulting storms were notably stronger.

Question 4. How will you ensure that NOAA's office of Oceanic Affairs will continue to provide valuable, accurate data when the Trump Administration has proposed a significant cut of 32 percent to the office?

Answer. I am not aware of the basis for the cuts in funding to the Office of Oceanic Affairs. If confirmed, I hope to learn more about this office and then re-evaluate the situation.

Question 5. This position is responsible for a multitude of issues beyond meteorology, issues such as oceanography, ports and navigation, and fisheries. Can you please provide examples of how your previous industry experience prepared you for the undertaking of such a broad portfolio?

Answer. My tenure at Panasonic included much more than meteorology. I oversaw the research and development of many observing systems, from aviation-based sensing ranging from wide-body commercial airlines to unmanned aerial vehicles to maritime via a company called ITC Global that we acquired specializing in satellite-based communications for industrial operations in extreme environments, including deep-water energy exploration, remote mining and transoceanic shipping. As part of this, I am also familiar with satellite operations and deployment, as well as radio frequency spectrum allocation and space weather hazards. I was involved with three major corporate acquisitions, structured multimillion dollar international business relationships with both industry and international meteorological agencies, and five separate procurement cycles of multimillion dollar high performance computing hardware, storage, and data center facilities. I also managed day-to-day operations, as well as oversaw external research and development contracts at both the National Center for Atmospheric Research, as well as several major universities, which have supported many researchers, scientists, professors, and students over the years. These programs ranged from code development to observing system cost-benefit analyses to several observing system simulation experiments (OSSEs). I am deeply familiar with research to operations (R2O) and production HPC, as our global modeling program that supports many industry sectors operates 24x7x365. Last year, we had a respectable 99.9947 percent uptime. While much of the "wet side" will fall under RDML Tim Gallaudet, I do have experience in the fishery area as well. I have spent time working on both charter fishing vessels, and doing satellite imagery processing of sea surface temperature data for the commercial tuna fishery. I have also been involved in the aquaculture of coral (Acropora species), and even worked on NOAA's own Ron Brown.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. CATHERINE CORTEZ MASTO TO NEIL JACOBS, JR.

Nevada specific—Western Regional Climate Center & "Climate Change".

Question 1. Inaugurated in 1986, the Western Regional Climate Center (WRCC) a partnership with the Desert Research Institute in Reno, Nevada, is one of six regional climate centers in the United States that delivers high-quality climate data services in conjunction with NOAA and national climate and weather partners. The WRCC serves as a focal point for coordination of applied climate activities in the West, including drought and climate monitoring, and conduct applied research on the impacts of climate variability and climate extremes in the western United States. As the western U.S. feels the impacts of greater extremes in weather and climate and WRCC are tasked to study these changes, are NOAA and the staff of WRCC under Administration guidelines or edict discouraging the mention of global climate change when discussing and conducting climate research?

Answer. I am not aware of any such edict.

Question 2. Would you ever condone any such guidance?

Answer. No.

Question 3. And can I get your commitment to advocate for the efforts at the WRCC against any ill-conceived budget cuts that could harm Nevadans, and others in the West?

Answer. I fully support studying the effects of climate change on western states. It is my highest priority to improve the understanding of droughts and other forms of severe weather through implementation of the Weather Research and Forecasting Innovation Act.

National Weather Service Inquiry.

Question 4. Dr. Jacobs, as you know, the National Weather Service plays an indispensable role in protecting people from both routine and severe weather events around the country. Every year, lives are saved thanks to timely and accurate forecasts provided by skilled forecasters. As the Weather Service continues to evolve it is critical that all decisions that may impact its ability to provide reliable forecasts be transparent, supported by evidence, and not result in a degradation of current services. Recently, my colleagues in the House have requested information relating to the NWS Operations and Workforce Analysis. I have spoken with these colleagues, and as I understand it, many questions still remain.

Will you commit to a fully transparent process, and completely fulfill information requests from Congress, so that we can be assured that any and all proposed decisions stemming from the Operations and Workforce Analysis are indeed supported by evidence and will not result in a degradation of current services and unnecessary impacts on the NWS workforce?

Answer. Yes, I strive for full transparency and complete information.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. TODD YOUNG TO NAZAKHTAR NIKAKHTAR

Question 1. Ms. Nikakhtar, Indiana is home to a significant number of auto manufacturers and their suppliers. U.S. auto industry has raised concerns regarding the European Union's effort to promote EU auto standards abroad at the expense of U.S. auto standards. If confirmed, I believe you would oversee the Automotive Team at the International Trade Administration. The Auto Team is charged with assisting automakers and their vast network of American suppliers to ensure broad acceptance of domestic standards across the globe as the European Union pushes their own standards. In recent years, ITA Automotive Team have been beneficial in ensuring acceptance of U.S. auto standards in regions such as Latin America, the Middle East, and Asia, where strides toward full acceptance of U.S. (FMVSS) auto standards have recently been made. Will you pledge to continue these efforts and ensure broad acceptance of domestic auto standards across the globe? Do you believe the ITA currently has the resources to effectively promote these standards globally? If not, I would like to work with the Administration to ensure they can achieve this mission.

Answer. I am aware of and fully support the ITA Automotive Team's efforts to advocate globally for the acceptance of vehicles and automotive parts built to comply with U.S. regulatory requirements. I am also well aware of the European Union's strategy to aggressively promote its regulations in bilateral and regional trade agreements and through its technical assistance programs. Third country adoption of EU regulatory requirements acts as a barrier to the importation of U.S.-made automotive products, and movement toward EU-style third party certification requirements reduce the competitiveness of U.S. products. Equivalent or greater safety or environmental performance can be achieved with comparable U.S. regulations and certification measures.

As you reference, the ITA Automotive Team, in close coordination with the ITA Standards Team, ITA's Standards Attachés in foreign posts, and interagency partners, has successfully rolled back movement toward the sole acceptance of EU regulations in various countries, including Ecuador, Morocco, Israel, and Chile. Additionally, the ITA Teams have been able to maintain acceptance of U.S. regulations in major markets such as the Gulf Cooperation Council (GCC) and Colombia. The ITA Automotive Team is also actively working to preserve or extend market access in Malaysia, Vietnam, the Philippines, India, Brazil, Argentina, and Costa Rica.

These efforts involve engaging our trading partners in technical outreach on the U.S. regulatory system and advocating for acceptance of U.S. compliant products. This work must be sustained and strengthened. If confirmed, I will ensure that ITA continues to use every available tool to combat the EU's influence on third country markets with respect to its auto standards. I will also evaluate how resources are allocated to maximize effectiveness of our mission.

I look forward to working collaboratively with your office and with the ITA staff, interagency partners, and industry stakeholders to continue to develop and strengthen our international strategy to maintain acceptance of U.S. compliant vehicles and parts globally.

Question 2. The number of countries that accept motor vehicles certified to U.S. auto safety standards has been declining in recent years. This trend is due in part to successful efforts by the EU to persuade other countries to accept vehicles certified to their standards. I understand that the U.S. negotiators are making a concerted effort to "lock-in" acceptance of U.S. vehicles in the NAFTA talks and that the acceptance of U.S.-certified vehicles will be one of the topics discussed during the KORUS talks. Will you work to ensure U.S. auto safety standards are adequately addressed in future free trade agreement negotiations?

Answer. If confirmed, I will work to ensure that acceptance of U.S. automotive safety standards is a priority in all ongoing and FTA discussions. Better leveraging our FTA negotiations can be an effective tool in combatting the EU's efforts to promote its auto safety standards (to the detriment of U.S. standards), and to avoid broader global automotive regulatory fragmentation.

I fully support U.S. negotiators' efforts to secure commitments to accept automotive products engineered to U.S. safety standards as part of the NAFTA renegotiations. Although both Mexico and Canada currently accept U.S. automotive products, achieving this commitment as part of a renegotiated NAFTA will set a vital precedent and model for future U.S. FTAs, mirroring the approach used by the EU in all of its recent FTAs. Doing so will also send an important commercial and polit-

ical message of North American solidarity and help facilitate efforts for the NAFTA countries to jointly pursue recognition of those safety standards in other markets.

I also recognize that, despite the existence of KORUS, U.S. automotive exports continue to face significant regulatory hurdles in South Korea. If confirmed I will closely monitor the ongoing KORUS discussions and make sure that progress on automotive standards is a top priority.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. BILL NELSON TO NAZAKHTAR NIKAKHTAR

U.S. Automakers. The U.S. and the EU have different approaches to automobile safety. Not only do the safety standards differ themselves, but the U.S. largely relies on self-certification, while the EU requires prior regulatory approval.

Question 1. What will you do to help U.S. automakers overcome the challenges of having to deal with two different sets of regulations?

Answer. If confirmed, I will ensure that the ITA Automotive and Standards Teams continue to aggressively seek the acceptance of Federal Motor Vehicle Safety Standards (FMVSS) worldwide. This includes addressing regulations that emerge in individual countries and regions that act as technical barriers to U.S. auto exports, both through bilateral consultations and through multilateral forums like the World Trade Organization's Agreement on Technical Barriers to Trade.

I will also ensure that ITA's teams are in constant contact with U.S. Government embassies to report early indications of any country moving toward the acceptance of only EU regulations or other regulations that are incompatible with FMVSS. I will also work to include acceptance of U.S. and other globally recognized FMVSS-compatible safety regulations in all U.S. FTAs, as U.S. negotiators are currently doing in the context of NAFTA renegotiations and KORUS Joint Committee discussions. Additionally, I will ensure that we continue to proactively engage our trading partners in technical outreach on the U.S. regulatory system to advocate for the acceptance of U.S. compliant products.

Question 2. Do you believe the Commerce Department has sufficient resources to do so?

Answer. If confirmed, I will ensure that ITA continues to use every tool available to combat the EU's influence over regulations in third country markets. I will also evaluate how resources are allocated to maximize the effectiveness of ITA's mission.

Question 3. How should the EU and other nations treat American-made vehicles that are in compliance with Federal motor vehicle safety standards (FMVSS)?

Answer. Motor vehicles built to FMVSS achieve the highest levels of safety performance. If a manufacturer builds to FMVSS, it should be able to sell that product worldwide. If confirmed, I will advocate for the global acceptance of FMVSS, as doing so will be critical to eliminating costly and redundant automotive testing and calibration requirements that have no added safety benefit. By ensuring that vehicles certified to FMVSS are accepted by our trading partners, we will be able to ensure that U.S. vehicles are competitive abroad, promote U.S. exports, strengthen the U.S. automotive industry, and create new jobs.

Florida Fruit and Vegetable Growers. Florida fruit and vegetable growers are being overwhelmed with below-cost fruits and vegetables from Mexico—including bell peppers, tomatoes, strawberries, and cucumbers. We need to make this right for them—before they are forced to close up shop and we to have to depend on Mexico for all of our fruits and vegetables during the winter.

Question 4. What can you do to assist efforts to get the Commerce Department to self-initiate a trade case and ensure a fair market for winter produce?

Answer. A critical component of trade remedy cases is the statutory component of injury to the domestic industry caused by unfairly traded imports. If confirmed, I will ensure that Industry & Analysis provides to ITA's self-initiating unit robust data concerning the impact of subject imports on U.S. producers' production levels, prices, and competitive position in the marketplace, accounting for the seasonal nature of harvesting and selling produce in particular regions in the United States. These critical data elements will factor into the self-initiating unit's analysis of whether subject imports have caused injury to U.S. industries or threatened U.S. industries with material injury. I will additionally commit to working with the U.S. Government to address Mexico's exportation of dumped and subsidized produce to the United States through the ongoing North American Free Trade Agreement negotiations as well as bilateral negotiations.

Exports to Latin America. Florida acts as a central hub for trade with Latin America. In fact, Latin America makes up 3 out of the top 5 export markets for Florida.

However, the value of goods exported to our top South American trading partners declined from 2015 to 2016. Given all the anxiety and rhetoric about trade that has been coming out, how do you intend to ease tensions with our trade partners in Latin America and increase opportunities for American exports in that part of the world?

Question 5. Do you see statements by the President and others in the Administration as counterproductive to that effort?

Answer. I appreciate the critical role Latin America plays in the strength of Florida's economy and of the U.S. economy overall. It is important that we maintain strong trade relations with our trading partners in the region. President Trump has met with many of his Latin American counterparts to discuss the expansion of our trading relationships in ways that benefit both parties.

The United States maintains trade agreements with 11 Latin American countries and is actively engaged in constructive trade dialogue with other Latin American trading partners through trade and investment framework agreements, unilateral preferential programs, bilateral trade councils, and other initiatives. These activities—and most particularly the President's priority on renegotiating and modernizing NAFTA—demonstrate the Administration's commitment to a closer trading relationship with our Latin American trading partners and to expanding opportunities in the region for American businesses, farmers, ranchers, workers and service providers.

If confirmed, I look forward to working with your office and Florida producers to understand in detail the full range of challenges concerning Florida's trade with Latin America—including the impact of recessions in parts of South America, weak commodity prices, and price suppression caused by unfair trade—and will commit to developing and implementing trade policies to improve Florida's competitive trading position.

Imported Consumer Products. One major issue with certain consumer products imported from China is the failure of manufacturers to stand behind their products in cases of defect or recall. In the case of Chinese drywall, for example, Chinese manufacturers (including some partially or wholly owned by the Chinese government) refused to provide remedies or compensation to impacted homeowners for products that were defective and caused substantial property damage and negative health impacts. In addition, the Chinese government has generally refused to assist in service of process (under the Hague Convention) for lawsuits against Chinese manufacturers for defective products.

Question 6. How can the Commerce Department work to ensure that U.S. consumers are made whole by Chinese and other foreign manufacturers of defective products?

Answer. I have audited numerous Chinese companies across many industries and have witnessed firsthand the lack of rigorous manufacturing protocols that lead to the production of defective products, many of which are exported to the United States. If confirmed, I will commit to working tirelessly—through bilateral and multilateral negotiations and by way of amendments to our trade agreements—to ensure that all of our trading partners are held accountable for their failures to expeditiously recall defective products and for the damages (personal and property) caused by such defective products. I also welcome the opportunity to work with your office on these objectives.

Response to Written Questions Submitted by Hon. Maria Cantwell to Nazakhtar Nikakhtar

Question 1. The trade dispute between the U.S. and China creates economic hardship for some high value, high tech American manufacturers and exporters. The pressure on U.S. manufacturers of polysilicon including one of my constituents REC Silicon has become acute and threatens its continued existence if it is not resolved in the near term. However, this dispute would also boost U.S. exports by several hundred million dollars immediately and create high paying jobs in an industry important to both semiconductor & solar industries. As Assistant Secretary for Industry and Analysis, how do you intend to seek a comprehensive solution to this challenge so that our great American manufacturing companies can fairly compete?

Answer. China's ongoing trade distortive practices, including meritless retaliation policies, have caused significant injury and, in many cases, irreparable harm to countless American companies. With respect to polysilicon manufacturers in particular, China's retaliatory tariffs (in response to the U.S.-China solar trade dispute) has restricted market access for U.S. polysilicon exporters, which has resulted in significant declines in U.S. producers' output and workforce. Further, the prospect

of the United States imposing measures in response to the International Trade Commission's recent safeguards decision and recommendations on tariff levels on solar cells and panels could result in retaliation by the Chinese. If confirmed, I will ensure that bilateral negotiations between the U.S. and China include pressure on China to terminate its retaliatory practices and eliminate the dumping and subsidization of exports. I will also work to secure substantial and meaningful market access for U.S. polysilicon producers in China and other countries.

Question 2. Industry and Analysis is the home of the International Trade Administration's digital expertise and has an important role to play in supporting ITA's Digital Attachés program. This initiative gives America's digital exporters "boots on the ground" in some of the most important and challenging markets for their products and services. Specifically, I&A digital trade experts have helped equip Foreign Commercial Service Officers with the knowledge needed to advocate for openness to U.S. digital goods and services in a variety of overseas markets. I&A's policy expertise is therefore crucial to the success of these efforts. How will you ensure that your team continues to contribute effectively to the attachés' efforts?

Answer. I share your assessment of the importance of the Digital Attaché Program and its role in ensuring that all U.S. companies have access to the digital economy and can reach global markets. If confirmed, I will ensure that the full complement of digital and industry experts in Washington, D.C., and abroad have the support needed to enhance their ability to address protectionist policies that restrict the free flow of digital information and to advise companies engaged in digital trade on how best to enter new markets. I will also endeavor to raise the profile of our digital team to ensure that the business community is aware of and encouraged to use ITA's Digital Attachés.

Question 3. Ensuring data flows freely across the Atlantic promotes economic growth for American Small and Medium Size Enterprises and large companies alike, while giving consumers of digital goods and services new ways to work, learn, and communicate. $260 billion in digital services trade moves between the U.S. and the EU annually. In 2015, the European Court of Justice invalidated a core agreement that governed the transfer of data between the EU and U.S. The successor agreement, the EU-U.S. Privacy Shield Framework, recently underwent its first annual review, led by the European Commission and U.S. Department of Commerce. While this concluded positively, Privacy Shield is under its own legal threat in Europe and some implementation concerns remain. Over 2,400 participating organizations, mainly in the U.S., would find their ability to engage in transatlantic commerce endangered if Privacy Shield is discontinued. The Industry and Analysis division houses the Privacy Shield program office.

Can you assure me that you will provide all the resources and support needed to ensure the Framework's smooth functioning? Will you also commit to continue engaging as appropriate in the European policy debates that affect the Privacy Shield's viability?

Answer. Yes. As you noted, by providing robust and enforceable protections for the transfer of personal data between the U.S. and the EU, the Privacy Shield Framework plays a critical role in promoting digital trade across the Atlantic. If confirmed, I will ensure that the smooth functioning of the Framework remains a top priority of Industry & Analysis, and will commit to working with U.S. and EU stakeholders to ensure that the Framework fosters, promotes, and develops international commerce in a manner that complies with EU data protection requirements and affords meaningful legal protections to users.

The Department of Commerce plays a key role in driving international digital trade initiatives, whether it is market access for U.S. digital products, standards, cybersecurity, emerging technologies, cross-border data flows, privacy issues, or the impact of digital trade on many other goods and services. Expanding the U.S. economy by facilitating digital trade will remain at the top of ITA's agenda if I am confirmed.

Question 4. The Internet sector now employs nearly 3 million Americans and makes up 7 percent of U.S. GDP. Industry and Analysis plays an important role in coordinating the trade advisory committees that inform U.S. trade policy. I understand there are a number of pending applicants waiting for Secretary Ross's approval. Given the internet's widespread economic impact will you help ensure that interested internet-based companies and associations are able to join relevant ITACs without undue delay?

Answer. It is important that U.S. Government officials and trade negotiators fully understand the concerns and interests of a broad spectrum of U.S. business, including the Internet sector, and other interests when formulating trade negotiating positions and trade policy. One of the ways we seek input from the Internet sector is

through the Industry Trade Advisory Committees ("ITACs") jointly administered by the Department of Commerce and the United States Trade Representative. The ITACs serve as an important link between industries and government. U.S. Government policy makers rely on industry representatives, including those from the Internet sector, to identify obstacles and provide advice on how business is hindered by trade issues. Currently, we do have representation from the Internet sector serving on two our ITACs—the Information and Communications, Services, and Electronic Commerce (ITAC 8) and on Intellectual Property Rights (ITAC 15). I look forward to increasing membership on all of the ITACs as our advisors are an important part of our trade policy process.

Question 5. Previously, I&A spearheaded several innovative digital trade-related initiatives. These included the inaugural Innovation and Investment Dialogue with the EU in March 2016. Such efforts helped advance U.S. digital priority priorities in new and effective ways. Can you assure us that you will provide I&A with the instruction, backing, and resources to continue developing initiatives like the *Dialogue*?

Answer. Yes, if confirmed, I will ensure that initiatives relating to the advancement of U.S. digital entrepreneurship, competitiveness, and investment are a top priority of the Department of Commerce. I will also ensure that Industry & Analysis devotes substantial support and resources to initiatives that promote innovation in digital trade.

Question 6. The Department of Commerce has an important role to play in representing economic interests in national security policymaking. We have witnessed this role in recent years in the Privacy Shield and encryption contexts. Industry and Analysis' sector expertise and industry relationships are critical sources of insight for such discussions. How will you ensure that I&A remains a strong voice when it comes to addressing these often-contentious issues with interagency colleagues?

Answer. Inter-agency collaboration is critical to delivering solutions that advance both the objectives of the U.S. Government and industry stakeholders. If confirmed, I will ensure that the Department of Commerce—through the advice and expertise of the Department's industry analysts and ITAC membership—has a leading voice in developing and implementing policies that promote trade, advance national security objectives, and protect digital transfers of data. I will also ensure that such policies receive meaningful input and support from other U.S. Government agencies including, inter alia, the Federal Trade Commission, the U.S. Intelligence Community, the United States Treasury, as well as the Privacy Shield Ombudsperson.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. AMY KLOBUCHAR TO NAZAKHTAR NIKAKHTAR

Tourism. The Industry and Analysis unit of the International Trade Administration is tasked with creating a positive climate for growth in travel and tourism by reducing institutional barriers to tourism. As co-chair of the Travel and Tourism Caucus with Senator Heller, I have been working on policies to attract international visitors to the United States. International tourists spend an average of $4,400 when they visit and we need to continue to promote the United States as a welcoming destination to international visitors.

Question 1. Ms. Nikakhtar, what can the Industry and Analysis unit do to promote international tourism?

Answer. International tourism is critically important to the U.S. economy. In 2016, total travel and tourism spending supported directly and indirectly over 7.6 million jobs in 2016 (5.2 percent of total employment), from $1.54 trillion in spending. International travel accounted for $244.7 billion in U.S. trade, 33 percent of the overall value of U.S. trade in services, supporting 1.2 million U.S. jobs, and resulted in a $84 billion trade surplus. Given its sizeable impact, if confirmed, I will work to ensure that the Department of Commerce continues to promote international tourism to the United States while reducing unnecessary barriers. I also welcome the opportunity to work with your office to advance these objectives.

Iron Ore. More than 4,000 jobs in Minnesota are associated with the iron ore and steel industries. Our steelworkers and iron ore miners can compete with anyone in the world, but when foreign producers dump cheap steel in our country, it undercuts our domestic industry and puts American jobs at risk. American workers and businesses deserve a level playing field and the Department of Commerce is essential to making that happen.

Question 2. Ms. Nikakhtar, how will you help ensure that American workers, including Minnesota's iron ore miners and steelworkers, can compete on a fair playing field with foreign firms?

Answer. I have devoted my entire career to leveling the playing field for U.S. industries, both within the U.S. Department of Commerce and in the private sector. Through my extensive experience, I am acutely aware of the fact that the leveling of any playing field necessarily involves addressing trade-distorting practices both domestically and internationally. China's global oversupply of dumped and subsidized steel is a prime example.

If confirmed, I will advocate relentlessly for fair trade and, in doing so, will assist the Department of Commerce and the U.S. Government to:

(1) develop viable long-term U.S. trade policies that deter unfair trade,

(2) engage in meaningful bilateral and multilateral negotiations with our trading partners to discourage unfair trade,

(3) utilize all legal and practical trade remedy options to level the playing field for U.S. industries, and

(4) provide assistance to U.S. industries injured by unfair trade (including trade adjustment assistance).

RESPONSE TO WRITTEN QUESTION SUBMITTED BY HON. RICHARD BLUMENTHAL TO NAZAKHTAR NIKAKHTAR

Export-Import Bank. The Export-Import Bank plays a vital role in supporting our economy. It is critical to Connecticut's manufacturing sector and helps to maintain our trade relationships with other countries.

Question. Do you support the Export-Import Bank? What will you do to ensure the success of the Export-Import Bank?

Answer. International trade is critical to the growth of our economy, including the growth of small and medium-size enterprises. Yet, many U.S. enterprises find it difficult to access export financing through private sector lenders that are unable or unwilling to accept risks—political or commercial—associated with a particular deal. In this regard, the Export-Import (EXIM) Bank plays a critical role in providing financing for transactions that would otherwise not occur.

I support practical, fair, and transparent initiatives that facilitate the expansion of opportunities abroad for American companies through export financing. If confirmed as Assistant Secretary of Industry & Analysis, I will strive to ensure that our companies continue to have access to reliable financing options. As the Secretary of Commerce serves as a non-voting member of EXIM Bank's Board of Directors, and this function has been delegated internally to Industry & Analysis, my staff and I will give full consideration to Board-level financing requests and promote continued interagency cooperation.

RESPONSE TO WRITTEN QUESTION SUBMITTED BY HON. TOM UDALL TO NAZAKHTAR NIKAKHTAR

Question. The Assistant Secretary serves as the primary liaison between industry and the Department of Commerce. It is important for businesses in my state of New Mexico to have an opportunity weigh in on issues—without the expense of traveling to Washington. If confirmed, how will you make sure you engage with businesses that do not have representation in Washington, D.C.?

Answer. To be sure, representation in Washington D.C. is at times lopsided, and U.S. firms' engagement with the Government sometimes leans towards businesses that have the financial ability to have an ongoing presence here. Government access for smaller companies needs to be improved.

If confirmed as Assistant Secretary, I will promote outreach initiatives to U.S. businesses to ensure that, inter alia, (1) they have meaningful access to the agency in order to provide input on key issues that are important to them, (2) they are able to benefit from the vast trade-related resources and business networks of Industry& Analysis, and (3) their collective voices are heard by the Department of Commerce when shaping industry and trade policies. If confirmed, I will work though my colleagues and partners, including our Commercial Service representatives in New Mexico, to understand the issues facing your constituents. We need to ensure all doors are open in order for us to be successful in our mission to promote and protect U.S. industry in a very competitive global marketplace.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. GARY PETERS TO NAZAKHTAR NIKHAKTAR

Question 1. The U.S. auto industry has raised concerns regarding the European Union's effort to promote EU auto standards abroad at the expense of U.S. auto standards. If confirmed, you would oversee the Automotive Team at the International Trade Administration. The Auto Team is charged with assisting automakers and their vast network of American suppliers to counteract the EU efforts on auto standards. In recent years, ITA's Automotive Team and their colleagues at our embassies around the world have led efforts to move toward full acceptance of U.S. (FMVSS) auto standards. Will those efforts continue under your leadership?

Answer. I am aware of and fully support the ITA Automotive Team's efforts to advocate globally for the acceptance of vehicles and automotive parts built to comply with U.S. regulatory requirements. I am also well aware of the European Union's strategy to aggressively promote its regulations in bilateral and regional trade agreements and through its technical assistance programs. Third country adoption of EU regulatory requirements acts as a barrier to the importation U.S.-made automotive products, and movement toward EU-style third party certification requirements reduce the competitiveness of U.S. products. Equivalent or greater safety or environmental performance can be achieved with comparable U.S. regulations and certification measures.

The ITA Automotive Team, in close coordination with the ITA Standards Team, ITA's Standards Attachés in foreign posts, and interagency partners, has successfully rolled back movement toward the sole acceptance of EU regulations in various countries, including Ecuador, Morocco, Israel, and Chile. Additionally, the teams have been able to maintain acceptance of U.S. regulations in major markets such as the Gulf Cooperation Council (GCC) and Colombia. The ITA Automotive Team is also actively working to preserve or extend market access in Malaysia, Vietnam, the Philippines, India, Brazil, Argentina, and Costa Rica.

These efforts involve engaging our trading partners in technical outreach on the U.S. regulatory system and advocating for acceptance of U.S. compliant products. This work must be sustained and strengthened. If confirmed, I will ensure that ITA continues to use every available tool to combat the EU's influence on third country markets with respect to its auto standards. I will also evaluate how resources are allocated to maximize effectiveness of our mission.

I look forward to working collaboratively with your office and with the ITA staff, interagency partners, and industry stakeholders to continue to develop and strengthen our international strategy to maintain acceptance of U.S. compliant vehicles and parts globally.

Question 2. The number of countries that accept motor vehicles certified to U.S. auto safety standards has been declining in recent years. This trend is due in large part to the well-organized and successful efforts by the EU to persuade other countries to accept vehicles certified to their standards. I understand that the U.S. negotiators are making a concerted effort to "lock-in" acceptance of U.S. vehicles in the NAFTA talks and that the acceptance of U.S.-certified vehicles will be one of the topics discussed during the KORUS (Korean free trade agreement) talks. Will you pledge to support including these provisions in all future U.S. FTAs?

Answer. If confirmed, I will work to ensure that acceptance of U.S. automotive safety standards is a priority in all ongoing and future FTA discussions. Better leveraging our FTA negotiations can be an effective tool to countering the EU's efforts to promote its auto safety standards (to the detriment of U.S. standards), and to avoid broader global automotive regulatory fragmentation.

I fully support U.S. negotiators' efforts to secure commitments to accept automotive products engineered to U.S. safety standards as part of the NAFTA renegotiations. Although both Mexico and Canada currently accept U.S. automotive products, achieving this commitment as part of a renegotiated NAFTA will set a vital precedent and model for future U.S. FTAs, mirroring the approach used by the EU in all of its recent FTAs. Doing so will also send an important commercial and political message of North American solidarity and help facilitate efforts for the NAFTA countries to jointly pursue recognition of those safety standards in other markets.

I also recognize that, despite the existence of KORUS, U.S. automotive exports continue to face significant regulatory hurdles in South Korea. If confirmed I will closely monitor the ongoing KORUS discussions and make sure that progress on automotive standards is a top priority.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. CATHERINE CORTEZ MASTO TO NAZAKHTAR NIKAKTAR

Tourism and Trade Work.

Question 1. Would you agree that trade and international cooperation have a direct impact on tourism? What specifically will you do on a regular basis in this role to help expand the interests of bringing international visitors to one of America's best destinations for both indoor and outdoor activities, namely Nevada—where we saw over eight million international visitors in Las Vegas alone in 2016, accounting for $11 billion in spending?

Answer. Yes, trade and international cooperation have a direct and important impact on tourism in the United States, and indeed our economic ties and alliances with the global community are strengthened through international tourism.

If confirmed as Assistant Secretary, I will ensure that Industry & Analysis's National Travel and Tourism Office continues to create a positive climate for growth in travel and tourism to all states by, inter alia, (1) coordinating efforts across Federal agencies through the Tourism Policy Council to reduce international barriers to tourism, (2) working with private and public stakeholders to administer joint tourism marketing efforts, and (3) making available to our states and businesses travel and tourism statistics to enhance targeted tourism initiatives. I also welcome the opportunity to work with your office to ensure that tourism to Nevada—a critical component of the state's economy—continues to flourish, expand, and create jobs.

Question 2. And can you provide us a sense of how we can continue to improve our outreach worldwide?

Answer. It is important that the Department of Commerce's National Travel and Tourism Office continue to promote travel to the United States by representing U.S. tourism interests through intergovernmental organizations (*e.g.,* OECD, APEC, United Nations). It is also important to advance initiatives that facilitate travel to the United States, such as aviation liberalization, the streamlining of visa application processes, improvements to customer service at ports of entry, and the enhancement of passenger screening. All such initiatives must also ensure the security of our borders, the safety of the traveling public, and the safety of Americans at home.

Question 3. What are the trends we are currently seeing in international tourism, in spite of the rhetoric and policies of this administration?

Answer. The travel and tourism industry is one of the largest growing industries in the United States. For example, over 65 million tourists visited the United States in 2016 and contributed over 1.5 trillion U.S. dollars to GDP (directly and indirectly, including the wider effects from investment, the supply chain and induced income impacts). The industry is forecasted to contribute 1.6 trillion dollars to U.S. GDP in 2017, and more than 2.6 trillion dollars by the year 2027. On average in 2016, each visitor to the United States spent over $4,000 per visit, and tourism spending supported directly and indirectly over 14.2 million jobs in 2016 (9.4 percent of total employment). These trends are projected to increase each year for the next decade, making travel and tourism an integral component of the U.S. economy.

Question 4. Also on the subject of tourism, can you please provide me your thoughts on Brand USA? Do you support Federal funding of Brand USA? If yes, please help me reconcile what your position will be as the Trump Administration considers cutting funding for Brand USA again in their FY19 budget?

Answer. Given the importance of travel and tourism to the U.S. economy, if confirmed, I will commit to being a strong advocate for public-private partnerships that promote the United States as a tourist destination, and will do so based on the Administration's and Congress's approved budgets and policies.

Small Businesses and Workers. In your remarks, you've raised U.S. corporations, and how your previous experiences have prepared you for this role.

Question 5. Since the President has often touted how badly workers have come out from actions taken by our country, in trade, for example, can you tell me how you balance preserving the trade interests of these corporations, with protecting and staying true to American workers, and American small businesses, who may have different needs or priorities?

Answer. It is critically important that the United States Government continue to advocate for both fair trade at home and open markets abroad. Those two objectives must coexist in order for the United States and its trading partners to benefit from reciprocal, mutually beneficial trade relationships.

For many years, however, U.S. industries' competitive positions have been severely compromised by our trading partners' unfair trade practices. For example, within the United States, the importation of dumped and subsidized goods, market-

distorting behavior of state owned enterprises ("SOEs"), and the misappropriation of intellectual property and technical know-how by foreign competitors have caused substantial injury to U.S. firms, both large and small. Abroad, the global oversupply of goods at unfairly low prices, barriers to market access, and intellectual property and patent infringement have made it exceedingly difficult for U.S. firms to export their goods and services. These problems have caused countless U.S. industries to contract or erode, and they threaten the extinction of many others. Solutions are needed.

If confirmed, I will commit to working proactively with bureaus within the Department of Commerce and collaboratively with other U.S. Government agencies and industry leaders to assess the full range of impediments that each of our industries face in trade, and will work with President Trump's Administration, the United States Trade Representative's office, and bilaterally and multilaterally with our trading partners to ensure that playing fields are level for U.S. industries at home and overseas. While short-term solutions may at times involve utilizing trade remedy tools that are permitted under U.S. and international trade laws (including trade adjustment assistance), I will also commit to correcting distortions through trade policy negotiations with our trading partners in order to effectuate long-term solutions.

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