



COMMITTEE ON

SCIENCE, SPACE, AND TECHNOLOGY

REPUBLICANS Frank Lucas, Ranking Member

Opening Statement of Ranking Member Michael Waltz

Joint Space & Aeronautics and Research & Technology Subcommittees Hearing – “A Review of the Decadal Survey for Astronomy and Astrophysics in the 2020s”

December 1, 2021

Good Morning Chairman Beyer, Chairwoman Stevens, and Ranking Member Babin. I am pleased to be here for this joint subcommittee hearing to review the priorities and recommendations made by the National Academies for the decadal survey on astronomy and astrophysics, also known as ASTRO 2020.

The National Science Foundation (NSF) is the federal steward for ground-based astronomy in the U.S. and has supported some tremendous achievements in astronomy and astrophysics. These include the detection of gravitational waves at the LIGO Observatory, which proved part of Einstein’s theory of relativity, launched a new era of multi-messenger astrophysics and earned the 2017 Nobel Prize in Physics. In 2019, the Event Horizon Telescope project captured the first-ever image of a black hole, providing further confirmation of Einstein’s theory of general relativity.

As I expect we will hear today, much of the NSF’s most interesting astronomy projects are yet to come. The Vera C. Rubin Observatory in Chile has the potential to advance every field of astronomical study – from the inner Solar System to the large-scale structure of the universe.

The Daniel K. Inouye Solar Telescope (DKIST) is also expected to come online soon in Hawaii. It will produce the most detailed images of the sun ever taken by a ground-based device.

As we look to the future, I would be remiss if I did not also take a moment to speak on the legacy of the Arecibo Observatory in Puerto Rico, which experienced an unexpected and catastrophic collapse a year ago today. Before its untimely collapse, countless discoveries were made at Arecibo over its nearly 60-year history – including winning the 1993 Nobel Prize in Physics. I, along with Congresswoman Gonzalez-Colon, and several other Members had the opportunity to visit Arecibo this past summer.

We saw the extensive damage and ongoing clean-up. But what stood out to me most was the importance of the facility to the community in Puerto Rico and to increasing diversity in STEM.

While there we joined several local high school and STAR Academy students for lunch. As a supporter of increasing diversity in STEM, it was great to see so many young women, and all were native Spanish speakers. Each student shared their experience conducting hands-on research projects at the observatory and their plans for pursuing STEM degrees after high school. In short, they blew me away.

The trip made clear to me that Arecibo is an important compliment to this Committee's bi-partisan tradition of promoting diversity in STEM, including the "MSI STEM Achievement Act" that the Chairwoman and I ushered through the House this Congress.

I strongly believe to meet our true scientific and technological potential, we need an inclusive and diverse workforce that draws on the full talent pool available in our country. By sitting down with these students, I saw a program achieving those same goals at Arecibo. The Observatory's engagement with the community through STEM education and outreach should be applauded and exemplified.

I was pleased to see that the ASTRO 2020 survey recognizes that Arecibo has a future role in U.S. astronomy, though I have concerns that we have now ceded leadership in radio astronomy to the Chinese Communist Party (CCP) and their Five-hundred-meter Aperture Spherical radio Telescope, known as FAST.

The US should not rely on the capabilities of malign foreign actors like the CCP to excel in radio astronomy. As such, I look forward to working with the NSF as they continue to examine the future of Arecibo.

Like Arecibo, the NSF's astronomy program faces questions going forward. The NSF must evaluate how it supports existing and new facilities, including identifying facilities that may be nearing the end of its life cycle. It must also examine how it balances these commitments with funding individual research grants that will support the next generation of Nobel prize-winning astronomers.

I would like to thank the survey's co-chairs for participating in today's hearing, along with GAO. I look forward to hearing how we can continue our commitment to researching the fundamental nature of the universe.

Thank you and I yield back the balance of my time.