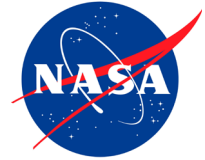


National Aeronautics and Space Administration



**Headquarters**

Washington, DC 20546-0001

August 23, 2023

Reply to attn. of: Office of Communications  
History and Information Services Division

John Greenwald, Jr.  
The Black Vault, Inc.  
27305 W. Live Oak Rd., Suite 1203  
Castaic, CA 91384-4520

Re: NASA FOIA Tracking Number **23-00599-F-GSFC**

Dear Mr. Greenwald:

This is our final response to your Freedom of Information Act (FOIA) request to the National Aeronautics and Space Administration (NASA), dated June 13, 2023, and received in this office on June 14, 2023. Your request was assigned the above-referenced tracking number. You seek the following:

*"All emails, with any level of classification, 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" and/or "AARO" and/or "Anomaly Resolution"*

*PLEASE INCLUDE ALL ATTACHMENTS TO EMAILS FOUND.*

*I ask that you search the follow e-mail boxes, with the time frames in the parentheses:  
- Lonnie Shekhtman (November 18, 2022, through the date of processing this request)  
You may omit any newspaper articles that are publicly available, which do NOT contain commentary. Should the email have additional commentary including a newspaper, I ask that you please include those as responsive to this request."*

In response to your request, NASA's Offices of Information Technology conducted a search of Lonnie Shekhtman's email account using the search terms "Unidentified Aerial" and/or "Unidentified Flying" and/or "UAP" and/or "UFO" and/or "Unidentified Spacecraft" and/or "Unidentified aircraft" and/or "UAPTF" and/or "AARO" and/or "Anomaly Resolution". That search identified records responsive to your request. We reviewed the responsive records under the FOIA to determine whether they may be disclosed to you. Based on that review, this office is providing the following:

8 page(s) are released in full (RIF);<sup>1</sup>  
3 page(s) are released in part (RIP);

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<sup>1</sup> All page counts are approximate numbers.

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

**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 work cell phone numbers and e-mail addresses of third parties.

**Fees**

Provisions of the FOIA allow us to recover part of the cost of complying with your request. In this instance, because the cost is below the \$50 minimum, there is no charge.

**Appeal**

You have the right to appeal my action regarding your request. Your appeal must be received within 90 days of the date of this response. Please send your appeal to:

Administrator  
NASA Headquarters  
Executive Secretariat  
ATTN: FOIA Appeals  
MS 9R17  
300 E Street S.W.  
Washington, DC 20546

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](mailto:Alyssa.k.bias@nasa.gov) or (202) 358-4664. For further assistance and to discuss any aspect of your request you may also contact:

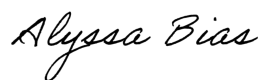
Stephanie Fox  
Chief FOIA Public Liaison  
Freedom of Information Act Office  
NASA Headquarters

300 E Street, S.W., 5P32  
Washington D.C. 20546  
Phone: 202-358-1553  
Email: [Stephanie.K.Fox@nasa.gov](mailto: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](mailto: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 myself, 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,


A handwritten signature in cursive script that reads "Alyssa Bias".

Alyssa Bias  
Government Information Specialist

This document is made available through the declassification efforts  
and research of John Greenewald, Jr., creator of:

# The Black Vault

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document clearinghouse in the world. The research efforts here are  
responsible for the declassification of hundreds of thousands of pages  
released by the U.S. Government & Military.

**Discover the Truth** at: **<http://www.theblackvault.com>**

**From:** [Shekhtman, Lonnie \(GSFC-690.0\)\[ADNET SYSTEMS INC\]](#)  
**To:** [Kopparapu, Ravi Kumar \(GSFC-6990\)](#)  
**Subject:** Re: [] Dec 16 UAPIOC Pass Down  
**Date:** Monday, December 19, 2022 8:35:47 AM

---

It's official, OK. Such a thoughtful note from Ryan Graves ...

--

Lonnie Shekhtman  
Senior Science Writer  
Solar System Exploration  
NASA's Goddard Space Flight Center  
(b) (6)

---

**From:** "Kopparapu, Ravi Kumar (GSFC-6990)" <ravikumar.kopparapu@nasa.gov>  
**Date:** Friday, December 16, 2022 at 4:42 PM  
**To:** "Shekhtman, Lonnie (GSFC-690.0)[ADNET SYSTEMS INC]" <lonnie.shekhtman@nasa.gov>  
**Subject:** FW: [] Dec 16 UAPIOC Pass Down

I have stepped down.

--

Ravi Kopparapu  
NASA Goddard Space Flight Center  
Greenbelt, MD 20771  
email: [ravikumar.kopparapu@nasa.gov](mailto:ravikumar.kopparapu@nasa.gov)

---

**From:** Ryan Graves (b) (6)  
**Date:** Friday, December 16, 2022 at 3:59 PM  
**To:** (b) (6)  
**Subject:** [EXTERNAL] Dec 16 UAPIOC Pass Down

Hello UAPIOC!

**I hope everyone had a fantastic Thanksgiving weekend!** There has been a lot of activity within the IOC over the past several weeks as we've taken an opportunity to step back and identify how we can strengthen and focus the organization with the influx of new members. This effort hasn't been evenly distributed, so it is coming if you do not see such activity in your sphere currently.

As part of this process, we're identifying updates to policy, procedure, or messaging that need to be

quickly consumed and integrated by the IOC. This email represents the first such **"Pass Down"** email. The purpose of a Pass Down email is to communicate a clear message or change within the IOC directly from IOC Leadership to all IOC members. The contents of the Pass Down are not immediately debatable; please do not enter into a debate via the reply all button. If a decision is controversial, please pass such input to your SC leadership, and the issue will be considered.

This first Pass Down is bittersweet.

For the past 16 months or so, our Co-chair, Dr. Ravi Kopparapu, has played an incredible role in forming this Committee. Beyond the simple execution required to create this IOC, Ravi found himself in a difficult position through NASA's coming to terms with the UAP topic. Even with an official UAPIST, Ravi has had to balance his professional role as an employee of NASA with a leadership role in the IOC. Ravi took an incredible stand against the mainstream NASA opinion on this topic before it was considered this seriously. This has not been without its difficulties and professional stresses for Ravi. We... I... asked a lot from Ravi. Perhaps not his participation but at least his soft blessing, as we 'gently' agitated the system within which Ravi works, to gain their attention and move this topic forward.

From the very beginning of this effort-Ravi pledged his energy to move this from a non-topic to a full-fledged Committee within the AIAA. Now, over a year later, we have succeeded in this goal.

**Ravi, thank you for the risks you took to support this conversation. Your indignation at the 'mainstream' science for ignoring this data has provided me with great motivation. Such clarity of thought is usually punished by contemporaries and celebrated by history. Ravi, let us be the first to celebrate your actions. Cheers to you and thank you.**

Dr. Michael Lembeck has been selected and has accepted the position of Co-Chair. His replacement within HFSC will be communicated in the near future.

I am honored that Michael has accepted this responsibility and I look forward to working with him in this new capacity.

Thank you,

Ryan Graves  
Chair  
AIAA UAPIOC

--

You received this message because you are subscribed to the Google Groups "All Hands" group. To unsubscribe from this group and stop receiving emails from it, send an email to [allhands+unsubscribe@aiaauap.org](mailto:allhands+unsubscribe@aiaauap.org).

**From:** [Rohloff, Katherine A. \(HQ-NA020\)](#)  
**To:** [Gran, Rani C. \(GSFC-1300\)](#); [Shekhtman, Lonnie \(GSFC-690.0\)\[ADNET SYSTEMS INC\]](#); [Jones, Nancy N. \(GSFC-1300\)](#)  
**Subject:** RE: Unidentified stuff  
**Date:** Wednesday, January 18, 2023 2:07:13 PM

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Hi all,

Absolutely, please feel free to forward me any interview requests for UAP and Ravi.

Kind regards,  
Katherine

Katherine Rohloff  
Press Secretary | Science Mission Directorate  
Office of Communications | NASA Headquarters  
C: (b) (6)  
[katherine.a.rohloff@nasa.gov](mailto:katherine.a.rohloff@nasa.gov)

---

**From:** Gran, Rani C. (GSFC-1300) <[rani.c.gran@nasa.gov](mailto:rani.c.gran@nasa.gov)>  
**Sent:** Thursday, January 12, 2023 1:58 PM  
**To:** Shekhtman, Lonnie (GSFC-690.0)[ADNET SYSTEMS INC] <[lonnie.shekhtman@nasa.gov](mailto:lonnie.shekhtman@nasa.gov)>; Jones, Nancy N. (GSFC-1300) <[nancy.n.jones@nasa.gov](mailto:nancy.n.jones@nasa.gov)>  
**Cc:** Rohloff, Katherine A. (HQ-NA020) <[katherine.a.rohloff@nasa.gov](mailto:katherine.a.rohloff@nasa.gov)>  
**Subject:** Unidentified stuff

Hello,

I'm passing along the name of the person that will be. Taking UAP requests at HQ. Katherine Rohloff <[katherine.a.rohloff@nasa.gov](mailto:katherine.a.rohloff@nasa.gov)>

I think she will do a great job handling these requests and she is fully aware of the challenges Ravi faces.

Rani

--

Rani C. Gran (she/her)  
Communications Manager  
Mail Code 130, B3, 224  
NASA Goddard Space Flight Center  
Greenbelt, MD. 20771  
Work Cell : (b) (6) \*\* (best number to reach me)  
Phone: 301-286-2483

**From:** [Glavin, Daniel P. \(GSFC-6900\)](#)  
**To:** [Glavin, Daniel P. \(GSFC-6900\); "690\\_all@nccs.nasa.gov"](#)  
**Cc:** [Tyahla, Lori J. \(GSFC-61A.0\)\[KBRwyle\]](#)  
**Subject:** [690\_all] Code 690 weekly report 3-17-23  
**Date:** Wednesday, March 15, 2023 2:12:41 PM  
**Attachments:** [Code 690 highlights week ending March 17 2023.pdf](#)

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Good afternoon,

Attached is the Code 690 Weekly Report for the week ending March 17. Please note that although potentially sensitive highlights such as participation in review panels, submission of proposals, and embargoed press release information are removed from the "690\_all" email distribution, all of these highlights are still included in the weekly highlights that are sent to Code 600 management and viewed by the Center Director and management from the other Directorates.

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Thank you,  
Danny

\*\*\*\*\*

Dr. Daniel P. Glavin (he/him)  
Associate Director for Strategic Science  
NASA Goddard Space Flight Center  
Solar System Exploration Division, Code 690  
Building 34, Room E119A  
8800 Greenbelt Rd., Greenbelt MD 20771  
Office: 301.614.6361  
Fax: 301.614.6015  
Mobile: (b) (6)  
<http://science.gsfc.nasa.gov/sed/bio/daniel.p.glavin>  
<https://www.amazon.com/author/danielglavin>  
Twitter: @MeteorDannyG

*You must be the change you wish to see in the world - Mahatma Ghandi*



**SCIENCES AND EXPLORATION DIRECTORATE**  
**Weekly Highlights**

**Code 690 highlights - week ending 3/17/23**

**690 Dashboard**

**Published Papers**

- This week: 3
- YTD: 27

**Submitted Proposals**

- ROSES (this week): 0
- ROSES (YTD): 13
- AO's (this week):
- AO's (YTD):

**90-day look-ahead “Coming Events”**

- Maryland Institute College of Art (MICA) AstroAnimation Course (February–April 2023)
- SSERVI RISE2 Potrillo Field Expedition, with science journalism students (3/26/23-4/4/23)
- Red Sox STEM Day (4/5/23)
- Mars Exploration Program Analysis Group (MEPAG) meeting, virtual and in-person in the DC area (4/11-12/23)
- Senior Living Community Outreach: Denise Hill (HQ), The Heliophysics Big Year (4/13/23)
- Earth Day at Union Station (4/20/23–4/21/23)
- Extraterrestrial Materials Analysis Group (ExMAG) virtual meeting (4/25-27/23)
- Maryland Day (4/29/23)

## SCIENCES AND EXPLORATION DIRECTORATE

### Weekly Highlights

#### Mission and Project News

- The Planetary Data System (PDS) Project Office (690.1) hosted the quarterly PDS Management Council virtual meeting, March 8-9, 2023.
- Noah Petro (698) and Barbara Cohen (698) were announced as the Project Scientists for the Artemis III and Artemis IV missions, respectively, during the NASA HQ Artemis Town Hall at LPSC on March 15 (photo credit: Stephanie Getty).



#### Published Papers

- Parker, E. T. (691), McLain, H. L. (691), Glavin, D. P. (690), Dworkin, J. P. (690) Elsila, J. E. (691), Aponte, J. C. (691) Naraoka, H. (external), Takano, Y. (external), Tachibana, S. (external), Yabuta, H. (external), Yurimoto, H. (external), Sakamoto, K. (external), Yada, T. (external), Nishimura, M. (external), Nakato, A. (external), Miyazaki, A. (external), Yogata, K. (external), Abe, M. (external), Okada, T. (external), Usui, T. (external), Yoshikawa, M. (external), Saiki, T. (external), Tanaka, S. (external), Nakazawa, S. (external), Tsuda, Y. (external), Terui, F. (external), Noguchi, T. (external), Okazaki, R. (external), Watanabe, S.-I. (external), Nakamura, T. (external), 2023: “Extraterrestrial amino acids and amines identified in asteroid Ryugu samples returned by the Hayabusa2 mission,” *Geochimica et Cosmochimica Acta*, 347, 42-57, doi: 10.1016/j.gca.2023.02.017, url: <https://www.sciencedirect.com/science/article/pii/S0016703723000923>. This paper details the abundances and distributions of amino acids and aliphatic amines observed in asteroid Ryugu samples returned by the Hayabusa2 mission. It also explores potential formation mechanisms of these vital biomolecules. Goddard was the primary institution involved in the sample handling and analyses detailed in this article.
- Jaime Crouse (693), Sandra Bastelberger (693) and Thomas Fauchez (693) have published the discovery paper of Wolf 1069b led by Diana Kossakowski (MPIA). Wolf 1069b is the sixth closest habitable zone exoplanet discovered so far. <https://arxiv.org/abs/2301.02477>

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## SCIENCES AND EXPLORATION DIRECTORATE

### Weekly Highlights

- Dina Bower, (693), Shahid Aslam, (693), Tilak Hewagama, (553), are co-authors on "Design and optimization of NUV-enhanced 4H-SiC separate-absorption-charge-multiplication avalanche photodiodes," Proc. SPIE 12415, Physics and Simulation of Optoelectronic Devices XXXI, 1241509 (10 March 2023); doi: 10.1117/12.2649236. This paper describes work on high sensitivity near-ultraviolet (NUV) avalanche photodiodes operating at wavelengths longer than 300 nm that are useful for various applications, including surface exploration of Ocean Worlds and other planetary bodies via Raman spectroscopy.

### Significant Events/Presentations

- Ravi Kopparapu (699/remotely) co-presented at "The Politics of UAP" workshop organized at the Ohio State University on the topic of Scientifically studying UAPs.
- Xiang Li (699) chaired the "2.07 In Situ Instruments for Landed Surface Exploration, Orbiters, and Flybys" session on the 2022 IEEE aerospace conference, and presented the paper titled: "Laser Desorption Mass Spectrometry of Cryogenic Samples on the Dragonfly Mission".
- Dr Meredith Elrod (699) is leaving on Thursday for the Planet-ESLAB-2023 meeting in The Netherlands. Dr. Elrod will be presenting a poster on "Surprising Decrease in the Martian He Bulge during PEDE-2018 and Changes in Upper Atmospheric Circulation" using MAVEN NGIMS data.
- Dr. Meredith Elrod (699) submitted a virtual poster that is also being presented by co-author James Roberts at LPSC this week. This is a state of the workplace and DEIA poster titled "The Cost of Diminished In-person Participation in 'Unsafe' Locations: The Necessity of Hybrid Meetings"
- Yasmina Martos (695/UMD) gave an invited talk entitled "Revealing Curie depth and geothermal heat flow from magnetic anomalies" at the MagNetZ seminar series.
- Ramin Lolachi (695/UMBC) gave a talk entitled "Phase Angle Dependence of Plume Scattering: Preliminary Ejecta Mass Estimates" about work related to the Double Asteroid Redirection Test (DART) mission at the 54<sup>th</sup> Lunar and Planetary Science Conference (LPSC), in Houston, TX. The coauthors include D. Glenar (695/UMBC), T. Stubbs (695) and L. Kolokolova (UMD).
- Danny Glavin (690) gave a talk entitled "Investigating the Impact of X-ray Computed Tomography Imaging on Organic Matter in the Murchison Meteorite: Implications for Bennu Sample Analyses" in the Advanced Curation session at the 54<sup>th</sup> Lunar and Planetary Science Conference on March 14.
- Dina Bower (UMD/693) presented a talk in the Astrobiology and Exobiology session at LPSC on March 13, 2023 "Establishing Useful Signatures of Life and Habitability in the "Silent Region" of the Raman Spectrum" with co-authors Amy Mcadam (699), C. yang (Brimrose Technology), T. Hewagama (553), M. Millan (LATMOS), M. Mulholland (ODU), U. Udeochu (UDC), C. Achilles (698), C. Knudson (CRESST II/UMD/699), J. Stern (699), C. Nixon (693), and P. Whelley

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## SCIENCES AND EXPLORATION DIRECTORATE

### Weekly Highlights

(UMD/698). The talk highlighted data collected from GIFT-funded field studies in Iceland and Hawaii and FLaRe-funded returned sample analyses from those sites, focusing on unique N-compounds (cyanates) potentially indicative of biogeochemical cycling, and whose signatures are found within the "silent region" of the Raman spectrum.

- Jose Aponte (691) presented the talk “Investigating Very Volatile Organic Compounds in Meteorites” at the FLaRe seminar series.
- Jose Aponte (691) presented the poster titled “Insoluble Cyanide in CI, CM, CR, CO, and CV Carbonaceous Chondrites” at the 54<sup>th</sup> Lunar and Planetary Science Conference in Houston TX.
- Jamie Elsila Cook (691) presented a talk entitled “Organic Compounds and Cyanide in the Apollo 17 Specially Curated ANGSA Samples” at the 54<sup>th</sup> annual Lunar and Planetary Science Conference in The Woodlands, TX.

### External Interactions

- Rosemary Killen and O.J. Tucker (695) attended the SSERVI Executive Council meeting on Sunday, March 12 where we presented updates on LEADER and plans for the future.
- Yasmina Martos (695/UMD) and Bethany Theiling (699) met with the CAVES & PANGAEA Project Lead, and Space Training Team of ESA.

### Communication/media

- OSIRIS-REx will be commemorated by the USPS in an upcoming postage stamp announced on 3/14 at <https://about.usps.com/newsroom/national-releases/2023/0314-usps-updates-2023-stamp-program.htm>



### Community Service

- Dr. Meredith Elrod (699) is serving on the SOC, VOC and LOC planning committees for the next DPS (Division of Planetary Science) meeting that is a joint meeting with EPSC (Europlanet Science Congress) that will be held in San Antonio, TX in October. The initial meeting for the SOC and LOC were held this week, the initial VOC was last week. Dr. Elrod has volunteered to be the co-chair for the VOC. Dr. Elrod is representing the Professional Culture and Climate Subcommittee (PCCS) of the DPS and making sure DEIA concepts are addressed in these meetings as needed.

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**SCIENCES AND EXPLORATION DIRECTORATE**  
**Weekly Highlights**

- Dina Bower (UMD/693) co-chaired the afternoon Astrobiology and Exobiology session at LPSC on Monday March 13, 2023.
- Nathan Roth (691/CUA) reviewed two manuscripts for *The Planetary Science Journal*.

**Education and Outreach**

- Olivia Wilkins (691/NPP) gave a virtual presentation to five K-3 classes (total of ~100 students) from Franklin Park School as part of their Women's Career Day on March 8, 2023.
- Natasha Johnson (691) gave a presentation about DAVINCI to Tim Livengood's (693/UMCP) Planetary Science class at UMD-College Park on 3/14.

**From:** [Oakes, Nick C. \(GSFC-1300\)\[Intern\]](#)  
**To:** [Jones, Nancy N. \(GSFC-1300\)](#); [Gallagher, Daniel Patrick. \(GSFC-130.0\)\[KBRwyle\]](#); [Ladd, David \(GSFC-130.0\) \[ADVOCATES IN MANPOWER MANAGEMENT, INC\]](#); [Tralie, James W. \(GSFC-130.0\)\[KBR\]](#); [Shekhtman, Lonnie \(GSFC-690.0\)\[ADNET SYSTEMS INC\]](#); [Steigerwald, William A. \(GSFC-1300\)](#); [Gran, Rani C. \(GSFC-1300\)](#); [Wasser, Molly L. \(GSFC-690.0\)\[ADNET SYSTEMS INC\]](#); [Arnold, Madison C. \(GSFC-130.0\)\[X3M Systems, LLC\]](#)  
**Date:** Wednesday, March 29, 2023 12:21:51 PM

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Isn't Venus like the #1 thing reported as a UFO throughout recent history?

**From:** [Shekhtman, Lonnie \(GSFC-690.0\)\[ADNET SYSTEMS INC\]](#)  
**To:** [Kopparapu, Ravi Kumar \(GSFC-6990\)](#)  
**Date:** Monday, May 15, 2023 8:08:56 AM

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## **NASA Provides Coverage of Unidentified Anomalous Phenomena Meeting**

NASA is holding a public meeting at 10:30 a.m. EDT Wednesday, May 31, of its independent study team on categorizing and evaluating data of unidentified anomalous phenomena (UAP). The agency also will host a media teleconference at the conclusion of the meeting.

<https://www.nasa.gov/press-release/nasa-provides-coverage-of-unidentified-anomalous-phenomena-meeting>

POC: Katherine Rohloff, [katherine.a.rohloff@nasa.gov](mailto:katherine.a.rohloff@nasa.gov)