U.S. HOUSE OF REPRESENTATIVES COMMITTEE ON

SCIENCE, SPACE, & TECHNOLOGY

Opening Statement

Chairwoman Mikie Sherrill (D-NJ)
of the Subcommittee on Environment

Subcommittee on Space & Aeronautics
Subcommittee on Environment

Looking Back to Predict the Future: The Next Generation of Weather Satellites.
September 21, 2022

Thank you, Chairman Beyer, and our witnesses, for joining us today both in person and virtually. I am looking forward to hearing about the successes and lessons learned from the current weather satellite programs, as well as learning more about what is to come with the next generation of satellites.

The National Oceanic and Atmospheric Administration's weather satellite programs play a key role in its mission to share Earth observations and scientific data used by the public, private, and academic sectors. Access to this knowledge is critical to communities in becoming resilient and weather-ready. My district, and many of my colleagues' districts, have seen increasingly frequent and severe weather.

Communities such as Little Falls, Woodland Park, and Denville in my district have faced repeated, catastrophic, and sometimes deadly flooding events, such as the high intensity rainfall from remnants of Hurricane Ida. I am interested in hearing from our witnesses today about how observations by these satellites - and the next generation after them - will give communities like those in New Jersey's 11th district accurate and up-to-date forecasting tools to predict and avoid life-threatening weather–especially extreme rainfall–and confront the ever-worsening effects of the climate crisis.

At the national level, rainfall and flooding like that experienced in New Jersey and other extreme weather events can cause billions of dollars in losses to our communities. NOAA found that by July of this year, the U.S. had already experienced nine weather and climate disasters that exceeded one billion dollars each, and the year is not over yet.

We are still in the midst of what is predicted to be an above average Atlantic Hurricane Season. Just this past Sunday, Hurricane Fiona made landfall in Puerto Rico knocking out power to the island and causing catastrophic flooding. That is why this hearing is so critical. So many aspects of our society and economy depend on the environmental, weather, and climate information collected from these satellites. Any potential satellite malfunction or launch delay that could

cause data gaps that would be devastating to national security, the U.S. economy, and most importantly, public safety.

It has been several years since this Committee has done extensive oversight over our Nation's operational weather satellite programs. Today we will hear about the successful partnership between NOAA and NASA to develop, launch, and operate the current generation of geostationary and polar-orbiting weather satellites. In fact, earlier this year we celebrated the successful launch of the third satellite in the GOES-R Series, and we look forward to what we hope is another successful launch of the JPSS-2 satellite later this year. The credit for these recent successes is largely due to our esteemed NOAA and NASA witnesses today, and the teams that support their efforts.

However, this partnership has not been without its issues. Both the Joint Polar Satellite System (or "JPSS") and Geostationary Operational Environmental Satellite (or "GOES") programs initially faced ballooning costs and extended delays. Since then, NOAA and NASA have successfully turned around these programs. Despite some challenges, including instrument malfunctions on-orbit, the agencies have worked to ensure no disruption in observations, and that the same mistakes are not repeated. Continued planning, testing, and adjustments are required to minimize the risk of any potential loss of observational data. I hope to hear about the current contingency plans in case of any potential malfunctions or mishaps, and how NOAA and NASA will work together to address any issues.

As the projected end of service dates for both the GOES-R and JPSS Series are expected at the end of the next decade [2040 and 2039, respectively], it is important for NOAA to be developing the capabilities of the next generation of satellites with the help of NASA's expertise. NOAA is taking into consideration new technologies and increasing user needs through input from a variety of stakeholders while establishing the future satellite architecture in a timely and cost-effective way. With all these considerations and lessons learned from the current weather satellites, I look forward to hearing from NOAA and NASA about their progress on the next generation of weather satellites. The time is ripe for a discussion on GeoXO, and the future of low Earth orbit and space weather satellites.

The importance of these satellites providing uninterrupted environmental and weather observations at a time when climate change is causing more severe and frequent extreme weather events cannot be stressed enough. The Department of Commerce's Office of Inspector General's continuous oversight of the satellite programs provides Congress, and the public, with consistent updates on possible risks these programs may face. I look forward to hearing OIG's findings of a recent audit on NOAA's progress of the next generation satellites as well as any recommendations OIG may have in improving this progress.

Again, thank you to all our witnesses for being here today. My colleagues and I are committed to supporting the continued success of the nation's operational weather satellites.

I yield back the balance of my time.