

There's no better illustration than what took place at the close of World War II, when the United States transported dozens of captured V-2 rockets from Germany to New Mexico. These were among the most sophisticated weapons in the world, a reminder that much of World War II was fought far from the battlefield, by Alan Turing in Bletchley Park and Oppenheimer in Los Alamos and by countless others who developed radar and aircraft and antibiotics.

The military wanted to understand this new missile technology that the V-2 represented, but scientists were also invited to use these tests to take measurements of the atmosphere. And then one engineer had an idea to rig a camera and attach it to one of the rockets. And so in this brief moment between the end of a world war and the start of a cold war, a group of scientists erupted with joy as they discovered that they had captured the very first photos of our world as seen from space. Their work would continue as the Rocket and Satellite Research Panel. And after the launch of Sputnik in 1957, the work of this panel would be assumed by a new agency called NASA. The research into these weapons of war would lead to the missions of Mercury and Gemini and Apollo.

That's the incredible promise of the work scientists do every day, like the scientists, researchers and engineers, and innovators we honor with these medals. Yes, scientific progress offers us a chance to achieve prosperity and defend our Nation. It has offered us benefits that have improved our lives and our health, improvements that we often take for granted. But it also gives us something more. At root, science forces us to reckon with the truth as best as we can ascertain it and to reckon with the power that comes from this knowledge, for good and for ill. With each new discovery brings new responsibility to move past our differences and to

address our shared problems, to embrace a sense of wonder and our common humanity.

Carl Sagan, who helped broaden the reach of science to millions of people, once described his enthusiasm for discovery in very simple terms. He said, "Somewhere, something incredible is waiting to be known." Thank you all for the incredible discoveries that you have made, the progress you've invented, and the benefits you've bestowed on the American people and the world.

So it is now my honor to ask the recipients to come forward to receive their medals, and as their citations are read, I will—you'll just have to bend down a little bit—[laughter]—we will bestow on you the highest honor that our Nation can give you for your science, technology, and innovation.

So do we have someone here for the citations?

[At this point, Lt. Cmdr. Ryan T. Siewert, USCG, Coast Guard Aide to the President, read the citations, and the President presented the medals.]

Well, that—the ceremony is over, but I think it would be appropriate for everybody to, again, to stand up and give these recipients a big round of applause.

NOTE: The President spoke at 1:52 p.m. in the East Room at the White House. In his remarks, he referred to Secretary of Commerce Gary F. Locke; Secretary of Health and Human Services Kathleen Sebelius; Secretary of Energy Steven Chu; Lisa P. Jackson, Administrator, Environmental Protection Agency; and John P. Holdren, Director, White House Office of Science and Technology Policy; and Linda P.B. Katehi, Chair, President's Committee on the National Medal of Science, and chair, National Medal of Technology and Innovation Nomination Evaluation Committee.

## Remarks at a White House Event Celebrating Scientific Exploration October 7, 2009

*The President.* I want to welcome all the students and teachers and amateur astronomers to

the White House tonight. I won't speak long, because we've got a bunch of telescopes and

great exhibits to get our hands on. But before we begin, let me first acknowledge a few other stars who are out tonight.

First of all, John Holdren, my science adviser, an actual physicist, is here and eager to look through one of these telescopes. Our NASA Administrator, Charles Bolden, who's spent some time orbiting the Earth himself, and his deputy, Lori Garver, are here. Where's Charles and Lori? There're in the back there. Give them a round of applause. We've got some specialists from NASA, the Smithsonian, and the American Museum of Natural History in New York here with us as well.

And we've got some of the heroes who have flown closer to the stars than anybody else. Buzz Aldrin, a man who actually walked on the Moon, where's Buzz? Right there. Sally Ride, the first American woman in space, is here. Mae Jemison, the first African American woman in space, give her a big round of applause. And John Grunsfeld is here, the man they call the "Hubble Repairman," not to be mistaken with the Maytag repairman—[laughter]—for all the upgrades that he's made up there to the telescope that allows us to see farther than anyone ever imagined. So give John a big round of applause.

Now, NASA's equipment is some pretty powerful stuff, but astronomy also depends on the curiosity and the contributions of amateur astronomers. And there are two students here tonight who've made some pretty amazing discoveries of their own.

First of all, Caroline Moore and her dad Robert—raise your hand. Where's Dad? There's Robert. They look at the stars together in New York. And last year—think about this—when she was only 14 years old, she became the youngest person ever to discover a supernova, and not just any supernova, but a kind that we may have never seen before. And earlier this year, Lucas Bolyard—Lucas, raise your hand. Where are your folks? Where's Lucas's folks? Raise your hands. I know you guys are proud. A high school sophomore from West Virginia discovered some unusual data that turned out to be an extremely rare kind of star called a pulsar. And Lucas was explaining to me just what a pulsar was so that I wasn't

embarrassed when I came out here. [Laughter]

Now, if they can discover something great, so can any of you other students who are here tonight. All you need is a passion for science. From the moment humans first walked on this Earth, we've been endlessly fascinated by the stars. As long as we've been around, we've been trying to unlock the mysteries of the universe and figure out our proper place in the cosmos and somehow make sense of it all.

It was 400 years ago this year that Galileo built his first telescope. It was just three times more powerful than the naked eye. But he kept on working on it and improving on it, until he built one 33 times as powerful. And then he turned it towards the sky. And he discovered that our Moon wasn't smooth, that Venus had phases, that Jupiter had moons, and that Copernicus was right that we do revolve around the Sun.

Now, we've come a long way since then. While Galileo's first telescope had lenses an inch wide, the Hubble space telescope has mirrors about 7½ feet wide. A few years ago, the Hubble showed us the deepest image of the universe ever taken. And in that image, we can see about 10,000 galaxies, and each of those galaxies can hold billions of stars. Now that's a lot, but get this: It would take 13 million of those images to map the entire sky. That's how immense it is.

So there are a lot of mysteries left, and there are a lot of problems for you students to solve. And I want to be a President who makes sure you have the teachers and the tools that you need to solve them.

And that's why we're working to reinvigorate math and science in your schools and attract new and qualified math and science teachers into your classrooms, some with lifetimes of experience. That's why we've launched a "Race to the Top" to raise standards and upgrade your curricula and improve teaching and learning in math and science. That's why we're making a college education more affordable, so that by the time many of you graduate in 2020, America will once again have the highest proportion of college graduates in the world. And that's how we'll move

American students to the top of the pack in math and in science over the next decade and guarantee that America will lead the world in discovery in this new century.

But that's going to take more than just what I as President or anybody in government can do; it's going to take each and every one of you students. It'll take your sense of wonder, your passion, your persistence, your willingness to dedicate your lives to the pursuit of discovery. And it's going to take some hard work. Caroline and Lucas didn't just get lucky; they pored over data before they knew what they had found. Galileo worked for years to prove his theories. The Hubble's journey from paper to space took decades, because that's how success is won, by test by test and trial by trial.

Now, this morning, I awarded the National Medals of Science and Technology to individuals who've made extraordinary contributions to the advancement of human knowledge. And here's my question: Which one of you are going to come back here to claim your prize?

*Audience members.* Me!

*The President.* I like that. Are you going to find a new star or a cure for a disease? Will you invent the next iPhone or a brand new industry that no one's even dreamed of yet? What will your great discovery be?

Galileo changed the world when he pointed his telescope to the sky, and now it's your turn. We need you to study, do well in school, explore everything from the infinite reaches of space to the microscopic smallness of the atom. We need you to think bigger and to dig deeper and to reach higher, and we need your restless curiosity and your boundless hope and imagination. Our future depends on it.

So don't let anybody tell you that there isn't more to discover. Don't let anybody tell you that there's knowledge that's beyond your reach. There's something out there for each and every one of you to discover. And seeing how it's a beautiful night, and we've got a bunch of

telescopes out on the lawn, let's get started together.

All right? So thank you very much, everybody. I'm glad you guys are here. Let's go have some fun. I think I'm going to get the first dibs at looking through one of these telescopes. Is that right, John?

*White House Office of Science and Technology Policy Director John P. Holdren.* That is absolutely right.

*The President.* All right, now why don't you explain to us what exactly this telescope is here? What do we got?

*Director Holdren.* Well, the first thing—

*The President.* Talk in the mike.

*Director Holdren.* I'm sorry. [Laughter] The first thing to notice is that there are two eyepieces you could look through. The one that is aligned with the barrel of the telescope is just the aimer that points it in the right direction. The eyepiece you want to look in, Mr. President, is the angled one at the bottom. And if you look in there—that's the one—if you look in there, you will see a double-double star in the Constellation Lyra, 160 light years away.

*The President.* A hundred and sixty light years; that's far away. [Laughter]

*Director Holdren.* That means it takes the light from those stars 160 years to get here. So what you are seeing, Mr. President, happened 160 years ago. But have a look.

*The President.* A hundred and sixty years ago. Let's take a look. That's pretty far away. [Laughter] That's pretty cool. All right.

All right. Outstanding. Well, let's go take a look at everything, right?

*Director Holdren.* Absolutely.

*The President.* All right, guys. Have fun.

NOTE: The President spoke at 8:07 a.m. on the South Lawn at the White House. The transcript was released by the Office of the Press Secretary on October 8.

*Oct. 8 / Administration of Barack Obama, 2009*

## Letter to Congressional Leaders Transmitting a Report on the United States-India Nuclear Cooperation Approval and Nonproliferation Enhancement Act

*October 8, 2009*

Dear \_\_\_\_\_:

BARACK OBAMA

I transmit herewith the report required under section 204(c) of the United States-India Nuclear Cooperation Approval and Nonproliferation Enhancement Act, signed into law on October 8, 2008.

Sincerely,

NOTE: Identical letters were sent to John F. Kerry, chairman, and Richard G. Lugar, ranking member, Senate Committee on Foreign Relations; and Howard L. Berman, chairman, and Ileana Ros-Lehtinen, ranking member, House Committee on Foreign Affairs.

## Message to the Congress on Continuation of Waiver Certification Under the Clean Diamond Trade Act

*October 8, 2009*

*To the Congress of the United States:*

The Clean Diamond Trade Act (Public Law 108–19) (the “Act”) authorizes the President to “prohibit the importation into, or exportation from, the United States of any rough diamond, from whatever source, that has not been controlled through the Kimberley Process Certification Scheme.” The Act takes effect on the date that the President certifies to the Congress that (1) an applicable waiver that has been granted by the World Trade Organization (WTO) is in effect, or (2) an applicable decision in a resolution adopted by the United Nations Security Council pursuant to Chapter VII of the Charter of the United Nations is in effect. The Act remains in effect during those periods in which, as certified by the President to the Congress, such an applicable waiver or decision is in effect.

On July 29, 2003, the President certified that the WTO General Council had adopted a decision granting a waiver pursuant to Article

IX of the Marrakesh Agreement Establishing the World Trade Organization concerning the Kimberley Process Certification Scheme for rough diamonds. The waiver applies to the United States and other WTO members that requested the waiver and to any WTO member that notifies the WTO of its desire to be covered by the waiver. The waiver was scheduled to have effect from January 1, 2003, through December 31, 2006. On December 19, 2006, the WTO General Council adopted a decision to extend the waiver through December 31, 2012.

I hereby certify that an applicable waiver, within the meaning of the Act, granted by the World Trade Organization has been in effect since January 1, 2003, and will remain in effect through December 31, 2012.

BARACK OBAMA

The White House,  
October 8, 2009.

## Remarks on Winning the Nobel Peace Prize

*October 9, 2009*

Good morning. Well, this is not how I expected to wake up this morning. After I received the news, Malia walked in and said,

“Daddy, you won the Nobel Peace Prize, and it is Bo’s birthday!” And then Sasha added, “Plus, we have a 3-day weekend coming up.”