



COMMITTEE ON
SCIENCE, SPACE, AND TECHNOLOGY
REPUBLICANS Frank Lucas, Ranking Member

Opening Statement of Space & Aeronautics Subcommittee Ranking Member Brian Babin

Joint Environment and Space & Aeronautics Subcommittee Hearing - *Space Weather: Advancing Research, Monitoring, and Forecasting Capabilities*

October 23, 2019

Thank you for holding this hearing, Chairwoman Fletcher.

Today's hearing is on a growing topic of national concern, even if it is not an issue most of our constituents might immediately identify.

Space weather, commonly defined, refers to variations in the space environment between Earth and the sun due to solar activity. This is an ongoing phenomenon which typically has minimal consequences. However, it can have widespread effects such as interfering with GPS signals and disruptions to our electrical grid during severe events. We have had to be more mindful of the effects of space weather as we have increased our use of satellites for communication and remote sensing in our daily lives.

Space weather is an issue of importance across the federal government. Agencies such as NASA and NOAA within our committee's jurisdiction play an important role in increasing our knowledge and better monitoring space weather. However, it is important to acknowledge space weather as a national security issue. Our military has a variety of assets in orbit around Earth which could be potentially harmed by electromagnetic interference and are dependent on satellites built by NASA and operated by NOAA for timely and accurate information.

Both the Obama and Trump Administrations have acknowledged the need for better coordination of space weather-related activities across the federal government by developing and updating a space weather strategy and action plan. This plan covers topics about how federal agencies should identify and protect infrastructure from acute space weather events and which agencies should lead mitigation and research activities.

Our nation's infrastructure is not all that is threatened by space weather events. I proudly represent Johnson Space Center, the home to NASA's astronaut corps. These are the astronauts who currently work on the International Space Station more than 200 miles above the Earth's surface and will one day serve on missions to the Moon and Mars.

While we have developed techniques and technology to reduce the threats posed by increased radiation exposure due to a severe solar event, we have more work to do to mitigate these hazards to our astronauts.

As the ranking member of the space and aeronautics subcommittee, I've supported efforts to spur the commercialization of low Earth orbit by private sector companies. These new entrants into the space economy have a vested interest in protecting their assets. However, they also offer an opportunity to provide data and resources to our federal agencies as we seek to improve our space weather efforts.

As this committee potentially considers legislation relating to space weather monitoring and research, we must be certain that whatever legislation we mark up is not a top-down legislative mandate and ensures a role for the commercial sector. The Weather Research and Forecasting Innovation Act, which was passed by this committee and signed into law two years ago, serves as a template for how we could accomplish this. The Weather Act took steps to integrate commercial weather data into NOAA's forecast models and a similar model should guide us when developing space weather legislation.

I want to thank our witnesses for taking time to attend today's hearing and sharing your experience and expertise on this important topic. I look forward to a productive conversation on how best we move forward.

Thank you and I yield back.

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