# 2024 Current Fiscal Year Report: National Space Council Users' Advisory Group

Report Run Date: 05/08/2024 03:58:41 AM

1. Department or Agency 2. Fiscal Year

National Aeronautics and Space 2024

Administration

3b. GSA
3. Committee or Subcommittee

Committee No.

National Space Council Users' Advisory 2630

Group

4. Is this New During 5. Current 6. Expected 7. Expected Fiscal Year? Charter Renewal Date Term Date

No 11/30/2023 11/30/2025

8a. Was Terminated During 8b. Specific 8c. Actual Termination Term Date

FiscalYear? Term Date

Authority

No

9. Agency 10b.

Recommendation for Next Req to Terminate?

| Continue of the c

Continue Not Applicable Not Applicable

11. Establishment Authority Statutory (Congress Created)

12. Specific Establishment

13. 14. 14c. Effective Committee\_

Authority Date Type Presidential?

NASA Authorization Act of 1991 (Public Law 101-611,

Section 121), and Executive 06/30/2017 Continuing No

Order 14056 on National

Space Council dated

December 1, 2021.

**15. Description of Committee** Scientific Technical Program

Advisory Board

16a. Total
Number of
No Reports for this FiscalYear

Reports

17a. 0 17b. Closed 0 17c. Partially Closed 0 Other Activities 0 17d. Total 0 Open

### **Meetings and Dates**

No Meetings

	Current FY F	Next FY
18a(1). Personnel Pmts to	\$0.00	20 00
Non-Federal Members	ψ0.00 (	00.00
18a(2). Personnel Pmts to	\$0.00\$	00.03
Federal Members	ψ0.00 (	0.00
18a(3). Personnel Pmts to	\$0.00	00.02
Federal Staff	ψ0.00 (	0.00
18a(4). Personnel Pmts to	\$0.00	00.02
Non-Member Consultants	φυ.υσφυ.υ	
18b(1). Travel and Per Diem to	\$0.00	00 02
Non-Federal Members	φο.σσ	0.00
18b(2). Travel and Per Diem to	\$0.00	00 08
Federal Members	φο.σσ (	,0.00
18b(3). Travel and Per Diem to	\$0.00	00.08
Federal Staff	φοίσος	,0.00
18b(4). Travel and Per Diem to	\$0.00	00.08
Non-member Consultants	ψο.σο ,	,
18c. Other(rents,user charges,	\$0.00	00.08
graphics, printing, mail, etc.)	φοίσος	,0.00
18d. Total	\$0.00\$	0.00
19. Federal Staff Support Years	0.00	0.00
(FTE)	0.00	3.00

# 20a. How does the Committee accomplish its purpose?

The function of the UAG is to ensure that the interests of industry, non-Federal entities, and other persons involved in aeronautical and space activities are adequately represented by the National Space Council.

#### 20b. How does the Committee balance its

#### membership?

The UAG membership is composed of representatives of industry, other non-Federal entities, and other recognizable groups of persons involved in aeronautical and space activities, as well as Special Government Employees who may be appointed as subject matter experts.

# 20c. How frequent and relevant are the Committee Meetings?

The UAG meets as frequently as needed, subject to the advance approval of the UAG Designated Federal Officer (DFO). The UAG meets two to three times each year. The UAG from time to time, but not less that once per year, meets with the National Space Council. Special meetings of the UAG may be required and supported as needed.

# 20d. Why can't the advice or information this committee provides be obtained elsewhere?

The UAG is a unique body of nationally-recognized aerospace industry experts and leaders at the national level, recognized for their specific expertise. Combined together, the membership is a critical brain trust for the nation.

# 20e. Why is it necessary to close and/or partially closed committee meetings?

Not Applicable

#### 21. Remarks

The National Space Council Users' Advisory
Group (UAG) is a FACA advisory committee
chartered by NASA on December 6, 2017; the
UAG charter was renewed by NASA on December
4, 2019, and again on December 3, 2021. NASA
was requested by the White House to sponsor and
manage the day-to-day operations of this
committee. This committee was established

pursuant to the NASA Authorization Act of 1991 (Public Law 101-611, Section 121), and Executive Order 14056 ("The National Space Council") signed by the President on December 1, 2021. As such, the UAG is a non-discretionary statutory Federal advisory committee, and has no termination date.

# **Designated Federal Officer**

James J. Miller DFO/Executive Secretary

James J. Willief DFO/Executive Secretary				
Committee Members	Start	End	Occupation	Member Designation
Badyal, Rajeev	01/26/2023	01/25/2025	Amazon	Representative Member
Bolden, Charles	01/26/2023	01/25/2025	Former NASA Administrator	Special Government Employee (SGE) Member
Bruno, Salvatore	06/13/2018	01/26/2025	United Launch Alliance	Representative Member
Bush, Lance	01/26/2023	01/25/2025	Challenger Center	Representative Member
Chatman, Bridget	01/26/2023	01/25/2025	Women in Aerospace	Representative Member
Colbert, Theodore	06/13/2018	01/25/2025	Boeing	Representative Member
Colleton, Nancy	01/26/2023	01/25/2025	Institute for Global Environmental Strategies	Representative Member
Drees, Drees	01/26/2023	01/25/2025	Commercial Spaceflight Federation	Representative Member
Fanning, Eric	01/26/2023	01/25/2025	Aerospace Industries Association	Representative Member
Harden Williams, Katrina	01/26/2023	01/25/2025	Ames Middle School - Ames, Iowa	Representative Member
Hastings, Daniel	01/26/2023	01/25/2025	MIT	Representative Member
Hickton, Dawne	01/26/2023	01/25/2025	Consultant	Special Government Employee (SGE) Member
Jablonsky, Daniel	01/26/2023	01/25/2025	Maxar Technologies	Representative Member
Kaufman, Dave	01/26/2023	01/25/2025	Ball Aerospace	Representative Member

Lin, Patrick	01/26/2023	01/25/2025	California Polytechnic State University	Representative Member
Lopez, Ronald	01/26/2023	01/25/2025	Consultant	Representative Member
Lyles, Lester	06/13/2018	01/25/2025	Aerospace Consultant	Special Government Employee (SGE) Member
Martin, Harold	01/26/2023	01/25/2025	North Carolina A&T University	Representative Member
Marvel, Kate	01/26/2023	01/25/2025	Project Drawdown	Representative Member
Mercer, Roosevelt	01/26/2023	01/25/2025	Virginia Space	Representative Member
Perez-Davis, Marla	01/26/2023	01/25/2025	Consultant	Special Government Employee (SGE) Member
Proctor, Sian	01/26/2023	01/25/2025	Maricopa Community College District	Representative Member
Schingler, Robbie	01/26/2023	01/25/2025	Planet	Representative Member
Shotwell, Gwynne	01/26/2023	01/25/2025	SpaceX	Representative Member
Smith, Robert	06/13/2018	01/25/2025	Blue Origin	Representative Member
Stricklan, Melanie	01/26/2023	01/25/2025	Slingshot Aerospace	Representative Member
Taiclet, James	02/26/2020	01/25/2025	Lockheed Martin	Representative Member
Vaughn, Mandy	06/13/2018	01/25/2025	Consultant	Special Government Employee (SGE) Member
Warden, Kathy	08/19/2019	01/25/2025	Northrop Grumman	Representative Member
Williams, Jeremy	01/26/2023	01/25/2025	Bayer Crop Science	Representative Member

**Number of Committee Members Listed: 30** 

# **Narrative Description**

What are the most significant program outcomes associated with this committee?

Checked if Applies

Improvements to health or safety	✓
Trust in government	✓
Major policy changes	✓
Advance in scientific research	✓
Effective grant making	
Improved service delivery	✓
Increased customer satisfaction	✓
Implementation of laws or regulatory	
requirements	
Other	

#### **Outcome Comments**

The new Administration and NASA worked together to process new member appointments and kick-off the first public meeting in February, 2023, following the Administration transition. Since then, administrative and fact-finding meetings have taken place to develop findings and recommendations, which are scheduled to be presented for deliberation and potential adoption on December 1, 2023. The final UAG results will then be presented by the UAG Chair to the Vice President at the next National Space Council meeting, planned to be held prior to the end of CY 2023.

# What are the cost savings associated with this committee?

	Checked if Applies
None	
Unable to Determine	✓
Under \$100,000	
\$100,000 - \$500,000	
\$500,001 - \$1,000,000	
\$1,000,001 - \$5,000,000	
\$5,000,001 - \$10,000,000	
Over \$10,000,000	
Cost Savings Other	

### **Cost Savings Comments**

What is the approximate <u>Number</u> of recommendations produced by this committee for the life of the committee?

#### **Number of Recommendations Comments**

The renewed UAG membership, consisting of at least half of the former membership, continued working to expand on earlier recommendations noted below that are still relevant and active, have continued to support the earlier recommendations, while they also worked to develop new findings and recommendations under the new UAG Chair, Gen Les Lyles. Because the new membership met for the first time in a public session in February, 2023, and are now scheduled to formally deliberate on proposed new findings December 1, 2023, we do not yet have new recommendations and/or government responses to report on for FY23 outcomes. However, ongoing work with regards to earlier work is still documented below to provide context for issue areas that the new UAG membership continues to explore. The Users' Advisory Group (UAG) has been actively involved in providing counsel on the U.S. effort to safely return to the Moon and then send humans on to Mars. The UAG has also produced multiple white papers that inform and advise on how the U.S. can most effectively continue to lead international space efforts. For background on continuing work, in FY 2020 there were six primary recommendations submitted to the National Space Council (NSpC): (1) NASA should update their technology roadmap and brief the UAG in light of the Artemis and Moon and to Mars programs, provide a briefing to the UAG and, if necessary, fund a brief external review. (October 21, 2019) (2) 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), with 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. (October 21, 2019) (3) 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). (October 21, 2019) (4) The NSpC should write a Space Policy Directive (SPD) concerning Science, Technology, Engineering and Mathematics (STEM) education in the U.S. with the intent to prepare the future space industry workforce. (October 21, 2019) (5) The DoD, DOC, and National Aeronautics and Space Administration (NASA) should work to jointly develop standards for space data protection and security plans, space data verification, and space data uncertainty quantification. (July 30, 2020) (6) The Department of Defense (DoD) and Department of Commerce (DOC) should work to create an interoperable approach on multi sourced space data modeling, data sharing, and curation architectures. Both departments should study lessons learned and fund studies and research around technical solutions and processes that allow incorporation of properly vetted international and commercial data into the space object catalog for military, civil and commercial uses. (July 30, 2020) Three

recommendations submitted in FY2019 were also partially implemented in FY2020: (7) Some UAG members expressed concerns about the pace of progress in the Moon to Mars initiative, including: The vehicle design and program design do not seem sufficiently innovative; Innovative, creative people are involved, but that they may be are trapped in a system that does not appear to facilitate efficient progress; There may be an excessive number of overly large goals, and these should be subdivided and prioritized; and, The UAG should therefore persuade the administration and NASA to consider alternate approaches. (November 15, 2018) (8) The UAG was asked to assess and to recommend options for the organizational structure of the U.S. Space Force (USSF), including a future Department of the Space Force. (April 8, 2019) (9) The UAG subcommittee recommended that the UAG form a task force to act as a "red team" to assess the revised lunar exploration plan and develop potential alternatives. (April 8, 2019)

What is the approximate <u>Percentage</u> of these recommendations that have been or will be <u>Fully</u> implemented by the agency?

55%

# % of Recommendations Fully Implemented Comments

Recommendations 1, 3, 7, 8, and 9 have been fully implemented as follows: (1) The NASA Space Technology Mission Directorate (STMD) briefed its lunar technology roadmap to the UAG in January 2020. (3) The UAG white paper, "Assessing the Utility of a U.S. Strategic In-Space Propellant Reserve: Economic Development in Low Earth Orbit and Cislunar1 Space," was delivered to the NSpC in September 2020. (8) The National Security subcommittee of the UAG has had three classified information gathering and discussion sessions with DoD leadership, initially focused on the USSF, its creation, the plan for its implementation, milestones for implementation of that plan, and then efforts to develop concepts for organizing areas such as operations, personnel policy, and procurement initiatives. The UAG paper, "Efficient Space Procurement Codification for the DAF/USSF, Including Incremental Funding," was delivered to the NSpC in September 2020. (7&9). Numerous fact-finding information exchanges with NASA/HEOMD (the Artemis lead managers) were conducted to understand the basic plans for the notional 2024 lunar architecture, the specific missions and visions supporting the lunar objectives, the risks associated with each element of the mission, and any broad trade spaces considered. The UAG also reviewed previous lunar architectures during the Apollo program to understand the differences and trades, as well as plans to ensure a sustainable presence on the lunar surface, as well opportunities for reusability of key lunar architecture elements for the future objective of traveling to Mars. UAG reps also interacted with the NASA Administrator to get a strategic overview of NASA's "Lunar to Mars" sustainability and reusability plans. The UAG reviewed NASA's internal

independent assessment of the Artemis program. The initial assessment of the 2024 Lunar Architecture determined that NASA has conducted a detailed, thorough review of options and trades required to return to the Moon as quickly as possible. The mission plans and elements of the architecture appear to be appropriate to achieve the Lunar objectives with sustainability and reusability factored in for future excursions from the lunar surface. However, a review of the Artemis Program Status Assessment (PSA) revealed concerns about the program organization and management structure. It also identified concerns about the schedule risks, particularly associated with the lunar Human Landing System (HLS) element of Artemis.

What is the approximate <u>Percentage</u> of these recommendations that have been o
will be Partially implemented by the agency?
33%

### % of Recommendations Partially Implemented Comments

Recommendations 4, 5, 6 have been partially implemented. The White House is working on a Space Policy Directive (SPD) that will implement the recommendations regarding STEM. Also, a follow-on White Paper, "Recommendations on Trust and Interoperability in Space Situational Awareness Data," was submitted to the NSpC in September 2020.

Does the agency provide the committee with feedback regarding actions taken to implement recommendations or advice offered?

Yes 🗸	No	Not Applicable
	•	

### **Agency Feedback Comments**

Contact the committee DFO for information on the Agency feedback process.

What other actions has the agency taken as a result of the committee's advice or recommendation?

	Checked if Applies
Reorganized Priorities	
Reallocated resources	
Issued new regulation	
Proposed legislation	
Approved grants or other payments	
Other	

#### **Action Comments**

FY 2023 UAG Update On September 8, 2022, General Lester L. Lyles (USAF, ret.) was

appointed Chair, and on December 16, 2022, as Chair of the National Space Council, Vice President Kamala Harris, as Chair of the National Space Council, announced the individuals selected to serve on the National Space Council's Users' Advisory Group (UAG). On February 23, 2023, a UAG public meeting was held at the JW Marriott Hotel in Washington D.C. and livestreamed. This was the first UAG meeting under the Biden-Harris Administration. The main objective was to lay out the UAG's work for the 2023-2025 term. Mr. Chirag Parikh, Deputy Assistant to the President & Executive Secretary of the NSpC, provided the opening remarks. Key expert presentations and discussions included: (1) Dr. Buzz Aldrin, Apollo 11 Astronaut, "Essential American Space Enterprise."; (2) Gen David D. Thompson, Vice Chief of Space Operations, USSF, "Military Space Priorities"; (3) Col Pamela Melroy (USAF, ret.), Deputy Administrator, NASA, "Civil Space Priorities"; (4) Dr. Richard DalBello, Director, Office of Space Commerce, NOAA, "Commercial Space Priorities"; and (5) Dr. Thomas Zurbuchen, Former Associate Administrator, Science Mission Directorate, NASA, "Space Science Priorities". These briefings were followed by updates from the UAG's six subcommittees, including their proposed focus areas and deliberation by UAG members. The meeting minutes, including the UAG deliberations, are available at https://www.nasa.gov/wp-content/uploads/2023/06/uag-2023-02-23-meeting-minutes.pdf. Following this meeting, a group of UAG representatives went to the White House for a meeting with Vice President Kamala Harris. The purpose of this follow-up meeting was to enable a fact-finding information exchange between the NSpC Chair and the members of the UAG. After numerous subcommittee level administrative and fact-finding meetings, the UAG will formally meet again on December 1, 2023, to deliberate proposed findings and recommendations, for presentation to the National Space Council, chaired by the Vice President.

Is the Committee engaged in the review of applications for grants?

#### **Grant Review Comments**

Not Applicable

### How is access provided to the information for the Committee's documentation?

	Checked if Applies
Contact DFO	✓
Online Agency Web Site	✓
Online Committee Web Site	✓
Online GSA FACA Web Site	✓
Publications	~

Other

#### **Access Comments**

Access to National Space Council UAG working information is available through the NASA-hosted website or through the NASA-designated DFO. The findings, recommendations, and meeting minutes are available at the UAG website hosted by NASA: https://www.nasa.gov/content/national-space-council-users-advisory-group A contact e-mail has been set up for the public to submit a question, comment, or idea to the UAG: contact@spacecounciluag.org. Other methods of information dissemination are also being considered.