NATIONAL SPACE COUNCIL

USER'S ADVISORY GROUP

AN INTRODUCTION
WHAT IS THE NATIONAL SPACE COUNCIL (NSpC)?

• An advisory body chaired by the Vice President consisting of several key Cabinet officials

• Previously existed from 1958-73, and 1989-93; reestablished on 6/30/2017

**OBJECTIVE:**
To coordinate U.S. national space policy across all relevant agencies and in all segments (civil, commercial, national security, international, etc.) and strengthen U.S. leadership in space
SUMMARY OF NSpC ACTIVITIES TO DATE

• The NSpC has met six times. 2019 meetings to date:
  • 3/26/2019 at the US Space & Rocket Center in Huntsville, AL
  • 8/20/2019 at Udvar-Hazy Center near Washington, DC

• Issued three Space Policy Directives (SPDs):
  • SPD 1 (12/11/2017): Calls for U.S.-led integrated program with commercial partners to return humans to the Moon with missions to Mars and beyond to follow
  • SPD 2 (5/24/2018): Calls for regulatory reform for commercial launch and reentry, commercial remote sensing, and spectrum use
  • SPD 3 (6/18/2018): Directs the development of a national space traffic management policy to preserve the space environment for future use
  • SPD 4 (2/19/2019): Establishment of the United States Space Force

• Directive to return US astronauts to the Moon by 2024, establish a sustainable presence, and prepare for Mars issued at March meeting

• Additional recommendations on LEO, lunar surface, Mars, international cooperation, and space nuclear power issued in August
But our determination — our determination is to capture the imagination of the American people — of men and women, and boys and girls all across this country — and, really, to inspire the world.
WHAT IS THE USERS’ ADVISORY GROUP (UAG)?

• The UAG is a Federal Advisory Committee governed by the Federal Advisory Committee Act (FACA)

• Charter signed 12/6/2017 and runs for two years unless renewed

• Intended to be industry and other non-Federal stakeholders’ voice to the White House National Space Council (NSpC)

• Tasked with advising the NSpC on any and all space policy issues relevant to these stakeholders

• Will meet 3-4 times annually; first meeting held 6/19/2018, last 10/21/2019
The function of the UAG is solely advisory and shall be to ensure that the interests of industry, other non-Federal entities, and other persons involved in aeronautical and space activities are adequately represented. The UAG shall provide advice and recommendations on matters including, but not limited to:

• The effect of existing and potential U.S. and foreign government policies, laws, regulations, treaties and other international instruments, programs and practices on national security, civil, and private sector space activities;

• National security space priorities, including those affecting Homeland Security, the Nation’s defense, and intelligence activities, as they relate to coordination, cooperation, and technology and information exchange among the civil, national security, and commercial space sectors;

• Human and robotic exploration priorities;

• Strategies to increase innovation, efficiency, and effectiveness in public and private space activities that benefit the American people and reduce the burden on the taxpayer;

• Strategies to increase public, academic, commercial, and international support for U.S. space policies and programs; and

• Strategies to ensure U.S. leadership in the economic development of outer space.
The UAG’s duties shall include, but are not limited to:

• Seek to ensure that the interests of industry, other non-Federal entities and other persons involved in aeronautical and space activities are adequately represented on the National Space Council;
• Provide subject matter expertise to the council;
• Submit reports with findings and recommendations to the Council;
• Conduct studies, reviews, and evaluations, as requested by the Council;
• and Submit an annual report to the Council on its activities, as requested by the Council.
# UAG Subcommittee Membership

## Economic Development and Industrial Base
- Dr. Mary Lynne Dittmar, Co-Chair
- Eric Stallmer, Co-Chair
- Tory Bruno
- Steve Crisafulli
- Tim Ellis
- Homer Hickam
- Fred Klipsch
- Gwynne Shotwell
- Dr. Bob Smith
- David Thompson
- Stuart Witt

## Exploration and Discovery
- Gen. Lester Lyles (USAF, Ret.), Chair
  - Col. Buzz Aldrin (USAF, Ret.)
  - Tory Bruno
  - Dr. Mary Lynne Dittmar
  - Marillyn Hewson
  - Homer Hickam
  - The Hon. Kay Ivey
  - Dennis Muilenburg
  - Fatih Ozmen
  - Gwynne Shotwell
  - Eric Stallmer
  - David Thompson
  - Pamela Vaughan
  - Kathy Warden
  - Stuart Witt

## National Security
- Adm. James Ellis, Jr. (USN, Ret.), Chair
  - Tory Bruno
  - Dean Cheng
  - Tim Ellis
  - Marillyn Hewson
  - Gen. Lester Lyles (USAF, Ret.)
  - Col. Pamela Melroy (USAF, Ret.)
  - Dennis Muilenburg
  - Fatih Ozmen
  - Eric Schmidt
  - Harrison Schmitt
  - Gwynne Shotwell
  - Dr. Bob Smith
  - Mandy Vaughan
  - Kathy Warden
  - Stuart Witt

## Outreach & Education
- Col. Eileen Collins (USAF, Ret.), Chair
  - Homer Hickam
  - Fred Klipsch
  - Pamela Vaughan
  - Mandy Vaughan
  - Stuart Witt

## Space Policy and International Engagement
- Dr. David Wolf, Chair
  - Col. Buzz Aldrin (USAF, Ret.)
  - Dean Cheng
  - Dr. Mary Lynne Dittmar
  - Adm. James Ellis, Jr. (USN, Ret.)
  - Homer Hickam
  - Fred Klipsch
  - Col. Pamela Melroy (USAF, Ret.)
  - Dennis Muilenburg
  - Eric Stallmer

## Technology and Innovation
- Col. Pamela Melroy (USAF, Ret.), Chair
  - Dean Cheng
  - Tim Ellis
  - The Hon. Kay Ivey
  - Gen. Lester Lyles (USAF, Ret.)
  - Fatih Ozmen
  - Eric Schmidt
  - Harrison Schmitt
  - Dr. David Wolf
SUBCOMMITTEE WORK

Broad remit in assigned areas; examples of current topics being explored: LEO economic development, SSA/STM, STEM workforce development

Subcommittees also given five tasks to prioritize by the VP:

1. Review current lunar exploration architecture and identify any areas for improvement.
2. Assess and recommend options for the organizational structure of the uniformed Space Force.
3. Provide findings and recommendations on how the United States can most effectively continue to lead international space efforts.
5. Review the Department of Commerce’s report on spectrum management and improving the competitiveness of the U.S. space sector. Make recommendations for implementation and improvement of U.S. competitiveness.
1. The NSpC should write a Space Policy Directive concerning STEM education in the United States (U.S.) with the intent to prepare the future space industry workforce.

2. The NSpC should direct the UAG to develop a white paper, outlining and scoping a study of the means to establish and maintain a U.S. Strategic Space Propellant Reserve modeled on the U.S. Strategic Petroleum Reserve (SPR). The white paper should identify variables important to establish reference requirements, such as: (a) the size and location of initial reserves needed to stimulate sufficient infrastructure to support an eventual $1T space economy; (b) technical means; (c) identification of markets that could be enabled; and (d) models for funding, and others. It is anticipated that a detailed study undertaken by the National Academies of Sciences, Engineering and Medicine would follow initial scoping by the UAG.
3. The NSpC should direct the UAG to define the scope of a study to be conducted by the National Academy of Public Administration, reviewing U.S. regulatory jurisdiction and governance (domestic) v. a goal of technology leadership across spectrum related technology sectors. The study should also address an assessment of the current U.S. governance model for spectrum v. alignment with multiple national technological leadership and capabilities priorities.

4. NASA should update their technology roadmap and brief the UAG in light of the Artemis and Moon and to Mars program, provide a briefing to the UAG and, if necessary, fund a brief external review. [Note: (1) the roadmap does not need to also be published; and (2) we don’t need roadmap across entire NASA enterprise, just key technologies for Artemis and going onto Mars.]
WE WANT TO IMPROVE

Submit your inputs to: hq-uag@mail.nasa.gov

- What new partnership constructs should we look at?
- Future areas of exploration and scientific research
- Bureaucratic and regulatory hurdles that need attention
- Innovative technologies with potential space applications
- Big ideas for advancing American leadership in space
LOOK UP AT THE STARS AND NOT DOWN AT YOUR FEET. TRY TO MAKE SENSE OF WHAT YOU SEE, AND WONDER ABOUT WHAT MAKES THE UNIVERSE EXIST.

BE CURIOUS.

-Stephen Hawking