## Statement of Dr. Kathyrn D. Sullivan

Nominee for Assistant Secretary of Commerce for

Observation and Prediction

U.S. Department of Commerce

National Oceanic and Atmospheric Administration

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Transportation Committee

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Mr. Chairman, Ranking Member Hutchinson, members of the Committee - I am honored to come before you today as President Obama's nominee for Assistant Secretary of Commerce, Environmental Observation and Prediction. I would also like to thank Secretary Locke and Undersecretary Lubchenco for their gracious support of my nomination.

My wonderful family is represented here today by my brother, Grant, his wife Lee, and their children Michelle, Daniel and Timothy. I thank them all, from the bottom of my heart, for always encouraging me to reach for the stars. With me here in spirit today are also my truly remarkable parents. My father and mother were outstanding natural teachers: Never exhausted by the endless questions of curious children, and always able to engage us in figuring out answers in a way that made us feel like peer-learners. Little wonder that such a home produced an inveterate explorer. I am also grateful to have my cousin Rita Kelly and a number of friends and colleagues from near and far here to support me today.

Our family moved to California when I was six, and I grew up among the then-open fields and rolling hills of the San Fernando Valley. I spent many weekends roaming the open stretches of the valley with friends, just curious to know what was beyond the end of our street. Our family's flying and fishing trips further fed my interest in everything geographical, and gave me my first lessons in expedition planning. This all took place against the backdrop of dramatic events in sea and space exploration, for these were the times of Alan Shepard, John Glenn, Jacques Cousteau and others. I felt

drawn deeply to the drama of challenge and discovery in the lives of these pioneers, and hoped I might find a way to center my life on such endeavors.

My plan for college was to parlay a natural flair for foreign languages into that adventurous life. To my dismay, but also everlasting good fortune, university requirements forced me to take three natural science courses during freshman year. Thus did I discover oceanography. Here before me stood real, accessible people, who seemed to know the whole planet like their backyard, and whose lives were full of just the blend of curiosity, problem-solving and adventure that I had been seeking. I changed majors on the spot and never looked back.

That decision led, eventually, to my doctoral work in marine geology and geophysics at Dalhousie University in Halifax, Nova Scotia. Satellite remote sensing and space-based oceanography were developing rapidly in those years. Though my own work involved the geology of the deep-sea floor, I followed these developments avidly. Sensing that these new methods would transform the earth sciences, I considered seeking a post-doctoral fellowship in the field to learn more, never imagining that I would someday orbit the Earth myself.

When NASA began recruiting the first class of space shuttle astronauts in 1976, I first dismissed the thought of applying. I loved the science I was doing, and I loved being at sea. When I re-framed the proposition into one of planning and conducting expeditions aboard a space ship rather than a marine vessel, I decided to try. Unlike aboard an oceanographic ship, the scientists in the shuttle program – called Mission Specialists – would be immersed fully in both the workings of the shuttle and the scientific

operations. The icing on the cake, of course, was that I would get to see the earth from space with my own eyes – an irresistible prospect.

My experience in orbit is undoubtedly one of the strongest factors shaping my perspective on the role for which I am nominated. No amount of words or photos can convey what it feels like to see our planet from this vantage point, nor express the flood of thoughts and questions that course through one's mind. The grand scale and vast power of the planet's natural systems are vividly apparent, but so are breathtakingly fine-scale features that remind one of the most exquisite filigree. The hand of man is also quite apparent across the face of the globe, evident in the gray smudges of urban areas, in ship wakes and jet contrails and, perhaps most stunningly, in the sparkling diamond lacework of cities at night.

This experience deepened my fascination with this amazing sphere on which we live. It strengthened my conviction that we must continually strive to better understand our home planet and the workings of its natural systems, and to translate scientific understanding into tools and information that help people live safe, productive and sustainable lives.

NOAA plays precisely that vital role for our country – advancing scientific knowledge, and then converting that enhanced understanding into useful information services for Americans. I was delighted and honored to be nominated and confirmed as the agency's Chief Scientist in the early 1990s, and look forward eagerly to joining the team again, if confirmed. During the past fifteen years, while my primary work has centered on science education, I have been able to stay abreast of developments in the earth sciences – and here I use that term broadly, to include oceanography and the atmospheric

sciences. My assignments as an oceanography officer during eighteen years in the U.S. Navy Reserve, and my service on the National Science Board and Pew Oceans Commission have been especially valuable in this regard.

The Assistant Secretary for Environmental Observation and Prediction is the person responsible for making sure that the American people get the best result from NOAA's investments in the satellites and other observation systems that allow us to forecast weather and climate conditions, as well as to predict other changes in our oceans and atmosphere. This is a responsibility that I take quite seriously and, if confirmed, I look forward to working closely with the Congress to execute this important function.

I thank you for your consideration of my nomination and the opportunity to address this Committee. I look forward to any questions you may have.