

TESTIMONY
OF
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BEFORE
THE

HOUSE SPACE, SCIENCE, AND TECHNOLOGY COMMITTEE,
ENVIRONMENT SUBCOMMITTEE

U.S. HOUSE OF REPRESENTATIVES
WASHINGTON DC

“From Orbit to Operations: How Weather Satellites Support the National Security Mission”

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Good morning, Chairman Babin, Ranking Member Lofgren, Subcommittee Chairman Franklin, Subcommittee Ranking Member Amo, and distinguished members of the committee. On behalf of the Oceanographer of the Navy, thank you for this opportunity to testify before you. My name is Chris Ekstrom, and I serve as the Deputy Oceanographer and Navigator of the Navy for the Deputy Chief of Naval Operations for Information Warfare. I assist in directing the Navy's oceanography, meteorology, and navigation programs, overseeing everything from policy and resources to strategic planning to ensure the Navy and Marine Corps' warfighting superiority. It is an honor to be here today with my NOAA and U.S. Air Force colleagues to discuss the critical relationships between us in supporting the national security mission.

The Navy-NOAA partnership is fundamental to the Navy's warfighting advantage and national security. Our ability to produce strategic, operational, and tactical meteorological and oceanographic forecasts relies heavily on the weather and ocean data we receive from NOAA. While the Department of Defense maintains its own sensing capabilities, over two thirds of the data ingested into Navy forecast systems originates from external sources and is provided by, or through, NOAA. This includes data from its satellite network, surface and upper-air observation systems, and ocean observing networks. This reliance is a deliberate policy decision, validated by the Joint Requirements Oversight Council, to leverage civil capabilities rather than duplicate them within the defense budget.

The deep-rooted collaboration between Navy and NOAA is formalized through the Oceanographer of the Navy's role as the Naval Deputy to the Undersecretary of Commerce for Oceans and Atmosphere and the NOAA Administrator. This position, which was established in

the 1970s, ensures we avoid duplication of federal oceanographic activities, maintain a close relationship in research and development, and address national security considerations in NOAA policy.

Our cooperation is executed under a broad memorandum of agreement that allows for the sharing of data, information, and capabilities that advance American prosperity and security. This framework supports a multitude of joint activities, including:

- Ocean and Atmosphere Sensing: The provision of ocean and atmosphere sensing tools and exchange of collected data.
- Hurricane Forecasting: Scientific, information, and personnel exchange for improved hurricane predictions.
- Hydrographic Surveying: Collaboration to improve tactics, techniques, and procedures for hydrographic surveying, data acquisition, and processing as well as coordination on national ocean and coastal mapping initiatives in support of commerce and national security.
- The U.S. National-Naval Ice Center: A tri-agency organization made up of the Navy, NOAA, and U.S. Coast Guard that provides and disseminates authoritative and timely strategic to tactical scale ice and snow products that enhance Naval access, maneuverability and superiority globally.
- Interagency Coordination: Support to the interagency meteorological coordination office and other scientific partnerships to gain access to data and information necessary for national security.

The Navy benefits tremendously from this partnership by directly applying NOAA data, products and capabilities to impact daily operations across the full spectrum of Naval Warfare. NOAA provides raw data from space-based environmental monitoring, as well as communication architecture, to enable 24/7 operations of critical numerical prediction that is vital to national and strategic military programs. Additionally, NOAA provides conventional observations, as well as data products that are foundational for forecasts that ensure safety of navigation, safety of flight, and resource protection. Similarly, NOAA provides the Navy with a wealth of bathymetry and hydrography data which is incorporated in electronic charts and allows for the safe maneuvering, navigation, and transit of Navy and other military vessels engaged in homeland defense and national security missions. This shared responsibility also allows Navy survey capabilities to focus on global requirements away from U.S. shores.

Our nation's military success is a critical component of our national security, and it is predicated on the comprehensive collection, processing, and exploitation of environmental data. The loss of NOAA-provided data, information, and infrastructure, from satellite command and control to the dissemination of oceanographic, atmospheric, and ionospheric data, would severely and immediately degrade the efficacy of the full spectrum of naval operations across the globe. Loss

of observational data would also directly and negatively impact the Navy's ability to fulfill its statutory responsibilities under Title 10 U.S. Code, Section 8951, which requires the Secretary of the Navy to maximize the safety and effectiveness of our forces through weather and ocean data and prediction.

Without NOAA's data the Navy's ability to meet Title 10 responsibilities and critical Naval Warfare requirements would be significantly degraded and induce risk to national security. Take anti-submarine warfare for example: a loss of data would drastically reduce the accuracy of undersea acoustic predictions, which are a key enabler of our undersea advantage. With the Interim National Defense Strategy's focus on homeland defense, the reliance upon and importance of NOAA data and capabilities has never been more important for national security.

Again, it is an honor to appear before you this morning. I appreciate your time and look forward to answering any questions you may have. Thank you.