National Aeronautics and Space Administration

**Headquarters**
Washington, DC 20546-0001

Reply to attn. of: Office of Communications

July 19, 2022

John Greenewald, Jr.
The Black Vault, Inc.
27305 W. Live Oak Rd., Suite 1203
Castaic, CA 91384-4520
john@greenewald.com

Re: FOIA Tracking Number 21-HQ-F-00603

Dear Mr. Greenewald:

This is our fourth interim response to your Freedom of Information Act (FOIA) request to the National Aeronautics and Space Administration (NASA), the clarified version of which was received in this office on July 22, 2021. You seek the following:

> *ALL emails, with any level of classification (list of NASA personnel below), which contain the following keywords:*
>
> *"Unidentified Aerial" and/or*
> *"Unidentified Flying" and/or*
> *"UAP" and/or*
> *"UFO" and/or*
> *"Unidentified Spacecraft" and/or*
> *"Unidentified aircraft" and/or*
> *"UAPTF"*
>
> *PLEASE INCLUDE ALL ATTACHMENTS TO EMAILS FOUND . . . search the [following] e-mail boxes, with the time frames in the parentheticals:*
>
> - *Mike Gold, Acting Associate Administrator, Office of International and Interagency Relations (November 2019 - May 2021)*
> - *Joel Montalbano, International Space Station (ISS) Program Manager (January 1, 2020, through the date of processing the request)*

- *Margaret Kieffer, Director of the Export Control and Interagency Liaison Division (January 1, 2017 - the date of processing this request)*

- *Suzanne Gillen, Former Associate Administrator for Legislative Affairs (January 1, 2017 - January 20, 2021)*

- *Dr. Ravi Kumar Kopparapu, Research AST, Planetary Studies (August 1, 2015 - the date of processing this request)*

- *Sandra E. Connelly, Deputy Associate Administrator (January 1, 2020 - the date of processing this request)*

- *Karen Feldstein, Associate Administrator for International and Interagency Relations (January 1, 2016 - the date of processing this request)*

- *Dr. Michael New, Deputy Associate Administrator for Research (June 1, 2018 - the date of processing this request)*

- *Dr. Paul Hertz, Astrophysics Division Director (April 1, 2000 - the date of processing this request)*

- *Bhavya Lal, Senior Advisor for Budget and Finance (January 1, 2020 - the date of processing this request)*

- *Thomas Zurbuchen, NASA Science Associate Administrator (June 11, 2021 - the date of processing this request)*

Our previous responses, dated October 6, 2021, January 11, 2022, and March 25, 2022, notified you that we tasked NASA's Office of Information Technology (IT) to search the email accounts of the above-named officials using the key words and date ranges you specified. That search located voluminous records as further explained in the fee section below. The March 25 response provided you with 169 pages of records from the accounts of Joel Montalbano, Suzanne Gillen, Sandra Connelly, Michael New, Paul Hertz, Bhavya Lal, and Thomas Zurbuchen, and notified you that we continue to process remaining records which will be issued to you on a rolling basis.

At this time, we have completed processing the enclosed records from the accounts of Margaret Kieffer and Karen Feldstein. We continue to process remaining records up to the agreed upon amount; however, please see the fee section below for additional information about remaining records.

As noted above, we completed processing the enclosed portion of responsive records. We reviewed them under the FOIA to determine whether they may be disclosed to you. Based on that review this office is providing the following:

__50__ page(s) are released in full (RIF);
__19__ page(s) are released in part (RIP);
__0__ page(s) are withheld in full (WIF);
__19__ page(s) are duplicate copies of material already processed.

NASA redacted from the enclosed documents certain information pursuant to the following FOIA exemptions:

**Exemption 5, 5 U.S.C. § 552(b)(5)**

Exemption 5 protects "inter-agency or intra-agency memorandums or letters which would not be available by law to a party other than an agency in litigation with the agency." 5 U.S.C. § 552(b)(5). Courts interpret Exemption 5 to incorporate three primary privileges: the attorney work-product privilege, the attorney-client privilege, and the deliberative process privilege. NASA invokes the deliberative process privilege in this instance.

The deliberative process privilege is intended to protect the decision-making process of government agencies and to encourage frank discussion of legal and policy issues. The scope of the privilege covers documents reflecting advisory opinions, recommendations, and deliberations comprising part of a process by which government decisions and policies are formulated. To qualify for the deliberative process privilege, a document must be both "pre-decisional" and "deliberative." Documents are pre-decisional when they precede an agency decision and are prepared in order to assist an agency in arriving at its decision. Documents are deliberative when they comprise part of the process by which government decisions are made. The type of records/information NASA withheld under this exemption consists of draft documents, portions of emails containing analyses, and recommendations and/or opinions expressed by employees. NASA considered the foreseeable harm that would result from the release of this information and determined that its release would hinder the decision-making process, create a chilling effect on internal deliberations, lead to uninformed decision-making, and public confusion. Please note that as a matter of administrative discretion, I released certain information falling under the umbrella of this exemption.

**Exemption 6, 5 U.S.C. § 552(b)(6)**

Exemption 6 allows withholding of "personnel and medical files and *similar files* the disclosure of which would constitute a clearly unwarranted invasion of personal privacy." 5 U.S.C. § 552(b)(6)(emphasis added). NASA invokes exemption 6 to protect unpublished NASA cell phone numbers, personal phone numbers, the names and contact information of third parties as well as any information that could identify such individuals.

## Fees

Provisions of the FOIA allow us to recover part of the cost of complying with your request. The fees that may be assessed to process a FOIA request vary depending on the category into which the FOIA requester falls. 5 U.S.C. § 552(a)(4)(A)(ii)(I),(II),(III). Pursuant to the NASA implementing regulations, 14 C.F.R. § 1206.507(b), media requesters will be charged for duplication only, although the first 100 pages are free. Duplication costs thereafter are charged at a rate of $0.15 per page. You have now been provided with a total of 260 pages. You have agreed to pay the estimated fee total of $382.50 for the remaining records. We will continue to process the remaining records and make release to you on a rolling basis.

## Appeal

Because processing is not yet complete, we ask that you defer any appeals until we complete our production of records. You do, however, have the right to appeal this response. Your appeal must be received within 90 days of the date of our final response. Please send your appeal to:

Administrator
NASA Headquarters
Executive Secretariat
ATTN: FOIA Appeals
MS 9R17
300 E Street S.W.
Washington, DC 2054

Both the envelope and letter of appeal should be clearly marked, “Appeal under the Freedom of Information Act.” You must also include a copy of your initial request, the adverse determination, and any other correspondence with the FOIA office. In order to expedite the appellate process and ensure full consideration of your appeal, your appeal should contain a brief statement of the reasons you believe this initial determination should be reversed. Additional information on submitting an appeal is set forth in the NASA FOIA regulations at 14 C.F.R. § 1206.700.

## Assistance and Dispute Resolution Services

If you have any questions, please feel free to contact me at Alyssa.k.bias@nasa.gov or (202) 358-4664. For further assistance and to discuss any aspect of your request you may also contact:

Stephanie Fox
FOIA Public Liaison
Freedom of Information Act Office
NASA Headquarters
300 E Street, S.W., 5P32
Washington D.C. 20546
Phone: 202-358-1553
Email: Stephanie.K.Fox@nasa.gov

Additionally, you may contact the Office of Government Information Services (OGIS) at the National Archives and Records Administration to inquire about the FOIA mediation services it offers. The contact information for OGIS is as follows: Office of Government Information Services, National Archives and Records Administration, 8601 Adelphi Road-OGIS, College Park, Maryland 20740-6001, e-mail at ogis@nara.gov; telephone at 202-741-5770; toll free at 1-877-684-6448; or facsimile at 202-741-5769.

***Important***: Please note that contacting any agency official including the undersigned, NASA's Chief FOIA Public Liaison, and/or OGIS is not an alternative to filing an administrative appeal and does not stop the 90 day appeal clock.

Sincerely,

Alyssa Bias

Alyssa Bias
Government Information Specialist

| | |
|---|---|
| **From:** | Bress, Kent G. (HQ-TF000) |
| **To:** | Baldwin, Arnold B. (JSC-NT411); Bowie, Monica T. (HQ-TE000); Capote, Sarah M. (HQ-TH000)[GENERAL DYNAMICS INFORMATION TECHNOLOGY (GDIT)]; cjackson@mail.hq.nasa.gov; Conole, Kevin C. (HQ-TH000); Dahlgren, Jennifer R. (HQ-TH000)[GENERAL DYNAMICS INFORMATION TECHNOLOGY (GDIT)]; Dalby, Melanie K. (HQ-TE000); Dove, Judy A (HQ-TG000); Drew, Benjamin A. (HQ-TH000); EWAN, SHANNON M. (HQ-TG000); Feldstein, Karen C. (HQ-TA000); Finley, Patrick T (HQ-TE000); Fleming, Devon C. (HQ-TB000); Flynn, David T. (HQ-TH000); Goldemen, Betsy (HQ-TG000); Hackley, Lisa M. (HQ-TD000); Hamilton, Carol J. (HQ-TD000); Harris, April P. (HQ-TB000)[Total Solutions Inc]; Hurst, Kimberly A. (HQ-TG000); Jean-pierre, Gerald D. (HQ-TB000)[Total Solutions Inc]; khodgdon@hq.nasa.gov; Kieffer, Margaret (HQ-TH000); Kirkham, Gib (HQ-TG000); Koeppe, Matthew T (HQ-TG000); Kuhl, Katelyn M. (HQ-TE000); Levy, Rebecca (HQ-OC000); Mann, Gregory A (HQ-TE000); Marcia Joseph (HQ-TD000); Masciola, Andrew J. (HQ-TG000); Mcintosh, Garvey (HQ-TA000); McKay, Meredith (HQ-TA000); MCMAHON-BOGNAR, CHRISTINE (HQ-TG000); Mcsweeney, Dennis (HQ-TG000); Meidinger, Jolene A. (HQ-TH000); Moore, Michael G. (HQ-TG000); Mulvey, Laura A. (HQ-TG000); Parks, Andy (HQ-TE000); PARSLEY, JACOB D. (HQ-TG000); Plumb, Thomas J. (HQ-TA000); Rausch, Diane (HQ-TD000); Richards, David (HQ-TH000)[GENERAL DYNAMICS INFORMATION TECHNOLOGY (GDIT)]; Ross-estes, Charlene (HQ-TB000)[Total Solutions Inc]; Santos, Juan F. (HQ-TH000); Shearer, Jon E. (HQ-TA000); Shephard, Patricia A. (HQ-TB000); Spencer, Bridgette M. (HQ-TB000); Tawney, Timothy (HQ-TA000); Tilman, Justin (HQ-TF000); Torres, Alfonso (HQ-TH000); Troxell, Jennifer L. (HQ-TH000); Whitby, Dionne M. (HQ-TE000); Tsougranis, Anthony Elias (HQ-TF000); Newman, Neal R. (HQ-TF000); Williams, Elizabeth (HQ-TF000); Carrodeguas, Judith (HQ-TF000); Convertino, Anthony J. (HQ-TF000)[Intern]; Coe, Ellie R. (HQ-TF000)[Intern]; Sespico, Emily (HQ-TF000)[Intern] |
| **Subject:** | FW: NASA INTERVIEW PREP DOCUMENT - as of 5-28-21 (internal distribution only) |
| **Date:** | Tuesday, June 1, 2021 2:27:58 PM |
| **Attachments:** | NASA INTERVIEW PREP DOCUMENT - as of 5-28-21.docx |

FYI, the new items are listed below.

Kent

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**From:** Beutel, Allard (HQ-NA020) <allard.beutel@nasa.gov>

**Sent:** Saturday, May 29, 2021 10:57 AM

**Subject:** NASA INTERVIEW PREP DOCUMENT - as of 5-28-21 (internal distribution only)

Morning, attached is the latest interview prep document. The top four items are new:

- Fiscal Year 2022 NASA Full Budget Proposal
- Earth System Observatory
- Hurricanes and NASA
- Search for Life, Technosignatures, and UAP/UFOs

The upcoming events public dates section is update.

-Allard

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Updated 5/28/21

**NASA INTERVIEW PREP DOCUMENT**

## RECENT HOT TOPICS

**Quick Reference**

Upcoming Events
Public Dates

### Fiscal Year 2022 NASA Full Budget Proposal

*On May 28, the Biden-Harris Administration released the full budget proposal for Fiscal Year 2022.*

- President's Fiscal Year 2022 budget requests $24.8 billion for NASA, an increase of more than 6% over what the agency received the previous year.

Overarching Points

- This funding request demonstrates the president's commitment to NASA and the people across the agency and its partners who have worked so hard this past year under the most difficult circumstances and achieved unprecedented success.
- The NASA workforce and the American people should be encouraged by what they see in this budget request. It is an investment in our future, and it shows confidence in what this agency has to offer. We owe it to the president and the American people to be good and responsible stewards of every tax dollar invested in NASA.
- This budget request includes the strongest NASA budget ever for science, which will help address the climate crisis at home and abroad, as well as advance robotic missions that will pave the way for astronauts to explore the Moon and Mars.
- This is also the strongest budget for exploration since the Apollo program.
- This budget request will restore America's global standing, promote racial and economic equity, and drive economic growth.

Supports Human Exploration of the Moon, Mars, and Beyond

- The president's funding request increases funding for Artemis by $350 million and gives us the resources to advance America's bipartisan Moon to Mars space exploration plan, agreed to by the Administration and Congress.
- This request keeps us on the path toward a regular cadence of Artemis missions with crew to the Moon by the middle of the decade.
- NASA's human landing system contract award, with the goal of a human demonstration mission to the lunar surface by 2024, is under protest.
- NASA is currently reviewing the overall Artemis timeline based on appropriations and expected budget, and outcome of the human landing system protest. We hope to provide an updated Artemis timeline later this year following conclusion of the protest.
- The FY2022 budget request assumes an Artemis I launch no earlier than November 2021, an Artemis II launch no earlier than September 2023, followed by Artemis III targeted for late 2024 and Artemis IV for late 2025. Landing the first woman and first person of color on the lunar surface as part of the Artemis program will promote equity – signaling to every American they too can see themselves among the stars.
- With NASA's Space Launch System rocket and Orion spacecraft, as well as U.S. commercial partnerships with the human landing system and Gateway lunar outpost, we will send astronauts to the Moon to test technologies and exploration practices that will make future missions more productive than ever before.
- This budget funds an upgraded Space Launch System, known as Block1B, that can deliver larger cargos to lunar orbit.

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- Gateway, built with our commercial and international partners, is important to sustainable lunar operations.
    - The foundation of our lunar outpost is targeted to launch no earlier than November 2024, with additional modules from our international partners launching later.
- We are working day and night to reduce risks and overcome the challenges of long-term human exploration of the Moon and Mars.
- The budget funds early design work and planning for additional surface architecture necessary including the lunar terrain vehicle and surface habitats to ensure our astronauts can explore more of the Moon than ever before and stay for increasingly longer periods of time in deep space.
- NASA's Lunar Surface Innovation Initiative is advancing technologies to support mission operations on the Moon. This budget includes funding for the preliminary design of a fission surface power system that could power operations on the Moon and Mars.

<u>Furthers Robotic Exploration of the Solar System and the Universe</u>

- This funding request also furthers robotic exploration of the solar system and the universe.
- The budget provides more than $650 million for the Mars Sample Return mission, the highest priority large mission in planetary science.
- It includes strong support for planetary defense, including the near-Earth objects (NEO) Surveyor mission to detect asteroids and comets that could potentially impact Earth.

<u>Enhances Research and Development at NASA</u>

- This funding request supports continued progress developing cutting-edge space technologies, transformative capabilities, and renewable energy, all of which feed the economy and create good paying American jobs.
- Investing in new technologies enhances NASA's missions and fosters the growing space economy.
- NASA routinely demonstrates new technologies, reducing overall risk and encouraging industry adoption. The budget includes $500 million for technology demonstrations.
- It fully funds the On-orbit Servicing, Assembly, and Manufacturing 1 (OSAM-1) mission. Robotically refueling a satellite and manufacturing and assembling spacecraft parts in-orbit will foster a more sustainable space economy.
- Launching next month, our Laser Communications Relay Demonstration will demonstrate a technology that can provide 10-100 times better data rates than commonly used radio frequency communications systems. In the coming years, we'll further refine laser communications technology for use in deep space.
- More than $280 million would be directed toward small business innovation research and technology transfer. The increase of $60 million will provide more money to small companies to research new ideas and develop innovative solutions to challenging problems.
- An investment in NASA and space infrastructure reaffirms our nation is the world's premier partner in space collaboration, and we will be for decades to come.
- We are investing in aviation to make our skies safer, our fuels cleaner, and to get you to your destination faster than ever before. This also includes investing in next-generation

aeronautics research that will safely integrate automated aircraft systems with piloted airplanes.
    - This budget enhances American competitiveness in the global aviation industry including the first two flights of new X-57 and X-59 aircraft.
    - NASA aeronautics is leading transformation of the way people and goods are moved through Advanced Air Mobility (air taxis, drone cargo deliveries, etc.), an emerging market expected to be worth $115 billion a year by 2035.
        - It will help safely deliver revolutionary aviation capabilities to previously underserved local, regional, intraregional, and urban areas. NASA investments today will spur the advancements of tomorrow.
- The budget provides a $30 million increase to accelerate transformative science at the frontiers of biological and physical sciences research in space.

Advances Climate Science

- Climate change has increasing economic and national security impacts, and this budget increases investments in climate research and science programs.
- This funding increases our ability to better understand Earth and how it works as an integrated system, from our oceans to our atmosphere and how it all impacts our daily lives.
- NASA is developing the next-generation Earth System Observatory. NASA's new Earth System Observatory will provide the world with an unprecedented understanding of our Earth's climate system, arming us with next-generation data critical to mitigating climate change, and protecting our communities in the face of natural hazards.
    - The Earth System Observatory will help improve our understanding of extreme weather events and our decision making on climate resilience, adaptation, and mitigation. It will also inform decisions that ensure communities have the resources they need to build resilience prior to these crises.
- Research on zero-emissions aviation
    - NASA Aeronautics is partnering with industry, academia and other agencies through the Sustainable Flight National Partnership to accomplish the aviation community's aggressive climate change agenda. Through advanced vehicle technologies, efficient airline operations and sustainable aviation fuels, collectively NASA and our federal government and industry partners aim to reduce carbon emissions from aviation by half by 2050, compared to 2005, and achieve net-zero emissions by 2060.
- NASA continues to lead the development of new small spacecraft capabilities. For example, small platforms can enable distributed observations for climate science.

Builds a Diverse Future STEM Workforce

- This budget invests in the Artemis Generation. It requests funding for NASA's STEM engagement efforts for the first time in five years to inspire the next generation of scientists, engineers, mathematicians, and explorers by supporting the agency's STEM efforts.
- With this budget, NASA will increase funding for Space Grant and MUREP and will work with university and consortia partners to implement initiatives focused on diversity, equity and inclusion.

- NASA taps into the skills of a diverse group of partners and reaches new groups through our small business programs, academic partnerships, and prizes, challenges, and crowdsourcing activities.
- The Space Technology Mission Directorate is collaborating with OSTEM's Minority University Research and Education Project to offer research planning grants and incentivize partnerships between minority-serving institutions and small businesses, setting them up to apply to NASA opportunities.

Continues Research on the International Space Station

- The space station is a convergence of science, technology, and human innovation that demonstrates new technologies and enables research not possible on Earth. The space station remains the springboard to NASA's next great leap in exploration, including future human missions to the Moon and eventually to Mars.
- With continued support for the International Space Station and the Artemis program, the president welcomes the international community to join us as we push human exploration deeper into space.
- This budget supports early design maturation of multiple commercially owned and operated low-Earth orbit (LEO) destinations (free flyers) from which NASA, along with other customers, can purchase services and stimulate the growth of commercial activities in LEO.
- In addition to maintaining continuous U.S. access to a space station in LEO, these new and more cost-effective platforms will democratize access to space by lowering the barriers to entry for the next generation of researchers, technologists, and tourists.

**Earth System Observatory**

*On May 24, the White House and NASA announced new Earth System Observatory missions to help address and mitigate climate change:*

- NASA will design a new set of Earth-focused missions to provide key information to guide efforts related to climate change, disaster mitigation, fighting forest fires, and improving real-time agricultural processes.
- With the Earth System Observatory, each satellite will be uniquely designed to complement the others, working in tandem to create a 3D, holistic view of Earth, from bedrock to atmosphere.
- "I've seen firsthand the impact of hurricanes made more intense and destructive by climate change, like Maria and Irma. The Biden-Harris Administration's response to climate change matches the magnitude of the threat: a whole of government, all hands-on-deck approach to meet this moment," said NASA Administrator Bill Nelson. "Over the past three decades, much of what we've learned about the Earth's changing climate is built on NASA satellite observations and research. NASA's new Earth System Observatory will expand that work, providing the world with an unprecedented understanding of our Earth's climate system, arming us with next-generation data critical to mitigating climate change, and protecting our communities in the face of natural disasters."
- The observatory follows recommendations from the 2017 Earth Science Decadal Survey by the National Academies of Sciences, Engineering and Medicine, which lays out ambitious but critically necessary research and observation guidance.
- Areas of focus for the observatory include:

  - Aerosols: Answering the critical question of how aerosols affect the global energy balance, a key source of uncertainty in predicting climate change.
  - Cloud, Convection, and Precipitation: Tackling the largest sources of uncertainty in future projections of climate change, air quality forecasting, and prediction of severe weather.
  - Mass Change: Providing drought assessment and forecasting, associated planning for water use for agriculture, as well as supporting natural hazard response.
  - Surface Biology and Geology: Understanding climate changes that impact food and agriculture, habitation, and natural resources, by answering open questions about the fluxes of carbon, water, nutrients, and energy within and between ecosystems and the atmosphere, the ocean, and the Earth.
  - Surface Deformation and Change: Quantifying models of sea-level and landscape change driven by climate change, hazard forecasts, and disaster impact assessments, including dynamics of earthquakes, volcanoes, landslides, glaciers, groundwater, and Earth's interior.
- NASA currently is initiating the formulation phase for the observatory.
- Among its first integrated parts is NASA's partnership with the Indian Space Research Organisation (ISRO), which brings together two different kinds of radar systems that can measure changes in Earth's surface less than a half-inch.
  - This capability will be utilized in one of the observatory's first missions intended as a pathfinder, called NISAR (NASA-ISRO synthetic aperture radar).
  - This mission will measure some of the planet's most complex processes such as ice-sheet collapse and natural hazards such as earthquakes, volcanoes, and landslides. NISAR can assist planners and decision makers with managing both hazards and natural resources in the future.

**Hurricanes and NASA**

*June 1 is the official start of hurricane season for the Atlantic Ocean.*

- After 2020 brought a record number of named storms in 2020, NASA is once again prepared to help understand and monitor these storms from its unique vantage point of space.
- NASA develops and launches satellites for NOAA, which is the lead federal agency for forecasting hurricanes. But the science of hurricanes doesn't start – or end – with forecasting.
- Global warming is increasing the heat in the ocean basins and already making it more likely that storms will intensify faster and be stronger, a phenomenon NASA scientists continue to study deeply.
- With the challenge posed by climate change, NASA has never been more committed to innovation in Earth science research.
  - Our next-generation Earth System Observatory, announced on May 24, missions will help us understand extreme weather events and other climate-fueled hazards to inform the solutions of the future.
- NASA researchers and data also support U.S. stakeholders before, during and after storms make landfall.
  - Stages of NASA Data:
    - Pre-storm assessment (feed weather prediction and forecasting models)

        - Near-real-time assessment (identify potential impacts ahead of landfall)
        - Post-storm assessment (help identify needs for support after landfall)
        - Data access and visualization
    - The NASA Disasters Mapping Portal takes disaster-related data and puts it into understandable, usable formats real-time use and application with the goal to bridge the gap between science products and the people who can use the data to assist in preparedness, response, mitigation, and recovery.
        - After a hurricane makes landfall, NASA satellites are in prime position to identify impacts such as damage, flood depth and extent, power outages, rainfall accumulation, landslide risk, and even soil moisture.
        - That information helps local governments, the Army Corps of Engineers, and FEMA monitor infrastructure failures and disruptions, isolate contaminated water supplies, and identify hotspots for urgent response needs.
- NASA also does plenty of its own deep research on hurricanes and tropical cyclone dynamics. A few examples among many:
    - NASA's Global Modeling and Assimilation Office is pioneering the use of ultra-high-resolution global weather and micro-climate models.
    - The CPEX-AW airborne campaign planned in the Caribbean this August and September will pilot new technology to use LiDAR to better understand atmospheric winds and convective clouds in tropical storms.
    - NASA's Jet Propulsion Laboratory (JPL) is studying the use of artificial intelligence/machine learning to improve hurricane prediction capabilities using NASA satellite data.

**Search for Life, Technosignatures, and UAP/UFOs**
*Public and media interest in the topic of Unidentified Aerial Phenomenon/Unidentified Flying Objects (UAP/UFOs) has seen an uptick in recent weeks following reports about the Department of Defense's release of three unclassified Navy videos. Likewise, the 2021 Intelligence Authorization Act, signed in December 2020, stipulated the government had 180 days to gather and analyze data from disparate agencies. Below is our response to the public and media who call for NASA comment:*

- One of NASA's key goals is the search for life in the universe. To date, NASA has yet to find any credible evidence of extraterrestrial life, however, NASA is exploring the solar system and beyond to help us answer fundamental questions, including whether we are alone in the universe. We stand ready to support the rest of the government in the search for life in the universe, be it close to home, on the planets or moons of our solar system, or deeper into space.

**NASA Administrator Fighting for Funding for NASA Missions**
*On May 19, NASA Administrator Sen. Bill Nelson testified virtually about NASA's fiscal year 2022 budget in front of the House Committee on Science, Space, and Technology. Sen. Nelson emphasized the support necessary to continue pursuing NASA's goals and missions. On May 21, he sent a video and following message to NASA employees:*

- President Biden's discretionary funding request for NASA – $24.8 billion – clearly demonstrates the Biden-Harris Administration's commitment to NASA, especially in light of the difficult circumstances of the past year. The full details of the president's budget

request are expected next week and will provide further insight into funding for all NASA programs.

Of course, NASA's goals and missions are challenging and require robust funding to see them through to completion. That's why I asked Congress yesterday, in a hearing before the House Appropriations Commerce, Justice, and Science Subcommittee, to include NASA in the upcoming American Jobs Plan, in addition to the president's full budget request.

NASA missions support tens of thousands of jobs nationwide and the Jobs Plan's focus on infrastructure, research, and development is an opportunity for Congress to include funding for NASA's critical missions, including the Artemis program, while also supporting good-paying American jobs.

China's Zhurong Mars rover landing last week is an example of why NASA's inclusion in the Jobs Bill is important – there is no time to wait.

Investments in technologies like nuclear thermal propulsion, advanced spacesuits, and updated, green infrastructure at our centers are important to our nation and NASA's future as a leader in space, innovation, and jobs around the country. I'm fighting to ensure the agency has the resources we need to continue that incredible legacy.

**China Mars Lander**
*On May 14 (Eastern Time), China's Tianwen-1 orbiter deployed its rover, recently named "Zhurong," to the surface of Mars. NASA has been asked to comment on several aspects of the landing. On May 19, NASA Administrator Sen. Bill Nelson issued the following statement after the China National Space Administration's (CNSA's) release of the first photos from the Zhurong Mars rover:*

- "Congratulations to the China National Space Administration on receiving the first images from the Zhurong Mars rover!" Nelson said. "As the international scientific community of robotic explorers on Mars grows, the United States and the world look forward to the discoveries Zhurong will make to advance humanity's knowledge of the Red Planet. I look forward to future international discoveries, which will help inform and develop the capabilities needed to land human boots on Mars."

  CNSA's successful landing of the Zhurong rover last week makes it only the second nation to ever land successfully on Mars. Zhurong joins active NASA missions – the Curiosity and Perseverance rovers and Insight Lander – in exploring the surface of the Red Planet.
- The week of May 16, media outlets asked whether CNSA used NASA animation from a Mars mission a decade ago for animation related to its Zhurong Mars lander. The following is our response:
  - NASA's imagery is made freely available for use by the public.
  - If pressed for more:
    - For questions about the Zhurong animation, please check directly with the China National Space Administration.

- NASA also was asked the week of May 16 whether the agency's InSight Mars lander was able to detect Zhurong's landing. The following is our response:
    - As part of its normal science, InSight's data acquired seismic and atmospheric measurements at the time of Zhurong's landing. As we did with NASA's Perseverance landing, the InSight science team examined seismic and pressure oscillation signals associated with the Zhurong landing. Based on preliminary examination of the data, we don't appear to have detected it, just as we didn't with Perseverance.
- Below is NASA's initial public comment about the landing from Science Mission Directorate Associate Administrator Dr. Thomas Zurbuchen on Twitter:
    - "Congratulations to CNSA's #Tianwen1 team for the successful landing of China's first Mars exploration rover, #Zhurong! Together with the global science community, I look forward to the important contributions this mission will make to humanity's understanding of the Red Planet."

**Human Landing System Sen. Cantwell Amendment**
*On May 12, Sen. Maria Cantwell offered an amendment in committee markup of the Endless Frontier Act that included language and proposed funding related to NASA's Human Landing System for the Artemis program. Below is our response to the public and media who call for comment:*

- NASA is excited to return to the Moon with more robot and human explorers than ever before as part of the Artemis program. Both government and commercial capabilities are necessary to enable long-term exploration on and around the Moon. By purchasing commercial services to take astronauts from lunar orbit to land on the surface of the Moon, we will ensure a robust deep space transportation system is in place as we learn to live and work on another world for the benefit of all. NASA is unable to comment on the proposed amendment due to ongoing litigation of the recent human landing system selection.

  More information can be found here: https://www.nasa.gov/nextstep/humanlander2

**Webb Telescope Reported Possible Launch Delay**
*On May 12, Space News reported ongoing work to address a problem seen on two previous Ariane 5 rocket launches could delay the high-profile launch of NASA's James Webb Space Telescope. Below is our response to calls for comment:*

- The launch readiness date for NASA's James Webb Space Telescope, which will be the premier observatory of the next decade, is Oct. 31, 2021. Webb is on schedule for that date, but we know schedule margin is tight. We are working closely with ESA and Arianespace on their launch vehicle readiness, and should a launch date change be needed, Webb has launch windows available almost every day of the year. Webb will study every phase in the history of our universe, including the first luminous glows after the creation of the cosmos, the formation of solar systems capable of supporting life on planets like Earth, and the evolution of our own solar system.

**Roscosmos Spaceflight Participants to the International Space Station Announcements**
*On May 13, Roscosmos announced it plans to send spaceflight participants (non professional astronauts) for short trips to the International Space Station this year, including an actress and*

*filmmaker on a Soyuz flight in October. Below is the response to the public and media who ask for NASA comment:*

- This year is truly a renaissance for human spaceflight both as we fly NASA and international partner astronauts on U.S. commercial crew spacecraft to the International Space Station and also as we see the expansion of private astronaut missions. As more people fly to space and do more things during their spaceflights, it attracts even more people to do more activities in low-Earth orbit, and reflects the growing market we envisioned the Commercial Crew Program enabling when we embarked on it about 10 years ago.

**Webb Name Webb Telescope Name Statement**

*On May 7, Slate.com posted an article with the headline and sub-headline "The James Webb Space Telescope Hasn't Launched Yet. In One Way, It's Already a Relic. It will collect important data, but what does its name say about who it's for?" Below is our response to the public and media who call for comment:*

- NASA is aware of concerns that have arisen about James E. Webb, and we are working with historians to examine his role in government. NASA named its next generation observatory, the James Webb Space Telescope, after its second administrator, who helped establish the Apollo Program that landed humans on the Moon. The agency made the naming decision in recognition of Webb's role in retaining an active science program at NASA in the agency's early years. Webb's work as administrator laid the groundwork for today's accomplishments, and science remains a critical part of NASA's work: to understand the universe, advance exploration, and inspire the next generation.

**NASA's Ingenuity Mars Helicopter**

*On April 19, NASA's Ingenuity Mars Helicopter successfully completed the first attempt at powered, controlled flight of an aircraft on another planet. The experimental rotorcraft was carried to the Red Planet on NASA's Perseverance Mars rover. Ingenuity progressively added more complex flights on April 22, April 25, April 30, May 7, and May 23. On April 30, NASA announced that after its next two demonstration flights, Ingenuity will embark on a new operations demonstration phase, exploring how aerial scouting and other functions could benefit future exploration of Mars and other worlds.*

- Ingenuity Key points:
  - Ingenuity is the first aircraft to attempt and achieve controlled flight on another planet (a "Wright Brothers" moment).
  - Ingenuity had already demonstrated feats of engineering – shrinking its size and mass, working with specialized materials, demonstrating flight in a thin atmosphere while still on Earth.
  - Tests on Earth proved many of its engineering principles.
  - With Ingenuity's success, future Mars exploration could include an ambitious aerial dimension.
  - Ingenuity is a technology demonstration. Its experimental mission is separate from the rover, but we do tech demos because they advance our capabilities and help prove concepts for future mission.
- Ingenuity's technology demonstration objectives are:
  - Prove powered flight in the thin atmosphere of Mars.

        - The Red Planet has lower gravity (about one-third that of Earth) but its atmosphere is just 1% as thick, making it much harder to generate lift.
    - Demonstrate miniaturized flying technology.
        - That requires shrinking down onboard computers, electronics and other parts so that the helicopter is light enough to take off.
    - Operate autonomously.
        - Ingenuity will use solar power to charge its batteries and rely on internal heaters to maintain operational temperatures during the cold Martian nights. After receiving commands from Earth relayed through the rover, each test flight is performed without real-time input from Mars Helicopter mission controllers.
- NASA's Perseverance Mars rover mission objectives are:
    - Take samples to leave on the surface for return to Earth in a few years. First leg of a round trip to Mars.
    - Search for signs of ancient microbial life as the rover explores a crater that billions of years ago might have been a large body of water like a lake.
    - Characterize the geology and climate of Mars.
    - Help pave the way for human exploration beyond the Moon.
- Perseverance Mars rover Key Points:
    - The Perseverance rover is the most capable rover ever sent to Mars and builds on the legacy of NASA's Mars Exploration Program and earlier rovers.
    - The mission embodies our nation's spirit of persevering even in the most challenging of situations, providing inspiration and advancing science and exploration. The mission itself personifies the human ideal of persevering toward the future.
    - The Mars 2020 mission is part of America's larger Moon to Mars exploration approach, which includes astronaut missions to the Moon that prepare for human exploration of the Red Planet.
    - NASA is committed to working with our international partners to accomplish stunning achievements in science, technology and exploration, and this mission reinforces those strong bonds.
    - Perseverance is the beginning of the first round-trip to another planet. The rover will collect rock and soil samples for return to Earth by future missions that could possibly confirm the ultimate astrobiology question: does life exist, or did it, elsewhere?
    - Perseverance carries the most sophisticated suite of instruments ever sent to Mars.
    - The mission addresses high-priority science goals to:
        - Return samples from Mars.
        - Search for clues about the potential for past life on Mars.
        - Find out what Mars' environment was like billions of years ago, and what might be preserved in the unique rocks of Jezero Crater.
        - Study what the planet's environment is like today.
    - NASA's robotic exploration of Mars is paving the way for future human missions to the Red Planet and will gather knowledge and demonstrate technologies that address the challenges of those human expeditions. Some relevant technologies include:
        - Entry, descent and landing technology.

        - In situ resource use.
        - Terrain-relative navigation.
    - The public will get to ride along. The mission has more cameras than any previous interplanetary mission, and while we have "felt" vibrations in response to wind with the InSight lander's seismometer and "translated" them into sounds that we could hear with the human ear, two microphones on Perseverance will attempt for the first time to hear audio of the rover's operations and travels, as well as the environment at Mars.
    - Perseverance joins a fleet that right now includes a rover, a lander and multiple orbiters. This is the 9th U.S. mission to land and the 5th rover. The U.S. is the only nation to successfully land on Mars.
    - On April 20, a toaster-size experimental instrument aboard Perseverance called the Mars Oxygen In-Situ Resource Utilization Experiment (MOXIE) converted some of the Red Planet's thin, carbon dioxide-rich atmosphere into oxygen – the first time this has ever been done.
        - While the technology demonstration is just getting started, it could pave the way for science fiction to become science fact – isolating and storing oxygen on Mars to help power rockets that could lift astronauts off the planet's surface. Such devices also might one day provide breathable air for astronauts themselves.

**UPCOMING EVENTS PUBLIC DATES**

*Below are the publicly listed dates of some high-profile activities/events/milestones in 2021. Internal planning, target, and pre-decisional dates are not listed below as they're not official and public yet. The public dates listed are as specific as they can be, at this time. This list will be regularly updated and added to, as appropriate. Text in red is newly updated public information:*

- **State of NASA – June 2**: NASA Administrator Bill Nelson's first live address to the NASA workforce about the state of the agency and its activities
- **Russian Spacewalk on the International Space Station - June 2:** Russian EVA 48 (Novitskiy and Dubrov) from Poisk to dismantle cables for Pirs docking compartment undocking
- **SpaceX CRS-22 – June 3:** Next commercial resupply services mission to space station from Florida
- **Laser Comm – June 23:** NASA's Laser Communications Relay Demonstration to test optical communications launches from Florida
- **Boeing Orbital Flight Test-2 – July 30 –** Boeing's uncrewed CST-100 Starliner OFT-2 (Orbital Flight Test-2) launch from Florida to the International Space Station
- **Northrop Grumman CRS-16 – July 2021:** Commercial resupply services mission to space station from Virginia
- **X-57 – Fall 2021 --** Flight test for NASA's first all-electric plane, X-57, at Armstrong Flight Research Center
- **Landsat 9 – September:** NASA and U.S. Geological Survey launch latest Earth observation satellite, Landsat 9, from California
- **CAPSTONE – Fall 2021:** NASA CubeSat to validate new navigation technologies and verify dynamics in Gateway's planned orbit will launch to space
- **Imaging X-Ray Polarimetry Explorer – Fall 2021:** NASA's IXPE mission to discover hidden astronomical objects in the universe launches from Florida

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- **SpaceX CRS-23 – Fall 2021:** Commercial resupply services mission to space station from Florida
- **Lucy – Oct 16:** NASA's Lucy mission to study the Trojan asteroids of Jupiter will launch from Florida
- **SpaceX Crew-3 – No earlier than Oct. 23:** Crew-3 will launch to station from Florida
- **SpaceX Crew-2 Return – No Earlier than Oct. 31:** Crew-2 returns to Earth
- **Webb Telescope – (Launch Readiness Date) Oct. 31:** NASA's James Webb Space Telescope to help answer questions about our cosmic origins launches from French Guiana
- **DART – Nov. 24:** Window opens to launch Double Asteroid Redirection Test from California, NASA's first flight demonstration for planetary defense
- **Webb Telescope – November/December:** The James Webb Space Telescope completes mission deployments/arrives in its L2 (second Lagrange Point) orbit about 29 days after launch
- **Artemis I - November:** NASA reviewing launch date for first integrated flight test of the uncrewed Space Launch System rocket and Orion spacecraft launches on a multi-week mission around the Moon
- **Orion splashdown:** NASA's Orion spacecraft splashes down on Earth following a multi-week mission around the Moon
- **Geostationary Operational Environmental Satellite-T – December:** NASA and NOAA's latest weather satellite, GOES-T, launches from Florida
- **Astrobotic's CLPS Flight – Late 2021:** Suite of robotic NASA payloads sent to the lunar surface as part of a Commercial Lunar Payload Services delivery. Landing takes place in the following weeks
- **Boeing's Crew Flight Test – Under review pending OFT-2:** Boeing's CFT earliest possible launch to space station from Florida
- **Boeing Starliner-1 – Under review pending outcome of earlier flight tests:** Launch date for first operational Boeing commercial crew launch to space station from Florida
- **Astronaut Candidates – 2021**: NASA will announce selections for the next class of astronaut candidates to begin training
- **Intuitive Machines' CLPS Flight – Early 2022:** Suite of robotic NASA payloads sent lunar surface as part of a Commercial Lunar Payload Services delivery. Landing takes place in the following weeks

## AGENCY COMMUNICATION THEME PRIORITIES

For full key points and other products for all themes, visit: https://communications.nasa.gov.

### Earth

NASA uses the vantage point of space to understand and explore our home planet, improve lives and safeguard our future.
Tagline: **Your Home. Our Mission.**

### Flight

NASA explores new technologies to make aircraft quieter and faster, get you gate-to-gate safely and on time, and transform aviation into a new economic engine at all altitudes.
Tagline: **NASA is With You When You Fly.**

### Humans in Space

NASA leads human space exploration in low-Earth orbit with commercial and international

partners to enable missions to the Moon and Mars. International Space Station missions are a catalyst for economic development and the advancement of scientific knowledge and new technologies that improve our lives.
Tagline: **Leading Discovery, Improving Life on Earth.**

**Moon to Mars**
NASA is leading a sustainable return to the Moon with commercial and international partners to expand human presence in space and bring back new knowledge and opportunities.
**Tagline: Moon Lights the Way.**

**Solar System & Beyond**
NASA is exploring our Solar System and beyond, uncovering worlds, stars, and cosmic mysteries near and far with our powerful fleet of space and ground-based missions.
Tagline: **Discovering the Secrets of the Universe.**

**Space Tech**
NASA technologies advance capabilities for space exploration, promote America's global leadership in innovation and transform the world around us.
Tagline: **Technology Drives Exploration.**

-end-

| | |
|---|---|
| **From:** | Kieffer, Margaret (HQ-TH000) |
| **To:** | Feldstein, Karen C. (HQ-TA000) |
| **Cc:** | McKay, Meredith (HQ-TA000); Kirkham, Gib (HQ-TG000); Meidinger, Jolene A. (HQ-TH000) |
| **Subject:** | RE: KAREN REVIEW -- RE: Upcoming UAP/UFO interagency document? |
| **Date:** | Friday, June 11, 2021 4:38:51 PM |

Thanks.

**From:** Feldstein, Karen C. (HQ-TA000) <karen.c.feldstein@nasa.gov>
**Sent:** Friday, June 11, 2021 4:19 PM
**To:** Kieffer, Margaret (HQ-TH000) <margaret.kieffer@nasa.gov>
**Cc:** McKay, Meredith (HQ-TA000) <meredith.mckay@nasa.gov>; Kirkham, Gib (HQ-TG000) <gib.kirkham@nasa.gov>; Meidinger, Jolene A. (HQ-TH000) <jolene.meidinger@nasa.gov>
**Subject:** Re: KAREN REVIEW -- RE: Upcoming UAP/UFO interagency document?

Tiny proposed tweak below, but great!

**From:** Margaret Kieffer <margaret.kieffer@nasa.gov>
**Date:** Friday, June 11, 2021 at 12:48 PM
**To:** Karen Feldstein <karen.c.feldstein@nasa.gov>
**Cc:** Meredith McKay <meredith.mckay@nasa.gov>, Gib Kirkham <gib.kirkham@nasa.gov>, "Meidinger, Jolene A. (HQ-TH000)" <jolene.meidinger@nasa.gov>
**Subject:** KAREN REVIEW -- RE: Upcoming UAP/UFO interagency document?

KF:

Riffing on the solid OCOMM statement in the attached, below is a draft NASA statement that can be used this week, taking into account BN remarks thus far (links pasted below).

- NASA is aware of the pending Unidentified Aerial Phenomenon (UAP) Task Force report to Congress, and agrees it is important to thoroughly investigate these UAPs.

- One of NASA's key goals is the search for life in the universe. To date, NASA has yet to find any credible evidence of extraterrestrial life; however, NASA is exploring the solar system and beyond to help us answer fundamental questions, including whether we are alone in the universe.

- NASA has a long history of interagency collaboration to meet new challenges, and stands ready to provide technical and scientific expertise~~, if requested~~.

**From:** Etkind, Marc R. (HQ-NA000) <marc.r.etkind@nasa.gov>
**Sent:** Tuesday, June 8, 2021 8:03 AM
**To:** Kieffer, Margaret (HQ-TH000) <margaret.kieffer@nasa.gov>; Feldstein, Karen C. (HQ-TA000) <karen.c.feldstein@nasa.gov>; Kirkham, Gib (HQ-TG000) <gib.kirkham@nasa.gov>; Fox, Karen C.

(GSFC-1300) <karen.c.fox@nasa.gov>
**Cc:** McKay, Meredith (HQ-TA000) <meredith.mckay@nasa.gov>; Meidinger, Jolene A. (HQ-TH000) <jolene.meidinger@nasa.gov>
**Subject:** Re: Upcoming UAP/UFO interagency document?

Thanks Margaret. We do have a few weeks before the report is released, but the questions are already coming fast and furious so would be great to get our statement together this week. Much appreciated.

---

**From:** "Kieffer, Margaret (HQ-TH000)" <margaret.kieffer@nasa.gov>
**Date:** Monday, June 7, 2021 at 2:48 PM
**To:** "Feldstein, Karen C. (HQ-TA000)" <karen.c.feldstein@nasa.gov>, "Kirkham, Gib (HQ-TG000)" <gib.kirkham@nasa.gov>, "Fox, Karen C. (GSFC-1300)" <karen.c.fox@nasa.gov>
**Cc:** "Etkind, Marc R. (HQ-NA000)" <marc.r.etkind@nasa.gov>, "McKay, Meredith (HQ-TA000)" <meredith.mckay@nasa.gov>, "Meidinger, Jolene A. (HQ-TH000)" <jolene.meidinger@nasa.gov>
**Subject:** RE: Upcoming UAP/UFO interagency document?

Karen:

We have some time before the report is released, but very much agree a TP or two for public use is warranted. FYSA, we have let ODNI know we will be coordinating a short statement with them. Folks seem to be interested in a NASA nexus, despite the fact that our role on this matter was minuscule.

Jolene Meidinger will reach out to you shortly to coordinate.

M

Margaret Kieffer
Director, Export Control and Interagency Liaison Division
Office of International and Interagency Relations
NASA Headquarters
Room 5X53
Office phone (202)358-1905
Secure: (b) (6)
marga
SIPR (b) (6)
JWICS (b) (6)

---

**From:** Feldstein, Karen C. (HQ-TA000) <karen.c.feldstein@nasa.gov>
**Sent:** Monday, June 7, 2021 2:42 PM

**To:** Kirkham, Gib (HQ-TG000) <gib.kirkham@nasa.gov>; Fox, Karen C. (GSFC-1300) <karen.c.fox@nasa.gov>
**Cc:** Kieffer, Margaret (HQ-TH000) <margaret.kieffer@nasa.gov>; Etkind, Marc R. (HQ-NA000) <marc.r.etkind@nasa.gov>; McKay, Meredith (HQ-TA000) <meredith.mckay@nasa.gov>
**Subject:** Re: Upcoming UAP/UFO interagency document?

Thanks, Gib! Hi Karen, I was also going to connect you with Margaret, Director of OIIR's Export Control and Interagency Liaison Division. I appreciate that the Administrator made some comments on this topic and it was a subject of discussion at our senior tag this a.m. Margaret can help advise on preparing for the report's release.

Best,
Karen

---

**From:** Gib Kirkham <gib.kirkham@nasa.gov>
**Date:** Monday, June 7, 2021 at 1:53 PM
**To:** "Fox, Karen C. (GSFC-1300)" <karen.c.fox@nasa.gov>, Karen Feldstein <karen.c.feldstein@nasa.gov>
**Cc:** Margaret Kieffer <margaret.kieffer@nasa.gov>
**Subject:** RE: Upcoming UAP/UFO interagency document?

Hi Karen,

Copying Margaret Kieffer, who's responsible for interagency collaboration in OIIR.

---

**From:** Fox, Karen C. (GSFC-1300) <karen.c.fox@nasa.gov>
**Sent:** Monday, June 7, 2021 1:09 PM
**To:** Feldstein, Karen C. (HQ-TA000) <karen.c.feldstein@nasa.gov>
**Cc:** Kirkham, Gib (HQ-TG000) <gib.kirkham@nasa.gov>
**Subject:** Upcoming UAP/UFO interagency document?

Cheers, Karen –

Thomas Zurbuchen let me know that as OIIR helps organize interagency collaboration, and that you might be the best person to ask about the upcoming Unidentified Aerial Phenomena document that is supposed to be released later this month.

Understood that it is confidential and that you can share no details about it. . . But I'm trying to be prepared for when it is released. If you are able to share any information about whether NASA participated and – even better -- in what capacity (provided technical expertise? Discussed science research? Policy conversations?) that could help me be prepared for the day of the release.

Anything you are legally allowed to tell me would be very helpful! (We also have several people with top security clearance within the comms office, and so another alternative would be to have them take a look at the document. . . )

The administrator has been actively discussing UFOs with the media, as you are probably aware, and so I'd like to be able to react as quickly as possible to share information on the day of the release about how we participated and who helped provide information.

Thanks so much!
--Karen

--
Karen C. Fox
Senior Science Communications Officer
Office of Communications
NASA Headquarters
Karen.fox@nasa.gov

| | |
|---|---|
| **From:** | Johnson, Alana R. (HQ-DG000)[ASRC FEDERAL SYSTEM SOLUTIONS] |
| **To:** | McGuinness, Jackie (HQ-NA000); Feldstein, Karen C. (HQ-TA000) |
| **Cc:** | Thompson, Tabatha T. (HQ-NA020) |
| **Subject:** | Re: [EXTERNAL] UFO explainer |
| **Date:** | Thursday, June 17, 2021 9:51:03 AM |
| **Attachments:** | TP 21-016 Search for Life_UAPs.docx<br>UAPs draft plan.pptx |
| **Importance:** | High |

---

I've attached the TPs and the explainer charts.
Let me know if you need anything else.

Thanks!
Alana

**Alana R. Johnson**
*Senior Communications Specialist, PAAC V Contract*
*Planetary Science Division*
alana.r.johnson@nasa.gov
o: (202) 358-1501 | c: b6
NASA Headquarters, 300 E. St SW, Washington, DC. 20546
asrcfederal.com | Purpose Driven. Enduring Commitment.

---

**From:** "McGuinness, Jackie (HQ-NA000)" <jackie.mcguinness@nasa.gov>
**Date:** Thursday, June 17, 2021 at 9:48 AM
**To:** "Feldstein, Karen C. (HQ-TA000)" <karen.c.feldstein@nasa.gov>, "Johnson, Alana R. (HQ-DG000)[ASRC FEDERAL SYSTEM SOLUTIONS]" <alana.r.johnson@nasa.gov>
**Cc:** "Thompson, Tabatha T. (HQ-NA020)" <tabatha.t.thompson@nasa.gov>
**Subject:** FW: [EXTERNAL] UFO explainer

Hi all - I know Karen is out today – Alana, do you happen to have info on this? Anyone else I should loop?

Thanks,
Jackie

---

**From:** Joey Roulette (b) (6)
**Date:** Thursday, June 17, 2021 at 9:32 AM
**To:** "McGuinness, Jackie (HQ-NA000)" <jackie.mcguinness@nasa.gov>
**Subject:** [EXTERNAL] UFO explainer

Hi Jackie, I'm working on a quick explainer/FAQ about the Pentagon UAP program and want to include a bit about NASA's SETI and biosignature research.

Just so I get things right, can you send a broad list or summary of any/all active programs within NASA that concern the hunt for biosignatures and extraterrestrial intelligence? Anything quick would be super helpful.

Thanks
Joey R

--
**Joseph Roulette • Space Reporter**

**Deletion Page**

18 pages containing duplicate information are held in the file. The pages consist of talking points and slides NASA already processed.

| | |
|---|---|
| **From:** | Meidinger, Jolene A. (HQ-TH000) |
| **To:** | Kieffer, Margaret (HQ-TH000); Cruz, Randy C. (HQ-AA000)[Affiliate]; Feldstein, Karen C. (HQ-TA000) |
| **Subject:** | RE: UAP Report |
| **Date:** | Friday, June 25, 2021 10:59:18 AM |

Margaret – Yes, that is all consistent with our discussions.

Best/Jolene

---

**From:** Kieffer, Margaret (HQ-TH000) <margaret.kieffer@nasa.gov>
**Sent:** Friday, June 25, 2021 10:53 AM
**To:** Cruz, Randy C. (HQ-AA000)[Affiliate] <randy.c.cruz@nasa.gov>; Feldstein, Karen C. (HQ-TA000) <karen.c.feldstein@nasa.gov>; Meidinger, Jolene A. (HQ-TH000) <jolene.meidinger@nasa.gov>
**Subject:** RE: UAP Report

Randy:

Suggested TPs are below…Jolene ok by you?

For background, what Jolene was provided does not reflect OIIR outreach to two of the three individuals identified as "contributors." In one case, the individual provided general background info associated with propulsion technology, without knowledge they were contributing to this specific report. In the other case, the individual was contacted for insights into aerodynamics on a particular case, but that individual did not have the necessary clearance, so no NASA analysis was provided beyond what is available on our websites. The first individual, no longer with NASA, we understand from Gen Stratton may have been consulted a few times for NASA data that would corroborate anomalies the UAP TF collected. We are not aware that any NASA data that was relevant or provided.

- NASA agrees it is important to thoroughly investigate these UAPs.
- I am told that NASA did not provide specific analysis on events outlined in the UAP report, rather we contributed general information, in the fields of propulsion and aerodynamics.
- NASA has a long history of interagency collaboration to meet new challenges, and stands ready to provide technical and scientific expertise.
- One of NASA's key goals is the search for life in the universe. To date, NASA has yet to find any credible evidence of extraterrestrial life; however, NASA is exploring the solar system and beyond to help us answer fundamental questions, including whether we are alone in the universe.

---

**From:** Cruz, Randy C. (HQ-AA000)[Affiliate] <randy.c.cruz@nasa.gov>

**Sent:** Friday, June 25, 2021 10:15 AM
**To:** Feldstein, Karen C. (HQ-TA000) <karen.c.feldstein@nasa.gov>; Kieffer, Margaret (HQ-TH000) <margaret.kieffer@nasa.gov>; Meidinger, Jolene A. (HQ-TH000) <jolene.meidinger@nasa.gov>
**Subject:** FW: UAP Report

I am happy to forward the info Jolene and I have received from the UAPTF. Let me know.

V/r,
Randy

---

**From:** Etkind, Marc R. (HQ-NA000) <marc.r.etkind@nasa.gov>
**Sent:** Friday, June 25, 2021 10:09 AM
**To:** Cruz, Randy C. (HQ-AA000)[Affiliate] <randy.c.cruz@nasa.gov>
**Cc:** McGuinness, Jackie (HQ-NA000) <jackie.mcguinness@nasa.gov>
**Subject:** UAP Report

Hi Randy. With the UAP report coming out today, the Administrator would like some background on NASA involvement in the report. I understand our involvement was minimal and that this is a DOD report. That said. Any chance I can get some quick facts we can give him, including timing of our input and areas of discussion. Lmk if phone is easier. Thanks.

**From:** Lal, Bhavya (HQ-AA000)
**To:** Etkind, Marc R. (HQ-NA000); Cruz, Randy C. (HQ-AA000)[Affiliate]
**Cc:** McGuinness, Jackie (HQ-NA000)
**Subject:** Re: UAP Report
**Date:** Friday, June 25, 2021 3:57:06 PM

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Ok. Using the time to reread the report.

Bhavya Lal, Ph.D.
b6 [redacted]

---

On: 25 June 2021 15:33, "Etkind, Marc R. (HQ-NA000)" <marc.r.etkind@nasa.gov> wrote:

> And looking like 430.
>
> ---
>
> On: 25 June 2021 12:32, "Etkind, Marc R. (HQ-NA000)" <marc.r.etkind@nasa.gov> wrote:
>
> > Thanks Randy. Adding Bhavya to see if she can join.
> >
> > ---
> >
> > On: 25 June 2021 12:21, "Cruz, Randy C. (HQ-AA000)[Affiliate]" <randy.c.cruz@nasa.gov> wrote:
> >
> > > Scheduled the 6th floor SCIF at 4:15 with the Administrator and Margaret Kieffer to answer any questions he has.
> > >
> > > Randy
> > >
> > > ---
> > >
> > > **From:** Etkind, Marc R. (HQ-NA000) <marc.r.etkind@nasa.gov>
> > > **Sent:** Friday, June 25, 2021 10:30 AM
> > > **To:** McGuinness, Jackie (HQ-NA000) <jackie.mcguinness@nasa.gov>; Cruz, Randy C. (HQ-AA000)[Affiliate] <randy.c.cruz@nasa.gov>
> > > **Subject:** Re: UAP Report
> > >
> > > Will find a time to call you. In the next hour.
> > >
> > > ---
> > >
> > > On: 25 June 2021 10:21, "McGuinness, Jackie (HQ-NA000)" <jackie.mcguinness@nasa.gov> wrote:
> > >
> > > > Hey Randy - if possible, would you mind providing some details before 11:30am? Nelson is doing a Washington Post interview at noon and it would be helpful for him to have a

clearer understanding ahead of that.

Thank you!

Get Outlook for iOS

---

**From:** Etkind, Marc R. (HQ-NA000) <marc.r.etkind@nasa.gov>
**Sent:** Friday, June 25, 2021 10:09:18 AM
**To:** Cruz, Randy C. (HQ-AA000)[Affiliate] <randy.c.cruz@nasa.gov>
**Cc:** McGuinness, Jackie (HQ-NA000) <jackie.mcguinness@nasa.gov>
**Subject:** UAP Report

Hi Randy. With the UAP report coming out today, the Administrator would like some background on NASA involvement in the report. I understand our involvement was minimal and that this is a DOD report. That said. Any chance I can get some quick facts we can give him, including timing of our input and areas of discussion. Lmk if phone is easier. Thanks.

**From:** Beutel, Allard (HQ-NA020)
**Subject:** NASA INTERVIEW PREP DOCUMENT - as of 6-25-21 (internal distribution only)
**Date:** Friday, June 25, 2021 11:44:04 PM
**Attachments:** NASA INTERVIEW PREP DOCUMENT - as of 6-25-21.docx

---

Good evening, attached is the latest interview prep document.

The top item is new:

- Search for Life, Technosignatures, and UAP/UFOs

The updated items are:

- Hubble Space Telescope Issue
- Upcoming Events Public Dates section

-Allard

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Updated 6/25/21

**NASA INTERVIEW PREP DOCUMENT**

## RECENT HOT TOPICS

**Quick Reference**

Upcoming Events
Public Dates

### Search for Life, Technosignatures, and UAP/UFOs

*Public and media interest in the topic of UAP/UFO (Unidentified Aerial Phenomena /Unidentified Flying Objects) has seen an uptick in recent weeks following reports related to the Department of Defense's release of three unclassified U.S. Navy videos. An unclassified preliminary report from the Office of the Director of National Intelligence was released June 25, which is when we posted a NASA article on what the agency is doing to search for life beyond Earth. And below is our response to the public and media who call for NASA comment:*

- One of NASA's key goals is the search for life in the universe. To date, NASA has yet to find any credible evidence of extraterrestrial life; however, NASA is exploring the solar system and beyond to help us answer fundamental questions, including whether we are alone in the universe. We lead the U.S. government's search for extraterrestrial life, be it close to home, on the planets or moons of our solar system, or deeper into space.

  NASA does not actively search for UAPs and the lack of robust data is the central problem for scientific study of UAPs and to determine whether they are natural or human-made phenomena – there is no current data to support that UAPs or UFOs are evidence of alien technologies.

### Hubble Space Telescope Issue

*Starting on June 16, NASA has provided status updates that the Hubble Space Telescope operations team has been working since June 13 to resolve an issue with the observatory's payload computer.*

- The Hubble operations team continues working to solve the payload computer issue onboard the Hubble Space Telescope. The team is working to collect all the data available to them to isolate the problem and determine the best path forward for bringing the computer back to operations. At this time, there is no definitive timeline for bringing the computer back online. However, the team has multiple options available to them and are working to find the best solution to return the telescope to science operations as soon as possible. Launched in 1990, Hubble has contributed greatly to our understanding of the universe over the past 30 years.

### Senate Confirms Pam Melroy as NASA's Deputy Administrator

*On June 17, the U.S. Senate confirmed Pam Melroy to be NASA's next Deputy Administrator. The following statements were issued following confirmation:*

- "It's an honor to be confirmed by the Senate to serve as NASA Deputy Administrator, and I am humbled by President Biden and Vice President Harris' confidence in me," Melroy said. "I look forward to returning to the NASA family and working with Administrator Nelson to ensure the United States continues to lead in space and beyond – exploring the wonders of the universe, expanding the Earth science research critical to combatting climate change, unlocking scientific discoveries that will change the world as we know it, and inspiring the next generation of discoverers and dreamers."

- "Pam is a pioneer and veteran of NASA, and will be an outstanding leader as we venture farther out to the stars," said NASA Administrator Bill Nelson. "We certainly are lucky to have her on board, and I look forward to leading NASA with her as a team."

**Mission Equity**
*On June 15, NASA announced a new effort called Mission Equity that included issuing a Request for Information (RFI) seeking public input to broaden access to the agency.*

- NASA is launching Mission Equity, a comprehensive effort to assess expansion and modification of agency programs, procurements, grants, and policies, and examine what potential barriers and challenges exist for communities that are historically underrepresented and underserved.
- NASA Administrator Bill Nelson said of Mission Equity:
  - "NASA is a 21st century agency with 22nd century goals. To be successful, it's critical that NASA takes a comprehensive approach to address the challenges to equity we see today. The agency's new Mission Equity is a bold and necessary challenge for NASA to ensure our programs are accessible to all Americans and, especially, those living in historically underserved communities across the country. Because when NASA opens doors to talent previously left untapped, the universe is the limit."
- NASA issued a request for information (RFI) on June 15, entitled Advancing Racial Equity and Support for Underserved Communities in NASA Programs, Contracts and Grants. To this RFI, the agency is seeking public feedback as it conducts a thorough review of its programs, practices, and policies to assess:
  - Potential barriers that underserved and underrepresented communities and individuals may face in agency procurement, contract, and grant opportunities.
  - Whether new policies, regulations, or guidance may be necessary to advance equity and opportunities in agency actions and programs.
  - How agency resources and tools can assist in enhancing equity, including advancing environmental justice.
- Areas in which the agency would like to receive comments include:
  - Diversity and Equal Opportunity at NASA and in the STEM Community
  - Opportunities for NASA to Leverage its Data, Expertise, and Missions to Help Underserved Communities
  - Barriers/Gaps to Accessing Current NASA Grants, Programs, and Procurements
  - Engagement and Outreach with Organizations and Individuals from Underserved and Underrepresented Communities
- Underserved and underrepresented communities include: Black, Latino, and Indigenous and Native American persons, Asian Americans and Pacific Islanders and other persons of color; members of religious minorities; lesbian, gay, bisexual, transgender, and queer (LGBTQ+) persons; persons with disabilities; persons who live in rural areas; and persons otherwise adversely affected by persistent poverty or inequality.
- Through the RFI process, NASA hopes to initiate vibrant, meaningful, and ongoing dialogues that will help the agency build and improve current agency policies, practices, and programs. The deadline for public comments to this RFI is Monday, July 12, but we encourage submission of comments as soon as possible to enable early analysis and follow-up discussions. NASA will host a virtual public meeting soon, during which NASA officials will discuss the RFI and corresponding agency goals.

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**NASA Administrator Statement on US Innovation and Competitiveness Act**
*NASA Administrator Bill Nelson released the following statement June 8 after the Senate passed the U.S. Innovation and Competitiveness Act:*

- "The U.S. Innovation and Competitiveness Act, which includes the NASA authorization bill, is an investment in scientific research and technological innovation that will help ensure the U.S. continues to lead in space and sets us on a path to execute many landings on the Moon in this decade. I applaud the Senate passage of the bill and look forward to working with the House to see it passed into law."

**NASA Selects Two Missions to Venus**
*On June 2, NASA announced it has selected two new missions to Venus.*

- NASA's two new missions to Earth's nearest planetary neighbor aim to understand how Venus became an inferno-like world when it has so many other characteristics similar to ours – and may have been the first habitable world in the solar system, complete with an ocean and Earth-like climate.
- The selected missions are:
    - DAVINCI+ (Deep Atmosphere Venus Investigation of Noble gases, Chemistry, and Imaging)
        - DAVINCI+ will measure the composition of Venus's atmosphere to understand how it formed and evolved, as well as determine whether the planet ever had an ocean.
        - The mission consists of a descent sphere that will plunge through the thick atmosphere, making precise measurements of noble gases and other elements to understand why Venus's atmosphere is a runaway hothouse compared the Earth's.
        - DAVINCI+ also will return the first high resolution pictures of the unique geological features on Venus known as "tesserae," which may be comparable to Earth's continents, suggesting that Venus has plate tectonics.
        - This would be the first U.S.-led, missions to Venus's atmosphere since 1978, and the results from DAVINCI+ could reshape our understanding of terrestrial planet formation in our solar system and beyond.
    - VERITAS (Venus Emissivity, Radio Science, InSAR, Topography, and Spectroscopy)
        - VERITAS will map Venus' surface to determine the planet's geologic history and understand why it developed so differently than Earth.
        - Orbiting Venus with a synthetic aperture radar, VERITAS will chart surface elevations over nearly the entire planet to create 3D reconstructions of topography and confirm whether processes such as plate tectonics and volcanism are still active on Venus.
        - VERITAS also will map infrared emissions from Venus' surface to map its rock-type, which is largely unknown, and determine whether active volcanoes are releasing water vapor into the atmosphere.
- In addition to the two missions, NASA selected a pair of technology demonstrations to fly along with them.

  - VERITAS will host the Deep Space Atomic Clock-2, built by NASA's Jet Propulsion Laboratory and funded by NASA's Space Technology Mission Directorate. The ultra-precise clock signal generated with this technology will ultimately help enable autonomous spacecraft maneuvers and enhance radio science observations.
  - DAVINCI+ will host the Compact Ultraviolet to Visible Imaging Spectrometer (CUVIS) built by NASA's Goddard Space Flight Center. CUVIS will make high resolution measurements of ultraviolet light using a new instrument based on freeform optics. These observations will be used to determine the nature of the unknown ultraviolet absorber in Venus's atmosphere that absorbs up to half the incoming solar energy.
- DAVINCI+ and VERITAS are the final selections from four mission concepts NASA's Discovery Program picked in February 2020 as part of the agency's Discovery 2019 competition. Following a competitive, peer-review process, the two missions were chosen based on their potential scientific value and the feasibility of their development plans.
- NASA is awarding approximately $500 million per mission for development. Each is expected to launch between 2028 - 2030. The project teams now will work to finalize their requirements, designs, and development plans.

**Webb Telescope Reported Possible Launch Delay**
*During a June 1 ESA (European Space Agency) news conference, media asked about reported possible launch delays to NASA's James Webb Space Telescope. Below is our response to calls for comment:*

- NASA's James Webb Space Telescope, which will be the premier observatory of the next decade, remains on schedule for a launch readiness date no earlier than Oct. 31, 2021.

  Webb will ship to the launch site in August with little to no schedule margin. Launch processing will take two months. The observatory has completed all the post-environmental testing deployments, and it's in its final integration and folding stages. Final stow, closeout, and pack and ship are imminent. We are working closely with ESA and Arianespace on establishing the launch date. We'll launch approximately four months after the first launch of the Ariane 5 this year, which is scheduled for late July. Webb has no launch date constraints, so it can launch almost any day of the year.

  Webb will study every phase in the history of our universe, including the first luminous glows after the creation of the cosmos, the formation of solar systems capable of supporting life on planets like Earth, and the evolution of our own solar system.

**Fiscal Year 2022 NASA Full Budget Proposal**
*On May 28, the Biden-Harris Administration released the full budget proposal for Fiscal Year 2022.*

- President's Fiscal Year 2022 budget requests $24.8 billion for NASA, an increase of more than 6% over what the agency received the previous year.

Overarching Points

- This funding request demonstrates the president's commitment to NASA and the people across the agency and its partners who have worked so hard this past year under the most difficult circumstances and achieved unprecedented success.
- The NASA workforce and the American people should be encouraged by what they see in this budget request. It is an investment in our future, and it shows confidence in what this agency has to offer. We owe it to the president and the American people to be good and responsible stewards of every tax dollar invested in NASA.
- This budget request includes the strongest NASA budget ever for science, which will help address the climate crisis at home and abroad, as well as advance robotic missions that will pave the way for astronauts to explore the Moon and Mars.
- This is also the strongest budget for exploration since the Apollo program.
- This budget request will restore America's global standing, promote racial and economic equity, and drive economic growth.

<u>Supports Human Exploration of the Moon, Mars, and Beyond</u>

- The president's funding request increases funding for Artemis by $350 million and gives us the resources to advance America's bipartisan Moon to Mars space exploration plan, agreed to by the Administration and Congress.
- This request keeps us on the path toward a regular cadence of Artemis missions with crew to the Moon by the middle of the decade.
- NASA's human landing system contract award, with the goal of a human demonstration mission to the lunar surface by 2024, is under protest.
- NASA is currently reviewing the overall Artemis timeline based on appropriations and expected budget, and outcome of the human landing system protest. We hope to provide an updated Artemis timeline later this year following conclusion of the protest.
- The FY2022 budget request assumes an Artemis I launch no earlier than November 2021, an Artemis II launch no earlier than September 2023, followed by Artemis III targeted for late 2024 and Artemis IV for late 2025. Landing the first woman and first person of color on the lunar surface as part of the Artemis program will promote equity – signaling to every American they too can see themselves among the stars.
- With NASA's Space Launch System rocket and Orion spacecraft, as well as U.S. commercial partnerships with the human landing system and Gateway lunar outpost, we will send astronauts to the Moon to test technologies and exploration practices that will make future missions more productive than ever before.
- This budget funds an upgraded Space Launch System, known as Block1B, that can deliver larger cargos to lunar orbit.
- Gateway, built with our commercial and international partners, is important to sustainable lunar operations.
    - The foundation of our lunar outpost is targeted to launch no earlier than November 2024, with additional modules from our international partners launching later.
- We are working day and night to reduce risks and overcome the challenges of long-term human exploration of the Moon and Mars.
- The budget funds early design work and planning for additional surface architecture necessary including the lunar terrain vehicle and surface habitats to ensure our astronauts can explore more of the Moon than ever before and stay for increasingly longer periods of time in deep space.

- NASA's Lunar Surface Innovation Initiative is advancing technologies to support mission operations on the Moon. This budget includes funding for the preliminary design of a fission surface power system that could power operations on the Moon and Mars.

Furthers Robotic Exploration of the Solar System and the Universe

- This funding request also furthers robotic exploration of the solar system and the universe.
- The budget provides more than $650 million for the Mars Sample Return mission, the highest priority large mission in planetary science.
- It includes strong support for planetary defense, including the near-Earth objects (NEO) Surveyor mission to detect asteroids and comets that could potentially impact Earth.

Enhances Research and Development at NASA

- This funding request supports continued progress developing cutting-edge space technologies, transformative capabilities, and renewable energy, all of which feed the economy and create good paying American jobs.
- Investing in new technologies enhances NASA's missions and fosters the growing space economy.
- NASA routinely demonstrates new technologies, reducing overall risk and encouraging industry adoption. The budget includes $500 million for technology demonstrations.
- It fully funds the On-orbit Servicing, Assembly, and Manufacturing 1 (OSAM-1) mission. Robotically refueling a satellite and manufacturing and assembling spacecraft parts in-orbit will foster a more sustainable space economy.
- Launching next month, our Laser Communications Relay Demonstration will demonstrate a technology that can provide 10-100 times better data rates than commonly used radio frequency communications systems. In the coming years, we'll further refine laser communications technology for use in deep space.
- More than $280 million would be directed toward small business innovation research and technology transfer. The increase of $60 million will provide more money to small companies to research new ideas and develop innovative solutions to challenging problems.
- An investment in NASA and space infrastructure reaffirms our nation is the world's premier partner in space collaboration, and we will be for decades to come.
- We are investing in aviation to make our skies safer, our fuels cleaner, and to get you to your destination faster than ever before. This also includes investing in next-generation aeronautics research that will safely integrate automated aircraft systems with piloted airplanes.
    - This budget enhances American competitiveness in the global aviation industry including the first two flights of new X-57 and X-59 aircraft.
    - NASA aeronautics is leading transformation of the way people and goods are moved through Advanced Air Mobility (air taxis, drone cargo deliveries, etc.), an emerging market expected to be worth $115 billion a year by 2035.
        - It will help safely deliver revolutionary aviation capabilities to previously underserved local, regional, intraregional, and urban areas. NASA investments today will spur the advancements of tomorrow.
- The budget provides a $30 million increase to accelerate transformative science at the frontiers of biological and physical sciences research in space.

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Advances Climate Science

- Climate change has increasing economic and national security impacts, and this budget increases investments in climate research and science programs.
- This funding increases our ability to better understand Earth and how it works as an integrated system, from our oceans to our atmosphere and how it all impacts our daily lives.
- NASA is developing the next-generation Earth System Observatory. NASA's new Earth System Observatory will provide the world with an unprecedented understanding of our Earth's climate system, arming us with next-generation data critical to mitigating climate change, and protecting our communities in the face of natural hazards.
    - The Earth System Observatory will help improve our understanding of extreme weather events and our decision making on climate resilience, adaptation, and mitigation. It will also inform decisions that ensure communities have the resources they need to build resilience prior to these crises.
- Research on zero-emissions aviation
    - NASA Aeronautics is partnering with industry, academia and other agencies through the Sustainable Flight National Partnership to accomplish the aviation community's aggressive climate change agenda. Through advanced vehicle technologies, efficient airline operations and sustainable aviation fuels, collectively NASA and our federal government and industry partners aim to reduce carbon emissions from aviation by half by 2050, compared to 2005, and achieve net-zero emissions by 2060.
- NASA continues to lead the development of new small spacecraft capabilities. For example, small platforms can enable distributed observations for climate science.

Builds a Diverse Future STEM Workforce

- This budget invests in the Artemis Generation. It requests funding for NASA's STEM engagement efforts for the first time in five years to inspire the next generation of scientists, engineers, mathematicians, and explorers by supporting the agency's STEM efforts.
- With this budget, NASA will increase funding for Space Grant and MUREP and will work with university and consortia partners to implement initiatives focused on diversity, equity and inclusion.
- NASA taps into the skills of a diverse group of partners and reaches new groups through our small business programs, academic partnerships, and prizes, challenges, and crowdsourcing activities.
- The Space Technology Mission Directorate is collaborating with OSTEM's Minority University Research and Education Project to offer research planning grants and incentivize partnerships between minority-serving institutions and small businesses, setting them up to apply to NASA opportunities.

Continues Research on the International Space Station

- The space station is a convergence of science, technology, and human innovation that demonstrates new technologies and enables research not possible on Earth. The space station remains the springboard to NASA's next great leap in exploration, including future human missions to the Moon and eventually to Mars.

- With continued support for the International Space Station and the Artemis program, the president welcomes the international community to join us as we push human exploration deeper into space.
- This budget supports early design maturation of multiple commercially owned and operated low-Earth orbit (LEO) destinations (free flyers) from which NASA, along with other customers, can purchase services and stimulate the growth of commercial activities in LEO.
- In addition to maintaining continuous U.S. access to a space station in LEO, these new and more cost-effective platforms will democratize access to space by lowering the barriers to entry for the next generation of researchers, technologists, and tourists.

**Hurricanes and NASA**

*June 1 is the official start of hurricane season for the Atlantic Ocean.*

- After 2020 brought a record number of named storms in 2020, NASA is once again prepared to help understand and monitor these storms from its unique vantage point of space.
- NASA develops and launches satellites for NOAA, which is the lead federal agency for forecasting hurricanes. But the science of hurricanes doesn't start – or end – with forecasting.
- Global warming is increasing the heat in the ocean basins and already making it more likely that storms will intensify faster and be stronger, a phenomenon NASA scientists continue to study deeply.
- With the challenge posed by climate change, NASA has never been more committed to innovation in Earth science research.
    - Our next-generation Earth System Observatory, announced on May 24, missions will help us understand extreme weather events and other climate-fueled hazards to inform the solutions of the future.
- NASA researchers and data also support U.S. stakeholders before, during and after storms make landfall.
    - Stages of NASA Data:
        - Pre-storm assessment (feed weather prediction and forecasting models)
        - Near-real-time assessment (identify potential impacts ahead of landfall)
        - Post-storm assessment (help identify needs for support after landfall)
        - Data access and visualization
- The NASA Disasters Mapping Portal takes disaster-related data and puts it into understandable, usable formats real-time use and application with the goal to bridge the gap between science products and the people who can use the data to assist in preparedness, response, mitigation, and recovery.
    - After a hurricane makes landfall, NASA satellites are in prime position to identify impacts such as damage, flood depth and extent, power outages, rainfall accumulation, landslide risk, and even soil moisture.
    - That information helps local governments, the Army Corps of Engineers, and FEMA monitor infrastructure failures and disruptions, isolate contaminated water supplies, and identify hotspots for urgent response needs.
- NASA also does plenty of its own deep research on hurricanes and tropical cyclone dynamics. A few examples among many:

- NASA's Global Modeling and Assimilation Office is pioneering the use of ultra-high-resolution global weather and micro-climate models.
- The CPEX-AW airborne campaign planned in the Caribbean this August and September will pilot new technology to use LiDAR to better understand atmospheric winds and convective clouds in tropical storms.
- NASA's Jet Propulsion Laboratory (JPL) is studying the use of artificial intelligence/machine learning to improve hurricane prediction capabilities using NASA satellite data.

**Webb Name Webb Telescope Name Statement**
*On May 7, Slate.com posted an article with the headline and sub-headline "The James Webb Space Telescope Hasn't Launched Yet. In One Way, It's Already a Relic. It will collect important data, but what does its name say about who it's for?" Below is our response to the public and media who call for comment:*

- NASA is aware of concerns that have arisen about James E. Webb, and we are working with historians to examine his role in government. NASA named its next generation observatory, the James Webb Space Telescope, after its second administrator, who helped establish the Apollo Program that landed humans on the Moon. The agency made the naming decision in recognition of Webb's role in retaining an active science program at NASA in the agency's early years. Webb's work as administrator laid the groundwork for today's accomplishments, and science remains a critical part of NASA's work: to understand the universe, advance exploration, and inspire the next generation.

**UPCOMING EVENTS PUBLIC DATES**
*Below are the publicly listed dates of some high-profile activities/events/milestones in 2021 and 2022. Internal planning, target, and pre-decisional dates are not listed below as they're not official and public yet. The public dates listed are as specific as they can be, at this time. This list will be regularly updated, as appropriate. Text in red is newly updated public information:*

- **TROPICS Pathfinder Launch – No earlier than June 29:** Launch of a test satellite or Pathfinder on a rideshare on SpaceX Transporter 2 from Cape Canaveral Space Force Station, ahead of a constellation of six small satellites (launching in 2022) that will work together to provide near hourly updates of hurricanes and tropical cyclones
- **Boeing Orbital Flight Test-2 – July 30 –** Boeing's uncrewed CST-100 Starliner OFT-2 (Orbital Flight Test-2) launch from Florida to the International Space Station
- **Northrop Grumman CRS-16 – July 2021:** Commercial resupply services mission to space station from Virginia
- **Landsat 9 – September:** NASA and U.S. Geological Survey launch latest Earth observation satellite, Landsat 9, from California
- **Lucy – Oct 16:** NASA's Lucy mission to study the Trojan asteroids of Jupiter will launch from Florida
- **SpaceX Crew-3 – No Earlier than Oct. 31:** Crew-3 will launch to station from Florida
- **SpaceX Crew-2 Return – Early to mid-November:** Crew-2 returns to Earth
- **Webb Telescope – (Launch Readiness Date) Oct. 31:** NASA's James Webb Space Telescope to help answer questions about our cosmic origins launches from French Guiana
- **X-57 – (tentative Oct. 31) –** Flight test for NASA's first all-electric plane, X-57, at Armstrong Flight Research Center

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- **DART – Nov. 24:** Window opens to launch Double Asteroid Redirection Test from California, NASA's first flight demonstration for planetary defense
- **Webb Telescope – November/December:** The James Webb Space Telescope completes mission deployments/arrives in its L2 (second Lagrange Point) orbit about 29 days after launch
- **Artemis I - November:** NASA reviewing launch date for first integrated flight test of the uncrewed Space Launch System rocket and Orion spacecraft launches on a multi-week mission around the Moon
- **Orion splashdown – Late 2021:** NASA's Orion spacecraft splashes down on Earth following a multi-week mission around the Moon
- **Geostationary Operational Environmental Satellite-T – December:** NASA and NOAA's latest weather satellite, GOES-T, launches from Florida
- **SpaceX CRS-23 – Fall 2021:** Commercial resupply services mission to space station from Florida
- **CAPSTONE – Fall 2021:** NASA CubeSat to validate new navigation technologies and verify dynamics in Gateway's planned orbit will launch to space
- **Imaging X-Ray Polarimetry Explorer – Fall 2021:** NASA's IXPE mission to discover the secrets of black holes, pulsars, and other high-energy objects in the universe launches from Florida
- **Boeing's Crew Flight Test – Late 2021, under review pending OFT-2:** Boeing's CFT earliest possible launch to space station from Florida
- **Boeing Starliner-1 – Under review pending earlier flight tests:** Launch date for first operational Boeing commercial crew launch to space station from Florida
- **Astronaut Candidates – Late 2021**: NASA will announce selections for the next class of astronaut candidates to begin training
- **Laser Comm – Under Review:** NASA's Laser Communications Relay Demonstration to test optical communications launches from Florida
- **Intuitive Machines' CLPS Flight – Early 2022:** Suite of robotic NASA payloads sent lunar surface as part of a Commercial Lunar Payload Services delivery. Landing takes place in the following weeks
- **Astrobotic's CLPS Flight – 2022:** Suite of robotic NASA payloads sent to the lunar surface as part of a Commercial Lunar Payload Services delivery. Landing takes place in the following weeks.
- **Artemis II Crew Announcement – Early 2022:** NASA will announce the astronauts that will fly on the first crewed flight of Orion spacecraft and Space Launch System rocket for the Artemis II mission.
- **Webb Telescope – Spring 2022:** First science images from the James Webb Space Telescope, about six months after launch
- **TROPICS Launch – Spring 2022:** Time-Resolved Observations of Precipitation structure and storm Intensity with a Constellation of Smallsats (TROPICS), a constellation of six CubeSats, will launch from Kwajalein Atoll in the Marshall Islands. The satellites will work together to provide near hourly updates of hurricanes and tropical cyclones
- **The next crew rotation mission to the International Space Station after NASA's SpaceX Crew-3 is targeted for no earlier than mid-April 2022:** The specific commercial crew partner's spacecraft and rocket will be determined at a later date

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- **X-59 QueSST First Flight – (tentative June 1, 2022):** The first flight of the X-59 Quiet SuperSonic Technology (QueSST) aircraft will take place out of Lockheed flight facilities in Palmdale, California
- **Psyche – August 2022:** Window opens to launch Psyche from Florida, NASA's mission to study the metal-rich asteroid 16 Psyche.
- **Surface Water and Ocean Topography (SWOT) Launch – November 2022:** Launch of SWOT to observe details of the ocean's surface topography, and measure how water bodies change over time , jointly developed by NASA and the Centre National d'Études Spatiales (CNES), with contributions from the U.K. Space Agency (UKSA) and the Canadian Space Agency (CSA)
- **NISAR Launch (NASA + Indian Space Research Organization + synthetic aperture radars) – Late 2022:** Joint mission between NASA and the Indian Space Research Organization to track subtle changes in Earth's surface, spot warning signs of imminent volcanic eruptions, help to monitor groundwater supplies, track the melt rate of ice sheets tied to sea level rise, and observe shifts in the distribution of vegetation around the world
- **PACE Launch (Plankton, Aerosol, Cloud, ocean Ecosystem) - 2022:** PACE will advance the assessment of ocean health by measuring the distribution of phytoplankton, tiny plants and algae that sustain the marine food web
- **TEMPO launch (Tropospheric Emissions Monitoring of Pollution) - 2022:** NASA's first Earth Venture Instrument mission will measure pollution of North America, from Mexico City to the Canadian oil sands, and from the Atlantic to the Pacific hourly and at high spatial resolution. TEMPO will be the first space-based instrument to monitor air pollutants hourly across the North American continent during daytime

## AGENCY COMMUNICATION THEME PRIORITIES

For full key points and other products for all themes, visit: https://communications.nasa.gov.

### Earth

NASA uses the vantage point of space to understand and explore our home planet, improve lives and safeguard our future.
Tagline: **Your Home. Our Mission.**

### Flight

NASA explores new technologies to make aircraft greener and quieter, get you gate-to-gate safely and on time, and transform aviation into a new economic engine at all altitudes.
Tagline: **NASA is With You When You Fly.**

### Humans in Space

NASA leads human space exploration in low-Earth orbit with commercial and international partners to enable missions to the Moon and Mars. International Space Station missions are a catalyst for economic development and the advancement of scientific knowledge and new technologies that improve our lives.
Tagline: **Leading Discovery, Improving Life on Earth.**

### Moon to Mars

NASA is leading a sustainable return to the Moon with commercial and international partners to expand human presence in space and bring back new knowledge and opportunities.
**Tagline: Moon Lights the Way.**

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**Solar System & Beyond**
NASA is exploring our Solar System and beyond, uncovering worlds, stars, and cosmic mysteries near and far with our powerful fleet of space and ground-based missions.
Tagline: **Discovering the Secrets of the Universe.**

**Space Tech**
NASA technologies advance capabilities for space exploration, promote America's global leadership in innovation and transform the world around us.
Tagline: **Technology Drives Exploration.**

-end-

| | |
|---|---|
| **From:** | Feldstein, Karen C. (HQ-TA000) |
| **To:** | Kieffer, Margaret (HQ-TH000) |
| **Subject:** | Re: Preliminary-Assessment-UAP-20210625 (1).pdf -- summary of BN briefing |
| **Date:** | Sunday, June 27, 2021 1:40:45 PM |

I didn't read this carefully or appreciate that you wanted the report sent because it was being released publicly that day. I hope you weren't working this weekend – if not sent I can do so, or you can whenever you come online.

Thanks.

---

**From:** Karen Feldstein <karen.c.feldstein@nasa.gov>
**Date:** Saturday, June 26, 2021 at 10:11 AM
**To:** Margaret Kieffer <margaret.kieffer@nasa.gov>
**Subject:** Re: Preliminary-Assessment-UAP-20210625 (1).pdf -- summary of BN briefing

M - sorry I missed this last night and that you had to come in yesterday. Can you please go ahead and forward directly to whomever you feel is appropriate as a follow up to the meeting.

Thank you and have a great weekend.

K.

---

On: 25 June 2021 17:58, "Kieffer, Margaret (HQ-TH000)" <margaret.kieffer@nasa.gov> wrote:

> Jolene: Very timely, thanks!
>
> Karen:
> Suggest you get this rpt to A-suite folks soonest. We just finished the class convo attended by BN, PM, BL Randy and myself. Pam was ever so helpful with some of the technical details, btw. Two actions: (1) BN would like to ensure NASA is involved/participates in the forward work (if the UAP recommendation for a follow-on effort are supported by congress); and, (2) he requested "soonest" a briefing on the final report (likely they are/have briefed the hill, so an easy lift). BN would like TZ at the briefing along w/ PM. Assume you and BL as well.
>
> M
>
> **From:** Meidinger, Jolene A. (HQ-TH000) <jolene.meidinger@nasa.gov>
> **Sent:** Friday, June 25, 2021 5:21 PM
> **To:** Kieffer, Margaret (HQ-TH000) <margaret.kieffer@nasa.gov>; Feldstein, Karen C. (HQ-TA000) <karen.c.feldstein@nasa.gov>; McKay, Meredith (HQ-TA000) <meredith.mckay@nasa.gov>

**Subject:** Prelimary-Assessment-UAP-20210625 (1).pdf

FYSA. Note list of agencies that provided input on page 1 paragraph 3.

Best/Jolene

**From:** Kieffer, Margaret (HQ-TH000)
**To:** Feldstein, Karen C. (HQ-TA000)
**Subject:** Re: Preliminary-Assessment-UAP-20210625 (1).pdf -- summary of BN briefing
**Date:** Sunday, June 27, 2021 6:54:13 PM

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No biggie. OCOMM was tracking public release Fri, and TPs were done. I figured everyone saw via press Fri eve/Sat AM (it was widely reported), so i did not forward on Sat. It really was only timely for a few hours Fri.

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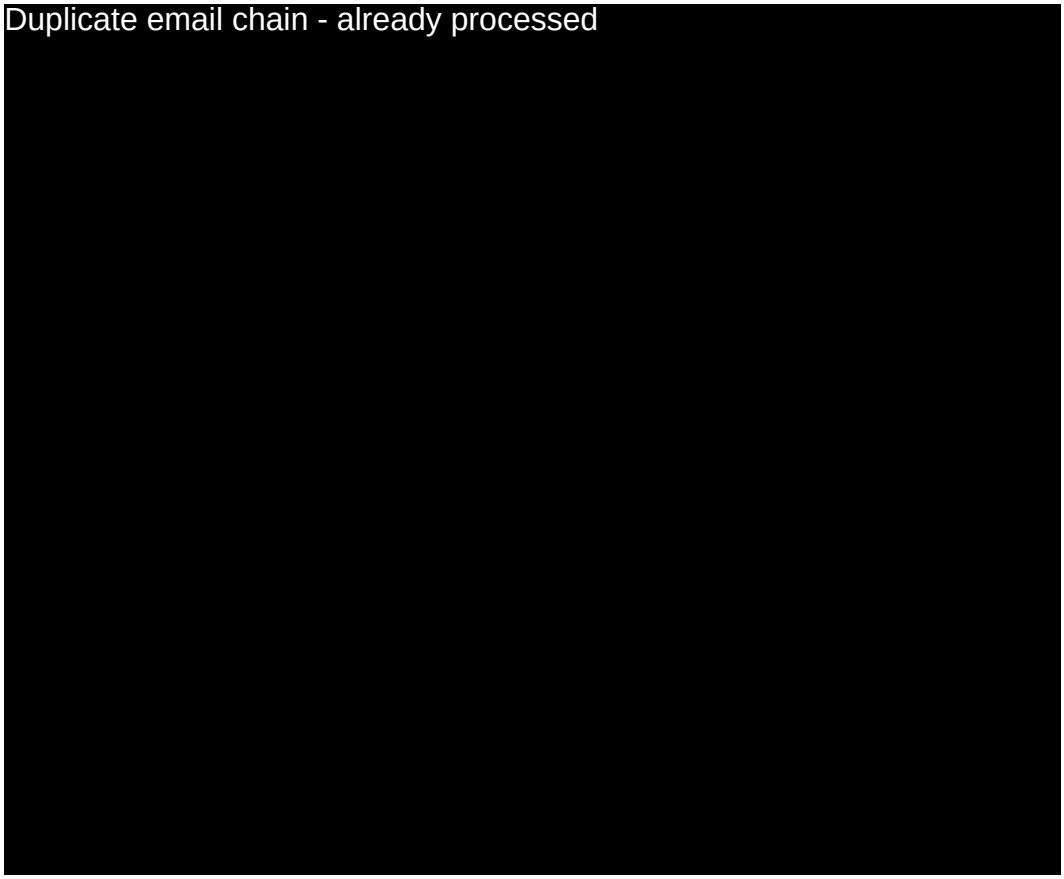
On: 26 June 2021 10:11, "Feldstein, Karen C. (HQ-TA000)" <karen.c.feldstein@nasa.gov> wrote:

> M - sorry I missed this last night and that you had to come in yesterday. Can you please go ahead and forward directly to whomever you feel is appropriate as a follow up to the meeting.
>
> Thank you and have a great weekend.
>
> K.

---

On: 25 June 2021 17:58, "Kieffer, Margaret (HQ-TH000)" <margaret.kieffer@nasa.gov> wrote:



**Deletion Page**

__1__ page containing duplicate information is held in the file. The page consists of email NASA already processed.

**From:** McKay, Meredith (HQ-TA000)
**To:** Feldstein, Karen C. (HQ-TA000)
**Subject:** Fwd: Any changes to this before 9:15 a.m.?
**Date:** Monday, June 28, 2021 6:51:03 AM

---

Randy is on our "rolls"? Thought they didn't follow through on that?

---

Begin Forwarded Message:

> **From:** "Kieffer, Margaret (HQ-TH000)" <margaret.kieffer@nasa.gov>
> **Subject:** RE: Any changes to this before 9:15 a.m.?
> **Date:** 28 June 2021 05:09
> **To:** "Feldstein, Karen C. (HQ-TA000)" <karen.c.feldstein@nasa.gov>, "Bress, Kent G. (HQ-TF000)" <kent.g.bress@nasa.gov>, "Fleming, Devon C. (HQ-TB000)" <devon.c.fleming@nasa.gov>, "Flynn, David T. (HQ-TH000)" <david.flynn@nasa.gov>, "Kirkham, Gib (HQ-TG000)" <gib.kirkham@nasa.gov>, "Mcsweeney, Dennis (HQ-TG000)" <dennis.mcsweeney@nasa.gov>
> **Cc:** "McKay, Meredith (HQ-TA000)" <meredith.mckay@nasa.gov>
>
> Guess ECILD, given where Randy is "bookkept" for the rest of his NASA tenure.
>
> ---
>
> **From:** Feldstein, Karen C. (HQ-TA000) <karen.c.feldstein@nasa.gov>
> **Sent:** Sunday, June 27, 2021 10:01 PM
> **To:** Kieffer, Margaret (HQ-TH000) <margaret.kieffer@nasa.gov>; Bress, Kent G. (HQ-TF000) <kent.g.bress@nasa.gov>; Fleming, Devon C. (HQ-TB000) <devon.c.fleming@nasa.gov>; Flynn, David T. (HQ-TH000) <david.flynn@nasa.gov>; Kirkham, Gib (HQ-TG000) <gib.kirkham@nasa.gov>; Mcsweeney, Dennis (HQ-TG000) <dennis.mcsweeney@nasa.gov>
> **Cc:** McKay, Meredith (HQ-TA000) <meredith.mckay@nasa.gov>
> **Subject:** Re: Any changes to this before 9:15 a.m.?
>
> Thank you. Who has the action to set that up, and with whom?
>
> ---
>
> On: 27 June 2021 21:54, "Kieffer, Margaret (HQ-TH000)" <margaret.kieffer@nasa.gov> wrote:
>
> > Suggest you add the briefing he requested Friday on the UAP TF report.
> > Rest of ECILD looks complete.
> >
> > ---
> >
> > On: 27 June 2021 17:08, "Feldstein, Karen C. (HQ-TA000)" <karen.c.feldstein@nasa.gov> wrote:
> >
> > > Hello, I hope you all had a nice weekend. Attached is an

updated engagement list for A/DA where I tried to capture all the pending items – if you have a moment to peruse before 9:15 tomorrow (so I can modify and print before the 9:30 scheduling meeting) I would appreciate it.
Hopefully, I didn't miss too many…

Thanks much and looking forward to a great week.

Karen

**From:** Cruz, Randy C. (HQ-AA000)[Affiliate]
**To:** Kieffer, Margaret (HQ-TH000); Feldstein, Karen C. (HQ-TA000); Meidinger, Jolene A. (HQ-TH000)
**Subject:** Re: Background info in the SCIF
**Date:** Monday, June 28, 2021 7:37:29 AM

---

I can do it and will keep you all informed until Jolene comes back.

Randy Cruz
Senior Advisor to the Administrator
NASA Headquarters
randy.c.cruz@nasa.gov
Office: (202) 358-1445
Cell: b6 [redacted]

---

On: 28 June 2021 05:14, "Kieffer, Margaret (HQ-TH000)" <margaret.kieffer@nasa.gov> wrote:

> Randy:
>
> Were you going to reach out to ODNI about the post-report release UAP briefing BN requested on Friday (Jolene is on leave this week), or should I do so?
>
> M
>
> ---
>
> **From:** Cruz, Randy C. (HQ-AA000)[Affiliate] <randy.c.cruz@nasa.gov>
> **Sent:** Friday, June 25, 2021 12:27 PM
> **To:** Feldstein, Karen C. (HQ-TA000) <karen.c.feldstein@nasa.gov>; Kieffer, Margaret (HQ-TH000) <margaret.kieffer@nasa.gov>; Meidinger, Jolene A. (HQ-TH000) <jolene.meidinger@nasa.gov>
> **Subject:** RE: Background info in the SCIF
>
> Karen,
>
> He's got questions that go beyond the talking points and is looking for background that may be easier to discuss in the SCIF.
>
> V/r,
>
> Randy

**From:** Feldstein, Karen C. (HQ-TA000) <karen.c.feldstein@nasa.gov>
**Sent:** Friday, June 25, 2021 12:23 PM
**To:** Cruz, Randy C. (HQ-AA000)[Affiliate] <randy.c.cruz@nasa.gov>; Kieffer, Margaret (HQ-TH000) <margaret.kieffer@nasa.gov>; Meidinger, Jolene A. (HQ-TH000) <jolene.meidinger@nasa.gov>
**Subject:** Re: Background info in the SCIF

Randy, can this meeting be handled unclass? The report that's coming out is the unclass version and it's a very simple story of how uninvolved NASA was…

---

**From:** "Cruz, Randy C. (HQ-AA000)[Affiliate]" <randy.c.cruz@nasa.gov>
**Date:** Friday, June 25, 2021 at 12:20 PM
**To:** Karen Feldstein <karen.c.feldstein@nasa.gov>, Margaret Kieffer <margaret.kieffer@nasa.gov>, "Meidinger, Jolene A. (HQ-TH000)" <jolene.meidinger@nasa.gov>
**Subject:** RE: Background info in the SCIF

Margaret,

You should have seen a meeting maker for 4:15 on the 6th Floor Scif. Lorenzo is already there and is standing by. He'll be arriving back from Goddard around that time.

V/r,

Randy

---

**From:** Feldstein, Karen C. (HQ-TA000) <karen.c.feldstein@nasa.gov>
**Sent:** Friday, June 25, 2021 11:22 AM
**To:** Kieffer, Margaret (HQ-TH000) <margaret.kieffer@nasa.gov>; Cruz, Randy C. (HQ-AA000)[Affiliate] <randy.c.cruz@nasa.gov>; Meidinger, Jolene A. (HQ-TH000) <jolene.meidinger@nasa.gov>
**Subject:** Re: Background info in the SCIF

Sounds good thank you.

---

On: 25 June 2021 11:02, "Kieffer, Margaret (HQ-TH000)" <margaret.kieffer@nasa.gov> wrote:

> Karen:
>
> Either Jolene or I are happy to support, as considered helpful.
>
> M
>
> ---
>
> **From:** Cruz, Randy C. (HQ-AA000)[Affiliate] <randy.c.cruz@nasa.gov>
> **Sent:** Friday, June 25, 2021 10:45 AM
> **To:** Feldstein, Karen C. (HQ-TA000) <karen.c.feldstein@nasa.gov>; Kieffer, Margaret (HQ-TH000) <margaret.kieffer@nasa.gov>; Meidinger, Jolene A. (HQ-TH000) <jolene.meidinger@nasa.gov>
> **Subject:** Background info in the SCIF
>
> Karen,
>
> Marc Etkind and Jackie McGuiness have expressed the Senator's desire to understand any details that may exist and is looking to get in the SCIF for a discussion this afternoon when they get back from Goddard. Just got off the phone with them. Happy to talk to him in the secure spaces and answer any questions he has. Let me know how you would like to tackle this.
>
> V/r,
>
> Randy
>
> Randy Cruz

Senior Advisor to the Administrator

NASA Headquarters

Office: (202) 358-1445

Cell: b6 [redacted]

| | |
|---|---|
| **From:** | Plumb, Thomas J. (HQ-TA000) |
| **To:** | Kieffer, Margaret (HQ-TH000); Flynn, David T. (HQ-TH000); Drew, Benjamin A. (HQ-TH000); Torres, Alfonso (HQ-TH000) |
| **Cc:** | Feldstein, Karen C. (HQ-TA000); McKay, Meredith (HQ-TA000); Cruz, Randy C. (HQ-AA000)[Affiliate]; Plumb, Thomas J. (HQ-TA000) |
| **Subject:** | DoD tagup topic update, 29 June 2021, 1430EST/1230MST |
| **Date:** | Tuesday, June 29, 2021 2:25:34 PM |

# DoD tagup topic update, 29 June 2021, 1430EST/1230MST

**Air Force-Space Force (DAF)-NASA-NRO Summit (AFNNS)**

- **Summit Date**. Proposed Summit date is **19 August**, before the Space Symposium (22-26 August)
  - Plus One A Date. If required TBD 12-23 July
  - Plus One B Date. TBD 2-12 August
- "**Host**" - NASA (Alvin leading); planning for in-person attendance at the Pentagon
- **Topics**. Could include:
  - Inclusion of a 30 min "principles only" session
- AFNNS "charter", future structure
- Decision-making agility (NRO)
  - Infrastructure (DAF)
  - Protect & Defend Strategy (DAF)
  - Cislunar (NASA)
  - Space Symposium messaging
  - Read-aheads on: On-orbit Servicing, Assembly, and Manufacturing (OSAM), Space Traffic Management

**Decadal Survey's Panel on Small Solar System Bodies**, 23 June

- USSF SpOC Chief Scientist Dr Mozer invited to brief capabilities to discover and mitigate hazardous objects in NEO and cislunar space, recognizing SSA/SDA areas of overlap in cislunar space
- Lots of interest and questions, including, "If a Chelyabinsk-sized asteroid was detected on an earth impact trajectory a few days out, does Space Force/Space Command have a determined role?" (the 2018 LA asteroid was discovered 8 hours prior to impacting Earth)

**"A Primer on Cislunar Space",** released by AFRL/SV
https://www.afrl.af.mil/Portals/90/Documents/RV/A%20Primer%20on%20Cislunar%20Space_Dist%20A_PA2021-1271.pdf?ver=vs6e0sE4PuJ51QC-15DEfg%3d%3d

**36th Space Symposium, Broadmoor, Colorado Springs, 22 Aug (Sunday) - 26 August (Thursday)**

- AT requested a DoD-focused activity **proposal for Administrator and senior leadership visit Wednesday, 25 August (**starting after a morning engagement). Proposal:
  - Broadmoor to **Peterson AFB**: Space Command HQ, mission briefing and engagement discussion (available leadership dependent)
  - Peterson AFB to **Schriever AFB**: Lunch, Space Force/Schriever ops briefing, NSDC brief/tour, SOPS brief/tour (among 1SOPS space-based SDA, 2SOPS GPS, 3rd Space Experimentation Squadron, 4SOPS SATCOM)
  - A shorter visit could be just to Schriever
  - Air Force Academy and Catalyst Campus visits are other visit options
- Gen Shaw had asked for short convo with Steve J, could consider Gen Shaw - Pam Melroy tag during symposium

**UAP report release**, Senator Nelson public comments
https://thehill.com/policy/national-security/560507-nasa-administrator-on-ufo-report-i-dont-think-we-are-alone

**HEOMD DoD HSF support management:**

**AFSCN & NRO communications support to human spaceflight missions (POC SCaN John Hudiburg)**
- Need AF Satellite Control Network-**AFSCN support for crewed missions.** (50SW MFR covered DM-2, Crew-1)
  - AFSCN support for CCP/Artemis was requested by RFA to USSPACECOM (Chief of Staff)
  - Space Command approved the RFA on a non-interference, reimbursable basis. Discussion with John Hudiburg, 15 June. NASA will ping SPACECOM POC Roger Kelly on reimbursable support (John to provide Tom with his technical POCs).

**NASA-DoD HSFS "Summit", KSC,** TBC 18-21 August
- Space Command Human Space Flight Support, Artemis Operational Planning Team meeting 16 August included discussion
- NASA POCs EGS Melissa Jones/CCP Dana Hutcherson
- SPACECOM lead representative planned to be DJ3 Brig Gen Zellmann
- Topics: support for Artemis and CCP
- NASA HQ HEOMD involvement (Bowersox)

**Air Mobility Command (AMC) reimbursable charges to CCP for C-17-related Air National Guard Military Personnel Appropriation (MPA) hours**
- USSPACECOM updated CCP on TRANSCOM/AMC reimbursable charges, around $300K charges per crew rotation
- After discussions, AMC won't charge for Crew-2 rotation but Crew-3 and follow-ons planned for charges. NASA asking for review of tasking and charges.
- NASA researching 7600 processes (SPACECOM, TRANSCOM, USAF AMC)

**Mobility support for NASA MOA (with TRANSCOM, SPACECOM, USAF-AMC)**
- USTRANSCOM drafted an MOA for Mobility support for NASA (general mobility support processes, requirement for 7600, no specific missions or charges in the MOA)
- POC for the MOA is Nado

**HSFS Artemis requirements development** over secure channels (POC Lark Howorth, JSC)
- Extension of 18SPCS SSN/conjunction support for ISS ops to Artemis profile
- Additional b5 [redacted]

**Update to DoD Support to NASA Space Flight Operations (2005)?**

**Event dates: OFT-2** 30 July, **Crew 2/Crew 3 rotation** October, **CFT-1** end of 2021

**Planetary Defense - NEO updates**
- **Space Surveillance Telescope (SST)**
  - Need b5 [redacted]
b5 [redacted]
    - Space Command passed their approval authority to S3/6Z review
    - S3/6Z provided several packages of test data for MITLL to filter with SST methodology, **in-work**

- Need to develop **data transfer from SST to demark in AUS, over commercial lines**
  - PDCO would like to propose b5 [redacted]
  - PDCO would like b5 [redacted]
  - **Lindley will tee up the request thru** b5 [redacted]
- **Public release of bolide light curves** by USSF S3S. AFSPC/CD 2019 memo was on reviewing expedited and wide release of bolide events and releasing bolide light curves to the public. Bolide reporting made progress, light curves release had objections by AFTAC.
- Met with USSF S3S POC Corey Griffith/Craig Myers and Randy Longenbaugh for update/roadmap, 13 May, next discussion o/a 1 July
  - S3S will request input to release, and hold in-person TEM (o/a July), then make recommendation to leadership.
  - S3S requested historical light curve pdfs from Sandia (Jake Proctor, Randy L to execute, awaiting classification discussion)
- Fireball event notification. Automated processing nearing completion of initial SDL installation, with a stand-along station and a unit-accessible web-based thin client version. PDCO engaging with SMC to determine POC and roadmap for approval on thin client access to unit.
  - After development of processor installation and access approval, proceed with unit training and CONOPS development with Space Force for processing events, to include Delta 4 leadership (prior 460SW/CC Col Pepper is now USSPACECOM DJ5. Update Pepper and gauge USSPACECOM interest in public notifications. (Intern AJ is assisting in NASA public notification CONOPS)

**Intern support to planetary defense efforts with Space Force/Space Command**
- Exploring tweeting USG-sensor discovered bolide reports over @AsteroidWatch twitter account, and supporting Space Command tweets/re-tweets
- Tom engaging intern AJ Convertino and working with PDCO Kelly Fast, coordinating with Justin

**Pillars Meeting, "International Engagement",** 22 July, 13-17EST, TS-level
- Meeting announcement includes a NASA Perspective

**Administrator call with** Space Force Chief of Space Operations (CSO) Gen Raymond, 9 June
- Collaboration follow up items: Rocket Cargo Vanguard concept; establishing a USSF-NASA fellowship program/bringing a USSF executive fellow in to work in A-Suite (a USSF Lt Col). Initial POC Nick Hague.

**JTF-SD J9 "Civil-Mil Affairs" bi-weekly tag ups,** last in-person tag 17 June
- J9 chief Major Nick Snyder (+ Kevin O'Rourke)
- Planning unclass TEM (TBC July) with topic brief: JTF-SD Commercial Operations (JCO)
- Considering in-person TEM at NSDC (TBC Fall)
- Topics: CONOPs development, training, exercises, contact procedures, clearances, personnel at NSDC, TDRS ephemeris in JCO, Artemis support

**USSPACECOM - NASA partnership engagement and agreements review**
- **Partnership strategic vector**
  - A partnership non-binding MOU was drafted, NASA indicated to Space Command that consideration of the MOU is on hold

- Senior leadership discussion, priorities vector, TBD
- **Cooperation overview paper/briefing; topic/contact list**
- **Operations enhancement with potential binding MOAs** (planetary defense / extended SDA; spaceflight safety/conjunctions, HSFS, cislunar ops planning)
- SPACECOM J53 (Strategic Engagements) working effort with Commander Technical Advisor office (Marcus Shaw, Aerospace). Discussions with OIIR have occurred. SPACECOM will raise roadmap to leadership, J5, COS, DCOM, to formalize desired work areas and effort level. Marcus Shaw may raise preliminary plans with Gen Shaw in his scheduled meetings.

**Schriever Wargame 2021 (SW21) (all planning and Capstone to be virtual, as of 8 March)**
- Commercial and Civil Workshop (OOB / toolkit), 9-10 February, classified virtual (Paul Konyha, JSC; Jay Pittman GSFC), positive feedback on value of participation. Debriefed with OIIR, 9 March.
- Scenario tracking/input.
- Capstone Part 1. Action Officer planning session, COA brief for Part 2. 5 days in August (TBD)
- Capstone Part 2. Coalition Council, decide on COA. Two 3-hour sessions, 7-8 September.
- Capstone Part 3. Action Officer discussions, moves, adjudication. 3 Days, 13-15 September.
- Capstone Part 4. Coalition Council, adjudication brief, last day is senior outbrief. Two 3-hour sessions, 28-29 September.

## ARTICLES

**Report: Space Force has to prepare for operations beyond Earth's orbit**
by **Sandra Erwin** — June 23, 2021
https://spacenews.com/report-space-force-has-to-prepare-for-operations-beyond-earths-orbit/
**"A Primer on cislunar space"** - AFRL/SV
https://www.afrl.af.mil/Portals/90/Documents/RV/A%20Primer%20on%20Cislunar%20Space_Dist%20A_PA2021-1271.pdf?ver=vs6e0sE4PuJ51QC-15DEfg%3d%3d

Washington Times (6/23, Gertz) "U.S. military space forces are preparing to defend systems beyond Earth's orbit in areas extending to the moon and beyond, according to a report by the Air Force Research Laboratory. Defending cislunar space — the volume of space outside of geosynchronous Earth orbit and within the moon's gravitational pull — is outlined in a memorandum of understanding between the Space Force and NASA. The report was made public this week after China and Russia announced plans for a joint international research station to be built on the moon."

**Space National Guard Proposal Headed to Congress Soon, Top Leaders Say**
(Military.com, 22 Jun 21) … Oriana Pawlyk
"We've done the report; it's complete. It's all through coordination; it's waiting for a final briefing," Chief of Space Operations Gen. John Raymond told lawmakers. Acting Air Force Secretary John Roth added that the report is with leadership within the Office of the Secretary of Defense and soon will be submitted to the Office of Management and Budget before congressional committees receive the final study. "We've been operating with the Guard for 25 years. It provides critical capability, both people-wise and equipment-wise," Raymond said. "We can't do our job without them today, and we can't do our job in the future without them."

**Space War, Like the Cold War, Is All Risk, No Reward**

(Air Force Magazine, 22 Jun 21) … Amanda Miller
Two officials with the Air Force Research Laboratory shared their vision during the Defense One Tech Summit on June 22: Col. Eric J. Felt, director of AFRL's Space Vehicles Directorate, and Kelly D. Hammett, director of its Directed Energy Directorate. The two described a future where deterrence and "unattributable" attacks are the norm, much like the cat-and-mouse days of the Cold War when the United States and Soviet Union competed but simultaneously sought to avoid all-out nuclear war.

**Space Development Agency to launch five satellites aboard SpaceX rideshare**
(Space News, 22 Jun 21) … Sandra Erwin
The U.S. Space Development Agency has five satellites riding on SpaceX's Transporter-2 rideshare mission scheduled to launch June 25.

**Army, Navy Satellite Operations To Consolidate Under Space Force**
By: Sandra Erwin
*Space News*
23 June 2021

The U.S. Space Force later this year will begin to take over the operation of 11 Navy narrowband communications satellites. It also will absorb Army units that currently operate military communications payloads, a Space Force official said June 23.

The transition, scheduled to begin in October, will create a more integrated U.S. military satcom enterprise which for decades has "largely been a loose federation," said Col. Matthew Holston, commander of Space Delta 8 at Schriever Air Force Base, Colorado.

Holston spoke about the upcoming reorganization at the SMi MilSatCom USA virtual conference.

Space Delta 8 operates communications and Global Positioning System (GPS) satellites from Schriever and from Vandenberg Space Force Base, California.

With 635 personnel, Space Delta 8 operates 66 satellites: 37 GPS, six Advanced EHF communications, five Milstar, two Enhanced Polar System hosted payloads, 10 Wideband Global Satcom (WGS) and six Defense Satellite Communications System (DSCS).

The operation of the Navy's 11 narrowband communications satellites will move to Space Delta 8. That includes a mix of Mobile User Objective System (MUOS), Ultra High Frequency Follow-On (UFO) and FLTSATCOM UHF satellites.

Space Delta 8 also will absorb three Navy satellite control antennas and ground control stations at Prospect Harbor, Maine; Laguna Peak, California; and Finegayan, Guam.

Transitioning from the Army are two units that currently are part of the Army's satellite operations brigade: The 53rd Signal Battalion and the SATCOM Directorate.

The 53rd Signal Battalion is the only U.S. military unit that controls the payloads of the WGS and DSCS communication constellations.

The SATCOM Directorate supports wideband and narrowband services for U.S. Space Command, and oversees international partner satcom agreements.

The consolidation of units is “really an opportunity from a space segment perspective as well as a resource management perspective to start moving towards an integrated satcom enterprise,” Holston said.

Army and Navy satellite operators will not be obligated to move over to the Space Force but can voluntarily transfer.

“We’re working with both our partners in the Army and the Navy to do the service transfers associated with that,” said Holston.

He said this is one step toward accomplishing the Space Force’s vision of an integrated satcom enterprise of military and commercial systems.

That strategy was laid out in the “United States Space Force Vision for Satellite Communications,” which was approved by Chief of Space Operations Gen. John Raymond in January 2020.

Raymond directed the Space Force to figure out how to integrate military and commercial satcom systems so users can roam between networks the way consumer cell phones switch between providers when they travel from one country to another.

Holston said the integration of commercial systems, including space internet services in low Earth orbit, is being handled by the Space Force’s acquisition organization, the Space and Missile Systems Center.

“I think those discussions are certainly ongoing,” he said. “If you look at the enterprise satcom vision, we certainly want to partner across what is available across different orbital regimes.”

**US Report Can't Explain UFOs, But Says They're Likely Real and Possibly a National Security Threat**
*(Military.com, 25 Jun 21)* … Stephen Losey
Many unidentified flying objects observed by the military and other government sources since 2004 probably actually exist and may pose a threat to national security, according to an intelligence report released Friday. Government sources originated 144 reports of unidentified aerial phenomena, or UAPs, the term the government now uses to describe objects popularly referred to as UFOs. Many incidents were witnessed firsthand by military aviators and observed by reliable sensor systems, the report adds.

UAPs largely remain a mystery. Aside from one that was identified as a large, deflating balloon, the government can't explain what they are. The report gives no indication the UAPs' origins are extraterrestrial. But whatever they are and wherever they're from, the intelligence community says they exist -- and should be taken seriously.

"UAP clearly pose a safety of flight issue and may pose a challenge to U.S. national security," states the report from the Director of National Intelligence, or DNI, titled "Preliminary Assessment: Unidentified Aerial Phenomena." "Safety concerns primarily center on aviators contending with an increasingly cluttered air domain. UAP would also represent a national security challenge if they are foreign adversary collection platforms or provide evidence a potential adversary has developed either a breakthrough or disruptive technology.”

The Pentagon announced Friday afternoon that Deputy Secretary of Defense Kathleen Hicks has ordered the military to draw up a plan to formalize the mission now performed by the Unidentified Aerial Phenomena Task Force. Hicks said that military aircrews and other personnel need to speak up when they see UAPs. "It is critical that the United States maintain operations security and safety at DoD ranges," she wrote in a memo released Friday by the Pentagon. "To this end, it is equally critical that all U.S. military aircrews or government personnel

report whenever aircraft or other devices interfere with military training. This includes the observation and reporting of UAPs."
The DNI report states that 80 of the UFOs observed were tracked across multiple sensors, including radar, infrared, electro-optical sensors and weapon seekers, as well as visual observation. For that reason, the report concluded that most of the observed UFOs probably were actual physical objects. In a few cases, the UAPs showed unusual flight characteristics, the report found, such as appearing to remain stationary in the air, moving against the wind, abruptly maneuvering, or traveling at considerable speed without any observable propulsion. The DNI said this could be the result of sensor errors, spoofing or observers misperceiving what was happening; it added that the issue needs further study.

In a handful of cases, military aircraft systems observed radio frequency energy alongside UAP sightings. Reported UAP sightings tended to cluster around U.S. training and testing grounds, the report states, but that may be because there are more advanced sensors there and greater attention by personnel. There is probably no single explanation for what UAPs are, the report concluded. They could be as mundane as airborne clutter such as birds, balloons and recreational drones, or airborne debris like plastic bags. They could also be natural atmospheric phenomena such as ice crystals and moisture registering on some infrared and radar systems, the report states.
They also could be technology deployed by potential adversary nations such as China or Russia, or non-governmental entities. The report acknowledges that some UAPs could be classified programs run by U.S. agencies, but said this could not be confirmed. When it passed the fiscal 2021 Intelligence Authorization Act, Congress ordered the DNI and Pentagon to produce a report on the threat posed by UAPs and what progress the Defense Department's task force has made in understanding that threat.

**Space Force Adds University of Colorado to Upcoming Partnership Program**
*(Air Fore Magazine, 25 Jun 21)* … Amanda Miller
The Space Force's No. 2 officer inspected the aerospace research facilities of its newest university partner June 24 under a program designed to help it recruit personnel with more technical expertise. Vice Chief of Space Operations Gen. David D. Thompson and Mark Kennedy, president of the University of Colorado system, agreed in principle that the university system will become part of the Space Force's University Partnership Program. The system includes, in part, its flagship campus in the aerospace research and industry hub of Boulder, plus a campus in the national security space hub of Colorado Springs. Kennedy said he's "thrilled" that the University Partnership Program will involve both workforce development and research development as CU Boulder is one of the highest-funded public aerospace research institutions in the U.S.
When the full list is announced, each of the program's cadre of aerospace research institutions will also be noteworthy in terms of already having "an incredibly strong officer development platform" in its Reserve Officer Training Corps detachment, Thompson said. Thompson told reporters that about 10 universities have agreed to come onboard and he expects the program to kick off with formal agreements in place this fall. "It is really a change in the way we do business," Thompson said. Starting over as a new service means the Space Force gets to ask itself, "What do we need to do differently that suits our needs, our challenges, in the 21st century workforce?" he said.

Faculty provided tours of their labs in the university's Department of Aerospace Engineering Sciences, including its space domain awareness laboratory where students were actively tracking objects in orbit and its design-build-fly cubesat laboratory that lets students do all three by the time they graduate. Overviews of research included human-machine teaming for space surveillance. Thompson said the Space Force has spent "a better part of the last year reaching out to universities, making sure they understand our goals and visions [and] … agreeing that we want to pursue it."

He said the service realized that it needed to adapt its approach to education and training to meet its particular needs, which are "very, very focused and very, very high-tech … to be able to operate successfully in an

incredibly complex physical and technical domain." "In many cases in the past, we haven't required it," Thompson said, referring to a focus on high-tech skills in the workforce. "We have counted on what universities have provided. We've hired engineering and consulting firms and what we call federally funded research and development corporations to provide that deep technical expertise." Workforce development for civilian personnel, in particular, has lagged behind.

Probably the largest and heaviest lift for us is we're going to be about 50 percent civilian workforce—government civilians" for whom job expectations and requirements "have not kept pace with what we do for military members," Thompson said. His former aide-de-camp helped to shape the idea for partnering with universities. "My previous aide-de-camp was an African American, and—demonstrating the bold leaders we expect in the Space Force," Thompson emphasized, seemingly for the benefit of the cadets present, "he came into my office one day, and he said, 'Gen. Thompson, first of all, do you know the No. 1 producer of African-American engineers in the nation?' And I said, 'No.' "He said, 'Let me tell you about that school.'"
That advice led to North Carolina Agricultural and Technical State University becoming the first to agree to a partnership. Thompson said "perhaps one day" the Space Force will have a dedicated ROTC detachment but that for now, Space Force will focus on the Air Force ROTC detachments at partner universities "to coalesce and bring, I'll call it, mass, to that."

*Thomas Plumb*
NASA Liaison - Peterson AFB, CO
Space Force Space Command NORAD/USNORTHCOM
C b6 Thomas.j.plumb@nasa.gov
O 719.554.4900 (currently in telework status)

**From:** Bress, Kent G. (HQ-TF000)

**To:** Baldwin, Arnold B. (JSC-NT411); Bowie, Monica T. (HQ-TE000); Capote, Sarah M. (HQ-TH000)[GENERAL DYNAMICS INFORMATION TECHNOLOGY (GDIT)]; cjackson@mail.hq.nasa.gov; Conole, Kevin C. (HQ-TH000); Dahlgren, Jennifer R. (HQ-TH000)[GENERAL DYNAMICS INFORMATION TECHNOLOGY (GDIT)]; Dalby, Melanie K. (HQ-TE000); Dove, Judy A (HQ-TG000); Drew, Benjamin A. (HQ-TH000); EWAN, SHANNON M. (HQ-TG000); Feldstein, Karen C. (HQ-TA000); Finley, Patrick T (HQ-TE000); Fleming, Devon C. (HQ-TB000); Flynn, David T. (HQ-TH000); Goldemen, Betsy (HQ-TG000); Hackley, Lisa M. (HQ-TD000); Hamilton, Carol J. (HQ-TD000); Harris, April P. (HQ-TB000)[Total Solutions Inc]; Hurst, Kimberly A. (HQ-TG000); Jean-Pierre, Gerald D (HQ-TB000)[Total Solutions Inc]; khodgdon@hq.nasa.gov; Kieffer, Margaret (HQ-TH000); Kirkham, Gib (HQ-TG000); Koeppe, Matthew T (HQ-TG000); Kuhl, Katelyn M. (HQ-TE000); Levy, Rebecca (HQ-OC000); Mann, Gregory A (HQ-TE000); Marcia Joseph (HQ-TD000); Masciola, Andrew J. (HQ-TG000); Mcintosh, Garvey (HQ-TA000); McKay, Meredith (HQ-TA000); MCMAHON-BOGNAR, CHRISTINE (HQ-TG000); Mcsweeney, Dennis (HQ-TG000); Meidinger, Jolene A. (HQ-TH000); Moore, Michael G. (HQ-TG000); Mulvey, Laura A. (HQ-TG000); Parks, Andy (HQ-TE000); PARSLEY, JACOB D. (HQ-TG000); Plumb, Thomas J. (HQ-TA000); Rausch, Diane (HQ-TD000); Richards, David (HQ-TH000)[GENERAL DYNAMICS INFORMATION TECHNOLOGY (GDIT)]; Ross-estes, Charlene (HQ-TB000)[Total Solutions Inc]; Santos, Juan F. (HQ-TH000); Shearer, Jon E. (HQ-TA000); Shephard, Patricia A. (HQ-TB000); Spencer, Bridgette M. (HQ-TB000); Tawney, Timothy (HQ-TA000); Tilman, Justin (HQ-TF000); Torres, Alfonso (HQ-TH000); Troxell, Jennifer L. (HQ-TH000); Whitby, Dionne M. (HQ-TE000); Tsougranis, Anthony Elias (HQ-TF000); Newman, Neal R. (HQ-TF000); Williams, Elizabeth (HQ-TF000); Carrodeguas, Judith (HQ-TF000); Convertino, Anthony J. (HQ-TF000)[Intern]; Coe, Ellie R. (HQ-TF000)[Intern]; Sespico, Emily (HQ-TF000)[Intern]

**Subject:** OIIR Division Directors staff meeting, 7/6/2021

**Date:** Tuesday, July 6, 2021 5:05:37 PM

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Karen Feldstein

- Will be out of the office on Friday
- Administrator travel. Helen and now Kayla are working with travel office to understand what will need to be done
- Waiting on proposal for Space Command visit after Space Symposium;
- Plans for JWST launch are on the 9th floor radar screen; both VVIP and potential CODEL
- NSC Asia region coordinator to meet with Senator Nelson; will require inputs to A-Suite on Thursday
- We've got a number of international meeting requests for Pam Melroy, including Korea and Australia
- Prepping introductory meeting for Pat Sanders and Sen Nelson, Bob and Pam
- For tomorrow's All Hands, thanks to DeVon for finding the great tool for submitting questions, and thanks to everyone who did. Our meetings are safe spaces, and Karen will always welcome any question, any time

Meredith McKay

- If you're working on a memo for the Administrator, check with your DD on format, which has been evolving a bit

Kent Bress

- briefing memo for ESA bilat with Meredith for review
- ready to sign extensions of agreements for loan of a painting to museums in the UK and Sweden
- Justin is finalizing the ARMD International Strategy; plan is for briefing final across ARMD at the September Executive Readiness Review
- Continuing to work next steps in collaboration with DLR and JAXA (broad review for the former, specific topics for the latter)
- IFAR is trying to make the call on virtual vs. in person for October summit in Poland; there will be a virtual IFAR leadership panel at the September ICAS conference in Shanghai
- ARMD OAA International Quarterly Review set for July 28; invited Matt and Garvey

Jesse Deihl

- Hoping the new CFO will be able to come on board soon

DeVon Fleming
- All Hands meeting tomorrow at 10:30. CLPS will be the special topic

Margaret Kieffer
- Provided comments to Indo-pac policy document
- Orbital Debris review team finishing its work, developing charts. Bhavya would like to wrap it up soon. Dr. Zurbuchen has provided comments
- Planning for AF/NRO/NASA summit is proceeding
- Natalie has the action to provide information Senator Nelson requested on recent UAP report
- Jolene and David are out today, David is back tomorrow, Jolene on Thursday
- Jen will be (b) (6) next week

Gib Kirkham
- Thomas is speaking w David Parker on Fri re MSR; there's an Administrator-level meeting on 15 Jul as well as a F2F on 19 Jul
- We've provided 30' window for Deputy Administrator and Head of Australian Space Agency at Space Symposium
- Thomas speaking w ISRO Scientific Secretary on 13 Jul
- NASA-ESA Joint Statement of Intent cleared SMD now w OGC

Dennis McSweeney
- Undocking/splashdown for SpaceX-22 was to have been today, but postponed due to Elsa to NET Friday or Saturday
- Roscosmos announced that Nauka module launch will be July 21; they'll participate in ISS MCB on July 19, waiting for ESA and JAXA to confirm that date
- Andy Parks traveling to JSC next week for discussion with MBRSC on airlock
- JAXA CubeSat MOU has been signed by both sides
- MEXT Minister Hagiuda would like to meet virtually with Senator Nelson

Meredith McKay
- NASA Inc sent new travel guidance today lifting mission critical requirement for vaccinated travelers
- Proposed Stage 2 transition plan for HQ is ready
- HQ is working on a contract for rodent elimination

**From:** Feldstein, Karen C. (HQ-TA000)
**To:** Kieffer, Margaret (HQ-TH000)
**Subject:** Re: UPDATE RE: DRAFT -- OIIR Weekly Update for week of Jul 19
**Date:** Friday, July 16, 2021 9:39:54 PM

Got it! Thanks and have a lovely weekend.

**From:** Margaret Kieffer <margaret.kieffer@nasa.gov>
**Date:** Friday, July 16, 2021 at 7:39 PM
**To:** Karen Feldstein <karen.c.feldstein@nasa.gov>, Meredith McKay <meredith.mckay@nasa.gov>
**Cc:** "code-i-dd@lists.hq.nasa.gov" <code-i-dd@lists.hq.nasa.gov>, "Torres, Alfonso (HQ-TH000)" <alfonso.torres@nasa.gov>
**Subject:** UPDATE RE: DRAFT -- OIIR Weekly Update for week of Jul 19

Sigh…this thing never stays still…BN UAP briefing just confirmed, and updated below.

**From:** code-i-dd-bounces@lists.hq.nasa.gov <code-i-dd-bounces@lists.hq.nasa.gov> **On Behalf Of** Kieffer, Margaret (HQ-TH000)
**Sent:** Friday, July 16, 2021 5:21 PM
**To:** Feldstein, Karen C. (HQ-TA000) <karen.c.feldstein@nasa.gov>; McKay, Meredith (HQ-TA000) <meredith.mckay@nasa.gov>
**Cc:** code-i-dd@lists.hq.nasa.gov; Torres, Alfonso (HQ-TH000) <alfonso.torres@nasa.gov>
**Subject:** [code-i-dd] DRAFT -- OIIR Weekly Update for week of Jul 19

Karen:

The draft OIIR weekly update is outlined below. The newly scheduled NRO and NOAA meetings are captured in upcoming activities, as well as the pending UAP report briefing for BN/PM and PSG-topic technical conv with PM.

Hope all have a wonderful weekend.

M

---

Bob,

Please see below the list of top-level, OIIR-supported activities of interest this week and some upcoming activities:

(b) (5)

[redacted]

(b) (5)

***Upcoming Activities***

**JULY 2021**

(b) (5)

**AUGUST 2021**

(b) (5)

To all on distribution - please let me know if you have any questions or would like any additional information.

Regards,
Karen

*Karen C. Feldstein*
*Associate Administrator for*
*International and Interagency Relations*
*NASA Headquarters*
*300 E St SW, Washington DC 20546*
*Tel: (202) 358-0400*
*Mobile:* (b) (6)

**From:** Kieffer_Margaret (HQ-TH000)
**To:** Feldstein_Karen C. (HQ-TA000)
**Subject:** Re: OIIR Weekly Update
**Date:** Sunday, July 18, 2021 8:40:29 PM

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Copy. M

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On: 18 July 2021 17:48, "Feldstein, Karen C. (HQ-TA000)" <karen.c feldstein@nasa.gov> wrote:

> Thank you, Margaret for the draft and to all for the inputs. For key items I added the DA remarks to the export control program review. Unfortunately, I realized just after I sent it that the meeting with Gen. Lyles re NAC hadn't been added but I decided not to send an addendum.
>
> Please use this revised list of upcoming events as the basis for next week's update.
>
> Thank you!
> Karen
>
> ---
>
> **From:** Karen Feldstein <karen.c.feldstein@nasa.gov>
> **Date:** Sunday, July 18, 2021 at 5:44 PM
> **To:** "Cabana, Robert D. {HQ-Associate Administrator} (KSC-AI000)" <robert.d.cabana@nasa.gov>
> **Cc:** "Melroy, Pamela A. (HQ-AB000)" <pamela.a.melroy@nasa.gov>, "Saunders, Melanie (HQ-AA000)" <melanie.saunders-1@nasa.gov>, "Quinn, Susie Perez (HQ-AH000)" <susie.p.quinn@nasa.gov>, "Dalton, Bale (HQ-AH000)" <bale.dalton@nasa.gov>, "Lal, Bhavya (HQ-AA000)" <bhavya.lal@nasa.gov>, "Cremins, Tom (HQ-AJ000)" <tom.cremins-1@nasa.gov>, "Etkind, Marc R. (HQ-NA000)" <marc.r.etkind@nasa.gov>, "Stephenson, Johnny F. (MSFC-NA000)" <johnny.f.stephenson@nasa.gov>, "Jacobs, Bob (HQ-NA000)" <bob.jacobs@nasa.gov>, "Kerwin, Mary D. (HQ-IA000)" <mary.d.kerwin@nasa.gov>, "Brown, Alicia N. (HQ-VA000)" <alicia.n.brown@nasa.gov>, "Flaherty, Christopher J. (HQ-VA030)" <christopher.j.flaherty@nasa.gov>, "Zurbuchen, Thomas H. (HQ-DA000)" <thomas.h.zurbuchen@nasa.gov>, "Lueders, Kathryn L. (KSC-CA000)" <kathryn.l.lueders@nasa.gov>, Meredith McKay <meredith.mckay@nasa.gov>, "Swails, Casey L. (HQ-LE030)" <casey.l.swails@nasa.gov>
> **Subject:** OIIR Weekly Update
>
> Bob,
>
> Below is a list of top-level, OIIR-supported activities of interest this week and some upcoming activities:
>
> **Public Meeting on NASA's Proposal to Withdrawal Land from Railroad Valley (RRV), Nevada:** On July 19, NASA will participate in a virtual public meeting with an official from the Department of Interior's Bureau of Land Management to provide an overview of, and hear public comments regarding, NASA's request to withdrawal nearly 23,000 acres of land from public use in RRV. NASA initiated the withdrawal application to preserve this land for satellite calibration activities. RRV is the best vicarious calibration site in the U.S. and one of the best in the world for Earth observing satellites because it has ideal and stable land characteristics, is well-instrumented, and can be relatively easily accessed by scientists. Representatives from SMD, OComm, and OIIR will attend.
>
> **ISS Multilateral Coordination Board (MCB):** On July 19, HEOMD AA Lueders will chair the ISS MCB, the highest-level governing board of the program, with her counterparts from the Canadian Space Agency (CSA), Roscosmos, the European Space Agency (ESA), and Japan's Ministry of Education, Culture, Sports, Science and Technology (MEXT).
>
> **Norms of Behavior for National Security Space Activities:** On July 20, the National Security Council (NSC) will kick off a series of biweekly Sub-Interagency Policy Committee (Sub-IPC) meetings to develop norms of behavior for national security space activities. The principal participants are DOD, the State Department, and the Intelligence Community. Civil departments and agencies are being included for awareness. OIIR will support.
>
> **NASA Annual Export Control Program Review:** On July 20, the Deputy Administrator will provide welcoming remarks at this OIIR-sponsored agencywide event for 75 NASA civil servants and contractors responsible for assuring agency compliance with U.S. export control regulations. The Deputy Administrator's participation will reinforce the critical

importance of protecting the nation's sensitive technologies.

**NSC Restricted IPC meeting**: On July 21, the NSC will hold the 2nd in a series of weekly in-person restricted IPC meetings to continue the development of strategic messaging and a diplomatic plan for Department of Defense space activities. OIIR will support.

**Climate presentation at Japan event:** On July 21, NASA Senior Climate Advisor (acting) Dr. Gavin Schmidt will provide a presentation on "NASA's Cooperation in Addressing the Climate Challenge" to a Japan Aerospace Exploration Agency (JAXA)-hosted virtual event.

**Launch of Russia's Nauka Multipurpose Laboratory Module (MLM) to ISS:** On July 21, Roscosmos is scheduled to launch the Nauka MLM to ISS from Baikonur, Kazakhstan, on a Proton-M rocket. The Nauka MLM includes a robotic arm provided by the European Space Agency. NASA's Director of Human Space Flight Programs in Russia, Tricia Mack, traveled from Moscow to Baikonur for launch.

**Potential Visit by Spain Prime Minister to JPL:** On July 22, the mayor of Los Angeles, Eric Garcetti, is scheduled to host the Prime Minister of Spain, Pedro Sanchez, for a meeting and brief tour at JPL. The visit isn't yet confirmed.

**Chief Scientist Lecture at Oxford:** On July 23, NASA Chief Scientist Dr. Jim Green will give a virtual lecture at the University of Oxford's St. Cross College Center for the History and Philosophy of Physics on "The Future of Space Activities and Preservation on Mars."

***Upcoming Activities***

| **JULY 2021** | |
|---|---|
| July 27-Aug 1 | Zurbuchen travel to Kourou, French Guiana for Ariane 5 launch |
| July TBD | Administrator meeting with SBA Administrator |
| **AUGUST 2021** | |
| Aug 4-5 | ISS Advisory Committee joint meeting with Roscosmos Advisory Expert Council (virtual) |
| Aug 4-5 (proposed) | Administrator meeting with President, Japan Aerospace Exploration Agency (JAXA) President |
| Aug 5 | Administrator Nelson meeting with Director, National Reconnaissance Office (NRO) |
| August 17 | Briefing on Task Force Report on Unidentified Aerial Phenomena |
| Aug 18 | Administrator Nelson meeting with NOAA Administrator |
| Aug 22-26 | 36th Space Symposium, Colorado Springs |
| Aug 25-Sep 3 | UN Committee on the Peaceful Uses of Outer Space (COPUOS) |
| Aug 29-Sep 4 | SMD AA Zurbuchen travel to Europe for meetings with CNES and ESA and remarks at the Swiss Economic Forum |

Please let me know if you have any questions or would like additional information.

Regards,
Karen

*Karen C. Feldstein*
*Associate Administrator for*
*International and Interagency Relations*
*NASA Headquarters*
*300 E St SW, Washington DC 20546*
*Tel (202) 358-0400*
*Mobile* b6

**From:** Kieffer, Margaret (HQ-TH000)
**To:** Feldstein, Karen C. (HQ-TA000); McKay, Meredith (HQ-TA000)
**Cc:** code-i-dd; Torres, Alfonso (HQ-TH000)
**Subject:** DRAFT: OIIR Weekly Updates for week of July 26
**Date:** Friday, July 23, 2021 6:48:56 PM

---

Karen:

Draft OIIR weekly updates for next week reflected below.

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Bob,

Below is a list of top-level, OIIR-supported activities of interest this week and some upcoming activities:

(b) (5)

[redacted]

***Upcoming Activities***

| AUGUST 2021 |
| --- |
| (b) (5) [redacted] |

(b) (5)

Please let me know if you have any questions or would like additional information.

Regards,
Karen

*Karen C. Feldstein*
*Associate Administrator for*
*International and Interagency Relations*
*NASA Headquarters*
*300 E St SW, Washington DC 20546*
*Tel: (202) 358-0400*
*Mobile:* (b) (6)

| | |
|---|---|
| **From:** | Feldstein_Karen C. (HQ-TA000) |
| **To:** | Cabana_Robert D. {HQ-Associate Administrator} (KSC-AI000) |
| **Cc:** | Melroy_Pamela A. (HQ-AB000); Saunders_Melanie (HQ-AA000); Quinn_Susie Perez (HQ-AH000); Dalton_Bale (HQ-AH000); Lal_Bhavya (HQ-AA000); Cremins_Tom (HQ-AJ000); Etkind_Marc R. (HQ-NA000); Stephenson_Johnny F. (MSFC-NA000); Jacobs_Bob (HQ-NA000); Kerwin_Mary D. (HQ-IA000); Brown_Alicia N. (HQ-VA000); Flaherty_Christopher J. (HQ-VA030); Zurbuchen_Thomas H. (HQ-DA000); Lueders_Kathryn L. (KSC-CA000); McKay_Meredith (HQ-TA000); Swails_Casey L. (HQ-LE030) |
| **Subject:** | OIIR Weekly Update |
| **Date:** | Sunday, July 25, 2021 5:08:14 PM |

Bob,

Below is a list of top-level, OIIR-supported activities of interest this week and some upcoming activities.

(b) (5)

***Upcoming Activities***

**AUGUST 2021**

(b) (5)

Please let me know if you have any questions or would like additional information.

Regards,

Karen

*Karen C. Feldstein*
*Associate Administrator for*
*International and Interagency Relations*
*NASA Headquarters*
*300 E St SW, Washington DC 20546*
*Tel: (202) 358-0400*
*Mobile:* b6 [redacted]

| | |
|---|---|
| **From:** | Potter, Sean (HQ-NA020) |
| **To:** | Bress, Kent G. (HQ-TF000); Feldstein, Karen C. (HQ-TA000); McKay, Meredith (HQ-TA000); Mcsweeney, Dennis (HQ-TG000); Kirkham, Gib (HQ-TG000); Mulvey, Laura A. (HQ-TG000) |
| **Cc:** | Carrodeguas, Judith (HQ-TF000) |
| **Subject:** | Re: [EXTERNAL] Interview Request - MBN-USAGM - U.S. government global broadcaster |
| **Date:** | Tuesday, July 27, 2021 12:19:24 PM |
| **Attachments:** | image001.png |

Thanks, Kent. Do you need to confer with State on this or is Jim good to proceed with the interview?

Sean

---

**From:** "Bress, Kent G. (HQ-TF000)" <kent.g.bress@nasa.gov>
**Date:** Tuesday, July 27, 2021 at 11:09 AM
**To:** "Potter, Sean (HQ-NA020)" <sean.potter@nasa.gov>, "Feldstein, Karen C. (HQ-TA000)" <karen.c.feldstein@nasa.gov>, "McKay, Meredith (HQ-TA000)" <meredith.mckay@nasa.gov>, "Mcsweeney, Dennis (HQ-TG000)" <dennis.mcsweeney@nasa.gov>, "Kirkham, Gib (HQ-TG000)" <gib.kirkham@nasa.gov>, "Mulvey, Laura A. (HQ-TG000)" <laura.a.mulvey@nasa.gov>
**Cc:** "Carrodeguas, Judith (HQ-TF000)" <judith.carrodeguas@nasa.gov>
**Subject:** RE: [EXTERNAL] Interview Request - MBN-USAGM - U.S. government global broadcaster

+ Judy, who supports Jim.

Thanks, Sean.

Kent

---

**From:** Potter, Sean (HQ-NA020) <sean.potter@nasa.gov>
**Sent:** Tuesday, July 27, 2021 10:04 AM
**To:** Feldstein, Karen C. (HQ-TA000) <karen.c.feldstein@nasa.gov>; McKay, Meredith (HQ-TA000) <meredith.mckay@nasa.gov>; Mcsweeney, Dennis (HQ-TG000) <dennis.mcsweeney@nasa.gov>; Kirkham, Gib (HQ-TG000) <gib.kirkham@nasa.gov>; Bress, Kent G. (HQ-TF000) <kent.g.bress@nasa.gov>; Mulvey, Laura A. (HQ-TG000) <laura.a.mulvey@nasa.gov>
**Subject:** FW: [EXTERNAL] Interview Request - MBN-USAGM - U.S. government global broadcaster

Hi – Just a heads up on the interview request below from the Middle East Broadcasting Networks, part of USAGM, the U.S. Agency for Global Media (MBN-USAGM).

After some internal discussion within OCOMM, it was decided that Jim Green could do this.

If you have any questions or concerns, please let me know.

Thanks,

Sean

---

**From:** "McGuinness, Jackie (HQ-NA000)" <jackie.mcguinness@nasa.gov>
**Date:** Monday, July 26, 2021 at 8:57 AM
**To:** Newsroom <hq-dl-newsroom@mail.nasa.gov>
**Subject:** FW: [EXTERNAL] Interview Request - MBN-USAGM - U.S. government global broadcaster

Hi all – Passing this along in case there's anyone else who might be a good fit for this.

Thanks,
Jackie

---

**From:** "Etkind, Marc R. (HQ-NA000)" <marc.r.etkind@nasa.gov>
**Date:** Monday, July 26, 2021 at 7:24 AM
**To:** "McGuinness, Jackie (HQ-NA000)" <jackie.mcguinness@nasa.gov>
**Subject:** Fwd: [EXTERNAL] Interview Request - MBN-USAGM - U.S. government global broadcaster

Can you navigate as you see fit. Thanks

---

Begin Forwarded Message:

> **From** (b) (6) [redacted]
> **Subject:** [EXTERNAL] Interview Request - MBN-USAGM - U.S. government global broadcaster
> **Date:** 23 July 2021 16:46
> **To:** "Etkind, Marc R. (HQ-NA000)" <marc.r.etkind@nasa.gov>
>
> Dear Marc,
>
> I am writing to invite Administrator Bill Nelson to appear for a 'live' interview

with our host on MBN-USAGM, which is Middle East Broadcasting Networks, part of USAGM, the US Agency for Global Media.

We have been closely following the Perseverance Mission to Mars, MOXIE, and the helicopter, Ingenuity, as well as the Earth System Observatory and NASA Supersonic X-59 QueSST.
In addition, MBN news programming has run in-depth segments on the release of Pentagon videos of UAP, Unidentified Aerial Phenomenon.

Please tell me if Administrator Nelson might be interested in a 10-15 minute interview that is focused on NASA and the many successes and contributions the Agency has made to the future of space travel, as well as his own personal experience as an astronaut.

Our audience, primarily terrestrial television with radio and social media, reaches 22 Arabic speaking countries throughout the Middle East and North Africa.

Administrator Nelson's interview can be conducted with a safely distanced camera crew, through a television studio, yours or ours, remotely or via Skype. Our primetime programming is scheduled between 2:00-4:00 pm EDT, although we do have a program, "From The Capital" broadcast at 6:00 pm, as well.

His perspective on the Mission and Space Policy is of fascinating to our viewers.

Interviews are about 15 minutes in length.

Please respond as to whether this would be possible.

Apart from the network, the Administrator may remember me from all the way back when he was a freshman Congressman, as I had just moved to the area from Florida, as well.

Thank you for your kind consideration.

Sincerely,
(b) (6)
[redacted]
Interview Producer
MBN-USAGM

(b) (6) m)

Sent from my iPhone

(b) (6)
Interview Producer

MBN MIDDLE EAST BROADCASTING NETWORKS, INC.

Middle East Broadcasting Networks, Inc.
7600 Boston Blvd
Springfield, VA 22153
T:(b) (6)
(b) (6)