



Opening Statement of Chairman Scott Franklin

Environment Subcommittee Hearing

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

January 13, 2025

Good morning, and thank you to our panel of witnesses for taking the time to share your expertise with us today.

This morning's hearing addresses a topic of utmost importance: the role of NOAA's weather satellite architecture in supporting our national security mission.

As a native Floridian and a naval aviator, I have personally experienced the value of the data produced by these satellites. Whether tracking an approaching hurricane or preparing for an operational mission, timely and accurate weather forecasting is the critical first step in effective and strategic decision-making.

NOAA plays a vital role in national defense readiness through its advanced infrastructure, technical capabilities, and leadership in data collection and modeling.

From ocean expertise that guides naval submarines and surface ships, to atmospheric data provided by satellites that enable Air Force Hurricane Hunters to operate in some of the most extreme conditions, these partnerships protect lives and property. Knowing the forecast often determines where and how to position troops and assets to stay one step ahead of our adversaries.

Weather can be an even greater threat to mission success than the fiercest opponent. One of the most consequential military operations of the last century—D-Day, the invasion that marked the beginning of the end of World War II—was delayed by a day based on weather forecasting. That operation, years in the making, required precise environmental conditions: a full moon for visibility, calm seas for a successful amphibious assault, and clear skies to ensure air support. Allied forecasters identified deteriorating conditions and recommended a delay—a decision that proved critical to success.

By contrast, weather conditions were not adequately considered during the 1980 mission to rescue hostages in Iran, and tragically, lives were lost. Like D-Day, that operation required specific environmental conditions. However, vital information drawn from historical weather records never reached planners and decision-makers, and the absence of real-time data prevented operators from anticipating a dust storm. Since then, the integration of weather information into military planning and execution has rightly been recognized as essential to mission success.

During my time as a naval aviator, every mission briefing began with a weather report. Even when every other element of a mission is carefully planned, unfavorable weather can cause it to fail before it ever begins.

According to NOAA, approximately 95 percent of the data used in weather forecasting models comes from satellites—providing continuous, around-the-clock coverage for the military, civilians, and a wide range of commercial enterprises. We must ensure that this data remains both continuously available and fully secure, particularly when supporting military operations.

This critical infrastructure extends far beyond Earth. Nearly one million miles away, we are closely monitoring the Sun.

Accurate space weather forecasting is crucial to protecting satellite constellations and ground-based radar systems. As we improve our understanding of space weather effects, we are better equipped to safeguard assets in both Low Earth Orbit and Geostationary Orbit.

Massive solar events, including coronal mass ejections, can disrupt communications, GPS signals, and satellite instruments. As with terrestrial weather, earlier and more accurate detection enables decision-makers to act swiftly to protect assets.

Hearings like these help Congress better understand the vital interconnections among entities whose missions may appear distinct but are deeply intertwined. As the next generation of weather satellites is developed, this understanding will strengthen our oversight and enhance our appreciation of NOAA's contribution to national security.

I thank our witnesses again for being here today, and I look forward to hearing each of your testimonies.