## REMARKS BY NASA ADMINISTRATOR CHARLES BOLDEN NATIONAL ASSOCIATION OF INVESTMENT COMPANIES WASHINGTON, DC October 20, 2009

Thank you for inviting me to speak here to the members of the National Association of Investment Companies.

I have been told that many if not most of you in this room today are investors. Well, so is NASA. We are all investing in our future in one way or another.

The law that created NASA, the National Aeronautics and Space Act of 1958, as amended, gives NASA an often overlooked mission. NASA's founding legislation states that we will "seek and encourage, to the maximum extent possible, the fullest commercial use of space."

As many of you may be aware, for the past three months we have had an independent study of America's human space flight program being conducted by the Review of U.S. Human Space Flight Plans Committee, commonly called the Augustine committee. This committee has been engaged in taking a serious look at our national space policy plans, and this important policy area is receiving serious attention.

By the end of this week, we expect to receive the final report of the Augustine committee and I will join with the President's science advisor, Dr. John Holdren and other principals from the Executive Office of the President in developing a recommendation for the President to assist him in determining his vision for the future of human space flight and space exploration in America. Whatever the President's decision, America needs NASA and private industry to work to achieve our national goals in space. This means that NASA must determine efficient and effective ways to leverage the power, and innovation of American industry and the American entrepreneur.

NASA has many tools for this. We can buy more needed products and services in a commercial manner. In the 1920s, the U.S. Post Office became a major customer for airmail, which created the demand that justified the private investment in many airlines. NASA is doing something similar right now. We are engaged in a new program — the Commercial Reusable Suborbital Research program — that will buy space transportation services from the emerging reusable spaceflight companies to conduct science research, technology development, with a keen focus on education.

You may not know it, but NASA also has the authority to fund prizes. Over this weekend, NASA just held a competition in California with \$750,000 in prizes for anyone in America who could move the most "regolith" --- or moon dirt --- with a robot. Twenty-three teams competed.

The winning team is "Paul's Robotics", led by a young man by the name Paul Ventimiglia. Paul not only beat out 22 other competitor teams, he beat teams of professional aerospace engineers, and teams of world-class robotics experts. Paul is a college student at Worcester Polytechnic Institute in Massachusetts. He heard about the competition from a high school teacher.

Now that is inspiring.

Let me say a little more. Paul's team did not win by a nose, say by one or two percent. Paul's team moved 84 percent more Moon dirt than the second place team that qualified to win the \$150,000 prize.

This brings me to the major reason I really came here to talk to you.

As the NASA Administrator one of my greatest challenges — the job I was given by the President — is to lead our NASA team in inspiring the next generation of Americans to once again seek become interested in math, science, engineering, and technology so that our nation can maintain its technological leadership in the world.

For over two decades, I have been speaking to children at schools around America. When I first started, in 1980when I would ask kids if they wanted to be astronauts, nearly every hand would go up. Kids were inspired by astronauts. But in recent years that has changed. Today, in comparison, I have noticed that fewer hands go up. This problem is not in our youngest. I still get a highly positive reaction from kindergarteners, first and second graders. But somewhere after that time we lose them. Studies show that by the time they have reached high-school, kids have made up their minds about whether they are going to pursue a career in math, science or engineering. Study after study shows we are losing them in the middle grade school years – sometimes as early as third grade for young black boys.

Why is this?

Many kids today are more excited, more motivated, to become a basketball or football star, than they are motivated to be an astronaut, even though the odds are similar. Others are deciding they want to be the next Bill Gates, Steve Jobs, Jeff Bezos rather than pursue a career in science or engineering. They are deciding they want to get rich by making the next new thing.

I am here today to suggest that we can change this dynamic — not by fighting against it, but by working with it.

I am convinced that within almost everybody —our high-school students, our 7<sup>th</sup> graders, and yes the 30, 40, and 50 somethings - in this audience — lives that kindergartener who still wants to go to space.

What if you did not have to choose between getting rich, doing good, and going to space? What if you could do all three at the same time? Who here in this room would make that choice?

What if you were a seventh grader and you knew that if you buckled down, and studied hard at math and science, that you could go to space? Not because you would be the one of the very few who might become a NASA astronaut, as I was so privileged, but because you saw hundreds of people of all nations traveling into space each and every year, and knew in your bones that you could soon be one of them?

What if you were a college student, and you knew that you could build real hardware in a semester engineering class, and that before

the end of the semester your experiment would fly in space, and that you would get the results back from space before you got your grades?

This day could come soon.

Some of the most exciting companies in America today go by the names of SpaceX, Blue Origin, Armadillo Aerospace, Virgin Galactic, Xcor, Bigelow Aerospace, Masten, Flag Suit, and Ad Astra. And today I add a new name to the list ... Peter's Robotics. What these companies, and others, are doing is nothing short of inspirational.

Today, we at NASA are devising ways to work with these companies and others who will come. I urge you, and all other investors, to take notice. Space may someday soon become the new thing in investing.

I came here today to make an appeal. I want your help with our common investment. I want to work with you on our real grand challenge — to inspire the next generation to accept the challenge of moving America to the next level of human exploration – beyond low Earth orbit.

Help us determine how we can create a more effective partnership between the genius of the American entrepreneur and the power of the federal government. Tell how we can work together to capture the hearts and minds of our children, to inspire them to believe, to know, that they too can make a difference in our world.

Let me close by quoting the late Professor Carroll Quigley of the Georgetown University School of Foreign Service:

"America is the greatest nation in the history of the world because our people have always believed in two things: that tomorrow can be better than today and that every one of us has a personal moral responsibility to make it so."

I challenge each of you here this morning to join me in demonstrating to the world that Professor Quigley was right in his assertion – that we remain the greatest nation in the history of the world. This is an open invitation. I'd love to hear your ideas on how we can raise the level of academic achievement in our public schools and reinvigorate the excitement and energy of our youth. This is an investment well worth making and one that will guarantee you a great return.