



SPACE FOUNDATION

Memorandum
National Space Council
Second Meeting of the Harris led council
September 9, 2022
Johnson Space Center

NOTE: Participant names were not released prior to the meeting. As a result, some individual speakers will not be identified in this memorandum as they are largely unknown. When an agenda is available, we will follow up on this memorandum.

VP Harris opening remarks: Administration is developing framework for novel space activities. Global model for the responsible use for space. To reaffirm the rights of / responsibilities from all space-faring nations. Moving into the “new frontier”. Leading space through collaboration – Artemis Accords – and inspiration. Additional leadership with ASAT Ban.

Session One: Climate Change

NASA Administrator Nelson: NASA will build a series of observatories (Earth System Observatory) to present information in the Earth Information Center. The SWAT mission will track surface water. This will help track climate change.

Department of the Interior: New Landsat-9 capabilities allow us to better track, and understand the consequences, of global climate change. This data is available for free for everyone. They are used to set research priorities. This data is used by Google Maps, Planet, etc. This information is accessible from NASA and the USGS through Landsat.gov programs.

Department of Agriculture: DOA can use climate data to measure agricultural production, especially in smart agriculture. This data is essential to landowners and farmers.

Department of Commerce: Highlighting the work that NOAA is doing with climate data. These have significantly enhanced measurements of national. Information is available about heat tracking. DOC will be initiating contract processes for buying key commercial services.

Department of State: Artemis Accords progress is moving fast. “We want more Artemis partners”. Working on the UN open working groups. DOS is also working on space security norms through COPOUS.

Office of Management and Budget: Requested increased funding for Earth science and observations, to broaden and diversify student workforce.

Session Two: STEM Education and Workforce

Office of Science and Technology Policy: OSTP has led inter-agency STEM taskforce, which will release a roadmap to support space-related STEM education and workforce today. Details immediate and long-term actions guided by diversity, equity, accessibility, etc. They will target outreach. Agencies have created an online repository with STEM resources for teachers. They will provide internships, apprenticeships, and fellowships.

High School Science Teacher: Space is a great way to get students engaged in STEM. Through a grant from DOE and partnerships with NASA. He was able to come to NASA for an externship to learn how to better educate.

Department of Education: Focused on increasing the STEM workforce across the country. Our Stakeholders have taught us that expanding access to high quality partnerships will be beneficial to all. There's a place for everyone in space.

Undersecretary of Defense Heidi Shyu: Space is critical to national defense. Universities are an essential partner. Space Force ROTC scholarships will cover full college fees. SF has partnership with the University of Puerto Rico.

CEO of Special Aerospace Services Heather Bulk: Strong demand for space services and hardware. Industry has an ongoing need for talent.

Department of Labor: They will be updating labor models to include skills training / skills hiring information for space. They will be creating an accelerator for the space sector.

To end the discussion, Vice President Kamala Harris made three recommendations to specific federal agencies. In short, she asked the Department of Education to lead STEM education activities and partnerships across the public and private sectors by standing up a STEM office within the Department and expanding pathways to space careers. In addition, she also requested that the Office of Science and Technology Policy (OSTP) inventory and align all space-related investments and partnerships between the federal government and colleges and universities. She also asked NASA, the DoD, and the Department of Commerce to recommend a plan to ensure that the space sector is included in federal programming.

Session Three: Human Space Exploration

Dr. Aarna Sharma, Research Scientist at Cedars-Sinai: Scientific research on the ISS and in LEO is important. There is a need to make microgravity more accessible for scientific research. Dr. Sharma shared an illustrative example by discussing the Cedar-Sinai Regenerative Medicine Institute's research project on stem-cell biology that will take place on the ISS in 2023.

Ms. Karina Drees, President of the Commercial Spaceflight Federation: Encourage private sector development to counter growing Chinese influence in the space arena. She voiced concern about avoiding a gap between the ISS decommissioning and commercial LEO operations. She recommends that NASA work with commercial providers to ensure the U.S. can leverage the ISS to continue private astronaut missions in order to increase and generate additional demand for commercial access.

Department of Transportation: The FAA and NTSB have signed a memorandum of agreement to clarify each organization's responsibilities in investigating commercial launch and reentry safety events. The Department is also currently revising and updating a set of recommended practices for human space flight occupant safety, actively engaged with industry stakeholders in the development of consensus standards that will establish safety norms across the human space flight industry, and standing up an aerospace rulemaking committee that will engage stakeholders on commercial human spaceflight.

To conclude the session, VP Harris requested that NASA develop a plan for a new microgravity national lab as we transition from the ISS to commercial space stations and finalize a plan for an initial lunar surface architecture that considers commercial and international partnerships. In addition, she requested that the Department of Transportation identify interim steps within the next year to use its existing authority to ensure the safety of humans in spaceflight

Session Four: Rules for Commercial Novel Space Activities

Dr. Ruth Stilwell, Executive Director of Aerospace Policy Solutions: called for the federal government to streamline and clarify the current regulatory framework for commercial space actors.

Dr. Chris Baldwin, Senior VP of XL Catlin: Space insurance for launch and in-orbit operations is a critical enabler for the future of space activities. The state of orbital debris further heightens the risk of collision. The federal government should lead the adoption of measures that incentives safe and responsible behavior in space through regulation.

Mr. Babak Nikravesh, Partner at Morrison and Foerster: A clear and predictable regulatory regime is conducive to a constructive investment environment. Maturing space technology startups seeking to accelerate growth need access to significant sources of capital.

Mr. Nikravesh stated that adopting a comprehensive legal and regulatory framework to govern emerging private sector capabilities in space will reassure institutional investors and promote private investment in commercial space.

General James Dickinson, Commander for U.S. Space Command: The growth of the U.S. commercial space economy presents the DoD with the opportunity to maintain a technological advantage over China, Russia, and other national actors and that the strength of commercial partners directly contributes to our national security.

Federal Commutations Commission: Highlighted the FCC proposal that would require LEO satellites to be disposed of no more than five years after being taken out of service. The FCC

pointed to the rapid growth of the space industry as the catalyst to amend the previous 25-year deadline.

Federal Aviation Administration: Discussed the March 2021 Streamlining Launch and Reentry Licensing Requirements rule and the number of advisories published to provide clarity to the industry.

Department of Commerce: Recommended that the federal government establish a “space portal” that will direct new space entrepreneurs to the applicable authorization processes and federal agencies.

To close the meeting, VP Harris requested that all Council members provide her proposals for the authorization and supervision of commercial novel space activities, including how the government will ensure that space operations abide by space safety norms and protocols.