



COMMITTEE ON

SCIENCE, SPACE, AND TECHNOLOGY

REPUBLICANS Frank Lucas, Ranking Member

Opening Statement of Ranking Member Brian Babin

Joint Environment and Space & Aeronautics Subcommittees Hearing – A Review of the Decadal Survey of Astronomy and Astrophysics in the 2020s

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The National Academy of Sciences' decadal surveys are an important part of our nation's space science program. They assess the current state of specific space science fields and offer recommendations for the executive branch to implement and manage, and for Congress to fund and oversee. The recently released report, *Pathways to Discovery in Astronomy and*

Astrophysics for the 2020s (also known as Astro2020), represents a multi-year engagement with the best and brightest in our nation's astronomy and astrophysics community.

This same process informed the development of numerous ground and space-based observatories in the past, including the Very Large Array, the Chandra X-ray Observatory, the Very Long Baseline Array, the Hubble Space Telescope, the Spitzer Space Telescope, the Compton Gamma Ray Observatory, the James Webb Space Telescope, the Nancy Grace Roman Space Telescope, and the Vera Rubin Observatory to name a few.

These observatories help us understand the universe and reveal the fundamental science that makes up space and time. They are marvels of discovery and engineering that demonstrate American ingenuity and industry. In keeping with this tradition, the Astro2020 decadal proposes an ambitious program for the future. Aspirational and even audacious goals are important because great nations do great things. But astronomy and astrophysics are also areas that are well suited for cooperation, not just competition, as they benefit all of humanity and not just America.

The Academy panel addresses the important balance of cooperation and leadership and also lays out a compelling case for a portfolio of ambitious flagship missions, and a robust baseline of smaller missions, technology maturation, and research work that underpins the entire community. They also made a concerted effort to take cost estimating into consideration, including off-ramps and recommended prioritizations if further cost overruns or funding shortfalls occur. This is important because, as we've

seen over the last two decadal surveys for astronomy and astrophysics, cost overruns and delays impact on the rest of the enterprise.

The health of our astronomy and astrophysics enterprise is important to the nation's overall industrial and scientific base. It takes time and decades of investments to create a skilled and knowledgeable workforce, robust supply chains, and infrastructure and institutions to support these cutting-edge technologies that push the state of the art. These same people, facilities, contractors, and institutions also support our national security and contribute to our economic and technological future.

But the health of this enterprise is undermined by cost-overruns and schedule slips that not only delay the start of new flagship missions, but also potentially erode research and analysis funding and postpone the development of smaller lower-cost missions that serve as a pipeline for early-career scientists. Neither of the flagships recommended by the previous two decadal surveys have flown yet. With any luck, Webb will launch later this month, but Roman recently exceeded its cost and schedule baseline, and isn't scheduled to launch until at least 2027.

Unfortunately, this isn't a new problem, as the Government Accountability Office has listed NASA Acquisition Management on its High-Risk Series since its inception in 1990. NASA, NSF, and DoD all have research and development and acquisition policies designed to address this challenge. GAO and agency Inspectors General (IG) have produced lessons learned, recommendations, and best practices. As we look towards the next decades, we should recognize that program management and execution are just as important to the space science sector as our people, infrastructure, and institutions.

I am excited to learn about what the community has in store for us in the coming decades. The launch of every new telescope and the construction of every new observatory holds the promise of rewriting our textbooks and inspiring the next generation of scientists. I want to thank the witnesses for their important work and look forward to their testimony.