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ENGINEERS AUSTRALIA SESA

Keynote Speaker

Bill Murtagh

National Oceanic and Atmospheric Administration (NOAA)

Keynote Title:

Space Weather: Understanding and Mitigating Impacts on Our Interconnected and Interdependent Critical Infrastructure

Biography:

Bill Murtagh currently serves as the Program Coordinator for the National Oceanic and Atmospheric Administration (NOAA) Space Weather Prediction Center (SWPC) in Boulder, Colorado. In November 2016, he completed a 26-month assignment in the White House Office of Science and Technology Policy (OSTP) as the Assistant Director for Space Weather, Energy and Environment Division. In his position at OSTP he oversaw the development and implementation of the National Space Weather Strategy and Action Plan.

Bill is NOAA's space weather lead in coordinating preparedness and response efforts with industry, emergency managers, and government officials around the world. He regularly briefs the White House, Congress, and other government leadership on vulnerabilities of critical infrastructure to space weather storms. Bill is also a key contributor in U.S. government efforts to advance international cooperation in space weather-related activities.

He is a regular guest speaker at universities, government agencies, and national and international conferences. He has provided numerous interviews to major media outlets and is featured in several documentaries on space weather.

Before joining NOAA, Bill was a weather forecaster in the United States Air Force. He coordinated and provided meteorological support for national security interests around the world. Bill transferred to the SWPC in 1997 as a space weather forecaster and liaison between NOAA and the U.S. Air Force. He joined NOAA in 2003 after retiring from the Air Force with 23 years of military service.

Abstract:

Space weather poses a serious global threat, with the potential to disrupt electric power transmission, transportation, space technology, telecommunications, and other critical infrastructure. This technology infrastructure is comprised of physical and cyber systems which are linked through interdependent networks. Disruption or damage to one system can cascade across systems and sectors, resulting in significant consequences. Extreme space weather events have been identified as a hazard with the potential to disrupt technologies and systems in space and on Earth. The United States has identified extreme space weather as a hazard of national-level concern. It has the potential to test the Nation's preparedness through complex societal and technical challenges. In recent years, U.S. Government leadership has made great strides in coordinating Federal activity to enhance preparedness for space weather. But much work remains as we explore options to mitigate risks to interconnected and interdependent systems.