U.S. Senator Maria Cantwell

Opening Statement at Nomination Hearing

Witnesses: Col. Pamela A. Melroy (USAF, Ret.), of New York, to be Deputy Administrator of the National Aeronautics and Space Administration

Hon. Carlos A. Monje, Jr., of Louisiana, to be Under Secretary of Transportation for Policy

Dr. Richard W. Spinrad, of Oregon, to be Under Secretary of Commerce for Oceans and Atmosphere

May 20, 2021

CANTWELL: Today before the committee and we have a panel of nominees here in very important positions for our government. First, Dr. Rick Spinrad is the President's nominee to Under Secretary of [Commerce for] Oceans and Atmosphere, and also known as the NOAA Administrator at the Department of Commerce. Dr. Spinrad, welcome to you and to your wife, Ilana, thank you for your willingness to serve. We're pleased that Congresswoman Suzanne Bonamici of Oregon will be providing introductory remarks for Dr. Spinrad as well, and we thank you for your leadership on many of these policies in the House of Representatives.

Dr. Spinrad's career in academia, as well as the federal service at NOAA and in the U.S. Navy have made him ready for success in running our nation's premier clients workforce. NOAA's sciences touch almost every aspect of our economy from weather forecasting, the need to keep our communities safe, to satellite data needed for precision agriculture, to ensuring that millions of jobs in the United States supported in the seafood industry are managed sustainably and on science. Science is critical across NOAA's missions but for us in the Pacific Northwest, science based fisheries management is paramount.

Salmon are central to our coastal economy, to our culture, to our treaty rights, and they are crucial to the survival of our orca population. So we have on a bipartisan basis, secured investments in salmon recovery and restoration. In 2018, Senator Risch and I worked on the Endangered Salmon Credit Core Prevention Act. And there are many things that we have done to focus on what we need to do on habitat, on replacing blocked culverts, on working on other barriers that prevent salmon from returning to spawning grounds. So I plan to ask Dr. Spinrad important questions about that, particularly as it relates to the urban oasis that salmon and Puget Sound represent, and what are the things that we need to do in reducing stormwater runoff, pollution, and other things that are just like here in this side of the country of the Chesapeake, impacting our fisheries. So we need leadership on salmon recovery and I look forward to his comments.

Next, we consider the nomination of Colonel Pam Melroy to be Deputy Administrator of NASA, and welcome her and her husband Doug. Senator Kelly will be here to formally introduce Colonel Melroy, who I believe they have worked together and he'll have a unique perspective. I have spoken about the importance of elevating women to science and technical leadership roles, and I couldn't be more pleased to see that President Biden has done that in nominating Colonel Melroy. She has an impressive background, having served as the space shuttle commander and an astronaut and Air Force officer in the commercial space office at FAA, and at DARPA, and as an aerospace executive. So it's hard to imagine a more qualified person for this role. Colonel Melroy, should you be confirmed, we'll ask you to pay special attention in keeping agency on track on the Mars via Artemis program mission, using the inspiration of potential at NASA to inspire the next generation of aerospace professionals, again, in the level of diversity that we would like to see, and focusing on maintaining our competitiveness and redundancy on our missions on issues like the human lander project.

Ranking Member Wicker and I put forth our vision of NASA in an amendment adopted unanimously—put forth in the Endless Frontier Act our NASA vision--and I hope that this time, our colleagues will help us get it over the goal line in the House of Representatives so we can have a clear congressional record for our intent about the Artemis mission and how we expect NASA to move forward. So I look forward to having those conversations.

And finally, we will consider the nomination of Carlos Monje, Jr. to be the Under Secretary of Policy at the Department of Transportation, welcome to you and to your wife, Anne. Mr. Monje will serve as the Acting under Secretary and Assistant Secretary of Transportation Policy for the U.S. Department of Transportation. During the Obama Administration, he oversaw the implementation of surface transportation programs, discretionary grant programs, in efforts to promote equity and economic development. He also served as Chief of Staff in the White House Domestic Policy Council and Special Assistant to the President during President Obama's administration. So again, thank you for your willingness to answer the call to serve.

Our transportation system, as we all know, is the backbone of our economy and getting people to and from work is critically important. I can say in my state, it also is very important in exports and the export economy. Getting our products and products from other states through our ports into their final destinations is a big economic driver. So making sure that we continue to address the efficiency as we come out of the pandemic is something we'll be asking Mr. Monje about during our questioning.

So I thank again our colleagues, I know that Senator Wicker made comments and is putting in a larger, longer statement for the record, so we will now turn to our witnesses, or I guess I should say our guests to help us introduce our witnesses, and we will start with you, Congresswoman Bonamici. Again thank you for being here.

Q&A with Witnesses:

CANTWELL: Thank you Mr. Monje. Each of you represent such important investments, economic strategies, science issues to the Pacific Northwest. I could literally, I'm sure, spend hours asking you questions today, each of you, but I'm going to have to be succinct because there's important data to get on the table.

First with you Mr. Monje, could you just tell me whether you support money going to mega projects? I'm concerned that mega projects that are the lifeblood of fixing big economic issues for our country always get left behind because they cost so much. Are you supportive of making sure in this next package we address mega projects?

MONJE: Yes ma’am, absolutely. These are projects that are very difficult to fund, because they cross different modes, different jurisdictions, different states. The Columbia River Bridge is great example of that, but there are examples all across the country of projects that if they were to fail, would really hamstring the economy and stop people from getting where they need to go.

CANTWELL: Thank you. We'll look forward to working with you on that. Colonel Melroy, could you explain why resiliency and redundancy in system operations--I did not know of your role on the Columbia oversight--but that just, you know, I think it's hard to explain how when we change in the integration of systems that somehow, in not testing, you know, the individual parts to the overall system, as we found with O Rings, we missed something, right? We missed a malfunction, at a temperature level. So, when we look at Artemis and what we're doing, why is resiliency and redundancy so important and if you could just throw in a few comments about why Artemis is, yes, a Moon project, but it's a precursor to Mars.

Col. MELROY: Thank you Chair Cantwell. Yes, I think there's many examples of why redundancy is important, particularly in space transportation options. And Columbia is a great example, it was very challenging to continue to build the International Space Station following that. And the amount of logistics that it takes to support people in science and space show us that having resiliency and redundancy in our transportation options are extremely important.

As far as Artemis, I think I see it as a systems engineering problem, all of the pieces have to work together, and there have to be multiple backups. And to me that's the meaning of resiliency, it allows you to have hiccups which you will occasionally have with new technologies, unforeseen circumstances going forward, especially in operations, and it allows you to protect the mission and protect the safety of those involved.

CANTWELL: Thank you. And is this a precursor to the efforts that we're trying to do beyond the Moon?

Col. MELROY**:** Yes, Senator, it's incredibly important that we learn how to do operations and develop the technologies that will allow us to go on to Mars, which is a much more challenging journey. So we're talking a few days to the Moon, and six months, at a minimum, to Mars. So being able to exercise those technologies on the Moon, and really understand lunar operations is what will prepare us to go to Mars as quickly as possible.

CANTWELL: Thank you. Dr. Spinrad, we had a chance to catch up about salmon in general and thank you for your opening statement on a variety of things. I guarantee you, I've had conversations with our colleague Senator Blackburn about using supercomputing time for better analysis of weather, and you know we had another incident where we lost a crew that maybe with better weather data and information could have helped us in that, so we definitely need better weather information. Thank you for focusing on tsunami in the Northwest, I mean we focus on the tsunami warning system and what we need to do advance it.

But I really want to focus on salmon. You and I had a chance to talk about salmon, particularly as it related to some of the issues like fixing culverts and habitat, and the impacts of pollution. And you suggested that, you know, focusing on this with new levels of science could give us, you know, better returns. That is, focusing on systems like the Chesapeake or Puget Sound as an ecosystem, and impacts with new science available today could give us better interest and information. And I just wanted to ask too whether this is where you see the best return for our dollars. You know, these big, you know, big estuaries, if you will.

SPINRAD: Thank you Chair Cantwell, I would characterize that as one of the critical questions for food security, national security, and economic security. Your question invokes elements of habitat protection, it invokes elements of sustainably managing natural resources, and of course it invokes issues associated with rebuilding critical infrastructure. I do believe that what some people are calling the urban ocean, and that is exactly the geographies you've talked about, places like Puget Sound, San Francisco Bay, Chesapeake Bay, represent critical areas for focus of not just research, but applications of that research to solutions to ensure we are sustaining these natural resources, including salmon, Pacific salmon. I'd point out obviously in Puget Sound it also deals with endangered species such as the Orca population who depend on salmon as well.

In short, I believe the solution does lie in two things, one of which you identified which is the best science, the best observations, the best predictive capabilities using exactly the kind of high performance computers that you alluded to. But another key point is the act of engagement from the get go with the local communities, local governments, jurisdictions, Tribal councils. After all, if we talk about the salmon in Puget Sound, the habitat protection is part of the Tribal treaty rights. So I think the combination of the

best science, the best communication of that science, and if you will, a whole of government approach, including federal and state and Tribal entities, will lead us to the solutions we need.

CANTWELL**:** Well, we definitely believe in a whole of government approach and on the Yakima Basin Project, which was shifting to a holistic approach to water management, getting more efficiency out of the system, and returning salmon where we could and yet still--we worked together and came up with a collaborative solution. But what do you think here might be a science that we can help people understand might emerge from this that would help us? You know, is it at return is spawning, is it some information? You know, we worked with the University of Washington on when climate was impacting our shellfish industry, and the complexity--so literally for a very small grant, I think it was 100-200,000 dollars, figured out that we should be doing seating for shellfish at a different time because of the temperature change in the water. Well that translated into a big result for the climate impacts on the shellfish industry. So is there something here that we should be looking at?

SPINRAD: Absolutely, Senator. I would say there are a few components. You alluded to the biological, we have to have the best understanding of how the ecosystem operates. There's a physical aspect to this, you talked about some of the pollution. How does that get distributed, what is the fate and effects of pollutants that may after the Sound? There is a hydrological challenge, there was a wonderful story in the Seattle Times just a few days ago about the different culverts and how effective or ineffective they are in transporting water and allowing the salmon up into their spawning grounds. And I would also point out a critical component of this is developing solutions that are long standing and withstanding, especially in the context of climate change. So will the solutions of 2021 work in 2025 or 2030? So, predictions and projections about how that climate will change the hydrology, the flow of the rivers in Puget Sound, and the circulation in Puget Sound, all of those have to be part of the solution.

CANTWELL: Thank you. And Mr. Monje, just so you know we, we believe that since culverts have been such -- had a dramatic effect that when we're looking at new transportation infrastructure investment, we should be thinking about these things, we call it salmon infrastructure but we're talking about the negative impacts and preventing the negative impacts or dealing with the stormwater runoff issue. So anyway, so it is connected and so we appreciate it. Thank you very much.