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*"Rummaging in the government's attic"*

Description of document: National Aeronautics and Space Administration (NASA) emails from The NASA Office of Communications (OC) containing the word "UAP" or the phrase "Unidentified Aerial Phenomena," May 26, 2021 - July 18, 2021

Requested date: 25-June-2021

Interim release date: 10-August-2021

Final Release date: 30-November-2021

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Source of document: FOIA Request  
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National Aeronautics and Space Administration

**Headquarters**

Office of Communications  
300 E Street, SW  
Washington, DC 20546-0001



August 10, 2021

Reply to Attn of: MS5L9, FOIA Public Liaison

Via Email

REF: FOIA Case No. 21-HQ-F-00562

Dear Sir,

This is an interim release of the responsive records to your Freedom of Information Act (FOIA) request, dated and received by the National Aeronautics and Space Administration ((NASA) Headquarters (HQ) FOIA Office on June 25, 2021. Your request was assigned FOIA Case Number 21-HQ-F-00562 and seeks:

“A copy of each email in the email accounts of individuals in the NASA **Office of Communications** that contains the word UAP , based on an electronic search. I limit this request to the time period May 1, 2021 through the present.”

In an email, dated July 11, 2021, you agreed to narrow your request to only include emails from Associate Administrator of Communications Marc Etkind containing the “word UAP OR the phrase Unidentified Aerial Phenomena. A copy of that email is enclosed for your reference.

In response to your request the Information Technology Office conducted searches of Mr. Marc Etkind’s email inbox using the search terms UAP and Unidentified Aerial Phenomena. At this time the search of Mr. Etkind’s email inbox is complete. The search located 118 emails totaling 543 pages. We are releasing this first interim with 135 pages at this time.

We have reviewed the responsive record under the FOIA to determine whether they may be accessed under the FOIA’s provisions. Based on that review, this office is providing these initial responsive records in full.

### **Appeal Rights**

You have the right to appeal my action on this interim release for your FOIA request. Your appeal must be received within 90 calendar days of the date of this letter. Your appeal must be in writing and addressed to:

Administrator  
 ATTN: FOIA Appeals  
 NASA Headquarters  
 Executive Secretariat  
 MS 9R17  
 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 copies of your initial request, this correspondence, 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 also contain a brief statement of the reasons you believe this initial determination should be reversed.

### **Assistance and Dispute Resolution Services**

For further assistance and to discuss any aspect of your request, you may contact NASA's Chief FOIA Public Liaison, Stephanie Fox, via telephone at 202-358-1553 or via e-mail at [Stephanie.K.Fox@NASA.gov](mailto:Stephanie.K.Fox@NASA.gov). You may also send correspondence to Ms. Fox at the following address:

National Aeronautics and Space Administration (NASA)  
 Freedom of Information Act Unit  
 NASA Headquarters  
 Attn: Stephanie Fox  
 Chief FOIA Public Liaison  
 300 E Street, S.W., 5P32  
 Washington D.C. 20546  
 (Fax) 202- 358-4332

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  
 Email: [ogis@nara.gov](mailto:ogis@nara.gov)  
 Telephone: (202) 741-5770  
 Toll free: 1-877-684-6448  
 Fax: (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.

If you have any questions or would like to discuss this matter, please contact me at 202-358-0680 or [Mireya.P.Nyirenda@nasa.gov](mailto:Mireya.P.Nyirenda@nasa.gov).

Sincerely,

A handwritten signature in cursive script that reads "Mia Nyirenda".

Digitally signed by Mireya  
Nyirenda  
Date: 2021.08.10 10:25:41  
-04'00'

MIREYA P. NYIRENDA  
FOIA Public Liaison Officer



## **[EXTERNAL] NASA Morning Briefing for Thursday, May 27, 2021**

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From: Bulletin Intelligence <nasa@BulletinIntelligence.com>  
To: nasa@BulletinIntelligence.com  
Sent: May 27, 2021 6:57:13 AM EDT  
Received: May 27, 2021 6:57:23 AM EDT

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Thursday, May 27, 2021 7:00 AM EDT

### Editor's Note

To subscribe or unsubscribe, please visit: <http://nasa.bulletinintelligence.com/subscribe>  
<<https://gcc02.safelinks.protection.outlook.com/?url=https://mailview.bulletinintelligence.com/mailview.aspx?m=2021052702nasa&r=email-af44&l=002-893&t=c&data=04|01|marc.r.etkind@nasa.gov|03fb1710013d4f3b31de08d920fe33ef|7005d45845be48ae8140d43da96dd17b|0|0|637577098436946313|Unknown|TWfPbGZsb3d8eyJWljoimc4wLjAwMDAiLCJQljoiv2luMzliLCJBTil6lk1haWwiLCJXVCI6Mn0=|1000&sdata=sKKznslDKMkHP7ZsdiAGM3TUx2CvDcwCeMRVYzNj8dc=&reserved=0>>. A NASA email address is required.

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#### Top Stories

#### NASA Tests Techniques For X-59 Low-Boom Flights

##### Aviation Week

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"Validating the quiet supersonic performance of NASA's X-59 QueSST low-boom flight demonstrator will require precise measurement of the shock waves generated by the aircraft and how they propagate through the atmosphere to the ground. To that end, the agency has flight tested a visual navigation..."

#### Interview With NASA Administrator On Climate Change

##### Spectrum News 13 (FL)

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a7a&t=c&data=04|01|marc.r.etkind@nasa.gov|03fb1710013d4f3b31de08d920fe33ef|7005d45845be48ae8140d43da96dd17b|0|0|637577098436956271|Unknown|TWFPbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQljojV2luMzliLCJBTil6lk1haWwiLCJXVCI6Mn0=|1000&sdata=z5ZrMWaZ1GyD63Rn7QQqX5sPUsr3zHgFzVJBvJAE/Sc=&reserved=0> (5/26)  
"NASA is all about space exploration. But now its mission is expanding to tackle a growing problem on our planet. Spectrum News 13's Samantha Joe Roth speaks with NASA's new administrator about how the agency plans to tackle climate change."

## NASA, Industry Face Challenges In Free Flyer Development

Aviation Week

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"Questions surround NASA's strategy for transitioning human activities in low Earth orbit from the aging International Space Station (ISS) to multiple commercial free flyers, with potential industry partners curious about the agency's funding commitment. NASA plans a two-phase, multiyear effort to..."

## U.S Firms GM, Lockheed Aim For The Moon With Lunar Rover Venture

Reuters

<https://gcc02.safelinks.protection.outlook.com/?url=https://mailview.bulletinintelligence.com/mailview.aspx?m=2021052702nasa&r=email-af44&l=006-f8b&t=c&data=04|01|marc.r.etkind@nasa.gov|03fb1710013d4f3b31de08d920fe33ef|7005d45845be48ae8140d43da96dd17b|0|0|637577098436966228|Unknown|TWFPbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQljojV2luMzliLCJBTil6lk1haWwiLCJXVCI6Mn0=|1000&sdata=v6U7pgnBmwVS+LIJ2M+IO03bxlz6FC9KkihiGHly1N8=&reserved=0> (5/26, Staff)  
"U.S. firms General Motors (GM) and Lockheed Martin Corp will develop a vehicle to drive NASA astronauts around on the moon's surface, they said on Wednesday, competing for a space project that could also promote their brands on earth. GM and Lockheed said they would collaborate to make a battery-powered, autonomous Lunar Terrain Vehicle for NASA's Artemis lunar landing program, which aims to return U.S. astronauts to the moon as early as 2024."

## Capital Calls: Jeff Bezos And Elon Musk's D.C. Space Battle

Reuters

<https://gcc02.safelinks.protection.outlook.com/?url=https://mailview.bulletinintelligence.com/mailview.aspx?m=2021052702nasa&r=email-af44&l=007-193&t=c&data=04|01|marc.r.etkind@nasa.gov|03fb1710013d4f3b31de08d920fe33ef|7005d45845be48ae8140d43da96dd17b|0|0|637577098436966228|Unknown|TWFPbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQljojV2luMzliLCJBTil6lk1haWwiLCJXVCI6Mn0=|1000&sdata=otfLs55VJ2Oh2ycgLCrVtK5yEVEOfUJsdpiIT85gokc=&reserved=0> (5/26)  
"COUNTDOWN. A fight between Elon Musk and Jeff Bezos over whose rocket firm will dominate the space race is about egos as big as the universe. But a battle in Washington, D.C. over funding for the National Aeronautics and Space Administration shows the contest centers just as much on earthly influence. NASA wants to go to the moon by 2024, and Musk's SpaceX and Bezos' Blue Origin both thought they would win funding to do so. But in April, the agency made a surprise decision to pick only SpaceX, citing a budget shortfall and technical factors. Blue Origin challenged the choice as unfair and risky."

## Opinion: We Need To Put Science At The Center Of The UFO Question

Washington Post

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## SolarWinds Hack 'A Big Wakeup Call,' NASA's Human Spaceflight Chief Says

### SPACE

<<https://gcc02.safelinks.protection.outlook.com/?url=https://mailview.bulletinintelligence.com/mailview.aspx?m=2021052702nasa&r=email-af44&l=009-5bc&t=c&data=04|01|marc.r.etkind@nasa.gov|03fb1710013d4f3b31de08d920fe33ef|7005d45845be48ae8140d43da96dd17b|0|0|637577098436976185|Unknown|TWFPbGZsb3d8eyJWljoimc4wLjAwMDAiLCJQljoiv2luMzliLCJBTil6lk1haWwiLCJXVCi6Mn0=|1000&sdata=iBIFVPNQHVvB8gqKrQAW+277IOjdX1Wma/APey8sl0=&reserved=0>> (5/26, Wall) "The effects of the SolarWinds hack extend out into the final frontier. In December 2020, news broke that a cyberattack had breached the defenses of the U.S. Treasury Department and one branch of the Department of Commerce. ... That same month, The Washington Post reported that NASA was one of those nine infiltrated agencies. NASA leaders know that the space agency, with its huge stores of advanced technical data, is an inviting target for hackers and therefore take significant measures to head them off. Even still it was compromised, and that shook the agency up."

### Flight

## NASA Tests Techniques For X-59 Low-Boom Flights

### Aviation Week

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## Watch NASA Prepare For Our Flying-car Future

### Mashable

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these vehicles.”

## Earth

### Interview With NASA Administrator On Climate Change

Spectrum News 13 (FL)

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“NASA is all about space exploration. But now its mission is expanding to tackle a growing problem on our planet. Spectrum News 13’s Samantha Joe Roth speaks with NASA’s new administrator about how the agency plans to tackle climate change.”

### Lunar Eclipse: Photos Of The Super Flower Blood Moon May 26

Florida Today

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### Total Lunar Eclipse Turns Moon Red: Relive The ‘Super Flower Blood Moon’

CNET News

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### Stunning Lunar Eclipse Photos And Videos Show 2021 Supermoon

Newsweek

<<https://gcc02.safelinks.protection.outlook.com/?url=https://mailview.bulletinintelligence.com/mailview.aspx?m=2021052702nasa&r=email-af44&l=00f-9cd&t=c&data=04|01|marc.r.etkind@nasa.gov|03fb1710013d4f3b31de08d920fe33ef|7005d45845be48ae8140d43da96dd17b|0|0|637577098437006053|Unknown|TWFPbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQljojV2luMzliLCJBTiI6Ikh1aWwiLCJXVCi6Mn0=|1000&sdata=N8iw+I7LDOzH/V6p6ch+AzxkY5rgQ/sHiBYRTmVu/4=&reserved=0>> (5/26, Palmer) “Images and videos have been shared online of the rare ‘Super Flower Blood Moon’ which is appearing in the

night sky this week. ... The Earth's atmosphere then filters the light as it passes, giving the moon a dark reddish glow. According to NASA, the more dust or clouds in Earth's atmosphere there are during the eclipse, the redder the moon will appear."

#### Rare "Super Flower Blood Moon" Lunar Eclipse Captured In Stunning Photos From Around The World

CBS News

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#### Blood Moon Lunar Eclipse Enthralls Viewers

Fox News

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#### Rising Global Temperatures 'Inexorably Closer' To Climate Tipping Point

Reuters

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#### NASA To Design New 'Earth System Observatory' As Part Of National Push Against Climate Change

SPACE

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Gohd) "NASA will design new, Earth-focused missions to support our growing understanding of climate change and provide important information to those on Earth impacted by its effects, the agency announced May 24 as part of a new Biden administration plan to 'enhance climate resilience.' The Biden administration, prior to meeting with climate and homeland security team members on May 24, announced earlier that day in a White House release that it will support the development of NASA's new 'Earth System Observatory' — a series of next-generation climate data systems that will be used to better track climate change and its impact on communities around the world."

## Humans in Space

### NASA, Industry Face Challenges In Free Flyer Development

#### Aviation Week

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"Questions surround NASA's strategy for transitioning human activities in low Earth orbit from the aging International Space Station (ISS) to multiple commercial free flyers, with potential industry partners curious about the agency's funding commitment. NASA plans a two-phase, multiyear effort to..."

### This Is What It's Like To Walk In Space

#### CNN

<<https://gcc02.safelinks.protection.outlook.com/?url=https://mailview.bulletinintelligence.com/mailview.aspx?m=2021052702nasa&r=email-af44&l=015-2c9&t=c&data=04|01|marc.r.etkind@nasa.gov|03fb1710013d4f3b31de08d920fe33ef|7005d45845be48ae8140d43da96dd17b|0|0|637577098437025964|Unknown|TWFPbGZsb3d8eyJWljoimc4wLjAwMDAiLCJQljoiv2luMzliLCJBTil6lk1haWwiLCJXVCi6Mn0=|1000&sdata=DoARqUvayfMMUprH9BI1ww2MVkDB7KfBIJ2W92fp6Go=&reserved=0>> (5/26, Strickland) "When astronauts venture outside of the International Space Station to go on spacewalks, the most important thing they have to do is focus. This may sound simple, but imagine trying to focus on a memorized set of tasks while stepping out of an airlock and wearing a 300-pound spacesuit – with the glow of planet Earth and the sun and the dark void of the universe all around you. A tether connects you to the space station, and the absence of gravity keeps you from falling."

### The Astronauts On Challenger Made Up The Perfect Crew

#### Air & Space Smithsonian Magazine

<<https://gcc02.safelinks.protection.outlook.com/?url=https://mailview.bulletinintelligence.com/mailview.aspx?m=2021052702nasa&r=email-af44&l=016-1a8&t=c&data=04|01|marc.r.etkind@nasa.gov|03fb1710013d4f3b31de08d920fe33ef|7005d45845be48ae8140d43da96dd17b|0|0|637577098437035921|Unknown|TWFPbGZsb3d8eyJWljoimc4wLjAwMDAiLCJQljoiv2luMzliLCJBTil6lk1haWwiLCJXVCi6Mn0=|1000&sdata=uotDuHBAtHXoliKKbzbQ1ghDrZvVfVy9u0e10nrpg=&reserved=0>> (5/26, Tedeschi) "On the morning of January 28, 1986, NASA launched the space shuttle Challenger from the Kennedy Space Center in Florida. The crew included the first Jewish astronaut, the second Black astronaut, and NASA's first Teacher in Space, Christa McAuliffe. In his latest book, The Burning Blue, Kevin Cook documents the crew's many achievements—and the flawed decision-making that led to their deaths. Cook spoke with Air & Space senior associate editor Diane Tedeschi in April."

### NASA Is Sending A Batch Of Adorable Squids To The Space Station

SlashGear

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#### ISS Astronaut Snaps Super Flower Blood Moon And Lunar Eclipse From Orbit

CNET News

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#### Astronauts On Set: Space Station May Host Wave Of TV Shows And Films

New York Times

<<https://gcc02.safelinks.protection.outlook.com/?url=https://mailview.bulletinintelligence.com/mailview.aspx?m=2021052702nasa&r=email-af44&l=019-b5a&t=c&data=04|01|marc.r.etkind@nasa.gov|03fb1710013d4f3b31de08d920fe33ef|7005d45845be48ae8140d43da96dd17b|0|0|637577098437045878|Unknown|TWfPbGZsb3d8eyJWljoimc4wLjAwMDAiLCJQljoiv2luMzliLCJBTil6lk1haWwiLCJXVCI6Mn0=|1000&sdata=Bzv5MyQtmYg3o3IN0gdBWIRQPUzbkGDaPCcTWrt7614=&reserved=0>> (5/26, Chang) "Who wants to be an astronaut? If the answer is you, there's a reality TV show, appropriately titled 'Who Wants to Be an Astronaut?', that you ought to apply for. The Discovery Channel is seeking to cast about 10 would-be astronauts to compete during the series's eight-episode run next year for a seat on a real-life trip to the International Space Station, followed by live coverage of the launch of the winner on a SpaceX rocket."

#### SpaceX Cargo Mission To Carry Water Bears, Baby Squids To Space Station

UPI

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#### NASA Astronaut Peggy Whitson Joining Private Mission To ISS

KTTLA-TV Los Angeles

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"Retired NASA astronaut Peggy Whitson is dusting off her spacesuit for another trip to space. But this time, she's flying private."

Moon to Mars

U.S Firms GM, Lockheed Aim For The Moon With Lunar Rover Venture

Reuters

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"U.S. firms General Motors (GM) and Lockheed Martin Corp will develop a vehicle to drive NASA astronauts around on the moon's surface, they said on Wednesday, competing for a space project that could also promote their brands on earth. GM and Lockheed said they would collaborate to make a battery-powered, autonomous Lunar Terrain Vehicle for NASA's Artemis lunar landing program, which aims to return U.S. astronauts to the moon as early as 2024."

Lockheed Martin And GM Are Working On An Electric Moon Buggy

The Verge

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"Lockheed Martin and General Motors unveiled plans on Wednesday to build an autonomous buggy-like vehicle that future astronauts can use to zip around the surface of the Moon. The two companies collaborated to pitch a conceptual Lunar Terrain Vehicle to NASA's Artemis program, a Moon exploration campaign that calls for various robots, vehicles, and scientific bases to be planted on the lunar surface within the next decade."

Lockheed Martin And GM Partner To Develop New Moon Buggy For NASA Astronauts And Cargo

CNBC

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"Lockheed Martin and General Motors are partnering to develop a new type of lunar vehicle for NASA to use during its upcoming Artemis missions to the moon, the companies announced Wednesday. 'Surface mobility is critical to enable and sustain long-term exploration of the lunar surface. These next-generation rovers will dramatically extend the range of astronauts,' Lockheed Martin executive vice president Rick Ambrose said in a statement."

## GM And Lockheed Martin Are Making A Self-driving Moon Buggy For NASA

SlashGear

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## Lockheed Martin And GM Partner Up To Build Next-gen Lunar Rover

New Atlas

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## Lockheed Martin And GM Planning Self-Driving Rovers For NASA's Return To The Moon

Forbes

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## Lockheed, General Motors Team Up On Lunar Rover Plan

UPI

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plan a fleet of robotic and piloted rovers, which would move farther than Apollo's three so-called moon buggies, according to a news release. The farthest distance an Apollo rover traveled was about 4.7 miles from the landing site."

## GM, Lockheed Team Up On Potential New-Era Moon Rover For NASA

Bloomberg

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## GM, Lockheed Martin Developing A Next-generation Lunar Rover

NBC News

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## Lockheed Martin, GM Team Up To Build New Astronaut Moon Buggy

SPACE

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## GM's Newest Vehicle: Off-road, Self-driving Rover For Moon

AP

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vehicles — for the moon. The project announced Wednesday is still in the early stages and has yet to score any NASA money. But the goal is to design light yet rugged vehicles that will travel farther and faster than the lunar rovers that carried NASA's Apollo astronauts in the early 1970s, the companies said."

## GM Joins Lockheed Martin To Design A Moon Buggy For NASA Astronauts

### CNET News

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## NASA's VIPER Rover To Look For Water, Resources On Moon

### Fox News

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## 'Marscapes' Plans Landscape Art Of Red Planet In Kickstarter Project

### SPACE

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## Op-Ed | Artemis 2026: Celebrating America's 250th With The Next Humans On The Moon

### Space News

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Bender) "On July 4, 2026, the United States will celebrate the 250th anniversary of its independence. America should commemorate this historical milestone in 2026 by landing humans on the moon for the first time since 1972. Sending humanity back to the moon in 2026 is not only technically feasible, but it also fits squarely in the projected timeline for NASA's already existing plan to return astronauts to the lunar surface — the Artemis program."

#### Hawley, Sanders Decry \$10B 'Bailout' To Jeff Bezos Tucked Into Bill To Rebuff China

Fox Business

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0e4&t=c&data=04|01|marc.r.etkind@nasa.gov|03fb1710013d4f3b31de08d920fe33ef|7005d45845be48ae8140d43da96dd17b|0|0|637577098437115572|Unknown|TWFPbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQIjoiV2luMzliLCJBTiI6Ikh1h1aWwiLCJXVCi6Mn0=|1000&sdata=cNv6wjR4GXsCCof1zIQAOiJw/yaSJi66XGAPIHE93s=&reserved=0> (5/26)

"Former Connecticut Senator Joe Lieberman (I) provides insight into the Senate Republicans proposing a counteroffer on Biden's infrastructure plan. Sens. Josh Hawley and Bernie Sanders are speaking out against a \$10 billion corporate 'bailout' to Blue Origin, a space flight company founded by Amazon's Jeff Bezos. ... The amendment would come after the company lost out on a multibillion-dollar NASA contract to SpaceX, run by Elon Musk. It would provide additional funding for NASA to carry out the Human Landing System program, and direct NASA to have two lander programs, giving Blue Origin another shot."

#### Capital Calls: Jeff Bezos And Elon Musk's D.C. Space Battle

Reuters

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0ce&t=c&data=04|01|marc.r.etkind@nasa.gov|03fb1710013d4f3b31de08d920fe33ef|7005d45845be48ae8140d43da96dd17b|0|0|637577098437125530|Unknown|TWFPbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQIjoiV2luMzliLCJBTiI6Ikh1h1aWwiLCJXVCi6Mn0=|1000&sdata=uzJkQIW1Rsy+FH+bxrN0GwHTKJs5E7zWXtOqnKHZ/cs=&reserved=0> (5/26)

"COUNTDOWN. A fight between Elon Musk and Jeff Bezos over whose rocket firm will dominate the space race is about egos as big as the universe. But a battle in Washington, D.C. over funding for the National Aeronautics and Space Administration shows the contest centers just as much on earthly influence. NASA wants to go to the moon by 2024, and Musk's SpaceX and Bezos' Blue Origin both thought they would win funding to do so. But in April, the agency made a surprise decision to pick only SpaceX, citing a budget shortfall and technical factors. Blue Origin challenged the choice as unfair and risky."

#### Bernie Sanders Is Fighting A Massive 'Bailout' To Jeff Bezos' Space Company

Vice

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912&t=c&data=04|01|marc.r.etkind@nasa.gov|03fb1710013d4f3b31de08d920fe33ef|7005d45845be48ae8140d43da96dd17b|0|0|637577098437125530|Unknown|TWFPbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQIjoiV2luMzliLCJBTiI6Ikh1h1aWwiLCJXVCi6Mn0=|1000&sdata=GzGdr2OQDTfo0a1+Nrbqn5fhPW0B9SHkfVS8ZF14LU=&reserved=0> (5/26,

Ferreira) "The icy rivalry between space companies SpaceX and Blue Origin, which are owned respectively by billionaires Elon Musk and Jeff Bezos, has now spilled into the US Senate. Senator Bernie Sanders (I-Vermont) introduced an amendment to a funding bill on Monday seeking to stop a plan to secure \$10 billion in government funding, some of which would likely go to Blue Origin to provide redundancy for a project contracted to SpaceX last month. Sanders called the funding 'the multibillion dollar Bezos Bailout' in his amendment. Though Musk and Bezos have traded personal taunts before, their feud has been amplified since April by NASA's decision to award SpaceX a prestigious \$2.9 billion contract to build a 'human landing system' for the Artemis program, which aims to return astronauts to the surface of the Moon this decade."

## South Korea Is The Latest Nation To Join NASA's Artemis Accords

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## NASA's Artemis Mission

WESH-TV Orlando (FL)

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## China's First Mars Rover Is Finally Cruising

BGR

<<https://gcc02.safelinks.protection.outlook.com/?url=https://mailview.bulletinintelligence.com/mailview.aspx?m=2021052702nasa&r=email-af44&l=030-8c4&t=c&data=04|01|marc.r.etkind@nasa.gov|03fb1710013d4f3b31de08d920fe33ef|7005d45845be48ae8140d43da96dd17b|0|0|637577098437135488|Unknown|TWFPbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQIjojV2luMzliLCJBTiI6lk1haWwiLCJXVCi6Mn0=|1000&sdata=geOb3ayY2URWZ3Cjnxk4M821v7LRvAtj/ZVWMxcxapg=&reserved=0>> (5/26, Wehner) "On the list of big surprises in space science over the past decade, the fact that China has rapidly become one of the major players in space exploration has to be near the top. The country, which watched for decades as the United States, Russia (and formerly, the Soviet Union), and European countries launched ever more advanced orbiters, landers, and rovers, has caught up to and in some cases surpassed its peers by completing some very difficult missions. The latest happens to be on Mars, where the China National Space Administration sent a trio of high-tech machines last year."

## Solar System and Beyond

## Black Holes, Aliens, Multiverse & Mars: Space TED Talks You Need To Watch

SPACE

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Earth. Not only can asteroids shed light on the beginnings of the solar system, they also pose a massive risk to our safety. ... Carrie Nugent is part of the team that uses NASA's NEOWISE telescope, a very valuable telescope that was pulled out of retirement and reprogrammed to search the skies for asteroids and catalog them."

#### Jupiter's Ocean Moon Europa May Have Deep-sea Volcanoes

SPACE

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#### Europa May Have Active Volcanoes On Its Ocean Floor

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Space Tech

#### Russia To Launch Nuclear-powered Spaceship To The Moon, On To Venus, Then Jupiter

The Hill

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Various

#### Opinion: We Need To Put Science At The Center Of The UFO Question

Washington Post

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16b&t=c&data=04|01|marc.r.etkind@nasa.gov|03fb1710013d4f3b31de08d920fe33ef|7005d45845be48ae8140d43da96dd17b|0|0|637577098437165359|Unknown|TWFPbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQljojV2luMzliLCJBTiI6lk1haWwiLCJXVCi6Mn0=|1000&sdata=XjRj5NFtbtLEZqbEchNIBqemZdRTxqkpAMabZiA7JRw=&reserved=0> (5/26)

“Ravi Kopparapu is a planetary scientist at NASA Goddard Space Flight Center. Jacob Haqq-Misra is a research scientist at the Blue Marble Space Institute of Science. With a government report due in June on unidentified aerial phenomena (UAP) and a recent ‘60 Minutes’ story on U.S. Navy pilots’ sightings and videos of mysterious images, prominent people in politics, the military and national intelligence are finally asking: What are we looking at?”

## SolarWinds Hack ‘A Big Wakeup Call,’ NASA’s Human Spaceflight Chief Says

### SPACE

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6ce&t=c&data=04|01|marc.r.etkind@nasa.gov|03fb1710013d4f3b31de08d920fe33ef|7005d45845be48ae8140d43da96dd17b|0|0|637577098437165359|Unknown|TWFPbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQljojV2luMzliLCJBTiI6lk1haWwiLCJXVCi6Mn0=|1000&sdata=75MsRgS9ybNRnWCcoyaVxWiWnjS1mPfnV8sVXh25vLw=&reserved=0> (5/26,

Wall) “The effects of the SolarWinds hack extend out into the final frontier. In December 2020, news broke that a cyberattack had breached the defenses of the U.S. Treasury Department and one branch of the Department of Commerce. ... That same month, The Washington Post reported that NASA was one of those nine infiltrated agencies. NASA leaders know that the space agency, with its huge stores of advanced technical data, is an inviting target for hackers and therefore take significant measures to head them off. Even still it was compromised, and that shook the agency up.”

## New Documentary Explores ‘Star Trek,’ Nichelle Nichols And NASA’s 1970s Astronaut Search

### SPACE

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c87&t=c&data=04|01|marc.r.etkind@nasa.gov|03fb1710013d4f3b31de08d920fe33ef|7005d45845be48ae8140d43da96dd17b|0|0|637577098437165359|Unknown|TWFPbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQljojV2luMzliLCJBTiI6lk1haWwiLCJXVCi6Mn0=|1000&sdata=p9/bKDF4INCN/KDGArlDCs6kDV3fO4AEF3NpPpnhsNM=&reserved=0> (5/26,

Howell) “In the 1970s, ‘Star Trek’ actor Nichelle Nichols saw an astronaut corps lacking in diversity and did what she could to change it. The story of how Nichols went about it – and the various people she inspired – is told in the new documentary ‘Woman In Motion: Nichelle Nichols, Star Trek and the Remaking of NASA.’”

## Nichelle Nichols’ New NASA Documentary Is Romantic And Unflinching

### io9

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e08&t=c&data=04|01|marc.r.etkind@nasa.gov|03fb1710013d4f3b31de08d920fe33ef|7005d45845be48ae8140d43da96dd17b|0|0|637577098437175311|Unknown|TWFPbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQljojV2luMzliLCJBTiI6lk1haWwiLCJXVCi6Mn0=|1000&sdata=IhUV6wWfLojbO6tIJGyyNHIFXwYZ/6h8B02ULhXdYI=&reserved=0> (5/26)

“Early on in the new documentary Woman in Motion, Star Trek legend Nichelle Nichols discusses the idea of the blurred lines between the fantastical and the real in her job as Lieutenant Uhura, a character in equal parts history-making and yet also held back by the harsh realities of the era her character was made in. The documentary itself, going far beyond that 23rd century future and all the way back into our own history, is a similar adventure. Directed by The Highwaymen’s Todd Thompson—and now coming to Paramount+ after a limited theatrical debut earlier this year—Woman in Motion: Nichelle Nichols, Star Trek and the Remaking of NASA showcases a fascinating balancing



act.”

## NASA Projects Over Budget And Behind Schedule, According To GAO Report

Florida Today

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Other

## Falcon 9 Completes Its 100th Successful Flight In A Row [Updated]

Ars Technica

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## SpaceX Is About To Hit A Ridiculous Milestone

BGR

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## SpaceX Bolsters Starlink Network With 60 More Satellites

Aviation Week

<<https://gcc02.safelinks.protection.outlook.com/?url=https://mailview.bulletinintelligence.com/mailview.aspx?m=2021052702nasa&r=email-af44&l=03c-2bf&t=c&data=04|01|marc.r.etkind@nasa.gov|03fb1710013d4f3b31de08d920fe33ef|7005d45845be48ae8140d43da96dd17b|0|0|637577098437185266|Unknown|TWFPbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQljojV2luMzliLCJBTiI6lk1haWwiLCJXVCi6Mn0=|1000&sdata=YYHw8nbiEdTDkgdrk5mLdc618HAFkilAmgQQXqmfQko=&reserved=0>> (5/26) “A SpaceX Falcon 9 rocket delivered the 29th batch of Starlink satellites into orbit on May 26 as the company expanded

beta trials of its high-speed internet service to Belgium and the Netherlands. More than 500,000 people have placed orders or put down deposits to try the service...”

## SpaceX Launches More Starlink Satellites As Orders Reach Half A Million

Florida Today

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0cb&t=c&data=04|01|marc.r.etkind@nasa.gov|03fb1710013d4f3b31de08d920fe33ef|7005d45845be48ae8140d43da96dd17b|0|0|637577098437195220|Unknown|TWFPbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQljojV2luMzliLCJBTil6lk1haWwiLCJXVCi6Mn0=|1000&sdata=P9KubtD3U6cdiFvvgzbPiGI/fJXVxoKI8o+yIVpykcg=&reserved=0> (5/26, Kelly) “A SpaceX Falcon 9 rocket helped deliver another batch of 60 Starlink satellites to low-Earth orbit Wednesday, further advancing the internet-beaming constellation that has already secured half a million pre-orders. ‘To date, over half a million people have placed an order or put down a deposit for Starlink,’ Youmei Zhou, a SpaceX propulsion engineer, said during a webcast leading up to the 2:59 p.m. launch from Cape Canaveral Space Force Station.”

## SpaceX Launches And Lands Falcon 9 Rocket For 85th Time

Bloomberg

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a47&t=c&data=04|01|marc.r.etkind@nasa.gov|03fb1710013d4f3b31de08d920fe33ef|7005d45845be48ae8140d43da96dd17b|0|0|637577098437195220|Unknown|TWFPbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQljojV2luMzliLCJBTil6lk1haWwiLCJXVCi6Mn0=|1000&sdata=9vKQ3frNWT5f3F/F6KoRc0XY64RxEx55RVcLwFh6bHTg=&reserved=0> (5/26)

“SpaceX Launches and Lands Falcon 9 Rocket for 85th Time”

## Viasat Threatens To Sue FCC Over SpaceX’s Starlink Plan

Law360

<[https://gcc02.safelinks.protection.outlook.com/?url=https://mailview.bulletinintelligence.com/mailview.aspx?m=2021052702nasa&r=email-af44&l=03f-](https://gcc02.safelinks.protection.outlook.com/?url=https://mailview.bulletinintelligence.com/mailview.aspx?m=2021052702nasa&r=email-af44&l=03f-7a3&t=c&data=04|01|marc.r.etkind@nasa.gov|03fb1710013d4f3b31de08d920fe33ef|7005d45845be48ae8140d43da96dd17b|0|0|637577098437205176|Unknown|TWFPbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQljojV2luMzliLCJBTil6lk1haWwiLCJXVCi6Mn0=|1000&sdata=uQclFcFCiCnkATUYhLOWr7eq50p2f8JMiFGWRax8ttw=&reserved=0)

7a3&t=c&data=04|01|marc.r.etkind@nasa.gov|03fb1710013d4f3b31de08d920fe33ef|7005d45845be48ae8140d43da96dd17b|0|0|637577098437205176|Unknown|TWFPbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQljojV2luMzliLCJBTil6lk1haWwiLCJXVCi6Mn0=|1000&sdata=uQclFcFCiCnkATUYhLOWr7eq50p2f8JMiFGWRax8ttw=&reserved=0> (5/26)

“Satellite provider Viasat Inc. has asked the Federal Communications Commission to halt rival SpaceX’s updating of its Starlink satellite fleet, saying the proposed changes pose environmental concerns that the FCC didn’t adequately consider and that Viasat plans to challenge in federal court. In a recent filing, Viasat said the FCC should put SpaceX’s plan on ice while the D.C. Circuit assesses whether the fleet of low-Earth orbit broadband satellites will cause harmful light pollution and dangerous space debris.”

## Is SpaceX’s Starlink Mega Constellation An Environmental Problem? The FCC Says ‘No’

Forbes

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6eb&t=c&data=04|01|marc.r.etkind@nasa.gov|03fb1710013d4f3b31de08d920fe33ef|7005d45845be48ae8140d43da96dd17b|0|0|637577098437205176|Unknown|TWFPbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQljojV2luMzliLCJBTil6lk1haWwiLCJXVCi6Mn0=|1000&sdata=VCxw7JQzuYBxi4vx3kKU5LjFLixG1VAtAYuX6PUBDFY=&reserved=0> (5/26,

O’Callaghan) “The Federal Communications Commission (FCC) has said SpaceX’s Starlink constellation does not require an environmental review, after concerns were raised about its impact on the night sky and the atmosphere. In May 2019, SpaceX began the launch and deployment of its Starlink constellation, a planned group of up to 42,000

satellites in orbit designed to beam the internet to Earth from space.”

## Starlink V1.0 L28 Mission Completes First “Shell” Of Satellites For Worldwide Coverage

NASA Space Flight

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## EU Court Rejects OHB Bid To Suspend European Space Agency Decisions

Reuters

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## Editorial: Flight Puts Virgin, NM In Space Race

Albuquerque (NM) Journal

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## **[EXTERNAL] NASA Morning Briefing for Monday, June 21, 2021**

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### Editor's Note

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Take 2: Spacewalking Astronauts Install New Solar Panel

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NASA 'Keeping Eye' On Jeff Bezos And Other Space Astronaut Billionaires

Fox Business

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Funding For Bezos Space Company Fails To Launch In House

Wall Street Journal

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96dd17b|0|0|637598698658382911|Unknown|TWFPbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQljojV2luMzliLCJBTiI6lk1haWwiLCJXVCi6Mn0=|1000&sdata=8EhWHjWN0jotivzNhGhS1PnWwCbU9rmLqxVbh6glJL0=&reserved=0> (6/18, Rubin) "HOUSE THROWS UP ROADBLOCKS to funding for Jeff Bezos's Blue Origin space exploration company that was approved as part of the Senate's bipartisan China competition legislation last week. Members from both parties made clear the \$10 billion authorization, pushed by Washington Democratic Sen. Maria Cantwell, for a second moon lander contract (Elon Musk's SpaceX won the first contract earlier this year, while Blue Origin was one of two runners-up) was a nonstarter for the House's version of science and innovation legislation."

#### Rep. Waltz Reacts To Latest 'Woke' NASA Ad

##### Fox News

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"MICHAEL WALTZ: More diversity in space than our astronauts, great. What we need to be focused on is getting more Americans into space because right now the Chinese are passing us. They are kicking our butts up there, and it's a real problem. Brian, more launches, more Chinese launches in space last year than the rest of the world combined, including the United States. As you said, just put their own astronauts in their own space station, which is brand new and being built, ours is 30 years old and decrepit."

#### If You Care About The US, Root For China To Score A Win In Space

##### The Hill

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"It can be argued that members of Congress and presidents sometimes appear to put their personal re-elections before all else — occasionally, this happens even at the expense of the long-term welfare of America. For politicians who view their lives and personal advancement in increments of two-, four- and six-year windows, tangible, immediate vote-influencing issues tend to dominate their policy decisions. ... The Biden administration and many members of Congress appear to have placed American preeminence in space back on the rear burner, or they've knocked it off the stove entirely. They're seeking to allocate more of NASA's space budget to climate change and other issues."

##### Flight

#### NASA, DLR Show SAFs Can Reduce Contrails' Climate Impact

##### Aviation Week

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"Cleaner-burning sustainable fuels can reduce aircraft contrails' cloudiness and their contribution to aviation's climate impact, joint research by NASA and German aerospace center DLR has concluded. Burning low-aromatic sustainable aviation fuel (SAF) can result in a 50-70% reduction in soot..."

## New NASA Study Finds Sustainable Aviation Fuels Help Eliminate Contrails

SlashGear

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Earth

## Nasa Warned The Earth Is Trapping Twice As Much Heat As In 2005 — A Pace That's 'Unprecedented'

Insider

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## Earth's Atmosphere Trapping 'Unprecedented' Amount Of Heat: NASA, NOAA Report

Fox News

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Humans in Space

## Take 2: Spacewalking Astronauts Install New Solar Panel

AP

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haWwiLCJXVCi6Mn0=|1000&sdata=rKt1cSXVVcUFk/ARBlcrC+IAR7V7GXsh5UutKiQkm4=&reserved=0> (6/20, Dunn) "Spacewalking astronauts equipped the International Space Station with the first in a series of powerful new solar panels Sunday, overcoming suit problems and other obstacles with muscle and persistence. It took two spacewalks for French astronaut Thomas Pesquet and NASA astronaut Shane Kimbrough to install and unfurl the panel to its full 63 feet (19 meters) in length."

#### Thousands Tune In As Astronauts Install A New Solar Array On The International Space Station

Forbes

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7bd&t=c&data=04|01|marc.r.etkind@nasa.gov|364888fa168f4085eeb608d934a3651c|7005d45845be48ae8140d43da96dd17b|0|0|637598698658422740|Unknown|TWFPbGZsb3d8eyJWljoimC4wLjAwMDAiLCJQljoiv2luMzliLCJBTil6lk1haWwiLCJXVCi6Mn0=|1000&sdata=/BGX1VsuSZxVYgmrq7Mtb6MHwDBpq0j2+rNxtbuMHsE=&reserved=0> (6/20, Porterfield) "Space enthusiasts across the world watched as two astronauts installed a new solar array onto the International Space Station, as part of a project to upgrade the station's ability to harness the sun's energy to provide electricity for the astronauts working and living on the station. Starting early Sunday morning, French European Space Agency astronaut Thomas Pesquet and American NASA astronaut Shane Kimbrough set up a new roll-out solar array, or an arrangement of multiple solar panels that run on a system, designed specially for the ISS in a space walk that was streamed live online."

#### Spacewalkers Unfurl First Of Six New Space Station Solar Arrays

Spaceflight Now

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9e2&t=c&data=04|01|marc.r.etkind@nasa.gov|364888fa168f4085eeb608d934a3651c|7005d45845be48ae8140d43da96dd17b|0|0|637598698658422740|Unknown|TWFPbGZsb3d8eyJWljoimC4wLjAwMDAiLCJQljoiv2luMzliLCJBTil6lk1haWwiLCJXVCi6Mn0=|1000&sdata=0DEqyHQBj7Bd5t+Hb8X/1Fx+Lun4YXA50D8uAwuywGA=&reserved=0> (6/20, Clark) "Astronauts Thomas Pesquet and Shane Kimbrough floated outside the International Space Station Sunday to deploy and unroll a new solar array blanket after encountering spacesuit glitches and an interference issue during a previous excursion Wednesday. Pesquet and Kimbrough switched their spacesuits to battery power at 7:42 a.m. EDT (1142 GMT) Sunday to begin a planned six-and-a-half hour spacewalk."

#### ESA/NASA Complete ISS Spacewalk To Install First New Solar Array

NASA Space Flight

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eb5&t=c&data=04|01|marc.r.etkind@nasa.gov|364888fa168f4085eeb608d934a3651c|7005d45845be48ae8140d43da96dd17b|0|0|637598698658432698|Unknown|TWFPbGZsb3d8eyJWljoimC4wLjAwMDAiLCJQljoiv2luMzliLCJBTil6lk1haWwiLCJXVCi6Mn0=|1000&sdata=GB4ImHiU3Xi6jUGMHL8O3Pa41SXUhA/1pW1VKqqRI50=&reserved=0> (6/20, Harding) "Two astronauts went outside the International Space Station (ISS) to complete installation of the first of six new Boeing-built solar arrays — part of a program to increase the station's electrical power generation capacity as its science and research demands increase and future expansion plans continue. The Extravehicular Activity (EVA) — officially known as US EVA-75 — began at 11:42 UTC / 07:42 EDT when Thomas Pesquet from the European Space Agency (ESA) and Shane Kimbrough from NASA took their spacesuits to battery power before exiting the Quest Airlock to begin their work."

#### Astronauts Install New Solar Panels In 6-hour Spacewalk On International Space Station

## CNN

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### Astronauts On Spacewalk Deploy First Roll-Out Solar Array To Boost Power For Station

## SPACE

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### In Second Attempt, Spacewalkers Successfully Deploy Balky Solar Array

## CBS News

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### Rocket Report: China Launches Crew Mission, SpaceX Runs Into Road Troubles

## Ars Technica

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ranks of reusable launch customers.”

Will Jeff Bezos Be An Astronaut When He Travels Into Space On A Blue Origin Flight? It's Complicated, Because Experts Say There's Still A Debate About Where Space Begins.

Insider

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NASA ‘Keeping Eye’ On Jeff Bezos And Other Space Astronaut Billionaires

Fox Business

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NASA Is Keeping A Watchful Eye On Jeff Bezos And Other Billionaires Competing In The Space Race, According To The Agency’s Chief

Insider

<<https://gcc02.safelinks.protection.outlook.com/?url=https://mailview.bulletinintelligence.com/mailview.aspx?m=2021062102nasa&r=email-dece&l=016-d14&t=c&data=04|01|marc.r.etkind@nasa.gov|364888fa168f4085eeb608d934a3651c|7005d45845be48ae8140d43da96dd17b|0|0|637598698658462567|Unknown|TWFPbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQljojV2luMzliLCJBTiI6lk1haWwiLCJXVCi6Mn0=|1000&sdata=EVWR0c7OqZOtCbSAwjTBUhw1jg+l2alxuAjl/N18jFY=&reserved=0>> (6/20, Tayeb) “It’s only weeks until Amazon CEO Jeff Bezos blasts off into space with his brother, Mark, and an unidentified passenger who paid \$28 million for a seat on Blue Origin’s, New Shepherd spacecraft. But in an interview with Fox Business, NASA said it had a message for the billionaires competing in a race to space: it’s not going to be the Wild West for those looking to travel there.”

Boeing Starliner Is On Track For Its July Test Flight

SlashGear

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test is a critical portion of the testing regime to clear Starliner to carry astronauts to and from the ISS in the future. Recently, teams at the Starliner production facility at the NASA Kennedy Space Center in Florida began to fuel the Starliner crew module and service module in preparation for the OFT-2 launch on Friday, July 30."

## Tens Of Thousands Sign Petition To Stop Jeff Bezos From Returning To Earth

NPR

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## ISS Spacewalk

Spectrum News 13 (FL)

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## ISS Spacewalk

KABC-TV Los Angeles

<<https://gcc02.safelinks.protection.outlook.com/?url=https://mailview.bulletinintelligence.com/mailview.aspx?m=2021062102nasa&r=email-dece&l=01a-6e4&t=c&data=04|01|marc.r.etkind@nasa.gov|364888fa168f4085eeb608d934a3651c|7005d45845be48ae8140d43da96dd17b|0|0|637598698658482480|Unknown|TWFPbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQljojV2luMzliLCJBTiI6lk1haWwiLCJXVCi6Mn0=|1000&sdata=vagqLyuYSPxBpQRMs+we00eE/QGp1dzW4ZTNnB+LC6U=&reserved=0>> (6/20) "It is a busy morning at the International Space Station. Here are live pictures of a spacewalk happening now."

## Moon to Mars

## Funding For Bezos Space Company Fails To Launch In House

Wall Street Journal

<<https://gcc02.safelinks.protection.outlook.com/?url=https://mailview.bulletinintelligence.com/mailview.aspx?m=2021062102nasa&r=email-dece&l=01b-ae7&t=c&data=04|01|marc.r.etkind@nasa.gov|364888fa168f4085eeb608d934a3651c|7005d45845be48ae8140d43da96dd17b|0|0|637598698658492438|Unknown|TWFPbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQljojV2luMzliLCJBTiI6lk1haWwiLCJXVCi6Mn0=|1000&sdata=84AAmwSiU9OG3yLKAGXvDTpw6K6sdBENAJUerFI9gEk=&reserved=0>> (6/18, Rubin) "HOUSE THROWS UP ROADBLOCKS to funding for Jeff Bezos's Blue Origin space exploration company that was approved as part of the Senate's bipartisan China competition legislation last week. Members from both parties made clear the \$10 billion authorization, pushed by Washington Democratic Sen. Maria Cantwell, for a second moon



lander contract (Elon Musk's SpaceX won the first contract earlier this year, while Blue Origin was one of two runners-up) was a nonstarter for the House's version of science and innovation legislation."

## Space Agencies Are Learning How To Make Food On Mars And The Moon

CNBC

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## Turkey Aims To Send Rocket To Moon In Three Years, Land Lunar Rover By 2030

SPACE

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## NASA Will Send A Mannequin On A Space Mission. Here's How You Can Help Name It.

Florida Today

<<https://gcc02.safelinks.protection.outlook.com/?url=https://mailview.bulletinintelligence.com/mailview.aspx?m=2021062102nasa&r=email-dece&l=01e-cd2&t=c&data=04|01|marc.r.etkind@nasa.gov|364888fa168f4085eeb608d934a3651c|7005d45845be48ae8140d43da96dd17b|0|0|637598698658502393|Unknown|TWFPbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQIjoiV2luMzliLCJBTiI6Ikl1haWwiLCJXVCi6Mn0=|1000&sdata=rRZnEjcXGaYRGLikQzYl8rEtwrzCHGiCw2kFYRfPe+w=&reserved=0>> (6/18, Miranda) "NASA will send a mannequin around the moon, and you can help name it. Slated to launch in November, a mannequin will be on board an uncrewed flight test of the Space Launch System and the Orion spacecraft, NASA said in a news release. Its mission? Collect data to help astronauts on trips, such as the Artemis II spaceflight scheduled for 2023. The mannequin is designed to resemble the human body and is used in training for emergency rescues, medical education and research."

## NASA Needs Your Help Naming The Dummy It's Sending To The Moon

CNET News

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081&t=c&data=04|01|marc.r.etkind@nasa.gov|364888fa168f4085eeb608d934a3651c|7005d45845be48ae8140d43da96dd17b|0|0|637598698658512348|Unknown|TWFPbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQljoiv2luMzliLCJBTil6lk1haWwiLCJXVCi6Mn0=|1000&sdata=rYOa1PD8q1K4gJjeYKx9dQNdirO+YUCOrqBqHG+aMto=&reserved=0> (6/18, Kooser) "NASA's Artemis I mission to send an Orion spacecraft around the moon is getting more real by the moment. First, NASA assembled its massive SLS rocket. Now the mission's non-human passenger, or 'moonikin,' needs a name. The space agency announced a Name the Artemis Moonikin Challenge to decide what the man-shaped manikin will be called. The uncrewed flight test is targeting takeoff for later this year. The manikin will allow NASA to collect data on how the journey might impact a real human body."

## Solar System and Beyond

### NASA's Sudden Interest In Venus Is All About Climate Change

#### The Hill

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### Europa Volcanism & Interior Heating Modeled In Detail, Offers Research Targets For Upcoming Missions

#### NASA Space Flight

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### NASA Struggles To Fix A Hubble Space Telescope Computer Glitch

#### Engadget

<<https://gcc02.safelinks.protection.outlook.com/?url=https://mailview.bulletinintelligence.com/mailview.aspx?m=2021062102nasa&r=email-dece&l=022-e41&t=c&data=04|01|marc.r.etkind@nasa.gov|364888fa168f4085eeb608d934a3651c|7005d45845be48ae8140d43da96dd17b|0|0|637598698658522305|Unknown|TWFPbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQljoiv2luMzliLCJBTil6lk1haWwiLCJXVCi6Mn0=|1000&sdata=hamfxBOvh6J2JoQfA9Des0DzjOMVI8q2/uCfE15S+sA=&reserved=0>> (6/19, Fingas) "The Hubble Space Telescope has been showing its age for a while, but a new problem is proving to be especially frustrating. As the AP reports, NASA has spent nearly a week (as of this writing) trying to fix a glitch in Hubble's payload computer. The system broke down on June 13th, and the operations team had no success either restarting the computer on the 14th or switching to a backup memory module. The agency also failed in repeated

attempts with both modules on the evening of June 17th.”

## NASA Is Working To Restore Hubble Space Telescope Operations

SlashGear

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## Computer Problem Takes Hubble Offline

Space News

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## Computer Glitch Sends Aging NASA Hubble Space Telescope Into Safe Mode

CNET News

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## Intelligent Life Probably Exists On Distant Planets — Even If We Can’t Make Contact, Astrophysicist Says

Washington Post

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have weighed in on these sightings, ... Beginning in the early 1960s, scientists have tried to calculate the odds of advanced extraterrestrial life. In 1961, researchers at the NASA-funded search for extraterrestrial intelligence (SETI) developed the 'Drake Equation' to estimate how many civilizations in the Milky Way might evolve to develop the technology to emit detectable radio waves."

Space Tech

No content.

Various

'The Burning Blue' Is A Compact, Suspenseful Chronicle Of The Challenger Disaster

Washington Post

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NASA Shuttle Crew Likely Survived First Seconds After Explosion, Book Claims

Daily Mirror (UK)

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NASA Launches Mission Equity Initiative To Include Underserved Populations

SlashGear

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## Rep. Waltz Reacts To Latest 'Woke' NASA Ad

### Fox News

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"MICHAEL WALTZ: More diversity in space than our astronauts, great. What we need to be focused on is getting more Americans into space because right now the Chinese are passing us. They are kicking our butts up there, and it's a real problem. Brian, more launches, more Chinese launches in space last year than the rest of the world combined, including the United States. As you said, just put their own astronauts in their own space station, which is brand new and being built, ours is 30 years old and decrepit."

## 'Reach Those We've Never Reached Before': NASA Joins The Woke Train With 'Mission Equity'

### Daily Caller

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## NASA Launches Mission For 'Equity'

### Fox News

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## If You Care About The US, Root For China To Score A Win In Space

### The Hill

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politicians who view their lives and personal advancement in increments of two-, four- and six-year windows, tangible, immediate vote-influencing issues tend to dominate their policy decisions. ... The Biden administration and many members of Congress appear to have placed American preeminence in space back on the rear burner, or they've knocked it off the stove entirely. They're seeking to allocate more of NASA's space budget to climate change and other issues."

#### NASA, USPS Team Up To Create Stunning Sun Stamps

Fox News

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#### NASA's Images Of The Sun Find A Place On Postage Stamps

SlashGear

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#### US Postal Service Releases 'Sun Science' Stamps With NASA Imagery

SPACE

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#### Ex-Astronaut Melroy Confirmed As Deputy NASA Administrator

Aviation Week

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haWwiLCJXVCi6Mn0=|1000&sdata=oLExxm75gijzppi1G9VCLiyNqwf8BfJtwODpxFIHzyA=&reserved=0> (6/18)

“Former space shuttle commander and retired U.S. Air Force Col. Pamela Melroy was confirmed by the U.S. Senate to become the deputy administrator of NASA, serving alongside NASA chief Bill Nelson.”

#### Ex-NASA Scientist Imprisoned For ‘Long-Running Deception’ Working In China

FedScoop

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815&t=c&data=04|01|marc.r.etkind@nasa.gov|364888fa168f4085eeb608d934a3651c|7005d45845be48ae8140d43da96dd17b|0|0|637598698658711478|Unknown|TWFpbGZsb3d8eyJWIjojMC4wLjAwMDAiLCJQIjojV2luMzliLCJBTiI6Ikl1haWwiLCJXVCi6Mn0=|1000&sdata=5/FCy5oGtSQgYhx7naSKh0D7HA0pkywM3c/m1hGLVJ4=&reserved=0> (6/18, Nyczepir) “U.S. District Judge P. Kevin Castel sentenced a former NASA nanotechnologist, suspected of giving Chinese nationals access to its facilities, to 30 days in prison Wednesday for lying to federal agents about working at a Chinese research university. Meyya Meyyappan, 66, served as chief scientist for exploration technology at the Center for Nanotechnology at NASA’s Ames Research Center, until he was caught lying to the FBI and NASA Office of Inspector General about being a visiting professor at Soochow University for an estimated \$1.4 million over five years.”

#### NASA Commemorates Juneteenth With Historic View From Space

SPACE

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748&t=c&data=04|01|marc.r.etkind@nasa.gov|364888fa168f4085eeb608d934a3651c|7005d45845be48ae8140d43da96dd17b|0|0|637598698658721424|Unknown|TWFpbGZsb3d8eyJWIjojMC4wLjAwMDAiLCJQIjojV2luMzliLCJBTiI6Ikl1haWwiLCJXVCi6Mn0=|1000&sdata=41nl6jGQLbKRJlvyX1H2cErFI4ELx7vZW0CUmKS16/Q=&reserved=0> (6/18, Gohd) “NASA is commemorating Juneteenth on Saturday (June 19) with a historic view from space. Saturday, June 19 marks Juneteenth, officially Juneteenth National Independence day and also known as Jubilee Day, Emancipation Day and Black Independence Day, which celebrates the end of slavery in the U.S.”

#### NASA, USPS Release Stamp Set

KTLA-TV Los Angeles

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b89&t=c&data=04|01|marc.r.etkind@nasa.gov|364888fa168f4085eeb608d934a3651c|7005d45845be48ae8140d43da96dd17b|0|0|637598698658721424|Unknown|TWFpbGZsb3d8eyJWIjojMC4wLjAwMDAiLCJQIjojV2luMzliLCJBTiI6Ikl1haWwiLCJXVCi6Mn0=|1000&sdata=TthcPswKWMvy/mxZHL0brl/mcUirgWIQWtgMx+Cu7j4=&reserved=0> (6/20) “NASA is teaming up with the US postal service to release a new set of stamps. The new stamps celebrate NASA’s decade long observation of the sun.”

Other

#### Russia And China Outline Joint Lunar Station Road Map

Aviation Week

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053&t=c&data=04|01|marc.r.etkind@nasa.gov|364888fa168f4085eeb608d934a3651c|7005d45845be48ae8140d43da96dd17b|0|0|637598698658731384|Unknown|TWFpbGZsb3d8eyJWIjojMC4wLjAwMDAiLCJQIjojV2luMzliLCJBTiI6Ikl1

haWwiLCJXVCi6Mn0=|1000&sdata=uBShVDzY4i4hkWHxfiC5t0OpGwXcRf2NyQ+Ef5Uh158=&reserved=0> (6/21)  
"Russia and China are deepening their cooperation in aerospace, making plans to develop a lunar base by 2035 that also will be open for international cooperation. The International Lunar Research Station (ILRS) being developed by Russia's Roscosmos space agency and the China National Space..."

#### SpaceX Successfully Launched GPS III Space Vehicle 05

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#### Space Tourism Startup Flies Test Balloon 20 Miles High Over Florida

UPI

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#### Space Force Launches Fifth GPS III Satellite For More Secure Positioning

Federal Times

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## **[EXTERNAL] NASA Morning Briefing for Thursday, June 24, 2021**

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#### Top Stories

Richard Branson And Jeff Bezos Will Fly To Space At Their Own Risk. Does That Make It Right For Everyone?

Washington Post

<<https://gcc02.safelinks.protection.outlook.com/?url=https://mailview.bulletinintelligence.com/mailview.aspx?m=2021062402nasa&r=email-cf10&l=003-62e&t=c&data=04|01|marc.r.etkind@nasa.gov|c1e755571a3348abde7908d936ff27a5|7005d45845be48ae8140d43da96dd17b|0|0|637601291800926018|Unknown|TWfPbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQIjojV2luMzliLCJBTiI6Ik1haWwWLCJXVCi6Mn0=|1000&sdata=/IJEEGztxg5NutMjWsN4YpMHrcUZxvG4R+04ludsaeQ=&reserved=0>> (6/23)

"Want to jump out of a perfectly good airplane and hope the parachute opens? Be our guest. Or try bungee jumping? Sure, go for it. And, yes, feel free to strap yourself into that roller coaster and loop-de-loop until you turn green. ... DeFazio is also taking aim at the FAA's dual mandate to both regulate and promote the space industry, which he said is a conflict of interest that could endanger the public. The FAA, he said in an interview, 'should not be promoting commercial space. NASA can promote commercial space. The Commerce Department can promote commercial space. The FAA's job is to regulate in the public interest.'"

Opinion: Americans Should Worry More About China Than Russia.

The New Space Race Shows Why. Washington Post (6/23) "The salute was carried live to 1 billion people but went unnoticed by most of the world. Three astronauts aboard China's new rival to the International Space Station gave military salutes to President Xi Jinping during a videoconference broadcast Wednesday on state television. ... NASA

Administrator Bill Nelson held up a photograph of China's Mars rover during a recent House hearing as he requested more funding for the Human Landing System."

## NASA Chief Reminds Congress They're The Ones Not Funding A Lunar Lander

Ars Technica

<<https://gcc02.safelinks.protection.outlook.com/?url=https://mailview.bulletinintelligence.com/mailview.aspx?m=2021062402nasa&r=email-cf10&l=004-025&t=c&data=04|01|marc.r.etkind@nasa.gov|c1e755571a3348abde7908d936ff27a5|7005d45845be48ae8140d43da96dd17b|0|0|637601291800935974|Unknown|TWFPbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQljojV2luMzliLCJBTiI6lk1haWwiLCJXVCi6Mn0=|1000&sdata=L/8YCWHboywVRQgSxmQxdUiipeWMyJOoAlk/3Ak1+mA=&reserved=0>> (6/23, Berger) "NASA Administrator Bill Nelson said the space agency expects a decision from the US Government Accountability Office on a lunar lander protest by August 4. This would seem to set a firm timeline after which NASA can move forward with its Artemis program. Nelson's comments came in response to members of the US House Science, Space, and Technology Committee asking for specifics on Artemis, which NASA intends to use to return humans to the Moon and eventually go on to Mars."

## Space Force Set To Defend Deep Space

Washington Times

<<https://gcc02.safelinks.protection.outlook.com/?url=https://mailview.bulletinintelligence.com/mailview.aspx?m=2021062402nasa&r=email-cf10&l=005-99c&t=c&data=04|01|marc.r.etkind@nasa.gov|c1e755571a3348abde7908d936ff27a5|7005d45845be48ae8140d43da96dd17b|0|0|637601291800935974|Unknown|TWFPbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQljojV2luMzliLCJBTiI6lk1haWwiLCJXVCi6Mn0=|1000&sdata=CnRpWlInkARwUONoAXYaieEnP6a5t5Nmpg+2ldKaBlk=&reserved=0>> (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."

Flight

## DLR-NASA Flight Tests Show SAFs Can Reduce Climate Impact Of Contrails

Aviation Week

<<https://gcc02.safelinks.protection.outlook.com/?url=https://mailview.bulletinintelligence.com/mailview.aspx?m=2021062402nasa&r=email-cf10&l=006-e4b&t=c&data=04|01|marc.r.etkind@nasa.gov|c1e755571a3348abde7908d936ff27a5|7005d45845be48ae8140d43da96dd17b|0|0|637601291800945935|Unknown|TWFPbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQljojV2luMzliLCJBTiI6lk1haWwiLCJXVCi6Mn0=|1000&sdata=Uzh+fbuwRFQj4qBfw5/4dtp3afQU4x1thdwz6OyCk5U=&reserved=0>> (6/23, Wick) "Cleaner-burning sustainable fuels can reduce aircraft contrail cloudiness and their contribution to aviation's climate impact, joint research by NASA and German aerospace center DLR has concluded. Burning low-aromatic sustainable aviation fuel (SAF) can result in a 50-70% reduction in soot-particle emissions and the resulting ice crystal concentrations, reducing the warming effect from contrail cirrus clouds, according to research published on May 17 in Nature Communications journal Earth & Environment."

Earth

## 'Strawberry' Supermoon To Adorn Night Sky Wednesday Through Friday

Washington Post

<<https://gcc02.safelinks.protection.outlook.com/?url=https://mailview.bulletinintelligence.com/mailview.aspx?m=2021062402nasa&r=email-cf10&l=007-e7e&t=c&data=04|01|marc.r.etkind@nasa.gov|c1e755571a3348abde7908d936ff27a5|7005d45845be48ae8140d43da96dd17b|0|0|637601291800945935|Unknown|TWFPbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQljojV2luMzliLCJBTiI6lk1haWwiLCJXVCi6Mn0=|1000&sdata=T43mljREeoQ5bOiwI7Qm+TBXCxzAwMDtsga+TsHtGSA=&reserved=0>> (6/23)  
“The first full moon of the summer is set to rise gracefully in the eastern sky Wednesday through Friday evenings and will appear a little plumper and brighter than normal. The June ‘Strawberry Moon’ is marginally considered a supermoon, according to NASA, the last in a series. Supermoons are those full moons that pass the Earth near the closest point in their monthly orbit (known as perigee) and can appear up to 30 percent brighter and 14 percent bigger than full moons that pass at their greatest distance (known as apogee).”

#### Last Supermoon Of 2021 Is This Week

NBC News

<<https://gcc02.safelinks.protection.outlook.com/?url=https://mailview.bulletinintelligence.com/mailview.aspx?m=2021062402nasa&r=email-cf10&l=008-987&t=c&data=04|01|marc.r.etkind@nasa.gov|c1e755571a3348abde7908d936ff27a5|7005d45845be48ae8140d43da96dd17b|0|0|637601291800955890|Unknown|TWFPbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQljojV2luMzliLCJBTiI6lk1haWwiLCJXVCi6Mn0=|1000&sdata=9YhtyosEfxlulqu5a+KMwKRYsENO1TN+F5qbDrUsCdQ=&reserved=0>> (6/23, Chow)  
“A ‘strawberry’ moon is rising. June’s full moon will light up the sky Thursday, marking the last supermoon of the year and capping off a series of recent skywatching events that included a lunar eclipse and a ‘ring of fire’ solar eclipse. ... Thursday’s full moon will be at peak illumination at 2:40 p.m. ET, but the lunar spectacle won’t be visible for several hours, until the moon rises over the horizon in the eastern skies. The moon will subsequently appear full through early Saturday, according to NASA.”

#### How To See Tomorrow’s Strawberry Moon, The Last Supermoon Of 2021

CNET News

<<https://gcc02.safelinks.protection.outlook.com/?url=https://mailview.bulletinintelligence.com/mailview.aspx?m=2021062402nasa&r=email-cf10&l=009-2ac&t=c&data=04|01|marc.r.etkind@nasa.gov|c1e755571a3348abde7908d936ff27a5|7005d45845be48ae8140d43da96dd17b|0|0|637601291800955890|Unknown|TWFPbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQljojV2luMzliLCJBTiI6lk1haWwiLCJXVCi6Mn0=|1000&sdata=1yZMBfZXIPd5HCh9dTV1R1VMBW+OMIsn+PybB5dJ+es=&reserved=0>> (6/23, Kooser)  
“What a year it’s been for moon viewing. After May’s ‘super flower blood moon’ eclipse, we’re returning to a straight-up full moon on Thursday. It will be the last supermoon of 2021. ... ‘For 2021, some publications consider the four full Moons from March to June, some the three full Moons from April to June, and some only the two full Moons in April and May as supermoons,’ NASA program executive Gordon Johnston said in April.”

#### The Strawberry Moon: How, When To Watch It

Fox News

<<https://gcc02.safelinks.protection.outlook.com/?url=https://mailview.bulletinintelligence.com/mailview.aspx?m=2021062402nasa&r=email-cf10&l=00a-835&t=c&data=04|01|marc.r.etkind@nasa.gov|c1e755571a3348abde7908d936ff27a5|7005d45845be48ae8140d43da96dd17b|0|0|637601291800965845|Unknown|TWFPbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQljojV2luMzliLCJBTiI6lk1haWwiLCJXVCi6Mn0=|1000&sdata=uuPjwD+21MSvsIWvu8qdceGx2P6FzQskBHVOFeSFj1o=&reserved=0>> (6/23, Musto)  
“Stargazers around the world will be able to enjoy the glow of the Strawberry Moon on Thursday night. According to NASA, the ‘marginal supermoon’ will appear opposite the sun in Earth-based longitude at 2:40 p.m. ET for much of the Earth, though it won’t be visible until it appears above the horizon.”

## Humans in Space

### Richard Branson And Jeff Bezos Will Fly To Space At Their Own Risk. Does That Make It Right For Everyone?

Washington Post

<<https://gcc02.safelinks.protection.outlook.com/?url=https://mailview.bulletinintelligence.com/mailview.aspx?m=2021062402nasa&r=email-cf10&l=00b-46b&t=c&data=04|01|marc.r.etkind@nasa.gov|c1e755571a3348abde7908d936ff27a5|7005d45845be48ae8140d43da96dd17b|0|0|637601291800965845|Unknown|TWfPbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQljojV2luMzliLCJBTiI6lk1haWwiLCJXVCi6Mn0=|1000&sdata=gt5tFCTJo5OUltMzWd/drXlwiOdPzihhSXy93jNzPxQ=&reserved=0>> (6/23) “Want to jump out of a perfectly good airplane and hope the parachute opens? Be our guest. Or try bungee jumping? Sure, go for it. And, yes, feel free to strap yourself into that roller coaster and loop-de-loop until you turn green. ... DeFazio is also taking aim at the FAA’s dual mandate to both regulate and promote the space industry, which he said is a conflict of interest that could endanger the public. The FAA, he said in an interview, ‘should not be promoting commercial space. NASA can promote commercial space. The Commerce Department can promote commercial space. The FAA’s job is to regulate in the public interest.’”

### SpaceX Sends Thousands Of Baby Squid To Space Station

The Hill

<<https://gcc02.safelinks.protection.outlook.com/?url=https://mailview.bulletinintelligence.com/mailview.aspx?m=2021062402nasa&r=email-cf10&l=00c-086&t=c&data=04|01|marc.r.etkind@nasa.gov|c1e755571a3348abde7908d936ff27a5|7005d45845be48ae8140d43da96dd17b|0|0|637601291800975803|Unknown|TWfPbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQljojV2luMzliLCJBTiI6lk1haWwiLCJXVCi6Mn0=|1000&sdata=qIR4VpM387yXanxw71h/jirzeBwRBqh1Rix8fCcqsOI=&reserved=0>> (6/23, Spencer) “One dozen bobtail squid that were raised at the Kewalo Marine Laboratory at the University of Hawaii boarded the International Space Station after catching a ride from a SpaceX resupply mission, according to The Guardian. The space mission is part of University of Hawaii doctoral student Jamie Foster’s research on the effects of spaceflight on squid, The Honolulu Star-Advertiser reported, to help determine how long humans can remain healthy in space.”

### Tide To Develop First Laundry Detergent For Astronauts’ Clothing On Space Station

SPACE

<<https://gcc02.safelinks.protection.outlook.com/?url=https://mailview.bulletinintelligence.com/mailview.aspx?m=2021062402nasa&r=email-cf10&l=00d-86a&t=c&data=04|01|marc.r.etkind@nasa.gov|c1e755571a3348abde7908d936ff27a5|7005d45845be48ae8140d43da96dd17b|0|0|637601291800975803|Unknown|TWfPbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQljojV2luMzliLCJBTiI6lk1haWwiLCJXVCi6Mn0=|1000&sdata=6IGCXM0Rm8lvRnSPH1kSVCGhO2CuLJcvdliEXrJUF6Y=&reserved=0>> (6/23, Pearlman) “Future astronauts may not need to worry about moon dust and Mars soil stains, thanks to an effort by Tide to develop a laundry detergent for use in space. The Procter & Gamble (P&G) laundry brand has partnered with NASA to explore how to clean astronauts’ clothes aboard the International Space Station (ISS), as well as on future crewed missions to the moon and Mars. Under the terms of the new Space Act Agreement, NASA may study Tide’s cleaning solutions, while the company works to bring the lessons from its off-planet tests to its line of everyday consumer products for use on Earth.”

### Equilibrium — Presented By NextEra Energy — A New Final Frontier: Washing Dirty Laundry In Space

The Hill

<<https://gcc02.safelinks.protection.outlook.com/?url=https://mailview.bulletinintelligence.com/mailview.aspx?m=2021062402nasa&r=email-cf10&l=00e->



0a6&t=c&data=04|01|marc.r.etkind@nasa.gov|c1e755571a3348abde7908d936ff27a5|7005d45845be48ae8140d43da96dd17b|0|0|637601291800985758|Unknown|TWFpbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQljojV2luMzliLCJBTiI6lk1haWwiLCJXVCi6Mn0=|1000&sdata=GWO8lhgbvYUkl0xiKir4g9YzmK3FbLCgXhv7UZX9Jf8=&reserved=0> (6/23, Elbein, Udasin) "NASA is teaming up with Procter & Gamble Co. to develop a washer-dryer combo that could eventually operate on the moon or even Mars using minimal amounts of water and detergent, the Associated Press reported. Up until this point, astronauts dealt with their tons of dirty laundry each year by throwing it away: launching their garments to burn up in the atmosphere aboard discarded cargo ships, according to the AP."

#### NASA And Tide Team Up To Deal With Dirty Laundry In Space

BGR

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"Humans have been living in space for years, but it took endless research and planning to make that possible. Everything we take for granted on the surface of the planet, where we have gravity and resources to accommodate our every whim, has to be engineered to work in space. Scientists have yet to solve every problem required to make living in space for extended periods comfortable to astronauts and affordable for the governments and companies that might be footing the bill."

#### NASA Looking To Solve Dirty Laundry Issue In Space

CBS News

<<https://gcc02.safelinks.protection.outlook.com/?url=https://mailview.bulletinintelligence.com/mailview.aspx?m=2021062402nasa&r=email-cf10&l=010-cb5&t=c&data=04|01|marc.r.etkind@nasa.gov|c1e755571a3348abde7908d936ff27a5|7005d45845be48ae8140d43da96dd17b|0|0|637601291800995713|Unknown|TWFpbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQljojV2luMzliLCJBTiI6lk1haWwiLCJXVCi6Mn0=|1000&sdata=6KI+pZkMcDIjxk0li92CPnHyv5QAuO00USPrbWTqNuY=&reserved=0>> (6/23)

"How do astronauts do laundry in space? They don't. They wear their underwear, gym clothes and everything else until they can't take the filth and stink anymore, then junk them. NASA wants to change that. CBS Los Angeles has the details."

#### On Sale: \$125,000 Balloon Trips To The Edge Of Space

CNN

<<https://gcc02.safelinks.protection.outlook.com/?url=https://mailview.bulletinintelligence.com/mailview.aspx?m=2021062402nasa&r=email-cf10&l=011-936&t=c&data=04|01|marc.r.etkind@nasa.gov|c1e755571a3348abde7908d936ff27a5|7005d45845be48ae8140d43da96dd17b|0|0|637601291800995713|Unknown|TWFpbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQljojV2luMzliLCJBTiI6lk1haWwiLCJXVCi6Mn0=|1000&sdata=ceGocObey9R1PdyF2XLsTfalx6SZep6iLmdeHOT0a8A=&reserved=0>> (6/23)

"If you're trying to avoid airborne viruses, heading to a near vacuum might not be the worst idea. A Florida company is planning to fly passengers to the edge of space in a high-tech version of a hot air balloon, with a pilot and up to eight travelers riding in a pressurized capsule suspended from an enormous blimp."

#### Florida-Based Space Balloon Company Launches Ticket Sales

UPI

<<https://gcc02.safelinks.protection.outlook.com/?url=https://mailview.bulletinintelligence.com/mailview.aspx?m=2021062402nasa&r=email-cf10&l=012->

8cb&t=c&data=04|01|marc.r.etkind@nasa.gov|c1e755571a3348abde7908d936ff27a5|7005d45845be48ae8140d43da96dd17b|0|0|637601291801005670|Unknown|TWFpbGZsb3d8eyJWljoimc4wLjAwMDAiLCJQljoiv2luMzliLCJBTiI6lk1haWwiLCJXVCi6Mn0=|1000&sdata=C++C14bcT33xyhlp/IPZ5kzGm9M9IKU7rjoXJCYR4XE=&reserved=0> (6/23, Brinkmann) "A new space tourism company began to sell tickets Wednesday for six-hour balloon rides to the stratosphere starting in 2024. The price of a seat: \$125,000. The company, Florida-based Space Perspective, plans up to 25 flights in the first year into what is the second major layer of the Earth's atmosphere and extends to about 31 miles, or more than 163,000 feet, above the planet's surface."

A Startup Offering To Take Tourists To Space In A Ship Lifted By An Enormous Balloon Is Selling Tickets For \$125,000 A Ride

Insider

<https://gcc02.safelinks.protection.outlook.com/?url=https://mailview.bulletinintelligence.com/mailview.aspx?m=2021062402nasa&r=email-cf10&l=013-97f&t=c&data=04|01|marc.r.etkind@nasa.gov|c1e755571a3348abde7908d936ff27a5|7005d45845be48ae8140d43da96dd17b|0|0|637601291801005670|Unknown|TWFpbGZsb3d8eyJWljoimc4wLjAwMDAiLCJQljoiv2luMzliLCJBTiI6lk1haWwiLCJXVCi6Mn0=|1000&sdata=jaHYGJXRPAh4JfCqIStOi7zygg+eb+0GQRZ4akX4wlo=&reserved=0> (6/23)  
"Forget airplanes, cruises, and hotels. Space Perspective wants to take you on a \$125,000 luxury trip to the 'edge of space,' according to the company. Spaceship Neptune. ... But don't picture your typical NASA rocket ship."

More Than 22,000 Apply To Join European Space Agency's Astronaut Corps, A New Record

SPACE

<https://gcc02.safelinks.protection.outlook.com/?url=https://mailview.bulletinintelligence.com/mailview.aspx?m=2021062402nasa&r=email-cf10&l=014-475&t=c&data=04|01|marc.r.etkind@nasa.gov|c1e755571a3348abde7908d936ff27a5|7005d45845be48ae8140d43da96dd17b|0|0|637601291801015627|Unknown|TWFpbGZsb3d8eyJWljoimc4wLjAwMDAiLCJQljoiv2luMzliLCJBTiI6lk1haWwiLCJXVCi6Mn0=|1000&sdata=iNj2mt3HVC0o43AzJyknD6tjwkp1OOtFP7c0K+c690=&reserved=0> (6/23, Pultarova) "The European Space Agency (ESA) received a record number of applications for its recently closed call for new astronauts, with more than 22,000 people applying — nearly three times as many applicants as in the previous astronaut recruitment round in 2008. In addition to that, ESA representatives said in a press briefing Wednesday (June 23) that a record number of women had applied: 5,419 compared to 1,287 in 2008."

European Space Agency Seeks Astronaut Applicants With Physical Disabilities

New York Daily News

<https://gcc02.safelinks.protection.outlook.com/?url=https://mailview.bulletinintelligence.com/mailview.aspx?m=2021062402nasa&r=email-cf10&l=015-de2&t=c&data=04|01|marc.r.etkind@nasa.gov|c1e755571a3348abde7908d936ff27a5|7005d45845be48ae8140d43da96dd17b|0|0|637601291801015627|Unknown|TWFpbGZsb3d8eyJWljoimc4wLjAwMDAiLCJQljoiv2luMzliLCJBTiI6lk1haWwiLCJXVCi6Mn0=|1000&sdata=f4iEh9MQvcWpbRz1bo/TkUQO8EX6XHVd3LnXWWGMu1A=&reserved=0> (6/24, Braine) "European Space Agency seeks astronaut applicants with physical disabilities"

Europe Seeks Disabled Astronauts, More Women In Space

AP

<https://gcc02.safelinks.protection.outlook.com/?url=https://mailview.bulletinintelligence.com/mailview.aspx?m=2021062402nasa&r=email-cf10&l=016-287&t=c&data=04|01|marc.r.etkind@nasa.gov|c1e755571a3348abde7908d936ff27a5|7005d45845be48ae8140d43da96dd17b|0|0|637601291801015627|Unknown|TWFpbGZsb3d8eyJWljoimc4wLjAwMDAiLCJQljoiv2luMzliLCJBTiI6lk1haWwiLCJXVCi6Mn0=|1000&sdata=yvKb4JOaETLFrEH0JnUvZRDN1Dv0K0tGjVP3BFSLKfE=&reserved=0> (6/23)

“The European Space Agency says it was ‘blown away’ by the record number of applicants — more than 22,000 — hoping to become the continent’s next generation of space travelers, including more women than ever and some 200 people with disabilities. In releasing the results of a new recruitment drive aimed at more astronaut diversity, the agency acknowledged Wednesday that it still has work to do on gender balance.”

#### Thousands Of People Want To Send Jeff Bezos Into Space Forever

The Hill

<<https://gcc02.safelinks.protection.outlook.com/?url=https://mailview.bulletinintelligence.com/mailview.aspx?m=2021062402nasa&r=email-cf10&l=017-820&t=c&data=04|01|marc.r.etkind@nasa.gov|c1e755571a3348abde7908d936ff27a5|7005d45845be48ae8140d43da96dd17b|0|0|637601291801025585|Unknown|TWFpbGZsb3d8eyJWljoimC4wLjAwMDAiLCJQIjoiV2luMzliLCJBTiI6Ikl1haWwLiLCJXVCi6Mn0=|1000&sdata=NDlrKreB7aLZQ9Mabb+WulK0nCOSgPNv4HARYS12VuM=&reserved=0>> (6/23, Spencer) “The second richest man and founder of Amazon, Jeff Bezos, is going to be launched into space as part of his company Blue Origin. However, once Bezos has blasted off, there are some who wish to have him lost in space, The Guardian reported.”

#### The Date Of Jeff Bezos’ Trip To Space Isn’t A Coincidence — It’s The Anniversary Of The Apollo 11 Mission To The Moon

Insider

<<https://gcc02.safelinks.protection.outlook.com/?url=https://mailview.bulletinintelligence.com/mailview.aspx?m=2021062402nasa&r=email-cf10&l=018-6b5&t=c&data=04|01|marc.r.etkind@nasa.gov|c1e755571a3348abde7908d936ff27a5|7005d45845be48ae8140d43da96dd17b|0|0|637601291801025585|Unknown|TWFpbGZsb3d8eyJWljoimC4wLjAwMDAiLCJQIjoiV2luMzliLCJBTiI6Ikl1haWwLiLCJXVCi6Mn0=|1000&sdata=eE5l2xgh868rZE0C29vkVSqxUls5dxv3zdOHZr+bZZ0=&reserved=0>> (6/23, Hartmans) “Jeff Bezos’ trip aboard a Blue Origin rocket next month will take place on a fortuitous day in space history. The 11-minute trip 62 miles above Earth will take Bezos to the edge of space. Inside Blue Origin’s New Shepard spacecraft, Bezos, his brother Mark, the unnamed tourist who paid \$28 million for the opportunity, and a fourth passenger will have three minutes to float around the spacecraft and view Earth from afar — or gaze into the depths of outer space.”

#### NASA, Tide Partner On Detergent For Astronauts

KCBS-TV Los Angeles

<<https://gcc02.safelinks.protection.outlook.com/?url=https://mailview.bulletinintelligence.com/mailview.aspx?m=2021062402nasa&r=email-cf10&l=019-f3e&t=c&data=04|01|marc.r.etkind@nasa.gov|c1e755571a3348abde7908d936ff27a5|7005d45845be48ae8140d43da96dd17b|0|0|637601291801035539|Unknown|TWFpbGZsb3d8eyJWljoimC4wLjAwMDAiLCJQIjoiV2luMzliLCJBTiI6Ikl1haWwLiLCJXVCi6Mn0=|1000&sdata=QUrD01KrdK+poAT7aa5GvtOyP0D3yMLtpmemqUp5Cto=&reserved=0>> (6/23) “NASA teaming up with Tide to figure out a way to get laundry done in orbit. Never thought of this.”

#### Moon to Mars

Opinion: Americans Should Worry More About China Than Russia. The New Space Race Shows Why.

Washington Post

<<https://gcc02.safelinks.protection.outlook.com/?url=https://mailview.bulletinintelligence.com/mailview.aspx?m=2021062402nasa&r=email-cf10&l=01a-57e&t=c&data=04|01|marc.r.etkind@nasa.gov|c1e755571a3348abde7908d936ff27a5|7005d45845be48ae8140d43da96dd17b|0|0|637601291801035539|Unknown|TWFpbGZsb3d8eyJWljoimC4wLjAwMDAiLCJQIjoiV2luMzliLCJBTiI6Ikl1>

haWwiLCJXVCi6Mn0=|1000&sdata=uglePme+yJiSoJ7HBeHwifPM6KnBJqPqKFfQYKoE1l=&reserved=0> (6/23)  
“The salute was carried live to 1 billion people but went unnoticed by most of the world. Three astronauts aboard China's new rival to the International Space Station gave military salutes to President Xi Jinping during a videoconference broadcast Wednesday on state television. ... NASA Administrator Bill Nelson held up a photograph of China's Mars rover during a recent House hearing as he requested more funding for the Human Landing System.”

#### NASA Chief Reminds Congress They're The Ones Not Funding A Lunar Lander

Ars Technica

<https://gcc02.safelinks.protection.outlook.com/?url=https://mailview.bulletinintelligence.com/mailview.aspx?m=2021062402nasa&r=email-cf10&l=01b-6d6&t=c&data=04|01|marc.r.etkind@nasa.gov|c1e755571a3348abde7908d936ff27a5|7005d45845be48ae8140d43da96dd17b|0|0|637601291801045495|Unknown|TWfPbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQljojV2luMzliLCJBTiI6lk1haWwiLCJXVCi6Mn0=|1000&sdata=vNTCrPfa9JetkQWa0Lw2MuSLOO+bcvoEtcpZhr5egdM=&reserved=0> (6/23, Berger) “NASA Administrator Bill Nelson said the space agency expects a decision from the US Government Accountability Office on a lunar lander protest by August 4. This would seem to set a firm timeline after which NASA can move forward with its Artemis program. Nelson's comments came in response to members of the US House Science, Space, and Technology Committee asking for specifics on Artemis, which NASA intends to use to return humans to the Moon and eventually go on to Mars.”

#### NASA Chief Promises More Moon, Mars Cost, Schedule Details

Aviation Week

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“By the end of this year Congress can anticipate a detailed cost and schedule assessment for NASA's efforts to return human explorers to the Moon and prepare for expeditions to Mars, agency Administrator Bill Nelson says. Complicating matters is a U.S. Government Accountability Office (GAO)...”

#### NASA, Nelson Push For Annual Moon Landings For 'A Dozen Years'

UPI

<https://gcc02.safelinks.protection.outlook.com/?url=https://mailview.bulletinintelligence.com/mailview.aspx?m=2021062402nasa&r=email-cf10&l=01d-595&t=c&data=04|01|marc.r.etkind@nasa.gov|c1e755571a3348abde7908d936ff27a5|7005d45845be48ae8140d43da96dd17b|0|0|637601291801055450|Unknown|TWfPbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQljojV2luMzliLCJBTiI6lk1haWwiLCJXVCi6Mn0=|1000&sdata=BksePO7kbG62IzUqQqx4MOj8DsFFyeFPOc079qE3eyc=&reserved=0> (6/23, Brinkmann) “NASA needs crewed lunar landings every year for ‘a dozen years,’ the agency's administrator, Bill Nelson, said in a House of Representatives committee hearing Wednesday. Nelson, who became administrator May 3, said Congress hasn't appropriated enough money for the nation's coming lunar aspirations.”

#### Nelson Says Artemis Plans Pending Decision On GAO Protest

Space News

<https://gcc02.safelinks.protection.outlook.com/?url=https://mailview.bulletinintelligence.com/mailview.aspx?m=2021062402nasa&r=email-cf10&l=01e-be8&t=c&data=04|01|marc.r.etkind@nasa.gov|c1e755571a3348abde7908d936ff27a5|7005d45845be48ae8140d43da96dd17b|0|0|637601291801055450|Unknown|TWfPbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQljojV2luMzliLCJBTiI6lk1

haWwiLCJXVCi6Mn0=|1000&sdata=m9JqJkIKg+LiTOmmh14Pnn5ax3XSZp9bj5QpUg50IXU=&reserved=0> (6/23, Foust) "NASA Administrator Bill Nelson told a House committee June 23 that NASA is awaiting a decision from the Government Accountability Office on protests of the agency's lunar lander contract before releasing more details on plans to return humans to the moon. Testifying before the House Science Committee, Nelson said those plans will depend on whether the GAO upholds protests filed by Blue Origin and Dynetics of NASA's award of a single Human Landing System (HLS) contract to SpaceX in April. The GAO has until Aug. 4 to rule on the two protests."

## Martian Dust Could End NASA's InSight Mission In A Matter Of Months

Gizmodo

<[https://gcc02.safelinks.protection.outlook.com/?url=https://mailview.bulletinintelligence.com/mailview.aspx?m=2021062402nasa&r=email-cf10&l=01f-](https://gcc02.safelinks.protection.outlook.com/?url=https://mailview.bulletinintelligence.com/mailview.aspx?m=2021062402nasa&r=email-cf10&l=01f-1d8&t=c&data=04|01|marc.r.etkind@nasa.gov|c1e755571a3348abde7908d936ff27a5|7005d45845be48ae8140d43da96dd17b|0|0|637601291801065402|Unknown|TWFpbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQIjoiV2luMzliLCJBTiI6Ikl1haWwiLCJXVCi6Mn0=|1000&sdata=N27pMGUKMOlb3KXiUbX/cmnHKEjZBrWEuRfUrd5fEEo=&reserved=0)

1d8&t=c&data=04|01|marc.r.etkind@nasa.gov|c1e755571a3348abde7908d936ff27a5|7005d45845be48ae8140d43da96dd17b|0|0|637601291801065402|Unknown|TWFpbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQIjoiV2luMzliLCJBTiI6Ikl1haWwiLCJXVCi6Mn0=|1000&sdata=N27pMGUKMOlb3KXiUbX/cmnHKEjZBrWEuRfUrd5fEEo=&reserved=0> (6/23, Dvorsky) "Dwindling access to power, the result of dust settling onto solar panels, is threatening to end NASA's InSight Mars mission by April of next year. News of InSight's worrisome condition was announced on June 21 at a meeting of NASA's Mars Exploration Program Analysis Group, as SpaceNews reports. The steady buildup of dust on the probe's solar arrays has been 'considerable,' as Bruce Banerdt, principal investigator for the InSight mission at NASA's Jet Propulsion Laboratory, explained during the meeting."

## Masten Delays First Lunar Lander Mission

Space News

<[https://gcc02.safelinks.protection.outlook.com/?url=https://mailview.bulletinintelligence.com/mailview.aspx?m=2021062402nasa&r=email-cf10&l=020-](https://gcc02.safelinks.protection.outlook.com/?url=https://mailview.bulletinintelligence.com/mailview.aspx?m=2021062402nasa&r=email-cf10&l=020-0db&t=c&data=04|01|marc.r.etkind@nasa.gov|c1e755571a3348abde7908d936ff27a5|7005d45845be48ae8140d43da96dd17b|0|0|637601291801065402|Unknown|TWFpbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQIjoiV2luMzliLCJBTiI6Ikl1haWwiLCJXVCi6Mn0=|1000&sdata=r+D69tCzL7qkodaMYu7FjbdoBJD3R/X5EfdS634hK8s=&reserved=0)

0db&t=c&data=04|01|marc.r.etkind@nasa.gov|c1e755571a3348abde7908d936ff27a5|7005d45845be48ae8140d43da96dd17b|0|0|637601291801065402|Unknown|TWFpbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQIjoiV2luMzliLCJBTiI6Ikl1haWwiLCJXVCi6Mn0=|1000&sdata=r+D69tCzL7qkodaMYu7FjbdoBJD3R/X5EfdS634hK8s=&reserved=0> (6/23, Foust) "Masten Space Systems is pushing back the launch of its first lunar lander mission by nearly a year, the latest in a series of delays by companies with NASA contracts to transport payloads to the moon. Masten said June 23 that its Masten Mission 1 lander, which had been scheduled to launch in December 2022 to land near Haworth Crater in the south polar regions of the moon, will instead launch in November 2023. The company blamed the delay on the cumulative effects of the COVID-19 pandemic and industry-wide supply chain issues."

## Mars Ingenuity Helicopter Marks The Successful Completion Of Its Eighth Test Flight

SlashGear

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132&t=c&data=04|01|marc.r.etkind@nasa.gov|c1e755571a3348abde7908d936ff27a5|7005d45845be48ae8140d43da96dd17b|0|0|637601291801075360|Unknown|TWFpbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQIjoiV2luMzliLCJBTiI6Ikl1haWwiLCJXVCi6Mn0=|1000&sdata=/RV+SmbtmPZA8oG4jev5+K4RQG5Q12KMm3q38kHJwMw=&reserved=0> (6/23, McGlaun) "NASA JPL has shared a tweet with a selfie taken by the Mars Ingenuity Helicopter. The picture was snapped during the helicopter's eighth test flight on Monday of this week. While NASA isn't sharing a wealth of details about the eighth test flight, what it has said is that the helicopter flew for 77.4 seconds over a distance of 160 meters."

## NASA's Mars Helicopter Has Now Flown Successfully 8 Times, Beaming Back Photos That Look Like A Sci-fi Film

Insider

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62402nasa&r=email-cf10&l=022-

4ff&t=c&data=04|01|marc.r.etkind@nasa.gov|c1e755571a3348abde7908d936ff27a5|7005d45845be48ae8140d43da96dd17b|0|0|637601291801075360|Unknown|TWFPbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQljojV2luMzliLCJBTiI6lk1haWwiLCJXVCi6Mn0=|1000&sdata=Ejj5LAKSL/zS7d1PGQ5/cyqjjNKd7hmP1GOiv6W5r+A=&reserved=0> (6/23, McFall-Johnsen) "The 4-pound helicopter spun its two pairs of blades to lift itself more than 30 feet above the ochre Martian dust. At a speed of 9 mph, it zipped to a new landing spot 525 feet away. The pair of robots landed in Mars' Jezero Crater on February 18. Ingenuity was meant to conduct up to five test flights in order to prove that helicopters could fly over and explore Mars. The demo chopper has far exceeded engineers' expectations."

#### Lockheed Martin To Build Aeroshell For Mars Sample Retrieval Lander

New Atlas

<https://gcc02.safelinks.protection.outlook.com/?url=https://mailview.bulletinintelligence.com/mailview.aspx?m=2021062402nasa&r=email-cf10&l=023-  
bdb&t=c&data=04|01|marc.r.etkind@nasa.gov|c1e755571a3348abde7908d936ff27a5|7005d45845be48ae8140d43da96dd17b|0|0|637601291801085315|Unknown|TWFPbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQljojV2luMzliLCJBTiI6lk1haWwiLCJXVCi6Mn0=|1000&sdata=0zbbSEImREF3iZlfp/cddqxWyvr0VCf28GoEkBrgXI=&reserved=0> (6/23, Szondy) "Lockheed Martin has been selected by NASA's Jet Propulsion Laboratory (JPL) in Pasadena, California to design and build the aeroshell and heat shield for the space agency's Mars Sample Retrieval Lander, which will help return the first Martian samples to Earth. Penciled in for a July 2026 launch, the Mars Sample Retrieval Lander is part of a tag-team string of Mars Sample Return missions to bring bits of Mars back to Earth for analysis. The first phase is already underway as NASA's Perseverance rover traverses the Martian surface in search of signs of ancient microbial life. As the nuclear-powered rover collects soil and rock samples, these will be packaged and left behind in caches."

#### NASA Administrator Discusses Budget At Hearing

WKMG-TV Orlando (FL)

<https://gcc02.safelinks.protection.outlook.com/?url=https://mailview.bulletinintelligence.com/mailview.aspx?m=2021062402nasa&r=email-cf10&l=024-  
ea3&t=c&data=04|01|marc.r.etkind@nasa.gov|c1e755571a3348abde7908d936ff27a5|7005d45845be48ae8140d43da96dd17b|0|0|637601291801085315|Unknown|TWFPbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQljojV2luMzliLCJBTiI6lk1haWwiLCJXVCi6Mn0=|1000&sdata=yEJqp5MsYUykwuvv9o/ioHTOxlyvp9j2FE6svFBSdM=&reserved=0> (6/23)  
"Former Florida Senator and current NASA Administrator Bill Nelson is on Capitol Hill fighting to get more money for space exploration."

#### China Plans To Send Its First Crewed Mission To Mars In 2033 And Build A Base There

CNBC

<https://gcc02.safelinks.protection.outlook.com/?url=https://mailview.bulletinintelligence.com/mailview.aspx?m=2021062402nasa&r=email-cf10&l=025-  
a10&t=c&data=04|01|marc.r.etkind@nasa.gov|c1e755571a3348abde7908d936ff27a5|7005d45845be48ae8140d43da96dd17b|0|0|637601291801095269|Unknown|TWFPbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQljojV2luMzliLCJBTiI6lk1haWwiLCJXVCi6Mn0=|1000&sdata=Na7HGONRUVvF+1gJlaFBec+KPT825mesVTLvLgl9YM=&reserved=0> (6/24, )  
"China plans to send its first crewed mission to Mars in 2033 as it continues to boost its space ambitions in a battle with the U.S. The world's second-largest economy is planning regular crewed missions to the Red Planet."

#### China Plans Its First Crewed Mission To Mars In 2033

Reuters

<https://gcc02.safelinks.protection.outlook.com/?url=https://mailview.bulletinintelligence.com/mailview.aspx?m=2021062402nasa&r=email-cf10&l=026-

3b1&t=c&data=04|01|marc.r.etkind@nasa.gov|c1e755571a3348abde7908d936ff27a5|7005d45845be48ae8140d43da96dd17b|0|0|637601291801095269|Unknown|TWFpbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQljojV2luMzliLCJBTiI6lk1haWwiLCJXVCi6Mn0=|1000&sdata=txiEokPD4loBldnN2JIQdYw1Wb0MX1UeRWu3AtW6yCc=&reserved=0> (6/24, Staff) "China aims to send its first crewed mission to Mars in 2033, with regular follow-up flights to follow, under a long-term plan to build a permanently inhabited base on the Red Planet and extract its resources. The ambitious plan, which will intensify a race with the United States to plant humans on Mars, was disclosed in detail for the first time after China landed a robotic rover on Mars in mid-May in its inaugural mission to the planet."

## Solar System and Beyond

### NASA Working To Resolve Computer Glitch, Return Hubble Space Telescope To Service

#### CBS News

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50a&t=c&data=04|01|marc.r.etkind@nasa.gov|c1e755571a3348abde7908d936ff27a5|7005d45845be48ae8140d43da96dd17b|0|0|637601291801105230|Unknown|TWFpbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQljojV2luMzliLCJBTiI6lk1haWwiLCJXVCi6Mn0=|1000&sdata=RUz//qcXGb4p7PA5xHS6U4Y6HuhkfLVHlbQ5Nk4dE8g=&reserved=0> (6/23, Harwood) "NASA is struggling to fix a computer glitch that has sidelined the iconic Hubble Space Telescope. While the problem is an uncomfortable reminder of the aging observatory's eventual mortality, engineers are confident they'll have it back up and running soon. 'Hubble is arguably the most important asset in the NASA's astrophysics portfolio, and it's been doing world-breaking science for over 30 years now,' Paul Hertz, director of astrophysics at NASA Headquarters, said Wednesday."

### Hubble Space Telescope's 1980s Computer Glitch May Run Deeper Than NASA Thought

#### SPACE

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41c&t=c&data=04|01|marc.r.etkind@nasa.gov|c1e755571a3348abde7908d936ff27a5|7005d45845be48ae8140d43da96dd17b|0|0|637601291801105230|Unknown|TWFpbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQljojV2luMzliLCJBTiI6lk1haWwiLCJXVCi6Mn0=|1000&sdata=r9HVcAgyUYiU6pQAUiMWkqUAv48taVrkHLg48xXTu3l=&reserved=0> (6/23, Bartels) "It turns out it's tricky to troubleshoot a 1980s computer that's dashing around Earth hundreds of miles over our heads. NASA has spent more than a week evaluating a computer issue that put the venerable Hubble Space Telescope out of commission on June 13 and that may force the spacecraft to turn to its backup computer. Now, ongoing tests suggest that the issue the team has identified so far may not be at the root of the computer's problems, according to an update from the agency."

### To Fix The Hubble Space Telescope, NASA May Have To Rely On A Computer That Hasn't Turned On Since 2009

#### Insider

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6c3&t=c&data=04|01|marc.r.etkind@nasa.gov|c1e755571a3348abde7908d936ff27a5|7005d45845be48ae8140d43da96dd17b|0|0|637601291801115180|Unknown|TWFpbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQljojV2luMzliLCJBTiI6lk1haWwiLCJXVCi6Mn0=|1000&sdata=z6cShgoNBWlEj5jk/UM5G4tMWCQ55XH35uabc4Gd59w=&reserved=0> (6/23, McFall-Johnsen) "NASA still hasn't figured out what forced its Hubble Space Telescope offline more than a week ago. The telescope's payload computer suddenly stopped working on June 13, sending NASA engineers scrambling to figure out the problem. That computer, built in the 1980s, is like Hubble's brain — it controls and monitors all the science instruments on the spacecraft. So the telescope has gone into a hibernation-like "safe mode" while NASA troubleshoots."

## As Teams Work To Bring Hubble Back Online, New Science Highlights Missing Dark Matter In Galaxy

### NASA Space Flight

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### Hubble Trouble: NASA Can’t Figure Out What’s Causing Computer Issues On The Telescope

### NPR

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### NASA’s Aging Hubble Space Telescope Stuck In Safe Mode As Glitch Fixes Falter

### CNET News

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### Hubble Space Telescope Finds Galaxy With Weirdly Little Dark Matter

### SPACE

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shadowy, invisible substance. Dark matter makes up the lion's share of a galaxy's mass, and it's critical to hold a galaxy's stars, gas and dust together. So, when scientists find evidence twice over that a certain galaxy seems to have a tiny fraction of the dark matter it ought to have, astronomers sit up and pay attention. And that's where recent observations with the venerable Hubble Space Telescope come in."

#### These Potentially Habitable Exoplanets Can See Earth As It Evolves

CNN

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#### There Is Only One Other Planet In Our Galaxy That Could Be Earth-Like, Say Scientists

Forbes

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#### How NASA's Parker Solar Probe Used Venus To Fly Closer To The Sun

ZDNet

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#### Venus Surprisingly Active Beneath The Surface, Scientists Say

CNET News

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Mack) "Something is moving on Venus – or rather beneath the planet's surface. It's not life, but it does suggest our neighboring world is a little less static than many previously believed. A team of global researchers analyzed NASA radar images from the Magellan mission to Venus and found big blocks of its lithosphere, or crust, appeared to have moved."

#### A New Analysis Of The Surface Of Venus Hints The Planet Might Be Geologically Active

SlashGear

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#### How Lobster Eyes Can Help Astronomers Get A Wider View Of The Cosmos

Astronomy News

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#### Citizen Scientists Discover 2 Gas Giants Around A Distant Sun-like Star

SPACE

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#### Aliens From 1,715 Stars Could've Seen Earth Over The Past 5,000 Years, Study Suggests

Gizmodo

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#### NASA Develops Balloon To Study Venus

KOKH-TV Oklahoma City

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Space Tech

No content.

Various

#### America Needs A Whole-of-government Approach To Studying Unidentified Aerial Phenomena

The Hill

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#### Space Force Set To Defend Deep Space

Washington Times

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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."

#### Fairborn Defense Contractor Wins \$233M In Contract Boosting NASA

Dayton (OH) Daily News

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#### See The Hubble Space Telescope's Iconic Pillars Of Creation In Lego Form

SPACE

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Other

#### European Space Agency Is Wary Of Partnering With China

Aviation Week

<<https://gcc02.safelinks.protection.outlook.com/?url=https://mailview.bulletinintelligence.com/mailview.aspx?m=2021062402nasa&r=email-cf10&l=03b-0e5&t=c&data=04|01|marc.r.etkind@nasa.gov|c1e755571a3348abde7908d936ff27a5|7005d45845be48ae8140d43da96dd17b|0|0|637601291801194837|Unknown|TWFpbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQIjoiV2luMzliLCJBTiI6Ikh1haWwLiLCJXVCi6Mn0=|1000&sdata=AYQW3hA25/YK9sZDgoa2hP7lkdXlFk6RGJjE7r2MCM4=&reserved=0>> (6/24) "Until the mid-2010s, the European Space Agency (ESA) had great hopes that cooperating with the China Manned Space Agency (also known as the China Manned Space Engineering Office) would be fruitful. Harsh diplomatic realities have since dampened enthusiasm. ESA astronauts Samantha Cristoforetti and..."

#### SpaceX's Starlink Satellite Internet Could Achieve Global Coverage By September

Engadget

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haWwiLCJXVCi6Mn0=|1000&sdata=nleoMPohsCoM5zwZxY7bAvWQrN/ETj2/tQPGsCYwJ90=&reserved=0> (6/23, Moon) "The Starlink satellite internet service may have the capability to provide users in far-flung regions around the world with high-speed connections before the year ends. SpaceX has deployed 1,800 or so satellites for the Starlink constellation so far. While that number's just a fraction of the 12,000 satellites regulators already approved for the constellation, it's enough to enable worldwide coverage. According to Reuters, SpaceX president Gwynne Shotwell has revealed at a web conference that the service will be able to offer continuous global coverage once all 1,800 satellites reach their operational orbit. The aerospace corporation expects that to happen as soon as September this year."

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93d&t=c&data=04|01|marc.r.etkind@nasa.gov|c1e755571a3348abde7908d936ff27a5|7005d45845be48ae8140d43da96dd17b|0|0|637601291801214743|Unknown|TWfPbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQljojV2luMzliLCJBTiI6lk1haWwiLCJXVCi6Mn0=|1000&sdata=qCaM38iTvt43Z/BZZ8UBpRKGXr8TxUcLhlesV+p1+ao=&reserved=0>. The NASA Morning Briefing is published five days a week by Bulletin Intelligence, which creates custom briefings for government and corporate leaders. We can be found on the Web at [BulletinIntelligence.com](https://BulletinIntelligence.com), or called at (703) 483-6100.

## **[EXTERNAL] NASA Morning Briefing for Monday, June 28, 2021**

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### Astronauts Complete Solar Panel Work In 3rd Spacewalk

AP

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successfully installed the second in a series of powerful solar wings that should keep the space station running the rest of this decade, as space tourism ramps up with visitors beginning in the fall.”

#### Virgin Galactic Gets FAA Approval To Take Customers To Space

Washington Post

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“Virgin Galactic says it has Federal Aviation Administration approval to fly customers into space, making it the first spaceline to cross that hurdle, the company announced Friday. The milestone comes at a key moment in the space race: On the anniversary of the Apollo 11 moon landing, July 20, Jeff Bezos plans to be onboard when one of his Blue Origin rockets makes its first crewed spaceflight. The FAA is expected to grant Blue Origin a commercial license soon, according to people familiar with the process.”

#### “Space Is For Everyone”: Europe’s Space Agency To Hire First Disabled Astronaut

Reuters

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#### The Chinese-Russian Lunar Axis Adopts A Plan From The Late Paul Spudis

The Hill

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#### Nelson’s First NASA Challenge: The Space Race With China

Orlando (FL) Sentinel

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Weiner, Paras) "While NASA focuses on Venus, China's space program, the China National Space Administration (CNSA), is aimed at landing people on the moon, something NASA hasn't done since Apollo 17 in 1972. It's astounding that 52 years since the U.S. landed, we have done nothing with human beings for decades but send commuter shuttles to a space station 200 miles away."

## Flight

### How NASA Intends To Make The Next Narrowbody Airlines 25% More Efficient

#### FlightGlobal

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## Earth

### Researchers Harness A NASA Satellite To Track Microplastics In The Atlantic

#### SlashGear

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## Humans in Space

### Astronauts Complete Solar Panel Work In 3rd Spacewalk

#### AP

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## Spacewalking Astronauts Deploy Second New Solar Array For Space Station

### SPACE

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## Astronauts Unfurl 60-Foot-Long Space Station Solar Array

### UPI

<<https://gcc02.safelinks.protection.outlook.com/?url=https://mailview.bulletinintelligence.com/mailview.aspx?m=2021062802nasa&r=email-13fc&l=00c-66f&t=c&data=04|01|marc.r.etkind@nasa.gov|13183b53bf6b42bca42508d93a23a276|7005d45845be48ae8140d43da96dd17b|0|0|637604746997841969|Unknown|TWFpbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQIjoiV2luMzliLCJBTiI6Ik1haWwiLCJXVCi6Mn0=|1000&sdata=kg5BtXUKiZBsr18nnvp3v6JIUyuVLvHfmbSfw+hlxQY=&reserved=0>> (6/25, Brinkmann) “Two astronauts concluded a spacewalk Friday outside the International Space Station and installed a second of six new solar arrays that will boost the orbiting laboratory’s electrical power supply. Shane Kimbrough and Thomas Pesquet exited the space station about 8 a.m. EDT. They successfully mounted and rolled out a 60-foot-long solar array, known as iROSA or International Space Station Roll-Out Solar Array. The spacewalk concluded after 6 hours, 45 minutes.”

## Spacewalking Astronauts Install Second Upgraded Solar Array

### Spaceflight Now

<<https://gcc02.safelinks.protection.outlook.com/?url=https://mailview.bulletinintelligence.com/mailview.aspx?m=2021062802nasa&r=email-13fc&l=00d-8e1&t=c&data=04|01|marc.r.etkind@nasa.gov|13183b53bf6b42bca42508d93a23a276|7005d45845be48ae8140d43da96dd17b|0|0|637604746997841969|Unknown|TWFpbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQIjoiV2luMzliLCJBTiI6Ik1haWwiLCJXVCi6Mn0=|1000&sdata=GDg0y1Lh/b/fBcXDrqHL2mdiRD1bd4Ub4F5Wxt72Xn0=&reserved=0>> (6/25, Harwood) “French astronaut Thomas Pesquet and NASA crewmate Shane Kimbrough floated back outside the International Space Station Friday and deployed a 60-foot-long roll-out solar array, the second of six new blankets being installed to upgrade the lab’s power system and offset age-related degradation. ‘It looks like the deployment is complete,’ Pesquet radioed, watching the array unroll itself six hours after the spacewalk began.”

## Pesquet & Kimbrough Complete New Solar Array Installation On ISS

### NASA Space Flight

<<https://gcc02.safelinks.protection.outlook.com/?url=https://mailview.bulletinintelligence.com/mailview.aspx?m=2021062802nasa&r=email-13fc&l=00e-108&t=c&data=04|01|marc.r.etkind@nasa.gov|13183b53bf6b42bca42508d93a23a276|7005d45845be48ae8140d43da96dd17b|0|0|637604746997851928|Unknown|TWFpbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQIjoiV2luMzliLCJBTiI6Ik1haWwiLCJXVCi6Mn0=|1000&sdata=2cwo3JDBsroKDBJ9yq5lxqv4JsifFs8ggIm2WewWJN8=&reserved=0>> (6/25, Harding) “For the third time in 9 days, Thomas Pesquet and Shane Kimbrough donned their spacesuits and ventured

outside the International Space Station (ISS), this time to install the second of six new Boeing-built ISS Roll Out Solar Arrays (IROSAs) to the outpost — part of a program to increase the station's electrical power capability as its science and research demands increase and future expansion plans continue.”

#### Virgin Galactic Gets FAA Approval To Take Customers To Space

Washington Post

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“Virgin Galactic says it has Federal Aviation Administration approval to fly customers into space, making it the first spaceline to cross that hurdle, the company announced Friday. The milestone comes at a key moment in the space race: On the anniversary of the Apollo 11 moon landing, July 20, Jeff Bezos plans to be onboard when one of his Blue Origin rockets makes its first crewed spaceflight. The FAA is expected to grant Blue Origin a commercial license soon, according to people familiar with the process.”

#### Virgin Galactic Gets Official Clearance To Start Flying Paying Customers To Space

Gizmodo

<<https://gcc02.safelinks.protection.outlook.com/?url=https://mailview.bulletinintelligence.com/mailview.aspx?m=2021062802nasa&r=email-13fc&l=010-5c0&t=c&data=04|01|marc.r.etkind@nasa.gov|13183b53bf6b42bca42508d93a23a276|7005d45845be48ae8140d43da96dd17b|0|0|637604746997861883|Unknown|TWFPbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQljojV2luMzliLCJBTiI6lk1haWwiLCJXVCi6Mn0=|1000&sdata=d9yj23BeSwjoCdd99sanCRJjXRNgKcJWgK+M7fC7FKk=&reserved=0>> (6/25, Dvorsky) “An upgraded FAA operators license now allows Virgin Galactic to include paying customers on its space flights, in what is a major milestone for the company and also the nascent space tourism sector. The space tourism industry is starting to heat up. Blue Origin will attempt its first crewed launch of the New Shepard rocket in July, with Amazon CEO Jeff Bezos and the winner of a \$28 million auction on board for the ride. Bezos is poised to beat his rivals in the emerging cold war of billionaires trying to get to space before the other guy, but today's news—that Virgin Galactic has secured an upgraded license to fly paying customers to space—means Richard Branson might actually be the first among them to see the curvature of Earth from suborbital space.”

#### Virgin Galactic Earns FAA Approval To Fly Humans To Space

ABC News

<<https://gcc02.safelinks.protection.outlook.com/?url=https://mailview.bulletinintelligence.com/mailview.aspx?m=2021062802nasa&r=email-13fc&l=011-747&t=c&data=04|01|marc.r.etkind@nasa.gov|13183b53bf6b42bca42508d93a23a276|7005d45845be48ae8140d43da96dd17b|0|0|637604746997861883|Unknown|TWFPbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQljojV2luMzliLCJBTiI6lk1haWwiLCJXVCi6Mn0=|1000&sdata=J72NKxsR2HPNxOhlsrnTrn+cPvE2y5roq0DqPT2ul/Y=&reserved=0>> (6/25, Thorbecke) “The company has already secured reservations from future passengers. Virgin Galactic, the private spaceflight firm founded by billionaire Richard Branson, said Friday that it had received Federal Aviation Administration approval to fly humans to space. The company said that its existing commercial space transportation operator license had been upgraded to allow it to fly customers on the heels of its successful crewed test flight last May, which an extensive data review found performed all flight objectives.”

#### FAA Gives Green Light To Virgin Galactic's Space Tourism

The Hill

<<https://gcc02.safelinks.protection.outlook.com/?url=https://mailview.bulletinintelligence.com/mailview.aspx?m=2021062802nasa&r=email-13fc&l=012-fe52&t=c&data=04|01|marc.r.etkind@nasa.gov|13183b53bf6b42bca42508d93a23a276|7005d45845be48ae8140d43da96dd17b|0|0|637604746997871840|Unknown|TWFpbGZsb3d8eyJWljoiMC4wLjAwMDAiLCJQIjoiV2luMzliLCJBTiI6Ikl1haWwWwLiCjXVCi6Mn0=|1000&sdata=vW43Kmk7FSWahZIGbldiin5TZ8MSHwocO6c24A0NW18=&reserved=0>> (6/25, Kelley) "Virgin Galactic, one of the aerospace companies working to pioneer space tourism, received approval from the Federal Aviation Administration (FAA) to take passengers to space. This follows a May 22 test flight of the company's VMS Eve and VSS Unity. It was Virgin Galactic's third space flight and the first launch from Spaceport America, located in New Mexico."

#### Virgin Galactic Receives FAA Approval To Take Passengers Into Space

Engadget

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#### Virgin Galactic Gets FAA Approval To Fly Customers To Space

Wall Street Journal

<<https://gcc02.safelinks.protection.outlook.com/?url=https://mailview.bulletinintelligence.com/mailview.aspx?m=2021062802nasa&r=email-13fc&l=014-5de&t=c&data=04|01|marc.r.etkind@nasa.gov|13183b53bf6b42bca42508d93a23a276|7005d45845be48ae8140d43da96dd17b|0|0|637604746997881799|Unknown|TWFpbGZsb3d8eyJWljoiMC4wLjAwMDAiLCJQIjoiV2luMzliLCJBTiI6Ikl1haWwWwLiCjXVCi6Mn0=|1000&sdata=GBp1IR9B4lq90kIX0eGCoEBZ1mjh40dvpd5mnNMSk6U=&reserved=0>> (6/25, Grossman) "Richard Branson's Virgin Galactic Holdings Inc. came a step closer to sending customers to the edge of space Friday as federal regulators expanded the company's operator license."

#### Virgin Galactic Cleared By FAA To Fly Customers Into Space

Bloomberg

<<https://gcc02.safelinks.protection.outlook.com/?url=https://mailview.bulletinintelligence.com/mailview.aspx?m=2021062802nasa&r=email-13fc&l=015-092&t=c&data=04|01|marc.r.etkind@nasa.gov|13183b53bf6b42bca42508d93a23a276|7005d45845be48ae8140d43da96dd17b|0|0|637604746997881799|Unknown|TWFpbGZsb3d8eyJWljoiMC4wLjAwMDAiLCJQIjoiV2luMzliLCJBTiI6Ikl1haWwWwLiCjXVCi6Mn0=|1000&sdata=ihV+3aU/pk61Zml5F60lacXRrRwa7O6x8WPNtwOR2dE=&reserved=0>> (6/25, Palazzo) "Virgin Galactic Holdings Inc. received regulatory approval to fly customers into space, moving the budding industry founded by billionaires one step closer to reality. The shares surged almost 40% – the biggest one-day jump ever. The Federal Aviation Administration upgraded the company's existing license to cover customer flights, Virgin Galactic said Friday in a statement, saying the approval was the first of its kind. The company also confirmed that a May 22 test flight performed well against objectives."

#### Virgin Galactic Cleared To Fly Customers On SpaceShipTwo

Space News

<<https://gcc02.safelinks.protection.outlook.com/?url=https://mailview.bulletinintelligence.com/mailview.aspx?m=2021062802nasa&r=email-13fc&l=016-ff1&t=c&data=04|01|marc.r.etkind@nasa.gov|13183b53bf6b42bca42508d93a23a276|7005d45845be48ae8140d43da96dd17b|0|0|637604746997891754|Unknown|TWFpbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQIjoiV2luMzliLCJBTiI6Ikh1aWwiLCJXVCi6Mn0=|1000&sdata=ZIOytRRydOHFgL8VX160e7YRv9uP7iFto6nLtqsq2Ps=&reserved=0>> (6/25, Foust) "The Federal Aviation Administration has granted permission to Virgin Galactic to fly customers, and not just employees, on its SpaceShipTwo suborbital vehicle, a move that could allow the company's founder to fly to the edge of space soon. Virgin Galactic announced June 25 that the FAA's Office of Commercial Space Transportation had updated its existing launch license for SpaceShipTwo, allowing the company to fly spaceflight participants in addition to crew on the vehicle."

## Branson's Virgin Galactic Cleared For Takeoff As Space Tourism Race Heats Up

Reuters

<<https://gcc02.safelinks.protection.outlook.com/?url=https://mailview.bulletinintelligence.com/mailview.aspx?m=2021062802nasa&r=email-13fc&l=017-9f3&t=c&data=04|01|marc.r.etkind@nasa.gov|13183b53bf6b42bca42508d93a23a276|7005d45845be48ae8140d43da96dd17b|0|0|637604746997891754|Unknown|TWFpbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQIjoiV2luMzliLCJBTiI6Ikh1aWwiLCJXVCi6Mn0=|1000&sdata=CSJnJ+Uw+kVQN+YCUVwCIQn4oLdzKZ8+oNBnnlagrTk=&reserved=0>> (6/25) "Billionaire Richard Branson's spaceship company Virgin Galactic (SPCE.N) said on Friday it received approval from the U.S. aviation safety regulator to fly people to space, turning up the pressure on rivals in the nascent and expensive space tourism sector. The company's shares surged as much as 40% to \$56.40, their highest since February, after more than doubling in value this year."

## Virgin Galactic Gets FAA's OK To Launch Customers To Space

AP

<<https://gcc02.safelinks.protection.outlook.com/?url=https://mailview.bulletinintelligence.com/mailview.aspx?m=2021062802nasa&r=email-13fc&l=018-735&t=c&data=04|01|marc.r.etkind@nasa.gov|13183b53bf6b42bca42508d93a23a276|7005d45845be48ae8140d43da96dd17b|0|0|637604746997901708|Unknown|TWFpbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQIjoiV2luMzliLCJBTiI6Ikh1aWwiLCJXVCi6Mn0=|1000&sdata=nrPI4mU5pRJV+wFXQntUCxgmPAd6IRKvhCFmDNo7Tnk=&reserved=0>> (6/25, Dunn) "Virgin Galactic finally has the federal government's approval to start launching customers into space from New Mexico. Richard Branson's rocketship company announced the Federal Aviation Administration's updated license on Friday. It's the final hurdle in Virgin Galactic's yearslong effort to send paying passengers on short space hops."

## These Tiny Indestructible Tardigrades Will Reveal How To Survive In Extremes Of Space

SPACE

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## Chinese Space Station A Looming Threat To US, Experts Say

## Washington Free Beacon

<<https://gcc02.safelinks.protection.outlook.com/?url=https://mailview.bulletinintelligence.com/mailview.aspx?m=2021062802nasa&r=email-13fc&l=01a-f65&t=c&data=04|01|marc.r.etkind@nasa.gov|13183b53bf6b42bca42508d93a23a276|7005d45845be48ae8140d43da96dd17b|0|0|637604746997911660|Unknown|TWFPbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQljojV2luMzliLCJBTiI6lk1haWwiLCJXVCi6Mn0=|1000&sdata=LReOxC0RwAW3ZazP1DkVtzSS2d1gRAosU67dvU2R3ic=&reserved=0>> (6/26, Beyrer) "China will use its space station to advance its military technology and strengthen its influence in foreign countries, experts and lawmakers warn the Washington Free Beacon. Three Chinese astronauts reached the Tiangong space station on June 17. The project ushers in an expansion of China's capabilities in space and a boost to its international prestige."

## Report Backs NASA Proposal To Change Astronaut Radiation Exposure Limits

### Space News

<<https://gcc02.safelinks.protection.outlook.com/?url=https://mailview.bulletinintelligence.com/mailview.aspx?m=2021062802nasa&r=email-13fc&l=01b-7f5&t=c&data=04|01|marc.r.etkind@nasa.gov|13183b53bf6b42bca42508d93a23a276|7005d45845be48ae8140d43da96dd17b|0|0|637604746997911660|Unknown|TWFPbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQljojV2luMzliLCJBTiI6lk1haWwiLCJXVCi6Mn0=|1000&sdata=fVXukMl1/8N9gLyPofBeqmGe29zpFmZtXj2Ght16wwM=&reserved=0>> (6/25, Foust) "A National Academies committee has endorsed a NASA proposal to change the radiation exposure limits the agency sets for its astronauts but cautioned that the revised limit is still insufficient for human Mars missions. The June 24 report by a committee established by the National Academies and sponsored by NASA backs the agency's proposal to set a single lifetime radiation exposure limit for astronauts, rather than different limits based on age and gender."

## ULA, Boeing, And NASA Prepare For Uncrewed And Crewed Starliner Flight Tests

### NASA Space Flight

<<https://gcc02.safelinks.protection.outlook.com/?url=https://mailview.bulletinintelligence.com/mailview.aspx?m=2021062802nasa&r=email-13fc&l=01c-053&t=c&data=04|01|marc.r.etkind@nasa.gov|13183b53bf6b42bca42508d93a23a276|7005d45845be48ae8140d43da96dd17b|0|0|637604746997921621|Unknown|TWFPbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQljojV2luMzliLCJBTiI6lk1haWwiLCJXVCi6Mn0=|1000&sdata=tAd3cSb2ORxg+sONNo+NYi6IJ72+2ZrHU6zJKoxsgSA=&reserved=0>> (6/26, Navin, Kanayama) "United Launch Alliance (ULA), Boeing, and NASA have all started their final preparations for the second Orbital Flight Test (OFT-2) for the CST-100 Starliner spacecraft. OFT-2 will demonstrate all of the changes made to the Starliner spacecraft following the partial failure on the first OFT mission in December 2019. Preparations are also underway for the Starliner Crew Flight Test (CFT), including the delivery of the Atlas V rocket to Cape Canaveral, Florida."

## Boeing And NASA Will Launch Rosie, A Dummy, Into Space Next Month

### SlashGear

<<https://gcc02.safelinks.protection.outlook.com/?url=https://mailview.bulletinintelligence.com/mailview.aspx?m=2021062802nasa&r=email-13fc&l=01d-cc6&t=c&data=04|01|marc.r.etkind@nasa.gov|13183b53bf6b42bca42508d93a23a276|7005d45845be48ae8140d43da96dd17b|0|0|637604746997921621|Unknown|TWFPbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQljojV2luMzliLCJBTiI6lk1haWwiLCJXVCi6Mn0=|1000&sdata=jPRsMSlt7np/x7AGDtKFxNggZHulRHQgfluwOx+vMX4=&reserved=0>> (6/25, Roston) "NASA and Boeing are gearing up to launch a literal dummy into space next month as part of the Commercial Crew Program. The dummy is named Rosie; she belongs to Boeing, which previously used her to collect data during its first (uncrewed) Orbital Flight Test, the OFT-1. This time around, Rosie will be sent into space to help collect data about Starliner's design."



## “Space Is For Everyone”: Europe’s Space Agency To Hire First Disabled Astronaut

Reuters

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## A Final Word Before Mr. Bezos Blasts Off

New York Times

<<https://gcc02.safelinks.protection.outlook.com/?url=https://mailview.bulletinintelligence.com/mailview.aspx?m=2021062802nasa&r=email-13fc&l=01f-6dd&t=c&data=04|01|marc.r.etkind@nasa.gov|13183b53bf6b42bca42508d93a23a276|7005d45845be48ae8140d43da96dd17b|0|0|637604746997931566|Unknown|TWFPbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQIjojV2luMzliLCJBTiI6Ik1haWwiLCJXVCi6Mn0=|1000&sdata=Um0wB9rWpAgi1a7lJEhhl+W9Qd5d8gWLFC43KrGcS8Q=&reserved=0>> (6/27, Bensinger) “In over a decade in which I’ve covered Amazon, one conversation stands out as neatly summarizing the ethos of the e-commerce giant under Jeff Bezos, who will step aside as chief executive next month. An Amazon executive was confronting his new role as a buyer of large appliances, like dishwashers, after several years as a book buyer. ... So while Mr. Bezos floats weightlessly in the cosmos, the question remains whether lawmakers can ultimately bring Amazon back down to earth.”

Jeff Bezos Is Heading To Space, But He’s Not The Only Mogul Obsessed With Extreme Experiences. Here Are The Wildest Ways The World’s Elite Spend Their Free Time.

Insider

<<https://gcc02.safelinks.protection.outlook.com/?url=https://mailview.bulletinintelligence.com/mailview.aspx?m=2021062802nasa&r=email-13fc&l=020-bdf&t=c&data=04|01|marc.r.etkind@nasa.gov|13183b53bf6b42bca42508d93a23a276|7005d45845be48ae8140d43da96dd17b|0|0|637604746997941532|Unknown|TWFPbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQIjojV2luMzliLCJBTiI6Ik1haWwiLCJXVCi6Mn0=|1000&sdata=SOWfFJ90Ony7q0W1DKvQWCvph7/ShQZJPYPhebaZd34=&reserved=0>> (6/26, Hartmans) “In just a few short weeks, Jeff Bezos will take the riskiest flight of his life, one that takes him 62 miles above Earth, right to the edge of space. The soon-to-be-ex-Amazon CEO is something of an adventurer, what with his trips out to sea or to the bottom of caves. But that doesn’t exactly make him unique among his peers — in fact, a passion for extreme experiences seems to be a common trait among the world’s billionaires.”

## A Petition To Make Jeff Bezos Stay In Space Has More Than 120,000 Signatures

CNBC

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more than a few people here on Earth are making it known they'd prefer it if the wealthiest man on the planet takes a one-way trip and remains in orbit. A petition on Change.org entitled 'Do not allow Jeff Bezos to return to Earth' launched in early June, after Bezos announced his plans to fly on next month's first passenger spaceflight of his company Blue Origin, and the petition already has more than 122,000 signatures as of Friday afternoon. Bezos has said he's dreamed of going to space since he was 5 years old."

#### Here Is How Richard Branson May Try To Beat Jeff Bezos To Space

CNBC

<<https://gcc02.safelinks.protection.outlook.com/?url=https://mailview.bulletinintelligence.com/mailview.aspx?m=2021062802nasa&r=email-13fc&l=022-667&t=c&data=04|01|marc.r.etkind@nasa.gov|13183b53bf6b42bca42508d93a23a276|7005d45845be48ae8140d43da96dd17b|0|0|637604746997951488|Unknown|TWFPbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQIjojV2luMzliLCJBTiI6Ikl1haWwiLCJXVCi6Mn0=|1000&sdata=RsNO8l6X9Wlsg7V9XtNKVZUIvrhYCZRnGu9vIDYkv1o=&reserved=0>> (6/25, Sheetz) "Jeff Bezos plans to launch himself to the edge of space on July 20, but fellow billionaire Sir Richard Branson might still try to fly with Virgin Galactic first. Virgin Galactic leadership previously stated the company would conduct three more spaceflights to complete development testing of spacecraft VSS Unity. The company is working to begin flying paying passengers in early 2022, having completed a successful mission last month with just two pilots."

#### ISS Spacewalk

KHOU-TV Houston

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#### Moon to Mars

#### The Chinese-Russian Lunar Axis Adopts A Plan From The Late Paul Spudis

The Hill

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#### Nelson's First NASA Challenge: The Space Race With China

Orlando (FL) Sentinel

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96dd17b|0|0|637604746997961443|Unknown|TWFPbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQljojV2luMzliLCJBTiI6lk1haWwiLCJXVCi6Mn0=|1000&sdata=uCYTDjSRlh8eUrorvbB7uDQg6NKBK3lwrcLL+qh6s6E=&reserved=0> (6/27, Weiner, Paras) "While NASA focuses on Venus, China's space program, the China National Space Administration (CNSA), is aimed at landing people on the moon, something NASA hasn't done since Apollo 17 in 1972. It's astounding that 52 years since the U.S. landed, we have done nothing with human beings for decades but send commuter shuttles to a space station 200 miles away."

## Mars May Have More Water Than Scientists Thought

SlashGear

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## NASA's Perseverance Rover Shot 62 Images For Its Iconic Selfie With Ingenuity

Engadget

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## 'Like A Flute': NASA Shares Sounds Of Mars Rover Snapping Epic Selfie

CNET News

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## Mars Helicopter Takes It To The Limit With More Groundbreaking Flights

CNN

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28a&t=c&data=04|01|marc.r.etkind@nasa.gov|13183b53bf6b42bca42508d93a23a276|7005d45845be48ae8140d43da96dd17b|0|0|637604746997981358|Unknown|TWFPbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQljojV2luMzliLCJBTiI6lk1haWwiLCJXVCi6Mn0=|1000&sdata=Y2MsyMvIN9ip5MQOIjA3w3VkuF8gMZZ3TT+P2wNdq64=&reserved=0> (6/25, Strickland) "Where are you now, Mars Ingenuity helicopter? While it seems like the little chopper has been quiet, it turns out that Ingenuity has aced more of its flights – and even got a software update to fix an annoying issue that impacted some of its previous outings. The 4-pound helicopter has successfully flown eight times on Mars as of June 21, according to an update from Teddy Tzanetos, the helicopter operations lead at NASA's Jet Propulsion Laboratory in Pasadena, California."

## China Wants To Build 'Sky Ladder' To Mars To Beam Up Humans And Cargo

The Hill

<[https://gcc02.safelinks.protection.outlook.com/?url=https://mailview.bulletinintelligence.com/mailview.aspx?m=2021062802nasa&r=email-13fc&l=02a-](https://gcc02.safelinks.protection.outlook.com/?url=https://mailview.bulletinintelligence.com/mailview.aspx?m=2021062802nasa&r=email-13fc&l=02a-c1f&t=c&data=04|01|marc.r.etkind@nasa.gov|13183b53bf6b42bca42508d93a23a276|7005d45845be48ae8140d43da96dd17b|0|0|637604746997991315|Unknown|TWFPbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQljojV2luMzliLCJBTiI6lk1haWwiLCJXVCi6Mn0=|1000&sdata=9jZ0jgGGZwiz4SSepuB5kATOCfO2KraFMp3YdD76Nfs=&reserved=0)

c1f&t=c&data=04|01|marc.r.etkind@nasa.gov|13183b53bf6b42bca42508d93a23a276|7005d45845be48ae8140d43da96dd17b|0|0|637604746997991315|Unknown|TWFPbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQljojV2luMzliLCJBTiI6lk1haWwiLCJXVCi6Mn0=|1000&sdata=9jZ0jgGGZwiz4SSepuB5kATOCfO2KraFMp3YdD76Nfs=&reserved=0> (6/25, Romaine) "China wants to build a 'Sky Ladder' to Mars as part of the country's plans for future Mars expeditions, according to China's state-owned media the Global Times. The country's top rocket manufacturer, Wang Xiaojun, announced this week that China is aiming to put people on Mars by 2033, and a part of its plan includes what it is calling the 'Sky Ladder.'"

## NASA Outline A Larger Helicopter For Future Mars Missions

SlashGear

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513&t=c&data=04|01|marc.r.etkind@nasa.gov|13183b53bf6b42bca42508d93a23a276|7005d45845be48ae8140d43da96dd17b|0|0|637604746997991315|Unknown|TWFPbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQljojV2luMzliLCJBTiI6lk1haWwiLCJXVCi6Mn0=|1000&sdata=XKi3KihssBwH19PxVzR98cF9HXrFOMrS+0ZNTBpnTrs=&reserved=0> (6/25, McGlaun) "NASA has had impressive success with the Ingenuity helicopter that's been testing on the surface of Mars for weeks now. With the success of the Ingenuity helicopter, NASA engineers are already looking at concepts for larger and more capable rotorcraft that could be used for future missions. NASA hopes to continue flying the Ingenuity helicopter and conducting more missions. Data the helicopter is collecting supports the planning stages for future helicopter designs by engineers at JPL, the Ames Research Center, and AeroVironment. NASA is already considering a larger flying vehicle called the Mars Science Helicopter."

## NASA's InSight Mars Lander Might Die By April If It Doesn't Get A Significant Energy Boost

Insider

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0e7&t=c&data=04|01|marc.r.etkind@nasa.gov|13183b53bf6b42bca42508d93a23a276|7005d45845be48ae8140d43da96dd17b|0|0|637604746998001271|Unknown|TWFPbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQljojV2luMzliLCJBTiI6lk1haWwiLCJXVCi6Mn0=|1000&sdata=9LKEAFhf2xdueEYIH16r86ytuYelCPYKMSHOoTwM1HA=&reserved=0> (6/25, McFall-Johnsen) "NASA's InSight lander may not survive another year on Mars. The \$800 million robotic science station landed in a Martian plain called Elysium Planitia in November 2018. Since then, it has detected more than 500 Mars quakes, felt more than 10,000 dust devils pass by, and started to measure the planet's core. But over the last six months, InSight has been facing an energy crisis, since dust is building up on its solar panels."

## NASA Scientists Find More Subsurface Lakes On Mars

Gizmodo

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## NASA Tells Lawmakers That It Wants To See Moon Landings Occur Annually For 12 Straight Years

Insider

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## Solar System and Beyond

### NASA Completes Tests To Identify Problem With Hubble Space Telescope Computer

Fox News

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### There's A Problem With Hubble, And NASA Hasn't Been Able To Fix It Yet

Universe Today

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reaching the end of its lifespan. In recent weeks, NASA identified a problem with the telescope's payload computer which suddenly stopped working."

## Even The Hubble Space Telescope's Backup Computer Is Glitching Now – Raising New Questions About What's Gone Wrong

Insider

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## NASA Is Pulling Out All The Stops To Fix The Hubble Space Telescope

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## Weird Neptune-like Exoplanet May Have Water Clouds

SPACE

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## The 7 Weirdest Things About Venus, Hell Planet

Gizmodo

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62802nasa&r=email-13fc&l=034-

ba7&t=c&data=04|01|marc.r.etkind@nasa.gov|13183b53bf6b42bca42508d93a23a276|7005d45845be48ae8140d43da96dd17b|0|0|637604746998041095|Unknown|TWFPbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQljojV2luMzliLCJBTiI6I6k1haWwiLCJXVCi6Mn0=|1000&sdata=y23WrcXJSXBbQaFdQrpPNtA8q5lCKwhEMHkacfm/ORI=&reserved=0> (6/25, Schultz) "It's been nearly 30 years since a NASA spacecraft went to Venus, a yellowish planet 67 million miles from the Sun and 141 million miles from us. Venus is often thought of as a sibling planet to Earth, both being rocky worlds close enough to the Sun to bask in its heat. And yet, at some point in their histories, the two worlds diverged in an extreme way."

## Scientists Find 29 Planets Where Aliens Could Be Watching Us

The Hill

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## Volunteers And Amateurs Named Credited In NASA's Latest Discoveries

NPR

<<https://gcc02.safelinks.protection.outlook.com/?url=https://mailview.bulletinintelligence.com/mailview.aspx?m=2021062802nasa&r=email-13fc&l=036-d61&t=c&data=04|01|marc.r.etkind@nasa.gov|13183b53bf6b42bca42508d93a23a276|7005d45845be48ae8140d43da96dd17b|0|0|637604746998051055|Unknown|TWFPbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQljojV2luMzliLCJBTiI6I6k1haWwiLCJXVCi6Mn0=|1000&sdata=o8lQjwDxKVoeLEFeCotvhpdb7GPQb9pPmmuhYC2UKxc=&reserved=0>> (6/26) "NASA is crediting volunteers and amateurs with advancing our knowledge of the universe through online data investigations, helping the agency identify two new planets far beyond our solar system. This month, NASA announced the discovery of two new planets far beyond our solar system, exotic worlds orbiting a star that's similar to our own sun but bigger and brighter and about 352 light years away. The find is published online in the Royal Astronomical Society, where the names of volunteers and amateurs are credited as co-authors. Cesar Rubio is a machinist in Pomona, Calif."

## Space Tech

### James Webb Space Telescope Will Study Quasars To Learn About The Early Universe

SlashGear

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at the centers of galaxies and feed on material from an accretion disk surrounding it, and unleashes torrents of radiation.”

#### Watch NASA Launch A Small Rocket With Dozens Of Student Experiments Today!

##### SPACE

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#### Watch NASA Rocket Launch Today Live From Wallops Island

##### Newsweek

<<https://gcc02.safelinks.protection.outlook.com/?url=https://mailview.bulletinintelligence.com/mailview.aspx?m=2021062802nasa&r=email-13fc&l=039-84f&t=c&data=04|01|marc.r.etkind@nasa.gov|13183b53bf6b42bca42508d93a23a276|7005d45845be48ae8140d43da96dd17b|0|0|637604746998061009|Unknown|TWFPbGZsb3d8eyJWljoimc4wLjAwMDAiLCJQljoiv2luMzliLCJBTiI6lk1haWwiLCJXVCi6Mn0=|1000&sdata=JCr7onqcqFHx9RDOOYzvKpUmiKOKfAr0WM4CG3N/xHo=&reserved=0>> (6/25, Browne) “NASA is launching a rocket packed with student science experiments on Friday morning, and some U.S. east coast residents may be able to see it in person. The Terrier-Improved Orion rocket is due to launch between 8 a.m. and 10 a.m. EDT. It will see dozens of experiments, built by college students across the U.S., launch aboard the scientific research rocket as part of the educational RockOn! Program.”

##### Various

#### NASA Team To Study New Roles For The Agency In Addressing Orbital Debris

##### Space News

<<https://gcc02.safelinks.protection.outlook.com/?url=https://mailview.bulletinintelligence.com/mailview.aspx?m=2021062802nasa&r=email-13fc&l=03a-61d&t=c&data=04|01|marc.r.etkind@nasa.gov|13183b53bf6b42bca42508d93a23a276|7005d45845be48ae8140d43da96dd17b|0|0|637604746998070968|Unknown|TWFPbGZsb3d8eyJWljoimc4wLjAwMDAiLCJQljoiv2luMzliLCJBTiI6lk1haWwiLCJXVCi6Mn0=|1000&sdata=pyecVEW/7u+2h3Ms/YwKA/33M9INZSCIDfdjIWrLmeo=&reserved=0>> (6/27, Foust) “NASA has established a working group to examine what new roles the agency can take to mitigate the growth of orbital debris and promote space sustainability. In a talk at the Secure World Foundation’s Summit for Space Sustainability June 23, Bhavya Lal, senior adviser to the NASA administrator for budget and finance, said she is leading a recently established team that will examine how the agency could take a larger role in efforts to mitigate and remediate orbital debris.”

#### NASA Will Dismantle Two Test Sites At Toxic Santa Susana Field Lab Area

##### Los Angeles Daily News

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a36&t=c&data=04|01|marc.r.etkind@nasa.gov|13183b53bf6b42bca42508d93a23a276|7005d45845be48ae8140d43da96dd17b|0|0|637604746998070968|Unknown|TWFPbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQljojV2luMzliLCJBTiI6lk1haWwiLCJXVCi6Mn0=|1000&sdata=iiCVXy0NNOHG9m5FY2ZHRPtQns//VikxVQktGHEOKa8=&reserved=0> (6/25, Grigoryants) "NASA said it will move forward with plans to demolish the Bravo and Coca vertical test stands at the Santa Susana Field Lab, contaminated when the area was used to test rocket engines and other activities for decades. Built in the 1950s, the Alpha, Bravo, Coca and Delta test stands were home to rocket testing for NASA's Space Shuttle program and for U.S. Air Force missiles. Later the sites would play a major role in buoying the Apollo program, which launched the first American astronauts to the moon."

## U.S. Has No Explanation For Unidentified Objects And Stops Short Of Ruling Out Aliens

New York Times

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3b0&t=c&data=04|01|marc.r.etkind@nasa.gov|13183b53bf6b42bca42508d93a23a276|7005d45845be48ae8140d43da96dd17b|0|0|637604746998080920|Unknown|TWFPbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQljojV2luMzliLCJBTiI6lk1haWwiLCJXVCi6Mn0=|1000&sdata=403vHf3Fsb7spn5aHFWTc6uJzIC1LSc3r9L7ri7EZNI=&reserved=0> (6/25, Barnes) "The government still has no explanation for nearly all of the scores of unidentified aerial phenomena reported over almost two decades and investigated by a Pentagon task force, according to a report released on Friday, a result that is likely to fuel theories of otherworldly visitations. ... The report avoids any real discussion of the possibility that the unexplained phenomena are extraterrestrial in nature. It was not the purpose of the government's task force to search for extraterrestrial life, a responsibility that falls to NASA, said a senior governmental official."

## Pentagon UFO Report

KRIV-TV Houston

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cdc&t=c&data=04|01|marc.r.etkind@nasa.gov|13183b53bf6b42bca42508d93a23a276|7005d45845be48ae8140d43da96dd17b|0|0|637604746998080920|Unknown|TWFPbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQljojV2luMzliLCJBTiI6lk1haWwiLCJXVCi6Mn0=|1000&sdata=F1Lf4r+FGREi1tJ6S5e/R2J3uGeuk0mqwYDdmfviYGY=&reserved=0> (6/26) "The Pentagon's long awaited UFO report to Congress failed to answer the question if aliens are out there. ... Here's more from our Craig Patrick's interview with the NASA Administrator two weeks ago. Do you think it could possibly be Russia or another foreign adversary?"

## Former NASA Administrator On The Possibility Of U.S.-China Cooperation In Space

CNBC

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ee4&t=c&data=04|01|marc.r.etkind@nasa.gov|13183b53bf6b42bca42508d93a23a276|7005d45845be48ae8140d43da96dd17b|0|0|637604746998090876|Unknown|TWFPbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQljojV2luMzliLCJBTiI6lk1haWwiLCJXVCi6Mn0=|1000&sdata=mZb6iAWKJM1/M2J7YgHQziQC9QPIYyAE++wfjAJ/Nxs=&reserved=0> (6/28) "Former NASA administrator Charles Bolden says the U.S. and China may not reach a partnership in space anytime soon due to the current political environment; and China will be following the U.S. in broader space exploration."

Other

## Elon Musk's Starship Could Attempt Orbital Test Next Month

The Hill

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#### SpaceX's New Rocket Factory Is Making Its Texas Neighbors Mad

NPR

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#### SpaceX President Gwynne Shotwell Says She Is Hoping For A Starship Orbital Launch In July

Insider

<<https://gcc02.safelinks.protection.outlook.com/?url=https://mailview.bulletinintelligence.com/mailview.aspx?m=2021062802nasa&r=email-13fc&l=041-dcb&t=c&data=04|01|marc.r.etkind@nasa.gov|13183b53bf6b42bca42508d93a23a276|7005d45845be48ae8140d43da96dd17b|0|0|637604746998100832|Unknown|TWFPbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQljojV2luMzliLCJBTiI6lk1haWwiLCJXVCi6Mn0=|1000&sdata=+kfyUoqsfOTYHHxHBtMTnp5oB2Ulv1gQVTjsmynf3oY=&reserved=0>> (6/27, Tayeb) "SpaceX's president, Gwynne Shotwell, said the company is "shooting for July" for its first Starship rocket orbit launch, SpaceNews reported. Speaking at the National Space Society's International Space Development Conference on Friday, Shotwell said: 'I'm hoping we make it, but we all know that this is difficult.'"

#### SpaceX Aiming For July For Starship Orbital Launch Despite Regulatory Reviews

Space News

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#### SpaceX Plans To Launch Its First Orbital Starship Test Flight In July

Engadget

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(6/26, Fingas) "SpaceX might conduct Starship's first orbital test flight in a matter of weeks. According to CNBC, SpaceX president Gwynne Shotwell told those at the online International Space Development conference that the company was 'shooting for July' when planning the orbital trip. Shotwell was aware of the challenges, but said that her firm was 'really on the cusp' of that key journey."

#### SpaceX Aims To Launch First Orbital Starship Flight In July, Company President Says

CNBC

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(6/25, Sheetz) "Elon Musk's SpaceX is 'shooting for July' to launch the first orbital spaceflight of its Starship rocket, company president Gwynne Shotwell said Friday. 'I'm hoping we make it, but we all know that this is difficult,' Shotwell said, speaking at the National Space Society's virtual International Space Development conference."

#### SpaceX Delays Rare-trajectory Cape Canaveral Launch To Next Week

Florida Today

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(6/25, Kelly) "SpaceX is targeting no earlier than next week for its upcoming Falcon 9 launch from Florida, a rare polar mission that will see the rocket pivot south and hug the state's east coast. The company on Friday confirmed teams were targeting no earlier than 2:56 p.m. Tuesday, June 29, for the 230-foot rocket's flight from Cape Canaveral Space Force Station. The mission named Transporter-2 was originally slated to fly from Launch Complex 40 on Friday, June 25."

#### Russia's Soyuz Launches Pion-NKS Naval Intelligence Satellite

NASA Space Flight

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(6/25, Graham) "Russia launched the first satellite for its long-delayed next-generation ocean reconnaissance system on Friday. The Pion-NKS No.901 satellite lifted off atop a Soyuz-2-1b carrier rocket from the Plesetsk Cosmodrome in Northern Russia at 22:50 Moscow Time (19:50 UTC). Pion-NKS is part of the wider Liana program, aimed at replacing the Soviet-era signals intelligence satellites which Russia previously used to collect and monitor radio signals from low Earth orbit. Pion replaces the Upravleniye Sputnik – Passivny Modifikirovanny (US-PM) satellites used for naval reconnaissance, while the complementary Lotos-S satellites are replacing Tselina-2 spacecraft that were specialized

for locating radio sources on land.”

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<[https://gcc02.safelinks.protection.outlook.com/?url=https://mailview.bulletinintelligence.com/mailview.aspx?m=2021062802nasa&r=email-13fc&l=048-](https://gcc02.safelinks.protection.outlook.com/?url=https://mailview.bulletinintelligence.com/mailview.aspx?m=2021062802nasa&r=email-13fc&l=048-888&t=c&data=04|01|marc.r.etkind@nasa.gov|13183b53bf6b42bca42508d93a23a276|7005d45845be48ae8140d43da96dd17b|0|0|637604746998140657|Unknown|TWFPbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQIjojV2luMzliLCJBTiI6Ik1haWwiLCJXVCi6Mn0=|1000&sdata=i62/BZn8CFa+IUP4pbSt6N2ph2/Bi/gEI4nYagrD/7U=&reserved=0)

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## **[EXTERNAL] NASA Morning Briefing for Wednesday, June 30, 2021**

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### Russian Cargo Ship Lifts Off For International Space Station

AP

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“An uncrewed Russian cargo ship blasted off Wednesday on a mission to deliver supplies to the International Space Station. The Progress MS-17 lifted off atop a Soyuz rocket from the Russian space complex in Baikonur, Kazakhstan, at 4:27 a.m. (23:27 GMT Tuesday).”

### Stunning Image Shows International Space Station Moving Across The Sun

The Hill

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### Northrop Grumman's Cygnus Cargo Ship Departs Space Station To Begin New Mission In Orbit

SPACE

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### Washington Goes Crazy With Talk Of UFOs, Alien Life

Washington Times

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“ANALYSIS/OPINION: Every summer in Washington, D.C., the dog days arrive. Temperatures soar into the 100s in the nation's capital, part of which was literally built in a swamp. ... NASA Administrator Bill Nelson, a former astronaut and U.S. senator, said Monday that he doesn't think we 'are alone' here on Earth.”

## NASA Ranks As The Best Place To Work In Government For Ninth Year

NextGov

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## After Delayed SpaceX Launch, Musk Says Reform Needed For Humanity To ‘Become A Spacefaring Civilization’

Fox Business

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Flight

No content.

Earth

## Mountaintop Glacier Ice Is Disappearing In Tropics Globally

Forbes

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## A Massive Lake Suddenly Vanished In Antarctica, Scientists Discover

Vice

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#### NASA Studying Louisiana River Delta System

KIAH-TV Houston

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Humans in Space

#### Russian Cargo Ship Lifts Off For International Space Station

AP

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#### Russia’s Progress Cargo Ship Successfully Launches To Space Station

SPACE

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## Russian Cargo Ship Sets Off After The International Space Station In Dramatic Sky Show

CBS News

<<https://gcc02.safelinks.protection.outlook.com/?url=https://mailview.bulletinintelligence.com/mailview.aspx?m=2021063002nasa&r=email-dc4f&l=00e-2b7&t=c&data=04|01|marc.r.etkind@nasa.gov|54f6bc2b70084295a97908d93bb5f9a7|7005d45845be48ae8140d43da96dd17b|0|0|637606475035571733|Unknown|TWFpbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQIjoiV2luMzliLCJBTiI6Ikl1haWwiLCJXVCi6Mn0=|1000&sdata=UtWu3FL47gld2vAMXWmsrQLy85rDeU/2xXsPtPGI0jQ=&reserved=0>> (6/29, Harwood) “A Russian Progress cargo ship blasted off from the Baikonur Cosmodrome in Kazakhstan on Tuesday and set off after the International Space Station, climbing into the light of the rising sun and putting on a spectacular show as its expanding exhaust plume billowed and blossomed in the upper atmosphere. The Progress MS-17/78P spacecraft and its Soyuz 2-1a booster took off from the Baikonur Cosmodrome at 7:27 p.m. ET (4:27 a.m. Wednesday local time), lighting up the predawn sky as it climbed directly into the plane of the space station’s orbit to kick off a two-day rendezvous.”

## Roscosmos Launches Progress MS-17 To ISS

NASA Space Flight

<<https://gcc02.safelinks.protection.outlook.com/?url=https://mailview.bulletinintelligence.com/mailview.aspx?m=2021063002nasa&r=email-dc4f&l=00f-6e1&t=c&data=04|01|marc.r.etkind@nasa.gov|54f6bc2b70084295a97908d93bb5f9a7|7005d45845be48ae8140d43da96dd17b|0|0|637606475035581682|Unknown|TWFpbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQIjoiV2luMzliLCJBTiI6Ikl1haWwiLCJXVCi6Mn0=|1000&sdata=+CvSXewv322hT2W7J5cL2By3wlkAva+RvFLqMAN9Hzw=&reserved=0>> (6/29, Navin, Kanayama) “Roscosmos has launched their latest resupply mission to the International Space Station, Progress MS-17. The launch occurred at 23:27 UTC on June 29 from Site 31/6 at the Baikonur Cosmodrome in Kazakhstan. A Soyuz 2.1a launch vehicle was used to launch the Progress MS-17 spacecraft. The mission is known to NASA as Progress 78P, as Progress MS-17 is the 78th Russian resupply mission to the ISS.”

## Stunning Image Shows International Space Station Moving Across The Sun

The Hill

<<https://gcc02.safelinks.protection.outlook.com/?url=https://mailview.bulletinintelligence.com/mailview.aspx?m=2021063002nasa&r=email-dc4f&l=010-5d5&t=c&data=04|01|marc.r.etkind@nasa.gov|54f6bc2b70084295a97908d93bb5f9a7|7005d45845be48ae8140d43da96dd17b|0|0|637606475035581682|Unknown|TWFpbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQIjoiV2luMzliLCJBTiI6Ikl1haWwiLCJXVCi6Mn0=|1000&sdata=7HJfQuren3BWAOMXGRkXWlduuAhArRyrkM6xzVY01U=&reserved=0>> (6/29, Guzman) “NASA has released a breathtaking composite image that shows the International Space Station (ISS) crossing in front of the sun. The image captured by NASA photographer Joel Kowsky shows the ISS as a small shape with visible solar arrays on both sides with the sun as a glowing, bright orange backdrop.”

## Spectacular Image Captures International Space Station Crossing In Front Of The Sun During Astronaut Spacewalk

CBS News

<<https://gcc02.safelinks.protection.outlook.com/?url=https://mailview.bulletinintelligence.com/mailview.aspx?m=2021063002nasa&r=email-dc4f&l=011-329&t=c&data=04|01|marc.r.etkind@nasa.gov|54f6bc2b70084295a97908d93bb5f9a7|7005d45845be48ae8140d43da96dd17b|0|0|637606475035591640|Unknown|TWFpbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQIjoiV2luMzliLCJBTiI6Ikl1haWwiLCJXVCi6Mn0=|1000&sdata=483rKiGXTO/8mUwZXcyQZLI36zTYzU23Yr88EIIgc4=&reserved=0>> (6/29, Lewis) “Astronauts were performing a spacewalk outside of the International Space Station as it passed in front of the sun last week — and a NASA photographer captured the exact moment it happened. The resulting image is breathtaking. A composite image made from seven frames taken by NASA photographer Joel Kowsky shows the

silhouette of the ISS last week as it transited the sun at about five miles per second, or about 18,000 miles per hour. The images, which feature the sun as a glowing orange backdrop to the orbiting laboratory, were taken from Nellysford, Virginia, NASA said in a statement Monday.”

#### NASA Shares A Spectacular Image Of The ISS Transiting The Sun

SlashGear

<<https://gcc02.safelinks.protection.outlook.com/?url=https://mailview.bulletinintelligence.com/mailview.aspx?m=2021063002nasa&r=email-dc4f&l=012-98f&t=c&data=04|01|marc.r.etkind@nasa.gov|54f6bc2b70084295a97908d93bb5f9a7|7005d45845be48ae8140d43da96dd17b|0|0|637606475035591640|Unknown|TWFPbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQljojV2luMzliLCJBTiI6lk1haWwiLCJXVCi6Mn0=|1000&sdata=D1O1h4thQq/BkyBYNFi1ygFqp9WRtjUlJJOHUmYydc=&reserved=0>> (6/29, McGlaun) “The International Space Station has been in orbit for many years. The space station has been used as a platform for conducting various scientific research that has resulted in some great science over the years. Currently, the ISS is being serviced by both Russian and American spacecraft with a crew of international astronauts on board.”

#### Northrop Grumman’s Cygnus Cargo Ship Departs Space Station To Begin New Mission In Orbit

SPACE

<<https://gcc02.safelinks.protection.outlook.com/?url=https://mailview.bulletinintelligence.com/mailview.aspx?m=2021063002nasa&r=email-dc4f&l=013-8af&t=c&data=04|01|marc.r.etkind@nasa.gov|54f6bc2b70084295a97908d93bb5f9a7|7005d45845be48ae8140d43da96dd17b|0|0|637606475035601606|Unknown|TWFPbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQljojV2luMzliLCJBTiI6lk1haWwiLCJXVCi6Mn0=|1000&sdata=nbdROKNjYUbcEPQ++vWeVn7e6mwAWB0WGDcfxKOWmCE=&reserved=0>> (6/29, Thompson) “A Northrop Grumman Cygnus cargo spacecraft successfully undocked from the International Space Station Tuesday (June 29) at 12:25 p.m. EDT (1625 GMT), more than four months after it arrived in orbit. The undocking aired live on NASA TV, with the spacecraft separating from the orbital outpost right on time, enabling the craft to begin a secondary mission before its planned fiery demise.”

#### Cygnus Supply Ship Departs Space Station After Four-month Mission

Spaceflight Now

<<https://gcc02.safelinks.protection.outlook.com/?url=https://mailview.bulletinintelligence.com/mailview.aspx?m=2021063002nasa&r=email-dc4f&l=014-6ab&t=c&data=04|01|marc.r.etkind@nasa.gov|54f6bc2b70084295a97908d93bb5f9a7|7005d45845be48ae8140d43da96dd17b|0|0|637606475035601606|Unknown|TWFPbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQljojV2luMzliLCJBTiI6lk1haWwiLCJXVCi6Mn0=|1000&sdata=oVjdkolIMM9RtjOmnBHtMyMau36o95v0nYxRI3gT3rD8=&reserved=0>> (6/29, Clark) “A Cygnus spacecraft owned by Northrop Grumman departed the International Space Station Tuesday, concluding a four-month mission that delivered more than 8,000 pounds of cargo. The automated resupply freighter will deploy five small CubeSats before re-entering the atmosphere and burning up over the Pacific Ocean.”

#### Do You Want To Go To Space?

Discovery Channel

<<https://gcc02.safelinks.protection.outlook.com/?url=https://mailview.bulletinintelligence.com/mailview.aspx?m=2021063002nasa&r=email-dc4f&l=015-07b&t=c&data=04|01|marc.r.etkind@nasa.gov|54f6bc2b70084295a97908d93bb5f9a7|7005d45845be48ae8140d43da96dd17b|0|0|637606475035611558|Unknown|TWFPbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQljojV2luMzliLCJBTiI6lk1haWwiLCJXVCi6Mn0=|1000&sdata=Gluj51yr73JRT2HTw1vgyJNO130hgMS7+Rlx7iVZ9tE=&reserved=0>> (6/29) “Discovery’s new series, WHO WANTS TO BE AN ASTRONAUT is giving regular people the chance to compete for an official spot aboard a rocket to outer space. The winner will get to live at the International Space Station (ISS) for

eight days. We caught up with former NASA astronaut and mechanical engineer, Mike Massimino, to ask him about life aboard the ISS, and tips for aspiring astronauts.”

## Remembering The Crew Of Soyuz 11, The Only Astronauts To Die In Space

Discover Magazine

<<https://gcc02.safelinks.protection.outlook.com/?url=https://mailview.bulletinintelligence.com/mailview.aspx?m=2021063002nasa&r=email-dc4f&l=016-e2b&t=c&data=04|01|marc.r.etkind@nasa.gov|54f6bc2b70084295a97908d93bb5f9a7|7005d45845be48ae8140d43da96dd17b|0|0|637606475035611558|Unknown|TWFPbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQIjojV2luMzliLCJBTiI6lk1haWwiLCJXVCi6Mn0=|1000&sdata=hDY1WD6Sp8pvv0BSEoXURcXJH/+iW1NozGvyitr1XM=&reserved=0>> (6/29, Evans) “A look of troubled uncertainty creased the man’s face. Kneeling beside him, another member of the recovery team likewise listened to the Soyuz 11 capsule, which had just landed following a record-breaking 23-day stay at the world’s first space station. Moments before, both men were eagerly clamoring to greet the returning cosmonauts — Georgi Dobrovolski, Vladislav Volkov, and Viktor Patsayev — whose fame swept Soviet Russia like a whirlwind in June 1971. But when they knocked on the capsule, they were met with only ominous silence.”

## Jeff Bezos Is Soon To Visit Space

Forbes

<<https://gcc02.safelinks.protection.outlook.com/?url=https://mailview.bulletinintelligence.com/mailview.aspx?m=2021063002nasa&r=email-dc4f&l=017-7a0&t=c&data=04|01|marc.r.etkind@nasa.gov|54f6bc2b70084295a97908d93bb5f9a7|7005d45845be48ae8140d43da96dd17b|0|0|637606475035621507|Unknown|TWFPbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQIjojV2luMzliLCJBTiI6lk1haWwiLCJXVCi6Mn0=|1000&sdata=CvgKaKoeO/GLc7HtBYJzB0dyzZ0t25H3FHbQ+q6Y+D0=&reserved=0>> (6/29, Placido) “Jeff Bezos, one of the world’s wealthiest men, is due to (briefly) leave Earth in late July, launched into space by his private spaceflight company Blue Origin. Quite a few earthlings want him to stay up there; more than 138,000 have signed a tongue-in-cheek petition proposing that Bezos be banned from returning to Earth.”

## Moon to Mars

## China Once Said It Couldn’t Put A Potato In Space. Now It’s Eyeing Mars

CNBC

<<https://gcc02.safelinks.protection.outlook.com/?url=https://mailview.bulletinintelligence.com/mailview.aspx?m=2021063002nasa&r=email-dc4f&l=018-dd0&t=c&data=04|01|marc.r.etkind@nasa.gov|54f6bc2b70084295a97908d93bb5f9a7|7005d45845be48ae8140d43da96dd17b|0|0|637606475035621507|Unknown|TWFPbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQIjojV2luMzliLCJBTiI6lk1haWwiLCJXVCi6Mn0=|1000&sdata=LprokKPqgzpovGOPksi2zZxO1QMuKlfl1lwFweX0kkg=&reserved=0>> (6/30, Kharpal) “In 1957, the Soviet Union launched Sputnik, the first artificial satellite, which sparked a space race with the U.S. China, however, was nowhere to be seen. While the U.S. and the Soviet Union were battling for superiority in this new domain, Mao Zedong, one of the founders of the Chinese Communist Party (CCP), reportedly said: ‘China cannot even put a potato in space.’”

## A Lunar Farside Telescope Could Detect Exoplanets Through Their Magnetospheres

Universe Today

<<https://gcc02.safelinks.protection.outlook.com/?url=https://mailview.bulletinintelligence.com/mailview.aspx?m=2021063002nasa&r=email-dc4f&l=019-683&t=c&data=04|01|marc.r.etkind@nasa.gov|54f6bc2b70084295a97908d93bb5f9a7|7005d45845be48ae8140d43da96dd17b|0|0|637606475035631462|Unknown|TWFPbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQIjojV2luMzliLCJBTiI6lk1>>

haWwiLCJXVCi6Mn0=|1000&sdata=EQOnV6lw1ZM80acamketglG0F7luWpD0R7nGDQOIovQ=&reserved=0> (6/29, Koberlein) "It's difficult to do radio astronomy on Earth, and it's getting harder every day. Our everyday reliance on radio technology means that radio interference is a constant challenge, even in remote areas. And for some wavelengths even the Earth's atmosphere is a problem, absorbing or scattering radio light so that Earth-based telescopes can't observe these wavelengths well. ... NASA is currently studying how we might build a radio telescope on the Moon. If it is built in the coming decades, we might finally see the aurora glow of a distant Earth."

#### NASA May Have Finally Solved A Mars Methane Mystery

CNET News

<<https://gcc02.safelinks.protection.outlook.com/?url=https://mailview.bulletinintelligence.com/mailview.aspx?m=2021063002nasa&r=email-dc4f&l=01a-682&t=c&data=04|01|marc.r.etkind@nasa.gov|54f6bc2b70084295a97908d93bb5f9a7|7005d45845be48ae8140d43da96dd17b|0|0|637606475035631462|Unknown|TWFPbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQljojV2luMzliLCJBTiI6lk1haWwiLCJXVCi6Mn0=|1000&sdata=n34V00IP7AT8bEy2Q0J0fP6TT7VHJsh1LIMUUDrFNW4=&reserved=0>> (6/29, Kooser) "Methane. On Earth, it's the stuff of cow farts and burps. On Mars, it's the stuff of mysteries. Scientists have been puzzling over methane readings from Mars, and NASA may be a step closer to figuring out what's going on with the gas on the red planet. It turns out the time of day has a big impact on methane detections."

#### NASA's Moon-bound Mannequin Astronaut Named After Hero Of Troubled Apollo 13 Mission

CNN

<<https://gcc02.safelinks.protection.outlook.com/?url=https://mailview.bulletinintelligence.com/mailview.aspx?m=2021063002nasa&r=email-dc4f&l=01b-56e&t=c&data=04|01|marc.r.etkind@nasa.gov|54f6bc2b70084295a97908d93bb5f9a7|7005d45845be48ae8140d43da96dd17b|0|0|637606475035641418|Unknown|TWFPbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQljojV2luMzliLCJBTiI6lk1haWwiLCJXVCi6Mn0=|1000&sdata=iGPSHGgKB5OzDcxDjoTp9/lJ7ufvBWeHlwxCyALpbGE=&reserved=0>> (6/29, Rogers) "After a weeks-long challenge to name NASA's moon-bound mannequin (or 'Moonikin' as NASA has dubbed it), the people have chosen: Campos is expected to take off on the uncrewed Artemis I moon mission slated for November. The name is a dedication to the late Arturo Campos, a Mexican American electrical engineer at NASA who was instrumental in bringing the imperiled Apollo 13 crew safely back home in 1970, according to NASA."

#### Dust Problems Draining Power From NASA's InSight Mars Lander

SPACE

<<https://gcc02.safelinks.protection.outlook.com/?url=https://mailview.bulletinintelligence.com/mailview.aspx?m=2021063002nasa&r=email-dc4f&l=01c-3d8&t=c&data=04|01|marc.r.etkind@nasa.gov|54f6bc2b70084295a97908d93bb5f9a7|7005d45845be48ae8140d43da96dd17b|0|0|637606475035641418|Unknown|TWFPbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQljojV2luMzliLCJBTiI6lk1haWwiLCJXVCi6Mn0=|1000&sdata=l44pU/l6GcLatwW9OwhoNfmWJRTH+FaJ86SULTbE+EE=&reserved=0>> (6/29, Howell) "Martian dust accumulating on the panels of NASA's InSight lander could force the Red Planet mission to end its work within the next 10 months, its principal investigator warned during a recent update. To save power and preserve InSight's essential items like heaters in the cold Martian environment, mission managers have already turned off several instruments on the lander. NASA has also tried a new way of encouraging the wind to blow off sand, but with limited success."

#### NASA's Mars Helicopter Ingenuity Could Keep Flying The Martian Skies For Months

SPACE

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2d4&t=c&data=04|01|marc.r.etkind@nasa.gov|54f6bc2b70084295a97908d93bb5f9a7|7005d45845be48ae8140d43da96dd17b|0|0|637606475035651374|Unknown|TWFPbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQljojV2luMzliLCJBTiI6lk1haWwiLCJXVCi6Mn0=|1000&sdata=6Z/hi78ljcaUW6FUxGjVllafYIYzJLclSffxoSRJ+GA=&reserved=0> (6/29, Wall) "The future of aerial Mars exploration looks bright. NASA's Mars helicopter Ingenuity, which landed inside Mars' Jezero Crater with the agency's Perseverance rover in February, has now completed eight Red Planet flights. That's three more than the maximum targeted for the 4-lb. (1.8 kilograms) chopper's original technology-demonstration mission — and Ingenuity isn't done yet."

#### NASA Reveals The Public's Favorite Dummy Name: Commander Moonikin

SlashGear

<https://gcc02.safelinks.protection.outlook.com/?url=https://mailview.bulletinintelligence.com/mailview.aspx?m=2021063002nasa&r=email-dc4f&l=01e-afb&t=c&data=04|01|marc.r.etkind@nasa.gov|54f6bc2b70084295a97908d93bb5f9a7|7005d45845be48ae8140d43da96dd17b|0|0|637606475035651374|Unknown|TWFPbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQljojV2luMzliLCJBTiI6lk1haWwiLCJXVCi6Mn0=|1000&sdata=IKbGJNt4VFQQ3pGSg/g5ZylxocBhFljixgWDtcvwwG8=&reserved=0> (6/29, Roston) "A few weeks ago, NASA asked the public to vote on their favorite name for the manikin (a type of human-sized dummy) that'll be used as part of the Artemis I lunar mission. Space fans spoke and now NASA is back with the final name for its latest manikin: Commander Moonikin Campos. Yes, that's right. Cmdr. Moonikin will be fitted with its own spacesuit and launched all by itself into space."

#### Solar System and Beyond

#### 'Pac-Man' In Space: Black Holes Gobble Up Neutron Stars In First Evidence Of A Rare Celestial Event

CNN

<https://gcc02.safelinks.protection.outlook.com/?url=https://mailview.bulletinintelligence.com/mailview.aspx?m=2021063002nasa&r=email-dc4f&l=01f-715&t=c&data=04|01|marc.r.etkind@nasa.gov|54f6bc2b70084295a97908d93bb5f9a7|7005d45845be48ae8140d43da96dd17b|0|0|637606475035661331|Unknown|TWFPbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQljojV2luMzliLCJBTiI6lk1haWwiLCJXVCi6Mn0=|1000&sdata=SJM6iGgoYYBlrm5m5UjXLI8haJCyEE1rhNOc0clWjvA=&reserved=0> (6/29, Strickland) "Nearly a billion years ago, two of the most extreme objects in the universe came together in a death spiral, and one of them didn't make it out alive. For the first time ever, astronomers have detected two separate instances of black holes swallowing dense neutron stars — and it played out like Pac-Man in space. ... 'We've now seen the first examples of black holes merging with neutron stars, so we know that they're out there,' said Maya Fishbach, a NASA Einstein Postdoctoral Fellow and LIGO Scientific Collaboration member."

#### Mystery Explosion 1,000 Years Ago May Be A Rare, Third Type Of Supernova

LiveScience

<https://gcc02.safelinks.protection.outlook.com/?url=https://mailview.bulletinintelligence.com/mailview.aspx?m=2021063002nasa&r=email-dc4f&l=020-6c6&t=c&data=04|01|marc.r.etkind@nasa.gov|54f6bc2b70084295a97908d93bb5f9a7|7005d45845be48ae8140d43da96dd17b|0|0|637606475035661331|Unknown|TWFPbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQljojV2luMzliLCJBTiI6lk1haWwiLCJXVCi6Mn0=|1000&sdata=7Ach4UStd5HShnfF7XHP38/zDjMncVlnNzhPG7P55wo=&reserved=0> (6/29, Specktor) "On July 4, 1054 — about 700 years before the United States popped its first celebratory firework — a mysterious light exploded in the sky. The blast was visible around the world, lingering in the daytime sky for nearly a month, and visible at night for nearly two years, according to NASA. At the time, Chinese astronomers labeled the mysterious blaze a 'guest star' — a temporary heavenly object that seemingly appeared from nothing, then vanished to nothing."



## Giant Comet Zooming Toward The Sun Is Largest Ever Seen

USA Today

<<https://gcc02.safelinks.protection.outlook.com/?url=https://mailview.bulletinintelligence.com/mailview.aspx?m=2021063002nasa&r=email-dc4f&l=021-c68&t=c&data=04|01|marc.r.etkind@nasa.gov|54f6bc2b70084295a97908d93bb5f9a7|7005d45845be48ae8140d43da96dd17b|0|0|637606475035671286|Unknown|TWFpbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQljoV2luMzliLCJBTiI6lk1haWwiLCJXVCi6Mn0=|1000&sdata=c6iGjiB7KCFPeEDKJFCckEVgN+AZcXh0HTv9KSivvkE=&reserved=0>> (6/29, Rice) "This is a big one. A giant comet – which scientists say is arguably the largest comet discovered in modern times – is on its way toward the sun and will make its closest approach to Earth in 2031. ... The comet probably came from the Oort Cloud, which is believed to be a giant spherical shell that surrounds the solar system, according to NASA. Most long-period comets such as this one come from the Oort Cloud, NASA said."

## Astronomers Believe There May Be More Earth-sized Planets Than They Thought

SlashGear

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## Earth-Like Planets May Be Lurking In The Glare Of Binary Star Systems

New Atlas

<<https://gcc02.safelinks.protection.outlook.com/?url=https://mailview.bulletinintelligence.com/mailview.aspx?m=2021063002nasa&r=email-dc4f&l=023-2b5&t=c&data=04|01|marc.r.etkind@nasa.gov|54f6bc2b70084295a97908d93bb5f9a7|7005d45845be48ae8140d43da96dd17b|0|0|637606475035681242|Unknown|TWFpbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQljoV2luMzliLCJBTiI6lk1haWwiLCJXVCi6Mn0=|1000&sdata=4nVZfYHZhRA3SsrRr7o0DtWZF0Rd0IQE8MiN1YrxV40=&reserved=0>> (6/29, Wood) "Double star systems may be concealing a population of potentially habitable Earth-sized planets in their combined glare, according to the results of a newly published study. Roughly half of all stars are thought to exist in binary systems, in which two massive stellar bodies orbit around a common center of mass. ... The scientists behind the study sought to discover how many stars in a sample of data collected by NASA's TESS exoplanet hunting mission were actually part of a double star system. They also hoped to shed light on whether it was likely that the intense light from the stars was capable of obscuring the presence of hitherto unknown Earth-like worlds."

## Scientists Say There's No Life On Venus — But Jupiter Has Potential

CBS News

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Lewis) "It turns out the clouds of Venus aren't made of the right stuff to support life — so now, scientists are turning to Jupiter instead. ... The findings come nearly a month after NASA announced two new discovery missions to the inferno-like planet, scheduled to launch between 2028 and 2030. One of those missions could help determine if Venus could have supported life billions of years ago."

These Scientists Spent Decades Pushing NASA To Go Back To Venus. Now They're On A Hot Streak.

Popular Science

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"Jörn Helbert was standing outside a stranger's apartment in the north end of Berlin with a bouquet of yellow roses. It was June 2020, and the woman behind the door was in mandatory quarantine. ... Helbert, Dyar, and a team of colleagues were in the last stages of pitching NASA on a mission called VERITAS, which would send a satellite to map Venus at higher resolution than ever before."

Venus Can't Sustain Life In The Clouds, But Jupiter Has Potential

CNET News

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Space Tech

Stratodynamics Completes Turbulence-Detection Sensor Flights

Aviation Week

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"Stratodynamics and UAVOS have completed a series of stratospheric flights with the HiDRON autonomous glider from Spaceport America in New Mexico. The flights tested sensors for the onboard detection of clear air turbulence. The early June flight campaign, supported by the NASA's Flight Opportunities..."

Various

Washington Goes Crazy With Talk Of UFOs, Alien Life

Washington Times

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#### NASA Administrator Bill Nelson Believes We Are Not Alone In The Universe

##### Fox News

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#### NASA Ranks As The Best Place To Work In Government For Ninth Year

##### NextGov

<<https://gcc02.safelinks.protection.outlook.com/?url=https://mailview.bulletinintelligence.com/mailview.aspx?m=2021063002nasa&r=email-dc4f&l=02a-14e&t=c&data=04|01|marc.r.etkind@nasa.gov|54f6bc2b70084295a97908d93bb5f9a7|7005d45845be48ae8140d43da96dd17b|0|0|63760647503571112|Unknown|TWFpbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQIjoiV2luMzliLCJBTiI6Ikl1haWwiLCJXVCi6Mn0=|1000&sdata=75UUtfNz7jIubBLkOQIIQFK9RpdM/awKQJv+jZsk+ak=&reserved=0>> (6/29, Bubl ) "For the ninth year in a row, NASA came out as the best place to work in the federal government among large agencies in a nonprofit's annual rankings. On Tuesday, the nonprofit Partnership for Public Service and global management consulting firm Boston Consulting Group released the 2020 Best Places to Work in the Federal Government rankings, based largely on responses to the Office of Personnel Management's annual Federal Employee Viewpoint Survey that was administered from Sept. 14, 2020, to Nov. 5, 2020. The Partnership and consultancy incorporated additional survey data from 10 agencies (including the Veterans Affairs Department and Peace Corps) as well as responses from intelligence agency employees."

#### Agencies Score High Marks From Employees On Handling Of Pandemic, But Leadership Issues Persist

##### Federal News Network

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Department (74.9).”

## DC Circ. Relaunches Ex-NASA Worker's Disability Bias Case

Law360

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“The D.C. Circuit revived a disability bias case from a former NASA employee on Tuesday, finding he wasn't required to forfeit a \$35,000 U.S. Equal Employment Opportunity Commission win in order...”

## Colombia Catches Hacker Wanted In The U.S. For 'Gozi' Virus

Washington Post

<<https://gcc02.safelinks.protection.outlook.com/?url=https://mailview.bulletinintelligence.com/mailview.aspx?m=2021063002nasa&r=email-dc4f&l=02d-23b&t=c&data=04|01|marc.r.etkind@nasa.gov|54f6bc2b70084295a97908d93bb5f9a7|7005d45845be48ae8140d43da96dd17b|0|0|637606475035731024|Unknown|TWFpbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQljojV2luMzliLCJBTiI6lk1haWwiLCJXVCi6Mn0=|1000&sdata=N51rEMWnM2SEYsx5GMC+enqrAadYDJAm8LpQ/fax5Jw=&reserved=0>> (6/29)  
“Colombian officials say they have arrested a Romanian hacker who is wanted in the U.S. for distributing a virus that infected more than a million computers from 2007 to 2012. ... Victims included individuals, corporations and also computers belonging to NASA.”

## Federal Agencies Need Stricter Limits On Facial Recognition To Protect Privacy, Says Government Watchdog

Washington Post

<<https://gcc02.safelinks.protection.outlook.com/?url=https://mailview.bulletinintelligence.com/mailview.aspx?m=2021063002nasa&r=email-dc4f&l=02e-1f9&t=c&data=04|01|marc.r.etkind@nasa.gov|54f6bc2b70084295a97908d93bb5f9a7|7005d45845be48ae8140d43da96dd17b|0|0|637606475035731024|Unknown|TWFpbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQljojV2luMzliLCJBTiI6lk1haWwiLCJXVCi6Mn0=|1000&sdata=bBE4K1VIYCCjVRYu4lqnFMUYmTjkd5ycPw5DGjXrPqo=&reserved=0>> (6/29)  
“The use of facial recognition technology is widespread throughout the federal government, and many agencies do not even know which systems they are using. That needs to change, the federal government's main watchdog said in a new report. Twenty agencies — including departments not generally associated with law enforcement, such as the U.S. Postal Service, the Fish and Wildlife Service and NASA — have used the tech, according to the Government Accountability Office.”

## Raymond Soto: The Awe And Wonder Of The Kennedy Space Center

USA Today

<<https://gcc02.safelinks.protection.outlook.com/?url=https://mailview.bulletinintelligence.com/mailview.aspx?m=2021063002nasa&r=email-dc4f&l=02f-593&t=c&data=04|01|marc.r.etkind@nasa.gov|54f6bc2b70084295a97908d93bb5f9a7|7005d45845be48ae8140d43da96dd17b|0|0|637606475035740982|Unknown|TWFpbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQljojV2luMzliLCJBTiI6lk1haWwiLCJXVCi6Mn0=|1000&sdata=Tzr161943v7e8fcrzExVkd807trR7Ru97aXra2MxJkA=&reserved=0>> (6/29)  
“Editor's Note: The USA TODAY NETWORK is auctioning its inaugural nonfungible token (NFT) inspired by the first newspaper delivered to space in 1971. Apollo 14 astronaut Alan Shepard, the first American in space, transported a special edition of TODAY, now FLORIDA TODAY and part of the USA TODAY NETWORK, to the moon and back. In celebration of the 50th anniversary of Shepard's visit, select stories from that edition are being republished, and visual

journalist Pat Shannahan assembled more than 300 photographs, illustrations and front pages from five decades of space coverage to recreate the cover as an interactive mosaic.”

## Evidence Suggests Aliens Might Be Surveilling Our Troops. Should We Be Worried?

Daily Caller

<<https://gcc02.safelinks.protection.outlook.com/?url=https://mailview.bulletinintelligence.com/mailview.aspx?m=2021063002nasa&r=email-dc4f&l=030-c3d&t=c&data=04|01|marc.r.etkind@nasa.gov|54f6bc2b70084295a97908d93bb5f9a7|7005d45845be48ae8140d43da96dd17b|0|0|637606475035740982|Unknown|TWFPbGZsb3d8eyJWljoimC4wLjAwMDAiLCJQljoiv2luMzliLCJBTiI6lk1haWwiLCJXVCi6Mn0=|1000&sdata=3WYEuBLMrwykohDwZ1HY2MIZaPHOU7R2/UN0GS3zbgc=&reserved=0>> (6/29, Hall) “The Office of the Director of National Intelligence released a report Friday on unidentified flying objects but didn’t exclude the possibility that aliens exist. Experts and commentators have called for more research into this topic to solve the questions the public has on the unidentified aerial phenomena. ... Just because UAPs are unidentified doesn’t mean they’re aliens, Ravi Kopparapu, a research scientist at NASA, told the Daily Caller News Foundation.”

## NASA Is Using Data Science To Fill Its Data Science Skills Gap

ZDNet

<<https://gcc02.safelinks.protection.outlook.com/?url=https://mailview.bulletinintelligence.com/mailview.aspx?m=2021063002nasa&r=email-dc4f&l=031-a17&t=c&data=04|01|marc.r.etkind@nasa.gov|54f6bc2b70084295a97908d93bb5f9a7|7005d45845be48ae8140d43da96dd17b|0|0|637606475035750942|Unknown|TWFPbGZsb3d8eyJWljoimC4wLjAwMDAiLCJQljoiv2luMzliLCJBTiI6lk1haWwiLCJXVCi6Mn0=|1000&sdata=EVYmwTHXPnsize+QPou1aSaw5NIRbw6mSlxqXIHFIE=&reserved=0>> (6/29, Samuels) “All the evidence suggests it’s tough to get hold of talented data scientists – and that’s even true at NASA, says David Meza, acting branch chief of people analytics and senior data scientist at the US space agency. So what does a skills gap look like at NASA? Meza says his team is still taking a ‘deep dive’ into the organisation’s data science talent demands – but clear patterns are emerging, particularly in terms of identifying capability that already exists within the organisation.”

Other

## After Delayed SpaceX Launch, Musk Says Reform Needed For Humanity To ‘Become A Spacefaring Civilization’

Fox Business

<<https://gcc02.safelinks.protection.outlook.com/?url=https://mailview.bulletinintelligence.com/mailview.aspx?m=2021063002nasa&r=email-dc4f&l=032-67f&t=c&data=04|01|marc.r.etkind@nasa.gov|54f6bc2b70084295a97908d93bb5f9a7|7005d45845be48ae8140d43da96dd17b|0|0|637606475035750942|Unknown|TWFPbGZsb3d8eyJWljoimC4wLjAwMDAiLCJQljoiv2luMzliLCJBTiI6lk1haWwiLCJXVCi6Mn0=|1000&sdata=QJPzJXvaTiXV3Yt6Apx4v3XARYcAyE4gFvlpJBgJxCl=&reserved=0>> (6/29, Best) “SpaceX was seconds away from sending dozens of satellites into orbit aboard its Falcon 9 rocket on Tuesday when the launch was called off because an airplane entered its launch zone. The launch’s 24-hour delay earned the ire of SpaceX CEO Elon Musk, who tweeted that the rocket’s ‘keep out zone’ is ‘unreasonably gigantic.’”

## SpaceX Scrubs Transporter 2 Launch Attempt Due To Range Violation

NASA Space Flight

<<https://gcc02.safelinks.protection.outlook.com/?url=https://mailview.bulletinintelligence.com/mailview.aspx?m=2021063002nasa&r=email-dc4f&l=033-1db&t=c&data=04|01|marc.r.etkind@nasa.gov|54f6bc2b70084295a97908d93bb5f9a7|7005d45845be48ae8140d43da96dd17b|0|0|637606475035760894|Unknown|TWFPbGZsb3d8eyJWljoimC4wLjAwMDAiLCJQljoiv2luMzliLCJBTiI6lk1>

haWwiLCJXVCi6Mn0=|1000&sdata=sPeotn3zUnliw3K1B/8NuxjcyTfn26rJcbkB8FpHPiU=&reserved=0> (6/29, Lentz)  
"SpaceX was preparing to launch the Transporter 2 mission on Tuesday, June 29 at 14:56 EDT (18:56 UTC) from Space Launch Complex 40 (SLC-40) at Cape Canaveral Space Force Station. However, the countdown was held at T-30 seconds due to an aircraft within the range's restricted airspace, setting up a next attempt no earlier than Wednesday, June 30."

#### Falcon 9 Launch Scrub Highlights Airspace Integration Problems

Space News

<https://gcc02.safelinks.protection.outlook.com/?url=https://mailview.bulletinintelligence.com/mailview.aspx?m=2021063002nasa&r=email-dc4f&l=034-112&t=c&data=04|01|marc.r.etkind@nasa.gov|54f6bc2b70084295a97908d93bb5f9a7|7005d45845be48ae8140d43da96dd17b|0|0|637606475035760894|Unknown|TWFPbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQIjoiV2luMzliLCJBTiI6Ik1haWwiLCJXVCi6Mn0=|1000&sdata=FHuBFOYzzjMDIQ7XoQ6XyzPwO4jrDu5TA8rcsYfWjTQ=&reserved=0> (6/29, Foust) "A SpaceX launch scrubbed in the final seconds of its countdown when an aircraft violated restricted airspace June 29 has aligned both the launch industry and the airline industry in their criticism of the Federal Aviation Administration. SpaceX was preparing to launch a Falcon 9 from Cape Canaveral Space Force Station in Florida at 2:56 p.m. Eastern. The Transporter-2 mission is carrying 88 satellites on SpaceX's second dedicated smallsat rideshare missions, supporting customers ranging from NASA and the Pentagon's Space Development Agency to several companies developing remote sensing and communications constellations."

#### Rarely Heard Sonic Booms Expected Tuesday As SpaceX Launches, Lands Falcon 9 Rocket

USA Today

<https://gcc02.safelinks.protection.outlook.com/?url=https://mailview.bulletinintelligence.com/mailview.aspx?m=2021063002nasa&r=email-dc4f&l=035-e41&t=c&data=04|01|marc.r.etkind@nasa.gov|54f6bc2b70084295a97908d93bb5f9a7|7005d45845be48ae8140d43da96dd17b|0|0|637606475035770850|Unknown|TWFPbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQIjoiV2luMzliLCJBTiI6Ik1haWwiLCJXVCi6Mn0=|1000&sdata=AeEUaiTMh6vQvIUH5HTi2OWXuHIAgeVNH8PK7tqQ/io=&reserved=0> (6/29, Kelly) "A rarely heard cannonade of sonic booms will reverberate across the Space Coast on Tuesday, the result of a SpaceX Falcon 9 rocket launch and subsequent landing at Cape Canaveral Space Force Station. After a 2:56 p.m. liftoff from Launch Complex 40, the rocket's 162-foot booster will separate from the payload-hauling second stage, flip around, and begin an autonomous descent toward nearby Landing Zone 1. Though it will have flown to an altitude hundreds of thousands of feet above Earth's surface, the booster will touch down just 5 1/2 miles from where it started."

#### Starlink Will Be Here In August, Elon Musk Says

Gizmodo

<https://gcc02.safelinks.protection.outlook.com/?url=https://mailview.bulletinintelligence.com/mailview.aspx?m=2021063002nasa&r=email-dc4f&l=036-35c&t=c&data=04|01|marc.r.etkind@nasa.gov|54f6bc2b70084295a97908d93bb5f9a7|7005d45845be48ae8140d43da96dd17b|0|0|637606475035770850|Unknown|TWFPbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQIjoiV2luMzliLCJBTiI6Ik1haWwiLCJXVCi6Mn0=|1000&sdata=yErpY+hzNFuJ/Hr8WQQp8gtiGD+0aLTPDLJR06UvCuw=&reserved=0> (6/29, Provenzano) "The low-orbit satellite broadband service Starlink will be available for global coverage beginning in August, Elon Musk said on Tuesday, with the exception of the north and south poles. During a virtual talk at the Mobile World Congress 2021, Musk announced that Starlink's high-speed broadband service is 'operational now in about 12 countries, and more are being added every month.'"

#### Elon Musk Counts On 500,000 Starlink Users Within The Next Year

The Verge

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Low Supply Drove U.S. Home Prices Higher In April

Washington Post

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SpaceX Had To Reschedule Its Rocket Launch Because A Helicopter Entered The ‘Keep Out Zone’ With Seconds To Go — And Elon Musk Isn’t Happy About It

Insider

<<https://gcc02.safelinks.protection.outlook.com/?url=https://mailview.bulletinintelligence.com/mailview.aspx?m=2021063002nasa&r=email-dc4f&l=039-0a4&t=c&data=04|01|marc.r.etkind@nasa.gov|54f6bc2b70084295a97908d93bb5f9a7|7005d45845be48ae8140d43da96dd17b|0|0|637606475035790767|Unknown|TWFPbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQljojV2luMzliLCJBTiI6lk1haWwiLCJXVCi6Mn0=|1000&sdata=7o25t2mvG5Z0N44zIz3Wdk1YcHggZ2fQsQCdQXh0ANc=&reserved=0>> (6/29, Canales) “Tesla CEO Elon Musk said a SpaceX launch was called off because an aircraft entered the so-called keep out zone. Musk, who also is CEO of SpaceX, tweeted Tuesday that the ‘keep out zone’ is ‘unreasonably gigantic,’ and since an aircraft entered it, the company was not able to launch its own.”

Elon Musk Calls For Reform After SpaceX Flight Canceled Due To Air Space Crowding

Newsweek

<<https://gcc02.safelinks.protection.outlook.com/?url=https://mailview.bulletinintelligence.com/mailview.aspx?m=2021063002nasa&r=email-dc4f&l=03a-95e&t=c&data=04|01|marc.r.etkind@nasa.gov|54f6bc2b70084295a97908d93bb5f9a7|7005d45845be48ae8140d43da96dd17b|0|0|637606475035790767|Unknown|TWFPbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQljojV2luMzliLCJBTiI6lk1haWwiLCJXVCi6Mn0=|1000&sdata=yCO2rb87IZj+2IDMf5vLpM3vSOIoKpziQo/pdUai4zc=&reserved=0>> (6/29, Fung) “SpaceX founder Elon Musk is calling for systematic reform after Tuesday’s Space X flight was canceled due to a range issue with another airplane in the launch zone. ‘Unfortunately, launch is called off for today, as an aircraft entered the ‘keep out zone,’ which is unreasonably gigantic,’ Musk tweeted Tuesday afternoon.”

## Elon Musk Calls Rocket Launch Regulations 'Broken' After Aircraft Delays SpaceX Launch

CNBC

<<https://gcc02.safelinks.protection.outlook.com/?url=https://mailview.bulletinintelligence.com/mailview.aspx?m=2021063002nasa&r=email-dc4f&l=03b-222&t=c&data=04|01|marc.r.etkind@nasa.gov|54f6bc2b70084295a97908d93bb5f9a7|7005d45845be48ae8140d43da96dd17b|0|0|637606475035800719|Unknown|TWFpbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQljojV2luMzliLCJBTil6lk1haWwiLCJXVCi6Mn0=|1000&sdata=Vvk7iUbAYr9B0ObQmtnetNzJjb2q8MkwH43w6feEo+8=&reserved=0>> (6/29, Sheetz) "SpaceX was seconds away from launching its 20th mission of this year Tuesday when the countdown was halted due to an aircraft entering the launch range, delaying the mission by at least a day. Elon Musk took to Twitter to voice his frustration about the delay, reiterating prior criticisms he has made about regulations around the business of launching rockets."

## Elon Musk Says Starlink Has 2 Major Telecommunications Partners

Fox Business

<<https://gcc02.safelinks.protection.outlook.com/?url=https://mailview.bulletinintelligence.com/mailview.aspx?m=2021063002nasa&r=email-dc4f&l=03c-92f&t=c&data=04|01|marc.r.etkind@nasa.gov|54f6bc2b70084295a97908d93bb5f9a7|7005d45845be48ae8140d43da96dd17b|0|0|637606475035800719|Unknown|TWFpbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQljojV2luMzliLCJBTil6lk1haWwiLCJXVCi6Mn0=|1000&sdata=G3VWnNGNiHNc8tOjDQB6bgYDpZPGcxgWh0tb203F1nA=&reserved=0>> (6/29, Manfredi) "SpaceX's satellite internet service, Starlink, has forged two 'quite significant' partnerships with major telecommunications companies, according to CEO Elon Musk. 'We have two quite significant partnerships with major country [telecommunications companies], that I'd like to be able to announce now but obviously we defer it to our partners to make any announcement,' Musk said during a virtual keynote at the Mobile World Congress trade show in Barcelona, Spain, on Tuesday."

## Elon Musk Says SpaceX Is Losing Money On Its Starlink Terminals But Has Found A Way To Cut Costs With Updated Versions

Insider

<<https://gcc02.safelinks.protection.outlook.com/?url=https://mailview.bulletinintelligence.com/mailview.aspx?m=2021063002nasa&r=email-dc4f&l=03d-efa&t=c&data=04|01|marc.r.etkind@nasa.gov|54f6bc2b70084295a97908d93bb5f9a7|7005d45845be48ae8140d43da96dd17b|0|0|637606475035810686|Unknown|TWFpbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQljojV2luMzliLCJBTil6lk1haWwiLCJXVCi6Mn0=|1000&sdata=8mn0u0wwDEbV5+SRlhJnkO9P5ySIX49/1+0YDeGiUkl=&reserved=0>> (6/29) "Elon Musk said Starlink will build new satellite terminals that can help the company save money. Terminals currently cost \$1,000 for each, he said. They're sold to customers for \$500."

## Elon Musk Says Starlink Will Be Available Worldwide In August

CNET News

<<https://gcc02.safelinks.protection.outlook.com/?url=https://mailview.bulletinintelligence.com/mailview.aspx?m=2021063002nasa&r=email-dc4f&l=03e-f75&t=c&data=04|01|marc.r.etkind@nasa.gov|54f6bc2b70084295a97908d93bb5f9a7|7005d45845be48ae8140d43da96dd17b|0|0|637606475035810686|Unknown|TWFpbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQljojV2luMzliLCJBTil6lk1haWwiLCJXVCi6Mn0=|1000&sdata=vWozYQBtlkqzTYZvo9/enjKgHd71We7z5RI6pUifcF4=&reserved=0>> (6/29, Reardon) "Elon Musk's satellite broadband service, Starlink, will be available worldwide except the North and South Poles starting in August, the billionaire entrepreneur said Tuesday during a talk at the virtual Mobile World Congress 2021. Starlink is 'operational now in about 12 countries, and more are being added every month,' Musk said."



## SpaceX Rocket Launch Carrying 88 Satellites Delayed By A Wayward Plane

SPACE

<<https://gcc02.safelinks.protection.outlook.com/?url=https://mailview.bulletinintelligence.com/mailview.aspx?m=2021063002nasa&r=email-dc4f&l=03f-d4a&t=c&data=04|01|marc.r.etkind@nasa.gov|54f6bc2b70084295a97908d93bb5f9a7|7005d45845be48ae8140d43da96dd17b|0|0|637606475035820637|Unknown|TWFPbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQljojV2luMzliLCJBTiI6lk1haWwiLCJXVCi6Mn0=|1000&sdata=YIveRPGK9Nonh3I/z60kuDwjPniwl2BKK10hjLcyKus=&reserved=0>> (6/29, Malik) “SpaceX postponed the launch of dozens of satellites just seconds before liftoff on Tuesday (June 29) when a wayward plane crept inside the mission’s safety zone. A used Falcon 9 rocket was just 11 seconds away from launching 88 small satellites into orbit at 2:56 p.m. EDT (1856 GMT) from Space Launch Complex 40 at Cape Canaveral Space Force Station in Florida when SpaceX called a hold in the countdown. A few minutes later, SpaceX production supervisor Andy Tran said the launch was scrubbed for the day.”

## SpaceX Transporter-2 Launch Today Scrubbed And Elon Musk Isn't Happy

SlashGear

<<https://gcc02.safelinks.protection.outlook.com/?url=https://mailview.bulletinintelligence.com/mailview.aspx?m=2021063002nasa&r=email-dc4f&l=040-722&t=c&data=04|01|marc.r.etkind@nasa.gov|54f6bc2b70084295a97908d93bb5f9a7|7005d45845be48ae8140d43da96dd17b|0|0|637606475035820637|Unknown|TWFPbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQljojV2luMzliLCJBTiI6lk1haWwiLCJXVCi6Mn0=|1000&sdata=/TknJ50SjVpEnjg/JQMm+wnAYhmOw7oWSYAIfI3D32A=&reserved=0>> (6/29, Davies) “SpaceX’s Transporter-2 launch has been called off at the last moment, with Elon Musk blaming an intrusion into the so-called ‘keep out zone’ around the site. The company had planned to launch its second dedicated SmallSat Rideshare Program mission from Cape Canaveral Space Force Station in Florida, today.”

## Elon Musk Touts SpaceX Surging Internet Growth, But Still Says Goal Is To Avoid Bankruptcy

CNN Business

<<https://gcc02.safelinks.protection.outlook.com/?url=https://mailview.bulletinintelligence.com/mailview.aspx?m=2021063002nasa&r=email-dc4f&l=041-72a&t=c&data=04|01|marc.r.etkind@nasa.gov|54f6bc2b70084295a97908d93bb5f9a7|7005d45845be48ae8140d43da96dd17b|0|0|637606475035830594|Unknown|TWFPbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQljojV2luMzliLCJBTiI6lk1haWwiLCJXVCi6Mn0=|1000&sdata=wdMHGmzG6L69BS3RVzfWKRHiOgXpLP9ZXsnkKIClt1l=&reserved=0>> (6/29, Wattles) “SpaceX has put more than 1,500 internet-beaming satellites into orbit, signed up more than 69,000 customers, installed ground stations in 12 countries and has plans to expand its one-of-a-kind network’s coverage all over the world — except the North and South pole — by next month. Still, SpaceX CEO Elon Musk said Tuesday, not running out of money is top of mind.”

## SpaceX Scrubs Transporter-2 Launch Due To Range Issue [Updated]

Ars Technica

<<https://gcc02.safelinks.protection.outlook.com/?url=https://mailview.bulletinintelligence.com/mailview.aspx?m=2021063002nasa&r=email-dc4f&l=042-b99&t=c&data=04|01|marc.r.etkind@nasa.gov|54f6bc2b70084295a97908d93bb5f9a7|7005d45845be48ae8140d43da96dd17b|0|0|637606475035830594|Unknown|TWFPbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQljojV2luMzliLCJBTiI6lk1haWwiLCJXVCi6Mn0=|1000&sdata=190uu2oJsLSKRqH52jZfIIViCKPIOPNIcpde0WbheSo=&reserved=0>> (6/29, Berger) “3pm ET Tuesday update: The countdown clock got to T-11 seconds on Tuesday afternoon before SpaceX called a hold to the launch of its Transporter-2 rideshare mission. The scrub was necessitated by a range issue caused by an airplane in the launch zone. The company will now turn around the vehicle for another launch attempt on Wednesday afternoon.”

## Musk Says May Need \$30 Billion To Keep Starlink In Orbit

Reuters

<<https://gcc02.safelinks.protection.outlook.com/?url=https://mailview.bulletinintelligence.com/mailview.aspx?m=2021063002nasa&r=email-dc4f&l=043-04c&t=c&data=04|01|marc.r.etkind@nasa.gov|54f6bc2b70084295a97908d93bb5f9a7|7005d45845be48ae8140d43da96dd17b|0|0|637606475035840549|Unknown|TWFPbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQIjoiV2luMzliLCJBTiI6lk1haWwiLCJXVCi6Mn0=|1000&sdata=H37gyU63gP/jaQuv28EJsS15dGu64jjTXeiyZ76mw7s=&reserved=0>> (6/29, Mukherjee, Laudette) “Billionaire entrepreneur Elon Musk said on Tuesday that his Starlink satellite internet venture was growing quickly as he forecast total investment costs in the business at between \$20 billion and \$30 billion. Without disclosing details, he also said Starlink has ‘two quite significant partnerships with major country telcos’ that could help the SpaceX division plug gaps in fifth-generation mobile and cellular networks.”

## SpaceX Had To Reschedule Its Rocket Launch Because A Helicopter Entered The ‘Keep Out Zone’ With Seconds To Go – And Elon Musk Isn’t Happy About It

Insider

<<https://gcc02.safelinks.protection.outlook.com/?url=https://mailview.bulletinintelligence.com/mailview.aspx?m=2021063002nasa&r=email-dc4f&l=044-747&t=c&data=04|01|marc.r.etkind@nasa.gov|54f6bc2b70084295a97908d93bb5f9a7|7005d45845be48ae8140d43da96dd17b|0|0|637606475035840549|Unknown|TWFPbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQIjoiV2luMzliLCJBTiI6lk1haWwiLCJXVCi6Mn0=|1000&sdata=ibvkLL4XJce/wg1kfJrlj/Yu4f+rIBcKIABGcUM+0l=&reserved=0>> (6/29) “Elon Musk tweeted an aircraft crossed the ‘keep out zone,’ preventing a SpaceX rocket launch. The SpaceX CEO said that the zone is ‘unreasonably gigantic.’”

## Virgin Orbit Looks To Increase Launch Rates In 2022

Space News

<<https://gcc02.safelinks.protection.outlook.com/?url=https://mailview.bulletinintelligence.com/mailview.aspx?m=2021063002nasa&r=email-dc4f&l=045-002&t=c&data=04|01|marc.r.etkind@nasa.gov|54f6bc2b70084295a97908d93bb5f9a7|7005d45845be48ae8140d43da96dd17b|0|0|637606475035850505|Unknown|TWFPbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQIjoiV2luMzliLCJBTiI6lk1haWwiLCJXVCi6Mn0=|1000&sdata=OfBb/3J2CFOIOmsv8GrnzlPpxBlnlAl1V2psVs69o=&reserved=0>> (6/29, Foust) “On the eve of its second revenue-generating launch, Virgin Orbit is looking to 2022 to ramp up its launch activity and operate from several airports in the United States and Great Britain. In a call with reporters June 29, Virgin Orbit Chief Executive Dan Hart confirmed that the company was ‘green for launch’ on a LauncherOne mission called ‘Tubular Bells: Part One.’”

## SpaceX’s Starship Could Launch To Orbit For 1st Time As Soon As July

SPACE

<<https://gcc02.safelinks.protection.outlook.com/?url=https://mailview.bulletinintelligence.com/mailview.aspx?m=2021063002nasa&r=email-dc4f&l=046-50d&t=c&data=04|01|marc.r.etkind@nasa.gov|54f6bc2b70084295a97908d93bb5f9a7|7005d45845be48ae8140d43da96dd17b|0|0|637606475035850505|Unknown|TWFPbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQIjoiV2luMzliLCJBTiI6lk1haWwiLCJXVCi6Mn0=|1000&sdata=JtRoFnUIHfI0sR6MjilVfLHasZKqtZW48IaifmLCTF4=&reserved=0>> (6/29, Howell) “SpaceX president Gwynne Shotwell says the company is still ‘shooting for July’ for the first orbital flight of its huge Starship Mars rocket, although she acknowledged the company may not meet that target. ‘I’m hoping we make it, but we all know that this is difficult,’ Shotwell said during the National Space Society’s International Space Development Conference on Friday (June 25).”

## Former U.S. Air Force Top Counsel Tom Ayres Joins Voyager Space

### Space News

<<https://gcc02.safelinks.protection.outlook.com/?url=https://mailview.bulletinintelligence.com/mailview.aspx?m=2021063002nasa&r=email-dc4f&l=047-be7&t=c&data=04|01|marc.r.etkind@nasa.gov|54f6bc2b70084295a97908d93bb5f9a7|7005d45845be48ae8140d43da96dd17b|0|0|637606475035860461|Unknown|TWFPbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQIjojV2luMzliLCJBTiI6lk1haWwiLCJXVCi6Mn0=|1000&sdata=dj1CrFNEG9XiXvnE0MWZnySMqEQH9KJU7cFQ3GI+T3M=&reserved=0>> (6/29, Erwin) "Voyager Space Holdings announced June 29 the appointment of former Department of the Air Force general counsel Tom Ayres as the company's chief legal officer and general counsel. Denver-based Voyager was founded in October 2019 as an alternative to the traditional venture capital models. It has since acquired several companies with the goal of becoming a vertically integrated space exploration industry player."

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<<https://gcc02.safelinks.protection.outlook.com/?url=https://mailview.bulletinintelligence.com/mailview.aspx?m=2021063002nasa&r=email-dc4f&l=049-d45&t=c&data=04|01|marc.r.etkind@nasa.gov|54f6bc2b70084295a97908d93bb5f9a7|7005d45845be48ae8140d43da96dd17b|0|0|637606475035870418|Unknown|TWFPbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQIjojV2luMzliLCJBTiI6lk1haWwiLCJXVCi6Mn0=|1000&sdata=0esF2owSFIT5IkR0luqqgrfeWu2P1zQWSzhuwkwJ38=&reserved=0>>. The NASA Morning Briefing is published five days a week by Bulletin Intelligence, which creates custom briefings for government and corporate leaders. We can be found on the Web at [BulletinIntelligence.com](https://BulletinIntelligence.com), or called at (703) 483-6100.



## Morning standup

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From: Etkind, Marc R. (HQ-NA000) <marc.r.etkind@nasa.gov>  
Sent: June 7, 2021 8:57:28 AM EDT  
Received: June 5, 2021 6:03:30 PM EDT

Comms schedule—can you share the sharepoint.

RFI on Thursday

UAP—see keith, what's our plan

Weekly reports—tabatha gathers, more forward looking 2 weeks.

Why no press by phone

Video release on social

Format of karen's messages

Gateway delay

DART

Ring of fire solar eclipse on thursday

- Web feature: NASA Map Gives Most Accurate Space-Based View of LA's Carbon Dioxide. Using data from NASA's Orbiting Carbon Observatory 3 (OCO-3) instrument on the International Space Station, researchers have released one of the most accurate maps ever made from space of the human-influence on carbon dioxide abundances in the Los Angeles metropolitan area.

- Langley Researchers Contribute to Detroit Air Quality Study. Langley researchers will contribute airborne measurements to a regional study called the Michigan Ontario Ozone Source Experiment (MOOSE), which will look at air quality in the Detroit area. The science flights will employ the GEOstationary Coastal and Air Pollution Events (GEO-CAPE) Airborne Simulator (GCAS) — sorry, acronym within an acronym there — which collects data similar to what Tropospheric Emissions: Monitoring of Pollution (TEMPO) will collect after its launch in 2022.

NASA Aeronautics Presentations at the Science Fiction Writers of America Conference: On June 6, 2021, the Science Fiction Writers of America's online Nebula Conference will host presentations on NASA's vision of the future of aviation by Advanced Air Vehicles Program (AAVP) Director Jimmy Kenyon (HQ), Revolutionary Vertical Lift Technology Project Manager Susan Gorton (LaRC), and X-59 Deputy Propulsion Lead Paul Dees (AFRC), moderated by AAVP Strategic Communications Lead Shannon Eichorn (GRC). Speaking to fiction writers will equip them to share NASA's vision in their stories and reach audiences who would not normally seek out NASA's news

NASA Awards Universities \$1.2M for Space Station, Suborbital Research

NASA has awarded \$1.2 million to nine universities and organizations across the country for research and technology development projects in areas critical to the agency's mission, including studying radiation effects and growing food for long-duration space travel.

NASA's Established Program to Stimulate Competitive Research (EPSCoR) supports science and technology

research and development at colleges and universities. All projects are applicable to NASA's work in Earth science, aeronautics, and human and robotic deep space exploration.

The schools will transfer research resulting from the projects to NASA, where it may be used as part of ongoing agency work.

The complete list of awardees and selected proposals are:

#### International Space Station Flight Opportunities

·Oklahoma State University, Stillwater: Enhanced Active Tissue Equivalent Dosimeter (eATED) for Space Crew Dosimetry.

·Montana State University, Bozeman: Microgravity Demonstration of a Novel In-Space Food Production System.

·University of Delaware, Newark: Reliability Evaluation of the Integrated Photonic Receiver Subsystems with All-Optical Signal Processors.

·University of Puerto Rico, San Juan: Microgravity Experiment to measure the Speed of Sound inside simulated Asteroid Regolith in the ISS environment (MESSAR).

·University of Kentucky, Lexington: ISS Flight for Instrument Testing.

·Iowa State University, Ames: Properties and Performance of Solder Joints Produced in Reduced-Gravity Environments: ISS Flight Opportunity.

#### Suborbital Flight Opportunities

·University of Alabama, Huntsville: Three-Dimensional Plume-Surface Interaction and Crater Formation Dynamic Measurements in Reduced Gravity Environments.

·University of Mississippi, Oxford: Thermal Transport Characterization of Phase-Change Material (PCM) Infused in Annular Passage Filled with Additively Manufactured Metal Foam Obtained Through Octet-Shaped Unit Cell Reticulation Under Micro-gravity Conditions.

·Oklahoma State University: Suborbital Flight Demonstration of Ionizing Radiation Dosimeters for Use in the Upper Atmosphere.

EPSCoR helps develop partnerships among NASA research missions and programs, academic institutions, and industry. It also assists the awardees as they establish long-term academic research enterprises that will be self-sustaining and competitive, and contribute to local economic viability and development.

To learn more about EPSCoR, visit:

Marc Etkind

Associate Administrator, Communications

NASA Headquarters

## Morning standup

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From: Etkind, Marc R. (HQ-NA000) <marc.r.etkind@nasa.gov>  
Sent: June 6, 2021 9:02:34 PM EDT  
Received: June 6, 2021 9:03:10 PM EDT

RFI on Thursday

UAP—see keith, what's our plan

Weekly reports—tabatha gathers, more forward looking 2 weeks.

Why no press by phone

Video release on social

Format of karen's messages

Gateway delay

- Web feature: NASA Map Gives Most Accurate Space-Based View of LA's Carbon Dioxide. Using data from NASA's Orbiting Carbon Observatory 3 (OCO-3) instrument on the International Space Station, researchers have released one of the most accurate maps ever made from space of the human-influence on carbon dioxide abundances in the Los Angeles metropolitan area.

- Langley Researchers Contribute to Detroit Air Quality Study. Langley researchers will contribute airborne measurements to a regional study called the Michigan Ontario Ozone Source Experiment (MOOSE), which will look at air quality in the Detroit area. The science flights will employ the GEOstationary Coastal and Air Pollution Events (GEO-CAPE) Airborne Simulator (GCAS) — sorry, acronym within an acronym there — which collects data similar to what Tropospheric Emissions: Monitoring of Pollution (TEMPO) will collect after its launch in 2022.

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EPSCoR helps develop partnerships among NASA research missions and programs, academic institutions, and industry. It also assists the awardees as they establish long-term academic research enterprises that will be self-sustaining and competitive, and contribute to local economic viability and development.

To learn more about EPSCoR, visit:

Marc Etkind

Associate Administrator, Communications

NASA Headquarters





## Today's 1 PM with the Administrator

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From: Etkind, Marc R. (HQ-NA000) <marc.r.etkind@nasa.gov>  
To: Quinn, Susie Perez (HQ-AH000) <susie.p.quinn@nasa.gov>  
Cc: Brown, Alicia N. (HQ-VA000) <alicia.n.brown@nasa.gov>  
Sent: June 6, 2021 9:34:48 AM EDT  
Received: June 6, 2021 9:35:04 AM EDT

Hi Susie

I have nothing pressing today with the Administrator. That said, I wouldn't mind a short catch up just to share the activities going on this week... which include...

RFI

VP at Goddard update.

UAP (aka UFOs)

Orlando Airport.

Marc Etkind

Associate Administrator, Communications

NASA Headquarters



## UAPs

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From: Etkind, Marc R. (HQ-NA000) <marc.r.etkind@nasa.gov>  
To: Cremins, Tom (HQ-AJ000) <tom.cremins-1@nasa.gov>  
Sent: June 7, 2021 8:19:46 AM EDT  
Received: June 7, 2021 8:19:46 AM EDT

Morning! I've been reading in the press about the UAP (aka UFOs) report coming from the Pentagon to Congress later in the month. I've heard second hand that NASA contributed to the report and trying to find out who, if anyone, from NASA was involved. Would appreciate any insight. Many thanks,

Marc

Marc Etkind

Associate Administrator, Communications

NASA Headquarters

## UAPs

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From: Etkind, Marc R. (HQ-NA000) <marc.r.etkind@nasa.gov>  
To: Cremins, Tom (HQ-AJ000) <tom.cremins-1@nasa.gov>  
Sent: June 6, 2021 9:30:54 AM EDT  
Received: June 6, 2021 9:31:11 AM EDT

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Marc

Marc Etkind

Associate Administrator, Communications

NASA Headquarters

## UAP

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From: Etkind, Marc R. (HQ-NA000) <marc.r.etkind@nasa.gov>  
To: Zurbuchen, Thomas H. (HQ-DA000) <thomas.h.zurbuchen@nasa.gov>, Lueders, Kathryn L. (KSC-CA000) <kathryn.l.lueders@nasa.gov>, Reuter, Jim L. (HQ-OA000) <jim.l.reuter@nasa.gov>, Pearce, Robert A. (HQ-EA000) <robert.a.pearce@nasa.gov>  
Sent: June 6, 2021 9:30:25 AM EDT  
Received: June 6, 2021 9:30:39 AM EDT

Morning! I've been reading in the press about the UAP (aka UFOs) report coming from the Pentagon to Congress later in the month. I've heard second hand that NASA contributed to the report and trying to find out who, if anyone, from NASA was involved. Would appreciate any insight. Many thanks,

Marc

Marc Etkind

Associate Administrator, Communications

NASA Headquarters

## UAP

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From: Etkind, Marc R. (HQ-NA000) <marc.r.etkind@nasa.gov>  
To: Cruz, Randy C. (HQ-AA000)[Affiliate] <randy.c.cruz@nasa.gov>  
Sent: June 6, 2021 9:31:22 AM EDT  
Received: June 6, 2021 9:31:40 AM EDT

Morning! I've been reading in the press about the UAP (aka UFOs) report coming from the Pentagon to Congress later in the month. I've heard second hand that NASA contributed to the report and trying to find out who, if anyone, from NASA was involved. Would appreciate any insight. Many thanks,

Marc

Marc Etkind

Associate Administrator, Communications

NASA Headquarters





## **[code-p] Daily Report for Tuesday, June 22**

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From: Potter, Sean (HQ-NA020) <sean.potter@nasa.gov>  
Sender: code-p-bounces@lists.hq.nasa.gov  
Sent: June 22, 2021 8:00:34 AM EDT  
Received: June 22, 2021 8:01:26 AM EDT  
Attachments: DAILY REPORT 06-22-2021.docx

Good morning.

Attached and below is today's Communications Daily Report.

Thank you,

Sean Potter

NASA Communications Daily Report

Tuesday, June 22

### Activities

·12:30 to 1:30 pm – NBC interview on NASA's search for life with Planetary Sciences Division Director Lori Glaze

oNBC's Tom Costello will interview Lori Glaze on NASA's ongoing work and research in the search for life beyond our own planet.

·3pm – NASA Administrator Bill Nelson live interview with Newsmax on vision for NASA

·Aviation Week interviews with Webb experts

o4:30 pm – Sandra Irish, Webb lead structures engineer; Begoña Vila, Webb instrument systems engineer; Bill Ochs, Webb project manager at Goddard; Scott Willoughby, Webb program manager at Northrop Grumman interview with Irene Klotz of Aviation Week at Northrop Grumman

o5 to 6 pm – Aviation Week interview of Webb team members Scott Willoughby and Bill Ochs

·7 to 8 pm – Virtual Tour: Space Environments Complex at Glenn

oVirtual tour followed by live Q&A with expert for registered guests. The SEC is home to the world's largest and most powerful Space Simulation Vacuum Chamber, which measures 100 ft. in diameter by 122 ft. high. It also boasts the Reverberant Acoustic Test Facility, which can simulate the noise of a spacecraft launch up to 163 decibels; and the Mechanical Vibration Facility, the world's most powerful spacecraft shaker system, which subjects test articles to the rigorous conditions of launch.

·Deutsche Welle interview with Dr. Ravi Kumar Kopparapu of Goddard for story on the UFO/UAP report.

·External Proctor & Gamble media release on NASA Space Act Agreement

·Webb Launch Readiness Exercise #4 concludes at the Space Telescope Science Institute in Baltimore

·Astronaut Jessica Meir for Emory University and Children's Healthcare of Atlanta

oResults of SpaceX's 20th Resupply Mission Research "How Growing Cardiac Stem Cells in Space Can Benefit our Cardiac Kids" in Atlanta.

·Astronaut Kate Rubins with Fox 40 Sacramento on her recent mission to the space station

## NASA Television

### On Air

·No new programming scheduled

### NASA HQ In-Studio Shoots, Productions:

·12:30 pm – Lori Glaze interview with NBC's Tom Costello via Zoom

### Social Media ActivitY

#### Agency

·Live coverage of Administrator Nelson's testimony before the House Science Committee on NASA's FY2022 Budget will air beginning at 10 a.m. EDT. Programming will air on NASA TV, the NASA App, [nasa.gov/live](https://nasa.gov/live) and will be promoted on flagship social media accounts.

·Women@NASA posts with flagship amplification to commemorate science fiction author Octavia E. Butler's birthday. In March, NASA named the landing site of the Perseverance rover "Octavia E. Butler Landing," after the author.

#### Solar System and Beyond

·Flagship social media accounts will amplify posts for the Ask an Astrobiologist live show featuring Goddard scientist Heather Graham. The program will stream live at 1 p.m. EDT to the NASA Astrobiology Facebook page.

#### Other

·NASA Knowledge: The Golden Record in English / Johnson

#### HQ Products

#### Release

·[TENTATIVE] RFI Public Meeting Registration

oInformation on how to register for the June 29 Mission Equity RFI event

#### Media Advisory

·NASA to Air Third Spacewalk to Install New Station Solar Arrays

·Northrop Grumman CRS-15 departure coverage advisory

## Contract Release

·[TENTATIVE] NASA Extends Cyclone Global Navigation Satellite System Mission Contract (notifications complete; held from Monday)

·4 pm – Contract Mechanical Integration Services and Technologies (MIST) II contract (held from Monday)

## Center Products

### Blog Post

·10 am – Artemis I LVSA Foaming and Integration / Kennedy

oBlog post on Artemis I Launch Vehicle Stage Adapter (LVSA) will be mated atop the core stage upon completion of thermal protection system (TPS) foaming.

·2 pm – Ingenuity Flight 8 Recap / JPL

oOperations lead Teddy Tzanetos recaps the flight from Sunday, June 20.

### Image/Video

·UTM close-out image feature / Ames

oA multi-image feature marks the close-out of the Unmanned Aircraft Systems Traffic Management project, or UTM. One photo is featured from each year of testing for the four technical capability levels achieved.

### Web Articles

·10 am – EPSCoR Feature / Kennedy

oFeature highlighting NASA's Established Program to Stimulate Competitive Research program with an overview of two of the recently funded projects.

·1:30 pm -- A Perseverance Scientist's Favorite Image from Jezero Crater / JPL

oAs part of an occasional series, a Perseverance scientist offers details on her favorite image of Jezero Crater. First up is an image of a feature called Delta Scarp.

## Attachment

### 1. DAILY REPORT 06-22-2021.docx

Type: application/vnd.openxmlformats-officedocument.wordprocessingml.document  
Size: 44 KB (45,747 bytes)

## **Attachment #1**

**DAILY REPORT 06-22-2021.docx**

### **Original view**

3 pages (displayed on pages 6 to 8)

# NASA Communications Daily Report

Tuesday, June 22

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  - As part of an occasional series, a Perseverance scientist offers details on her favorite image of Jezero Crater. First up is an image of a feature called Delta Scarp.





## FW: FIRST UPDATE - UFO Report

---

From: Etkind, Marc R. (HQ-NA000) <marc.r.etkind@nasa.gov>  
To: McGuinness, Jackie (HQ-NA000) <jackie.mcguinness@nasa.gov>, Brown, Alicia N. (HQ-VA000) <alicia.n.brown@nasa.gov>, Gulley, Bryan F. (HQ-NA000) <bryan.f.gulley@nasa.gov>, Quinn, Susie Perez (HQ-AH000) <susie.p.quinn@nasa.gov>, Bhavya Lal <bhavya.lal@nasa.gov>, Dalton, Bale (HQ-AH000) <bale.dalton@nasa.gov>, Lal, Bhavya (HQ-AA000) <bhavya.lal@nasa.gov>  
Sent: June 25, 2021 4:59:54 PM EDT  
Received: June 25, 2021 4:59:54 PM EDT

From: "Jacobs, Bob (HQ-NA000)" <bob.jacobs@nasa.gov>  
Date: Friday, June 25, 2021 at 4:58 PM  
To: "Etkind, Marc R. (HQ-NA000)" <marc.r.etkind@nasa.gov>, "Stephenson, Johnny F. (MSFC-NA000)" <johnny.f.stephenson@nasa.gov>, "Beutel, Allard (HQ-NA020)" <allard.beutel@nasa.gov>, "Thompson, Tabatha T. (HQ-NA020)" <tabatha.t.thompson@nasa.gov>, Brittany Brown <brittany.a.brown@nasa.gov>  
Subject: FIRST UPDATE - UFO Report

<https://www.dni.gov/files/ODNI/documents/assessments/Preliminary-Assessment-UAP-20210625.pdf>  
<<https://gcc02.safelinks.protection.outlook.com/?url=https://www.dni.gov/files/ODNI/documents/assessments/Preliminary-Assessment-UAP-20210625.pdf&data=04|01|marc.r.etkind@nasa.gov|82f7ea7320ec43f993d108d9381c0682|7005d45845be48ae8140d43da96dd17b|0|0|637602515282646232|Unknown|TWFPbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQljojV2luMzliLCJBTiI6Ik1haWwiLCJXVCi6Mn0=|1000&sdata=Verb3h0G2Nm7xJqr0NUWT8AYv4MM44J6iJigTg2QSXo=&reserved=0>>

We can expect inquiries accordingly.

bj

## FIRST UPDATE - UFO Report

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From: Jacobs, Bob (HQ-NA000) <bob.jacobs@nasa.gov>  
To: Etkind, Marc R. (HQ-NA000) <marc.r.etkind@nasa.gov>, Stephenson, Johnny F. (MSFC-NA000) <johnny.f.stephenson@nasa.gov>, Beutel, Allard (HQ-NA020) <allard.beutel@nasa.gov>, Thompson, Tabatha T. (HQ-NA020) <tabatha.t.thompson@nasa.gov>, Brown, Brittany A. (HQ-NA030) <brittany.a.brown@nasa.gov>  
Sent: June 25, 2021 4:58:46 PM EDT  
Received: June 25, 2021 4:58:48 PM EDT

<https://www.dni.gov/files/ODNI/documents/assessments/Preliminary-Assessment-UAP-20210625.pdf>  
<<https://gcc02.safelinks.protection.outlook.com/?url=https://www.dni.gov/files/ODNI/documents/assessments/Preliminary-Assessment-UAP-20210625.pdf&data=04|01|marc.r.etkind@nasa.gov|82f7ea7320ec43f993d108d9381c0682|7005d45845be48ae8140d43da96dd17b|0|0|637602515282646232|Unknown|TWFpbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQIjoiV2luMzliLCJBTiI6Ikk1haWwiLCJXVCi6Mn0=|1000&sdata=Verb3h0G2Nm7xJqr0NUWT8AYv4MM44J6iJigTg2QSXo=&reserved=0>>

We can expect inquiries accordingly.

bj



## **[code-p] Daily Report for Tuesday, June 29**

---

From: Potter, Sean (HQ-NA020) <sean.potter@nasa.gov>  
Sender: code-p-bounces@lists.hq.nasa.gov  
Sent: June 29, 2021 7:53:23 AM EDT  
Received: June 29, 2021 7:54:06 AM EDT  
Attachments: DAILY REPORT 06-29-2021.docx

Good morning.

Attached and below is today's Communications Daily Report.

Thank you,

Sean Potter

NASA Communications Daily Report

Tuesday, June 29

### Activities

·9 am – Sen. Nelson at Best Places to Work Event

·9 am to 1 pm – CBS Sunday Morning News Interview at JPL on Drought in West

oThe interview will be with hydrologist JT Reager.

·10:30 am – Sen. Nelson Interview with Bloomberg TV on commercialization

·10:30 to 11 am – Phil McAlister, director of commercial spaceflight development, interview with AP's Marcia Dunn about the agency's efforts to grow a strong low-Earth orbit economy

·11 am – Sen. Nelson records NASA Science Live video for Asteroid Day and KSC Indian River Bridge video

·11 am to 1 pm – Kathy Lueders Artemis update to National Academy of Engineering

·12:25 pm – Northrop Grumman CRS-15 Cygnus departure from International Space Station; live coverage on NASA TV begins at 12 pm.

·2:00 pm – Sen. Nelson Interview with Discovery on UAP report

·7:27 pm – Progress 78 launch from Baikonur Cosmodrome in Kazakhstan; live coverage on NASA TV begins at 7 pm

·Astronaut Mike Barratt for 16th Annual Space Life Sciences Summer Institute in Houston

·Launch of SpaceX Transporter-2 with NASA CubeSats

oSpaceX Transporter-2 rideshare mission will launch from Cape Canaveral Space Force Station in Florida. Includes the TROPICS pathfinder CubeSat, as well as two technology demonstration missions – PACE-1, and TILE-3, that will fly on CubeSat platforms.

- Webb presentations at the European Astronomical Society

- Anniversary: Launch of first nuclear powered satellite (Transit 4A) (1961)

## Social Media Activity

### Agency

- Pride Month – New edition of Faces of NASA web feature released for Pride month.

### Humans in Space

- Live coverage of the release of the Northrop Grumman “SS Katherine Johnson” Cygnus Cargo Craft from the International Space Station is scheduled for release at 12:25 pm. Coverage will be airing on NASA TV, the NASA App, [nasa.gov/live](https://nasa.gov/live) and NASA flagship social media accounts.

- Live coverage of the launch of the ISS Progress 78 Cargo Ship to the International Space Station from the Baikonur Cosmodrome in Kazakhstan launch scheduled for 7:27 pm, airing on NASA TV, the NASA App, and [nasa.gov/live](https://nasa.gov/live).

### Moon to Mars

- Flagship social media accounts will share communications products for the conclusion of the Purposeful Passengers – Name the Artemis Moonikin Challenge. Products include a news release and a Tumblr post.

### Space Tech

- Flagship will amplify Space Tech social media products surrounding the newest edition of NASA’s Software catalog.

## NASA Television

### On Air

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### In Production

- 10:30 am – Sen. Nelson interview with Bloomberg

- 11 am – Record Teleprompter Message for NASA Science Live

- 11:15 am – Record Teleprompter Message for Indian River Bridge Award

- 2 pm – Sen. Nelson interview with Discovery

## HQ Products

## Release

·Best Place to Work Results

·Available for Download, NASA Software Benefits Earth

oNASA's computational innovations are readily available for applications beyond space, including benefiting our home planet. The agency's latest software catalog has dozens of new codes available for free download.

·Public Names 'Moonikin' Flying Around Moon on NASA's Artemis I Mission

## Web Article

·9 am – After 60 Years, Nuclear Power for Spaceflight is Still Tried and True

oSix decades after the launch of the first nuclear-powered space mission, Transit IV-A, NASA is embarking on a bold future of human exploration and scientific discovery. This future builds on a proud history of safely launching and operating nuclear-powered missions in space.

·11 am – Abnormally High Alcohol, Mystery Heat Source Detected on Comet Wirtanen

oA study using Keck Observatory data finds that Comet 46P/Wirtanen was releasing an unusual amount of alcohol as it made its historic flyby of Earth two and a half years ago.

·12 pm – Black Holes Make Tsunamis in Computer Simulations

## Center Products

## Blog Post

·3 pm – ELaNa 33 CubeSat Deployment / Kennedy

oThe ELaNa 33 CubeSat IT-SPINS, created by Montana State University, will deploy after the NG-15 Cygnus spacecraft undocks from the ISS.

·[TENTATIVE] Ingenuity Flight 9 Preview / JPL

oIngenuity chief pilot Havard Grip looks ahead at what could be an ambitious next flight.

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oScientists closer to settling the question: Why do some instruments detect methane on Mars while others don't?

·12 pm – Evergreen story about PACE series of CubeSat missions / Ames (held from Monday)

oEvergreen webpage about the Payload Accelerator for CubeSat Endeavors, or PACE, initiative's series of missions. The timing of the feature is tied to the launch of the first mission, PACE-1, on SpaceX's Transporter-2 rideshare mission.

·[TENTATIVE] 3:30 pm – NASA Launches First of Six Tiny Satellites to Keep a Near-constant Eye / Goddard

oNASA launched a test satellite or Pathfinder, ahead of a constellation of six small satellites that will work together to provide near hourly updates of hurricanes and tropical cyclones. Also tied to Transporter-2 rideshare launch.

·Endowing Satellite Swarms With a Hive Mind / Goddard

oUsing machine learning, swarms of SmallSats buzzing around Earth could coordinate amongst themselves to collect data on important weather patterns at different times of the day or year, and from multiple angles. Such swarms could revolutionize scientists' understanding of weather and climate changes.

·NASA Satellites See Climate-Driven Upper Atmosphere Cooling and Shrink / Goddard

oThe sky isn't falling, but scientists have found the upper atmosphere is gradually dropping in response to rising human-produced greenhouse gas emissions. Combined data from three NASA satellites have produced the first long-term record that reveals a particular layer of the atmosphere, the mesosphere, is both cooling and shrinking.



## Attachment

### 1. DAILY REPORT 06-29-2021.docx

Type: application/vnd.openxmlformats-officedocument.wordprocessingml.document  
Size: 45 KB (46,405 bytes)

## **Attachment #1**

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Tuesday, June 29

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National Aeronautics and Space Administration

**Headquarters**  
Office of Communications  
Washington, DC 20546-0001



November 30, 2021

Reply to Attn of: MS5L9, FOIA Public Liaison

Via Email

REF: FOIA Case No. 21-HQ-F-00562

This is our Final Determination of your Freedom of Information Act (FOIA) request, dated and received by the National Aeronautics and Space Administration ((NASA) Headquarters (HQ) FOIA Office on June 25, 2021. Your request was assigned FOIA Case Number 21-HQ-F-00562 and sought:

“A copy of each email in the email accounts of individuals in the NASA **Office of Communications** that contains the word UAP , based on an electronic search. I limit this request to the time period May 1, 2021 through the present.”

In an email, dated July 11, 2021, you agreed to narrow your request to only include emails from Associate Administrator of Communications Marc Etkind containing the “word UAP OR the phrase Unidentified Aerial Phenomena. A copy of that email is enclosed for your reference.

In response to your request the Information Technology Office conducted searches of Mr. Marc Etkind’s email inbox using the search terms UAP and Unidentified Aerial Phenomena. At this time the search of Mr. Etkind’s email inbox is complete. The search located 118 emails totaling 543 pages<sup>1</sup>.

Pursuant to the White House, the United States Navy Consultations and NASA’s independent review of these responsive records under the FOIA, we are providing the following:

266 page(s) are released in full (RIF);<sup>2</sup>  
076 page(s) are released in part (RIP);  
03 page(s) are referred to another entity.

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<sup>1</sup> While the search located 118 emails totaling 543 pages, duplicate emails were removed from the collection of responsive records. The result was a total of 345 pages as more specifically described below. To facilitate processing, several emails with the same title were combined into one pdf file.

<sup>2</sup> All page counts are approximate numbers.

In keeping with the White House and the United States Navy recommendations and NASA's review, 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.

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 types of records/information NASA withheld under this exemption consists of draft documents, portions of emails containing analyses, recommendations, opinions and/or personal views 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.

**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, personal and third parties mentioned or referenced in these records and any information that could reasonably be expected to identify such individuals.

**Referral**

One document, totaling three pages, falls under the purview of the Secretary of Defense (OSD). We are referring this document to the Office of the Secretary of Defense/Joint Staff (OSD/JS) FOIA Office for direct contact to you. They will process the document under the FOIA and respond to you directly. Contact information for the OSD FOIA is available at:

**OSD/JS FOIA Requester Service Center**  
Freedom of Information Division  
1155 Defense Pentagon  
Washington, DC 20301-1155

Phone: 571-372-0498

Email: [whs.mc-alex.esd.mbx.osd-js-foia-requester-service-center@mail.mil](mailto:whs.mc-alex.esd.mbx.osd-js-foia-requester-service-center@mail.mil)

This referral was made in accordance with NASA regulations, which require NASA to determine whether another entity is better able to determine whether records are exempt from disclosure under the FOIA, and if so, then the record must be referred to the other entity. 14 C.F.R. § 1206.308. In general, the entity that created a record is presumed best able to determine whether it may be disclosed under the FOIA.

### **Appeal Rights**

You have the right to appeal my action on your FOIA request. Your appeal must be received within 90 calendar days of the date of this letter. Your appeal must be in writing and addressed to:

Administrator  
ATTN: FOIA Appeals  
NASA Headquarters  
Executive Secretariat  
MS 9R17  
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 copies of your initial request, this correspondence, 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 also contain a brief statement of the reasons you believe this initial determination should be reversed.

### **Assistance and Dispute Resolution Services**

For further assistance and to discuss any aspect of your request, you may contact NASA's Chief FOIA Public Liaison, Stephanie Fox, via telephone at 202-358-1553 or via e-mail at [Stephanie.K.Fox@NASA.gov](mailto:Stephanie.K.Fox@NASA.gov). You may also send correspondence to Ms. Fox at the following address:

National Aeronautics and Space Administration (NASA)  
Freedom of Information Act Unit  
NASA Headquarters  
Attn: Stephanie Fox  
Chief FOIA Public Liaison  
300 E Street, S.W., 5P32  
Washington D.C. 20546  
(Fax) 202- 358-4332

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  
Email: [ogis@nara.gov](mailto:ogis@nara.gov)  
Telephone: (202) 741-5770  
Toll free: 1-877-684-6448  
Fax: (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.

If I can be of further assistance, please contact me at 202-358-0680 or [Mireya.P.Nyirenda@nasa.gov](mailto:Mireya.P.Nyirenda@nasa.gov).

Sincerely,



Digitally signed by  
Mireya Nyirenda  
Date: 2021.11.30  
09:38:32 -05'00'

MIREYA P. NYIRENDA  
FOIA Public Liaison Officer

## Upcoming in wapo oped

---

From: Etkind, Marc R. (HQ-NA000) <marc.r.etkind@nasa.gov>  
To: Patrick Finley **b6** >  
Sent: May 26, 2021 1:49:27 PM EDT  
Received: May 26, 2021 1:49:27 PM EDT

We just found out that Ravi Kopparapu, a Goddard scientist, co-authored an op-ed for the Washington Post calling for more open-mindedness on research into unidentified aerial phenomenon (essentially UFOs). This will be published as early as this afternoon.

Over the past few years, UAP (Unidentified Aerial Phenomena, more commonly known as Unidentified Flying Objects or UFOs) have been reported in the news <<https://www.washingtonpost.com/nation/2021/05/17/ufo-sightings-navy-ryan-graves/>> repeatedly <<https://www.nytimes.com/2020/07/23/us/politics/pentagon-ufo-harry-reid-navy.html>>. The most obvious question everyone wants to know is, what are they? But these sightings are by definition unidentified, so asking "What are UFOs?" will only lead to speculative answers that bring us no closer to understanding them. Instead, we should be asking "how can we figure out what UFOs are?" Framing this question with active inquiry in mind would allow a science-based approach to investigate the identity of UAPs. And there-in lies the problem.

The language of scientists is data. But without access to full data, it is nearly impossible to verify or explain any observation. The lack of robust data, including the lack of access to some existing data, is the central problem for scientific study of UAPs. Science is unforgiving. Data is the authority. Our feelings and opinions are irrelevant.

But in recent decades, the scientific study of UAP has become a taboo. A precipitating point may have been the Condon report, commissioned by the US Air Force and conducted at the University of Colorado in the late 1960s, which stated that "....nothing has come from the study of UFOs....that has added to scientific knowledge." This led to the close of the ongoing Air Force-led UAP investigation named Project Blue Book. Prominent critics, such as Prof. Allen Hynek, an Ohio State astronomer, who served as a consultant on the Project Blue Book, argued that the work done in the Condon report was "inadequate" and "poorly organized." Since then, little to no interest has been given by the scientific community in the investigation of UAP. A big driver of this is a self-perpetuating cycle of this being viewed as a taboo topic. Once scientists ignored the subject, this created a vacuum of knowledge that was filled by conspiracy theories and sensational claims. In a few cases, some scientists that did engage in this topic were viewed by other scientists as putting conclusions before data, a troubling reversal of the scientific method. This in turn fueled the taboo culture, driving away trained scientists, creating a never-ending cycle of prohibiting any scientific study of the subject.

UAP investigation by the scientific community is not new. Distinguished scientists like Carl Sagan, James McDonald, Allen Hynek thought that UAP should be investigated scientifically. Project Blue Book examined several hundred UAP cases from the 1950s and 60s. About 700 of the more than 12,000 cases remained "unidentified" at the close of the project, although Hynek later argued that the number of unresolved cases should have been higher. Astronomer Carl Sagan recognized the need for scientists to discuss this problem, which already had widespread popular interest, and co-organized a symposium of American Association for the Advancement of Science (AAAS) in 1969 titled "UFOs: A Scientific Debate" <<https://www.amazon.com/UFOs-Scientific-Debate-Carl-Sagan/dp/0760701962>>. Sagan remained skeptical of the extraterrestrial hypothesis and would demand extraordinary evidence to justify such a claim; however, he also saw the scientific study of UAP as a valuable way to teach the broader public about how science is done. Most notably, the late Prof. James McDonald, a member of National Academy Sciences, conducted a rigorous analysis of a few UAP cases that Project Blue Book highlighted as unexplainable. His presentation at the AAAS symposium, titled "Science in Default" <[http://puhep1.princeton.edu/~mcdonald/JEMcDonald/mcdonald\\_aaas\\_69.pdf](http://puhep1.princeton.edu/~mcdonald/JEMcDonald/mcdonald_aaas_69.pdf)>, is one of the best scientific examinations of UAP cases. The discerning methods, evidence-based investigation, and an approach that considers all the available data (rather than cherry picking one instance of an event) used in this document provides a template of how trained scientists can investigate UAP.

Lack of reliable data is another crucial reason why the scientific community gave little attention to UAP. Most UAP sightings result in very limited data, usually video recordings from a single angle that can only be cross-validated with eyewitness testimony. Some UAP sightings were also observed on radar, which could assist in determining their identity. Without robust or credible data, UAP studies will always be viewed as fringe science and will never be able to come into the mainstream. No amount of grainy video snippets will help in de-mystifying the broader phenomena. Systematic collection of new data, or the availability of existing data, is paramount. While analyzing such data, strict agnosticism should be advocated to ensure an unbiased scientific approach. The recent declassification of UAP videos by the Navy brought the topic of UAPs out from the shadows of tabloid news and onto front page articles. While some of these events seem to have possible <https://www.metabunk.org/threads/go-fast-footage-from-tom-delonges-to-the-stars-academy-bird-balloon.9569/> explanations <https://www.thedrive.com/the-war-zone/40054/adversary-drones-are-spying-on-the-u-s-and-the-pentagon-acts-like-theyre-ufos> based on snippets of edited images and videos, the history of UFO scientific studies in the U.S is not limited to these videos, and reminds us to not paint the whole phenomena with one broad brush. This is not <https://www.nationalarchives.gov.uk/help-with-your-research/research-guides/ufos/> a U.S-specific occurrence, nor is it limited to observations by U.S armed forces. Commercial pilots <https://www.vice.com/en/article/z3xewj/air-canada-westjet-porter-pilots-ufo-sightings> have also reported seeing UAP. There may not be a single explanation to all such observations.

A notable aspect surrounding the media coverage of the U.S Navy videos is the absence of scientific or expert opinion, in addition to government officials and witness testimonials. If we truly want to understand what UAPs really are, then we need to engage the mainstream scientific community in a concerted effort to study them. This should include the involvement of experts and scientists trained in scientific methodology in such investigations. Make data available to them. Speak their language. Remove any taboos surrounding free scientific inquiry of UFOs. Because, ultimately, understanding UAP is a science problem.

The views and opinions expressed in this article are those of the authors and are not necessarily those of NASA or their employers.

Marc Etkind

Associate Administrator, Communications

NASA Headquarters

## FW: good memory

---

From: Etkind, Marc R. (HQ-NA000) <marc.r.etkind@nasa.gov>  
To: Fox, Karen C. (GSFC-1300) <karen.c.fox@nasa.gov>  
Cc: McGuinness, Jackie (HQ-NA000) <jackie.mcguinness@nasa.gov>, Jacobs, Bob (HQ-NA000) <bob.jacobs@nasa.gov>, Beutel, Allard (HQ-NA020) <allard.beutel@nasa.gov>, Thompson, Tabatha T. (HQ-NA020) <tabatha.t.thompson@nasa.gov>  
Sent: May 26, 2021 2:34:52 PM EDT  
Received: May 26, 2021 2:34:52 PM EDT

For the uap talking points—see 10.

From: "Brown, Alicia N. (HQ-VA000)" <alicia.n.brown@nasa.gov>  
Date: Wednesday, May 26, 2021 at 2:15 PM  
To: "Etkind, Marc R. (HQ-NA000)" <marc.r.etkind@nasa.gov>  
Subject: Fwd: good memory

This is part of nasas main objectives in law. Bill was one of the main sponsors of this bill in 2017.

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<<https://gcc02.safelinks.protection.outlook.com/?url=https://aka.ms/o0ukef&data=04|01|marc.r.etkind@nasa.gov|2f3f98945362474811b708d9207247d0|7005d45845be48ae8140d43da96dd17b|0|0|637576497458037437|Unknown|TWFPbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQljojV2luMzliLCJBTiI6Ik1haWwiLCJXVCI6Mn0=|1000&sdata=rgN4s7AQReUWwc5fpNbDk0IGiQMUJE1e1bVyRxXkDWo=&reserved=0>>

From: Keshian, Jaclyn R. (HQ-VA010) <jaclyn.r.keshian@nasa.gov>  
Sent: Wednesday, May 26, 2021 2:13 PM  
To: Brown, Alicia N. (HQ-VA000)  
Subject: good memory

From the 2017 bill

SEC. 507. CONGRESSIONAL DECLARATION OF POLICY AND PURPOSE. Section 20102(d) of title 51, United States Code, is amended by adding at the end the following: “(10) The search for life’s origin, evolution, distribution, and future in the universe.”.

§20102. Congressional declaration of policy and purpose

(a) Devotion of Space Activities to Peaceful Purposes for Benefit of All Humankind.-Congress declares that it is the policy of the United States that activities in space should be devoted to peaceful purposes for the benefit of all humankind.

(b) Aeronautical and Space Activities for Welfare and Security of United States.-Congress declares that the general welfare and security of the United States require that adequate provision be made for aeronautical and space activities. Congress further declares that such activities shall be the responsibility of, and shall be directed by, a civilian agency exercising control over aeronautical and space activities sponsored by the United States, except that activities peculiar to or primarily associated with the development of weapons systems, military operations, or the defense of the United States (including the research and development necessary to make effective provision for the defense of the United States) shall be the responsibility of, and shall be directed by, the Department of Defense; and that



determination as to which agency has responsibility for and direction of any such activity shall be made by the President.

(c) Commercial Use of Space.-Congress declares that the general welfare of the United States requires that the Administration seek and encourage, to the maximum extent possible, the fullest commercial use of space.

(d) Objectives of Aeronautical and Space Activities.-The aeronautical and space activities of the United States shall be conducted so as to contribute materially to one or more of the following objectives:

- (1) The expansion of human knowledge of the Earth and of phenomena in the atmosphere and space.
- (2) The improvement of the usefulness, performance, speed, safety, and efficiency of aeronautical and space vehicles.
- (3) The development and operation of vehicles capable of carrying instruments, equipment, supplies, and living organisms through space.
- (4) The establishment of long-range studies of the potential benefits to be gained from, the opportunities for, and the problems involved in the utilization of aeronautical and space activities for peaceful and scientific purposes.
- (5) The preservation of the role of the United States as a leader in aeronautical and space science and technology and in the application thereof to the conduct of peaceful activities within and outside the atmosphere.
- (6) The making available to agencies directly concerned with national defense of discoveries that have military value or significance, and the furnishing by such agencies, to the civilian agency established to direct and control nonmilitary aeronautical and space activities, of information as to discoveries which have value or significance to that agency.
- (7) Cooperation by the United States with other nations and groups of nations in work done pursuant to this chapter and in the peaceful application of the results thereof.
- (8) The most effective utilization of the scientific and engineering resources of the United States, with close cooperation among all interested agencies of the United States in order to avoid unnecessary duplication of effort, facilities, and equipment.
- (9) The preservation of the United States preeminent position in aeronautics and space through research and technology development related to associated manufacturing processes.
- (10) The search for life's origin, evolution, distribution, and future in the universe.

Jackie Keshian

Policy Advisor

Office of Legislative and Intergovernmental Affairs

(b) (6)

**Re: [EXTERNAL] 20210517 BC UAP Report to Congress v3 (002)**

---

From: Etkind, Marc R. (HQ-NA000) <marc.r.etkind@nasa.gov>  
To: Finley, Patrick T. EOP/WHO (b) (6)  
Sent: May 26, 2021 2:42:04 PM EDT  
Received: May 26, 2021 2:42:04 PM EDT

Thanks. Btw, I notified Pili, Kate and Matt in the WH and they shared with Emily and Patrick at the NSC.

From: Patrick Finley (b) (6)  
Date: Wednesday, May 26, 2021 at 1:49 PM  
To: "Etkind, Marc R. (HQ-NA000)" <marc.r.etkind@nasa.gov>  
Subject: [EXTERNAL] 20210517 BC UAP Report to Congress v3 (002)

fyi

## Attachment

### 1. 20210517 BC UAP Report to Congress v3 (002).docx

Type: application/vnd.openxmlformats-officedocument.wordprocessingml.document  
Size: 46 KB (47,318 bytes)

R

## **Attachment #1**

**20210517 BC UAP Report to Congress v3 (002).docx**

### **Original view**

3 pages (displayed on pages 4 to 6)



REFERRED TO OSD

REFERRED TO OSD

REFERRED TO OSD

## RE: [EXTERNAL] RE: UAPs/UFOs

---

From: Horne, Emily J. EOP/NSC (b) (6)  
To: Etkind, Marc R. (HQ-NA000) <marc.r.etkind@nasa.gov>, Berner, Kate EOP/WHO (b) (6), Tobar, Pili D. EOP/WHO (b) (6), Hill, Matt D. EOP/WHO (b) (6) >  
Cc: McGuinness, Jackie (HQ-NA000) <jackie.mcguinness@nasa.gov>, Evans, Patrick L. EOP/NSC (b) (6)  
Sent: May 26, 2021 6:16:06 PM EDT  
Received: May 26, 2021 6:16:15 PM EDT

Copy, thank you

From: Etkind, Marc R. (HQ-NA000) <marc.r.etkind@nasa.gov>  
Sent: Wednesday, May 26, 2021 4:20 PM  
To: Horne, Emily J. EOP/NSC (b) (6); Berner, Kate EOP/WHO (b) (6); Tobar, Pili D. EOP/WHO (b) (6); Hill, Matt D. EOP/WHO (b) (6)  
Cc: McGuinness, Jackie (HQ-NA000) <jackie.mcguinness@nasa.gov>; Evans, Patrick L. EOP/NSC (b) (6)  
Subject: Re: [EXTERNAL] RE: UAPs/UFOs

Hi Emily

Still working on the best course of action but in the mean time prepping talking points. Will get back to you soon with something more concrete.

From: Emily Horne (b) (6)  
Date: Wednesday, May 26, 2021 at 3:14 PM  
To: Katherine Berne (b) (6) "Etkind, Marc R. (HQ-NA000)" <marc.r.etkind@nasa.gov>, Pili Tobar (b) (6), Matt Hill (b) (6)  
Cc: "McGuinness, Jackie (HQ-NA000)" <jackie.mcguinness@nasa.gov>, Patrick Evans (b) (6)  
Subject: [EXTERNAL] RE: UAPs/UFOs

Thanks Marc! What/how/when are you all thinking for the Administrator's response?

From: Berner, Kate EOP/WHO (b) (6)  
Sent: Wednesday, May 26, 2021 2:34 PM  
To: Etkind, Marc R. (HQ-NA000) <marc.r.etkind@nasa.gov>; Tobar, Pili D. EOP/WHO (b) (6); Hill, Matt D. EOP/WHO (b) (6)  
Cc: McGuinness, Jackie (HQ-NA000) <jackie.mcguinness@nasa.gov>; Horne, Emily J. EOP/NSC (b) (6); Evans, Patrick L. EOP/NSC (b) (6)  
Subject: RE: UAPs/UFOs

Adding a few folks from NSC!

From: Etkind, Marc R. (HQ-NA000) <marc.r.etkind@nasa.gov>  
Sent: Wednesday, May 26, 2021 2:02 PM  
To: Tobar, Pili D. EOP/WHO (b) (6); Berner, Kate EOP/WHO (b) (6); Hill, Matt D. EOP/WHO (b) (6)  
Cc: McGuinness, Jackie (HQ-NA000) <jackie.mcguinness@nasa.gov>

Subject: UAPs/UFOs

Hi Pili

Just got word that a NASA scientist, Ravi Kopparapu has co-authored an op-ed for the Washington Post calling for more open-mindedness on research into unidentified aerial phenomenon (essentially UFOs). It is likely to be published this afternoon and I'm sure we will be getting questions from the press. It is likely the Administrator will want to respond—and our focus will be on NASA's long running search for life on other planets as well as habitable exoplanets.

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Over the past few years, UAP (Unidentified Aerial Phenomena, more commonly known as Unidentified Flying Objects or UFOs) have been reported in the news <https://www.washingtonpost.com/nation/2021/05/17/ufo-sightings-navy-ryan-graves/> repeatedly <https://www.nytimes.com/2020/07/23/us/politics/pentagon-ufo-harry-reid-navy.html>. The most obvious question everyone wants to know is, what are they? But these sightings are by definition unidentified, so asking "What are UFOs?" will only lead to speculative answers that bring us no closer to understanding them. Instead, we should be asking "how can we figure out what UFOs are?" Framing this question with active inquiry in mind would allow a science-based approach to investigate the identity of UAPs. And there-in lies the problem.

The language of scientists is data. But without access to full data, it is nearly impossible to verify or explain any observation. The lack of robust data, including the lack of access to some existing data, is the central problem for scientific study of UAPs. Science is unforgiving. Data is the authority. Our feelings and opinions are irrelevant.

But in recent decades, the scientific study of UAP has become a taboo. A precipitating point may have been the Condon report, commissioned by the US Air Force and conducted at the University of Colorado in the late 1960s, which stated that "...nothing has come from the study of UFOs....that has added to scientific knowledge." This led to the close of the ongoing Air Force-led UAP investigation named Project Blue Book. Prominent critics, such as Prof. Allen Hynek, an Ohio State astronomer, who served as a consultant on the Project Blue Book, argued that the work done in the Condon report was "inadequate" and "poorly organized." Since then, little to no interest has been given by the scientific community in the investigation of UAP. A big driver of this is a self-perpetuating cycle of this being viewed as a taboo topic. Once scientists ignored the subject, this created a vacuum of knowledge that was filled by conspiracy theories and sensational claims. In a few cases, some scientists that did engage in this topic were viewed by other scientists as putting conclusions before data, a troubling reversal of the scientific method. This in turn fueled the taboo culture, driving away trained scientists, creating a never-ending cycle of prohibiting any scientific study of the subject.

UAP investigation by the scientific community is not new. Distinguished scientists like Carl Sagan, James Mc Donald, Allen Hynek thought that UAP should be investigated scientifically. Project Blue Book examined several hundred UAP cases from the 1950s and 60s. About 700 of the more than 12,000 cases remained "unidentified" at the close of the project, although Hynek later argued that the number of unresolved cases should have been higher. Astronomer Carl Sagan recognized the need for scientists to discuss this problem, which already had widespread popular interest, and co-organized a symposium of American Association for the Advancement of Science (AAAS) in 1969 titled "UFOs: A Scientific Debate" <https://www.amazon.com/UFOs-Scientific-Debate-Carl-Sagan/dp/0760701962>. Sagan remained skeptical of the extraterrestrial hypothesis and would demand extraordinary evidence to justify such a claim; however, he also saw the scientific study of UAP as a valuable way to teach the broader public about how science is done. Most notably, the late Prof. James McDonald, a member of National Academy Sciences, conducted a rigorous analysis of a few UAP cases that Project Blue Book highlighted as unexplainable. His presentation at the AAAS symposium, titled "Science in Default" [http://puhep1.princeton.edu/~mcdonald/JEMcDonald/mcdonald\\_aaas\\_69.pdf](http://puhep1.princeton.edu/~mcdonald/JEMcDonald/mcdonald_aaas_69.pdf), is one of the best scientific examinations of UAP cases. The discerning methods, evidence-based investigation, and an approach that considers all the available data (rather than cherry picking one instance of an event) used in this document provides a template

of how trained scientists can investigate UAP.

Lack of reliable data is another crucial reason why the scientific community gave little attention to UAP. Most UAP sightings result in very limited data, usually video recordings from a single angle that can only be cross-validated with eyewitness testimony. Some UAP sightings were also observed on radar, which could assist in determining their identity. Without robust or credible data, UAP studies will always be viewed as fringe science and will never be able to come into the mainstream. No amount of grainy video snippets will help in de-mystifying the broader phenomena. Systematic collection of new data, or the availability of existing data, is paramount. While analyzing such data, strict agnosticism should be advocated to ensure an unbiased scientific approach. The recent declassification of UAP videos by the Navy brought the topic of UAPs out from the shadows of tabloid news and onto front page articles. While some of these events seem to have possible <https://www.metabunk.org/threads/go-fast-footage-from-tom-delonges-to-the-stars-academy-bird-balloon.9569/> explanations <https://www.thedrive.com/the-war-zone/40054/adversary-drones-are-spying-on-the-u-s-and-the-pentagon-acts-like-theyre-ufos> based on snippets of edited images and videos, the history of UFO scientific studies in the U.S is not limited to these videos, and reminds us to not paint the whole phenomena with one broad brush. This is not <https://www.nationalarchives.gov.uk/help-with-your-research/research-guides/ufos/> a U.S-specific occurrence, nor is it limited to observations by U.S armed forces. Commercial pilots <https://www.vice.com/en/article/z3xewj/air-canada-westjet-porter-pilots-ufo-sightings> have also reported seeing UAP. There may not be a single explanation to all such observations.

A notable aspect surrounding the media coverage of the U.S Navy videos is the absence of scientific or expert opinion, in addition to government officials and witness testimonials. If we truly want to understand what UAPs really are, then we need to engage the mainstream scientific community in a concerted effort to study them. This should include the involvement of experts and scientists trained in scientific methodology in such investigations. Make data available to them. Speak their language. Remove any taboos surrounding free scientific inquiry of UFOs. Because, ultimately, understanding UAP is a science problem.

The views and opinions expressed in this article are those of the authors and are not necessarily those of NASA or their employers.

Marc Etkind

Associate Administrator, Communications

NASA Headquarters

## Re: Talking points for the Administrator: Unidentified Aerial Phenomena

---

From: Johnson, Alana R. (HQ-DG000)[ASRC FEDERAL SYSTEM SOLUTIONS]  
<alana.r.johnson@nasa.gov>  
To: Fox, Karen C. (GSFC-1300) <karen.c.fox@nasa.gov>, Etkind, Marc R. (HQ-NA000)  
<marc.r.etkind@nasa.gov>, Stephenson, Johnny F. (MSFC-NA000)  
<johnny.f.stephenson@nasa.gov>, Thompson, Tabatha T. (HQ-NA020)  
<tabatha.t.thompson@nasa.gov>, Beutel, Allard (HQ-NA020)  
<allard.beutel@nasa.gov>, McGuinness, Jackie (HQ-NA000)  
<jackie.mcguinness@nasa.gov>  
Cc: Handal, Joshua A. (HQ-DG000)[ASRC FEDERAL SYSTEM SOLUTIONS]  
<joshua.a.handal@nasa.gov>  
Sent: May 27, 2021 9:15:40 AM EDT  
Received: May 27, 2021 9:15:41 AM EDT

Bringing your attention to this very useful page on NASA's Astrobiology page.

This provides past, present, and future NASA missions that key in on the search for life.

<https://astrobiology.nasa.gov/missions/>

Are you a journalist covering the Ingenuity Mars Helicopter or the Perseverance Mars rover, please fill out our media request form at <https://bit.ly/mars-landing-media>  
<<https://gcc02.safelinks.protection.outlook.com/?url=https://bit.ly/mars-landing-media&data=04|01|marc.r.etkind@nasa.gov|fd6761825d2841a1220408d9211186dc|7005d45845be48ae8140d43da96dd17b|0|0|637577181417449884|Unknown|TWFPbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQIjojV2luMzliLCJBTil6Ik1haWwiLCJXVCi6Mn0=|1000&sdata=dKA0YKdii9T45x0AHiw0jchHg6tLmrOP4i4aJ+qNOnE=&reserved=0>>.

Alana R. Johnson

Senior Communications Specialist, PAAC V Contract

Planetary Science Division

[alana.r.johnson@nasa.gov](mailto:alana.r.johnson@nasa.gov)

o: (202) 358-1501 | (b) (6)

NASA Headquarters, 300 E. St SW, Washington, DC. 20546

[asrcfederal.com](http://asrcfederal.com)

<<https://gcc02.safelinks.protection.outlook.com/?url=https://www.asrcfederal.com/&data=04|01|marc.r.etkind@nasa.gov|fd6761825d2841a1220408d9211186dc|7005d45845be48ae8140d43da96dd17b|0|0|637577181417449884|Unknown|TWFPbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQIjojV2luMzliLCJBTil6Ik1haWwiLCJXVCi6Mn0=|1000&sdata=fLoVSMQUyooi8woigjflpXXgZ7H6E/dXSukl2FPUEk=&reserved=0>>|Purpose Driven. Enduring Commitment.

From: "Fox, Karen C. (GSFC-1300)" <karen.c.fox@nasa.gov>  
Date: Thursday, May 27, 2021 at 8:30 AM  
To: "Etkind, Marc R. (HQ-NA000)" <marc.r.etkind@nasa.gov>, "Stephenson, Johnny F. (MSFC-NA000)" <johnny.f.stephenson@nasa.gov>, "Thompson, Tabatha T. (HQ-NA020)" <tabatha.t.thompson@nasa.gov>, "Beutel, Allard (HQ-NA020)" <allard.beutel@nasa.gov>, "McGuinness, Jackie (HQ-NA000)" <jackie.mcguinness@nasa.gov>  
Cc: "Johnson, Alana R. (HQ-DG000)[ASRC FEDERAL SYSTEM SOLUTIONS]" <alana.r.johnson@nasa.gov>, "Handal, Joshua A. (HQ-DG000)[ASRC FEDERAL SYSTEM SOLUTIONS]" <joshua.a.handal@nasa.gov>  
Subject: Re: Talking points for the Administrator: Unidentified Aerial Phenomena

Sounds good – we're planning on a more traditional and longer talking points/RTQs document for the comms office/everyone's use and we'll get that extra detail in there.

OK to take a couple days to pull it together? Or do you need that extra info ASAP?

--

Karen C. Fox

Senior Science Communications Officer

Office of Communications

From: "Etkind, Marc R. (HQ-NA000)" <marc.r.etkind@nasa.gov>  
Date: Thursday, May 27, 2021 at 8:27 AM  
To: "Fox, Karen C. (GSFC-1300)" <karen.c.fox@nasa.gov>, "Stephenson, Johnny F. (MSFC-NA000)" <johnny.f.stephenson@nasa.gov>, "Thompson, Tabatha T. (HQ-NA020)" <tabatha.t.thompson@nasa.gov>, "Beutel, Allard (HQ-NA020)" <allard.beutel@nasa.gov>, "McGuinness, Jackie (HQ-NA000)" <jackie.mcguinness@nasa.gov>  
Cc: "Johnson, Alana R. (HQ-DG000)[ASRC FEDERAL SYSTEM SOLUTIONS]" <alana.r.johnson@nasa.gov>, "Handal, Joshua A. (HQ-DG000)[ASRC FEDERAL SYSTEM SOLUTIONS]" <joshua.a.handal@nasa.gov>  
Subject: Re: Talking points for the Administrator: Unidentified Aerial Phenomena

Thanks all for pulling this together and interestingly didn't see much buzz around the op ed. Anyone else see anything? I'd like to have some more particulars in the material—can we have some detail on the various missions, discoveries past, present and future. So... what have the Mars missions found that point to life... and what will MSR add... and Europa and Titan? And also what have discovered in exoplanets and what will Webb search for? Thx

From: "Fox, Karen C. (GSFC-1300)" <karen.c.fox@nasa.gov>  
Date: Wednesday, May 26, 2021 at 5:19 PM  
To: "Etkind, Marc R. (HQ-NA000)" <marc.r.etkind@nasa.gov>, "Stephenson, Johnny F. (MSFC-NA000)" <johnny.f.stephenson@nasa.gov>, "Thompson, Tabatha T. (HQ-NA020)" <tabatha.t.thompson@nasa.gov>, "Beutel, Allard (HQ-NA020)" <allard.beutel@nasa.gov>, "McGuinness, Jackie (HQ-NA000)" <jackie.mcguinness@nasa.gov>  
Cc: "Johnson, Alana R. (HQ-DG000)[ASRC FEDERAL SYSTEM SOLUTIONS]" <alana.r.johnson@nasa.gov>, "Handal, Joshua A. (HQ-DG000)[ASRC FEDERAL SYSTEM SOLUTIONS]" <joshua.a.handal@nasa.gov>  
Subject: Talking points for the Administrator: Unidentified Aerial Phenomena

Cheers, all –

After talking to Marc this afternoon – and with an added request from Jackie to make sure UFO's were addressed – please find attached, and cut and pasted below, bullet points on Unidentified Aerial Phenomena. Which may be of use to Sen. Nelson.

These have been reviewed by members of SMD. We'll also put together a more formal RTQ document for the comms team within the next day or two with extra detail.

Thanks,

Karen

Talking Points: Unidentified Aerial Phenomena



·One of NASA's key goals is the search for life in the universe. Although we have yet to find signs of extraterrestrial life, NASA is exploring the solar system and beyond to help us answer fundamental questions, including whether we are alone in the universe.

·From studying water on Mars, probing promising "oceans worlds," such as Titan and Europa, to looking for biosignatures in the atmospheres of planets outside our solar system, NASA's science missions are working together with a goal to find unmistakable signs of life beyond Earth.

·To date, NASA has yet to find any credible evidence of extraterrestrial life, but we are not closed to the possibility that such life exists (b)(5) . 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.

·The nature of science is to better understand the unknown. When we learn of unidentified aerial phenomena, (UAP, or more commonly known as unidentified flying objects or UFOs), it opens up the door to new science questions to explore.

· Most UAP sightings result in very limited data, usually video recordings from a single angle that can only be cross-validated with eyewitness testimony. The language of scientists is data. But without access to an extensive set of data, it is nearly impossible to verify or explain any observation. The lack of robust data, including the lack of access to some existing data, is the central problem for scientific study of UAPs.

·In a sense, the discovery of technology from beyond Earth or the signatures of technology on other worlds would constitute the ultimate biosignature.

--

Karen C. Fox

Senior Science Communications Officer

Office of Communications

NASA Headquarters

Karen.fox@nasa.gov

## Attachment

### 1. UAP talking points.docx

Type: application/vnd.openxmlformats-officedocument.wordprocessingml.document  
Size: 16 KB (16,592 bytes)

## **Attachment #1**

**UAP talking points.docx**

**Original view**

1 page

## Talking Points: Unidentified Aerial Phenomena

- One of NASA's key goals is the search for life in the universe. Although we have yet to find signs of extraterrestrial life, NASA is exploring the solar system and beyond to help us answer fundamental questions, including whether we are alone in the universe.
- From studying water on Mars, probing promising "oceans worlds," such as Titan and Europa, to looking for biosignatures in the atmospheres of planets outside our solar system, NASA's science missions are working together with a goal to find unmistakable signs of life beyond Earth.
- To date, NASA has yet to find any credible evidence of extraterrestrial life, but we are not closed to the possibility that such life exists (b)(5). 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.
- The nature of science is to better understand the unknown. When we learn of unidentified aerial phenomena, (UAP, or more commonly known as unidentified flying objects or UFOs), it opens up the door to new science questions to explore.
- Most UAP sightings result in very limited data, usually video recordings from a single angle that can only be cross-validated with eyewitness testimony. The language of scientists is data. But without access to an extensive set of data, it is nearly impossible to verify or explain any observation. The lack of robust data, including the lack of access to some existing data, is the central problem for scientific study of UAPs.
- In a sense, the discovery of technology from beyond Earth or the signatures of technology on other worlds would constitute the ultimate biosignature.

**[EXTERNAL] Re: UFO UAP Alien earthenware pot, symbols, cloak drawings, ancient pot type, unique, and the Pentagon's UFO Report**

---

From: (b) (6)  
To: sean.potter@nasa.gov, sandra.p.jones@nasa.gov, marc.r.etkind@nasa.gov, ian.j.oneill@jpl.nasa.gov, clare.a.skelly@nasa.gov, Potter, Sean (HQ-NA020) <sean.potter@nasa.gov>, Jones, Sandra P. (JSC-AD911) <sandra.p.jones@nasa.gov>, Etkind, Marc R. (HQ-NA000) <marc.r.etkind@nasa.gov>, O'Neill, Ian J (JPL-1821)[JPL Employee] <ian.j.oneill@jpl.nasa.gov>, Skelly, Clare A. (HQ-NA020) <clare.a.skelly@nasa.gov>  
Sent: June 7, 2021 9:05:21 AM EDT  
Received: June 7, 2021 9:11:40 AM EDT  
Attachments: mmexport1520051098162.jpg, mmexport1520051087714.jpg, mmexport1520051079574.jpg

Dear NASA / Sen. Bill Nelson. Would you like my assistance, and old earthenware pot pictured below? Please advise. Thank you.

Best regards,

(b) (6)

On Thursday, 3 June 2021, 11:50:00 am AEST, (b) (6) wrote:

Dear NASA. Please see the following and attachments. Do you have any comments or suggestions?

Importantly who should I contact please?

Any help greatly appreciated.

Thank you.

Best regards

(b) (6)

----- Forwarded message -----

From: (b) (6)

To: info@si.edu <info@si.edu>

Sent: Thursday, 3 June 2021, 10:55:33 am AEST

Subject: UFO UAP Alien earthenware pot, symbols, drawing, ancient pot type, unique

Dear Smithsonian. I own this fascinating UFO UAP Alien cooking pot and posted the following request for info three years ago on Collectors Weekly. I have now been referred to you. Can you please help?

Your aerospace people may be able to help, along with anthropology, linguistical and carbon experts, etc.

Attached is more information excluding Infrared Thermal Rotating video.

Is it alien communication, or just amazingly multi-dimensional?

Should a copy of this email be sent to the forthcoming release of USA intel on UAP's, UFO's, Aliens, etc, or some other USA experts--if so who? Thanks.

UFO art & symbols on 7000 BC Catal Huyuk like cooking pot: Who made it? What does it communicate? | Collectors Weekly <<https://gcc02.safelinks.protection.outlook.com/?url=https://www.collectorsweekly.com/stories/244335-ufo-art-and-symbols-on-7000-bc-catal-huyuk&data=04|01|marc.r.etkind@nasa.gov|1a0c177ac8f14f5841e808d929b5c680|7005d45845be48ae8140d43da96dd17b|0|0|637586683021646099|Unknown|TWFPbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQljojV2luMzliLCJBTil6lk1haWwiLCJXVCI6Mn0=|1000&sdata=MW8VdlXcer6YEIOhOGqy29Of8uYmCtPQv2kv90sITN4=&reserved=0>>

UFO art & symbols on 7000 BC Catal Huyuk like cooking pot: Who made it? ...

Shop for—and learn—about vintage and antiques. Browse the best of eBay, connect with other collectors, and explo...

<<https://gcc02.safelinks.protection.outlook.com/?url=https://www.collectorsweekly.com/stories/244335-ufo-art-and-symbols-on-7000-bc-catal-huyuk&data=04|01|marc.r.etkind@nasa.gov|1a0c177ac8f14f5841e808d929b5c680|7005d45845be48ae8140d43da96dd17b|0|0|637586683021646099|Unknown|TWFPbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQljojV2luMzliLCJBTil6lk1haWwiLCJXVCI6Mn0=|1000&sdata=MW8VdlXcer6YEIOhOGqy29Of8uYmCtPQv2kv90sITN4=&reserved=0>>

Posted 3 years ago

UFOearthen...

<<https://gcc02.safelinks.protection.outlook.com/?url=https://www.collectorsweekly.com/user/UFOearthenware&data=04|01|marc.r.etkind@nasa.gov|1a0c177ac8f14f5841e808d929b5c680|7005d45845be48ae8140d43da96dd17b|0|0|637586683021656056|Unknown|TWFPbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQljojV2luMzliLCJBTil6lk1haWwiLCJXVCI6Mn0=|1000&sdata=eD8rpICJTJfRUi51yfKXcGJQukNFOUWA4eRnSQ7TnQQ=&reserved=0>>

(1 item)

UFOearthenware | Collectors Weekly

Shop for—and learn—about vintage and antiques. Browse the best of eBay, connect with other collectors, and explo...

<<https://gcc02.safelinks.protection.outlook.com/?url=https://www.collectorsweekly.com/user/UFOearthenware&data=04|01|marc.r.etkind@nasa.gov|1a0c177ac8f14f5841e808d929b5c680|7005d45845be48ae8140d43da96dd17b|0|0|637586683021656056|Unknown|TWFPbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQljojV2luMzliLCJBTil6lk1haWwiLCJXVCI6Mn0=|1000&sdata=eD8rpICJTJfRUi51yfKXcGJQukNFOUWA4eRnSQ7TnQQ=&reserved=0>>

Fascinated by UFO art on a 7000-year-old Catal Huyuk like cooking pot: Symbolic language, hidden meanings, seemingly inspired ancient earthenware and clothes from a vanished civilization or depicting futuristic spaceships and alien visitors. This 'two-handled' pot is worthy of carbon dating, linguistic, and special assessments.

What is earthenware worth if it is something way more modern than UFO alien art or text on a 7000 BC like Catal Huyuk cooking pot?

Who made it, what does it communicate, when and where was it made? For what special purposes -- to reach out from beyond the grave, awaken ideas of future worlds', depict a lost civilization's most important artifacts, architecture,

events, symbols, ideas, or just fine dining?

## Unsolved Mystery

1.

<<https://gcc02.safelinks.protection.outlook.com/?url=https://www.collectorsweekly.com/user/UFOearthenware&data=04|01|marc.r.etkind@nasa.gov|1a0c177ac8f14f5841e808d929b5c680|7005d45845be48ae8140d43da96dd17b|0|0|637586683021666003|Unknown|TWFPbGZsb3d8eyJWljoimC4wLjAwMDAiLCJQljoiv2luMzliLCJBTil6lk1haWwiLCJXVCi6Mn0=|1000&sdata=rQ4dFGlbf1pyeTMlqVvGLQD/VLyBWLdpNKg/ytWcnpw=&reserved=0>>UFOearthenware  
<<https://gcc02.safelinks.protection.outlook.com/?url=https://www.collectorsweekly.com/user/UFOearthenware&data=04|01|marc.r.etkind@nasa.gov|1a0c177ac8f14f5841e808d929b5c680|7005d45845be48ae8140d43da96dd17b|0|0|637586683021666003|Unknown|TWFPbGZsb3d8eyJWljoimC4wLjAwMDAiLCJQljoiv2luMzliLCJBTil6lk1haWwiLCJXVCi6Mn0=|1000&sdata=rQ4dFGlbf1pyeTMlqVvGLQD/VLyBWLdpNKg/ytWcnpw=&reserved=0>>, 3 years ago  
Thank you from people in China. Yes if I was an alien who visited earth say 7,000 years ago or anytime, I too would take a simple thing in front of me like a clay pot to record my visit in multiple "languages" or symbols and dimensions and technologies... including 1D, 2D, 3D, 4D, 5D,..., nD, and beyond any comprehension here now.

Further, if I was here on earth a short time from outer-space my record would be unique in time-space-systems dimensions, assuming it was valued for cooking, potential other uses, and survived for decades or much longer.

The earliest record inter-stellar or alien records are probably 1440 BC or 2018 AD, or not depending on what science and comments we believe.

2.

<<https://gcc02.safelinks.protection.outlook.com/?url=https://www.collectorsweekly.com/user/UFOearthenware&data=04|01|marc.r.etkind@nasa.gov|1a0c177ac8f14f5841e808d929b5c680|7005d45845be48ae8140d43da96dd17b|0|0|637586683021675961|Unknown|TWFPbGZsb3d8eyJWljoimC4wLjAwMDAiLCJQljoiv2luMzliLCJBTil6lk1haWwiLCJXVCi6Mn0=|1000&sdata=0qAgDMTKmDVZ7RUfuYYOS6ljHVjf2eb+7F/Bo3Ky8xg=&reserved=0>>UFOearthenware  
<<https://gcc02.safelinks.protection.outlook.com/?url=https://www.collectorsweekly.com/user/UFOearthenware&data=04|01|marc.r.etkind@nasa.gov|1a0c177ac8f14f5841e808d929b5c680|7005d45845be48ae8140d43da96dd17b|0|0|637586683021675961|Unknown|TWFPbGZsb3d8eyJWljoimC4wLjAwMDAiLCJQljoiv2luMzliLCJBTil6lk1haWwiLCJXVCi6Mn0=|1000&sdata=0qAgDMTKmDVZ7RUfuYYOS6ljHVjf2eb+7F/Bo3Ky8xg=&reserved=0>>, 3 years ago  
The GIMBAL and other footage from the USA government shows the same stuff as on this pot. Aircraft or space-time-systems that defy the laws of aerodynamics, physics, and show craft with no motors, wings, tails, as seen on this pot and its symbols. Must be a unique coincidence, separated by time, place, and craft. See  
<https://coi.tothestarsacademy.com/>  
<<https://gcc02.safelinks.protection.outlook.com/?url=https://coi.tothestarsacademy.com/&data=04|01|marc.r.etkind@nasa.gov|1a0c177ac8f14f5841e808d929b5c680|7005d45845be48ae8140d43da96dd17b|0|0|637586683021685933|Unknown|TWFPbGZsb3d8eyJWljoimC4wLjAwMDAiLCJQljoiv2luMzliLCJBTil6lk1haWwiLCJXVCi6Mn0=|1000&sdata=QiAmRSgff7XK4iuv76qnAtxalq/AQ1+RLFYLucrFCAM=&reserved=0>> for official usa videos, and see the cooking pot drawn by a pilot?

3.

<<https://gcc02.safelinks.protection.outlook.com/?url=https://www.collectorsweekly.com/user/UFOearthenware&data=04|01|marc.r.etkind@nasa.gov|1a0c177ac8f14f5841e808d929b5c680|7005d45845be48ae8140d43da96dd17b|0|0|637586683021685933|Unknown|TWFPbGZsb3d8eyJWljoimC4wLjAwMDAiLCJQljoiv2luMzliLCJBTil6lk1haWwiLCJXVCi6Mn0=|1000&sdata=BrZiyoa0WJlgwjv0gGJ74KL/LEBa3CsTi5v0LXM6Tss=&reserved=0>>UFOearthenware  
<<https://gcc02.safelinks.protection.outlook.com/?url=https://www.collectorsweekly.com/user/UFOearthenware&data=04|01|marc.r.etkind@nasa.gov|1a0c177ac8f14f5841e808d929b5c680|7005d45845be48ae8140d43da96dd17b|0|0|637586683021695880|Unknown|TWFPbGZsb3d8eyJWljoimC4wLjAwMDAiLCJQljoiv2luMzliLCJBTil6lk1haWwiLCJXVCi6Mn0=|1000&sdata=7aFW2ul+XclfJwr2mjbH2Bxf6/6CMQr7g05g2H6rCQc=&reserved=0>>, 3 years ago

## GIMBAL VIDEO — To The Stars Academy

<<https://gcc02.safelinks.protection.outlook.com/?url=https://coi.tothestarsacademy.com/gimbal&data=04|01|marc.r.etkind@nasa.gov|1a0c177ac8f14f5841e808d929b5c680|7005d45845be48ae8140d43da96dd17b|0|0|637586683021695880|Unknown|TWfPbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQljojV2luMzliLCJBTil6lk1haWwiLCJXVCi6Mn0=|1000&sdata=w9FGe3EC55PxLpTD7CwlbSXuz0UIPsgRXn+17UGIRVo=&reserved=0>>

In the midst of this exchange, the sensor is switched from “white-hot” to “black-hot.” The imaging of the object is now much clearer. It has a distinct shape: a distorted oval with small protrusions from the top and bottom. The object’s opaque aura is now also very distinct: a “cool” glow that extends about a body thickness around the entire object. There appears to be no observable flight surfaces or exhaust plume, nor any typical components usually associated with conventional aircraft.

“Look at that thing, dude.” The observer is clearly surprised at what is being seen.

At 0:24, the object makes a small, but very sharp, altitude change, possibly indicating it may be operating in a vacuum environment. Its direction and speed remain unchanged despite the continuous 120-knot headwind it is encountering.

“That’s not [unintelligible] is it?”

At 0:27, the object begins a series of distinct rotations and changes orientation by almost 100 degrees. Its orientation is now perpendicular to the horizontal plane despite the headwinds. This maneuver is executed in a manner that is inconsistent with current principles of aerodynamics, and possibly indicative of a vacuum environment. As the video concludes, the object’s orientation and performance seem to defy current principals of physics to include atmospheric resistance and normal aerodynamic forces. During the orientation change, it also slows to a near stop, but does not change altitude.

One observer states, “Look at that thing!”

Another observer says, “It’s rotating.”

## GIMBAL VIDEO — To The Stars Academy

GIMBAL is the first of three US military videos of unidentified aerial phenomenon (UAP) that has been through th...

<<https://gcc02.safelinks.protection.outlook.com/?url=https://coi.tothestarsacademy.com/gimbal&data=04|01|marc.r.etkind@nasa.gov|1a0c177ac8f14f5841e808d929b5c680|7005d45845be48ae8140d43da96dd17b|0|0|637586683021705837|Unknown|TWfPbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQljojV2luMzliLCJBTil6lk1haWwiLCJXVCi6Mn0=|1000&sdata=+dliASiXfCryJUWlqPXM9EJN+5a4LjYcof913gRPNn8=&reserved=0>>

To The Stars Academy To The Stars Academy Community of Interest provides reporting and analysis of anomalies including Unidentified A...

<<https://gcc02.safelinks.protection.outlook.com/?url=https://coi.tothestarsacademy.com/&data=04|01|marc.r.etkind@nasa.gov|1a0c177ac8f14f5841e808d929b5c680|7005d45845be48ae8140d43da96dd17b|0|0|637586683021705837|Unknown|TWfPbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQljojV2luMzliLCJBTil6lk1haWwiLCJXVCi6Mn0=|1000&sdata=K41MXagM3x0pbOn/2YIsKxBtPf6tdHzE6n9CzvaLib8=&reserved=0>>

To The Stars Academy

To The Stars Academy Community of Interest provides reporting and analysis of anomalies including Unidentified A...

<<https://gcc02.safelinks.protection.outlook.com/?url=https://coi.tothestarsacademy.com/&data=04|01|marc.r.etkind@n>



asa.gov|1a0c177ac8f14f5841e808d929b5c680|7005d45845be48ae8140d43da96dd17b|0|0|637586683021715799|Unknown|TWfPbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQljojV2luMzliLCJBTiI6Ik1haWwiLCJXVCi6Mn0=|1000&sdata=s/P2ZVEO8NX89and+s8vMqHK2PylblJetoth0xdsw+E=&reserved=0>

Attached are pictures so you can enlarge details.

Thank you.

Best regards

(b) (6)

Attachment

1. mmexport1520051098162.jpg

Type: image/jpeg  
Size: 128 KB (131,656 bytes)

2. mmexport1520051087714.jpg

Type: image/jpeg  
Size: 107 KB (109,804 bytes)

3. mmexport1520051079574.jpg

Type: image/jpeg  
Size: 93 KB (96,243 bytes)

Attachment #1

mmexport1520051098162.jpg

Image



Attachment #2

mmexport1520051087714.jpg

Image



Attachment #3

mmexport1520051079574.jpg

Image





## FW: [EXTERNAL] Discovery & Science Channel Special Event request //

### Administrator Bill Nelson

---

From: McGuinness, Jackie (HQ-NA000) <jackie.mcguinness@nasa.gov>  
To: Etkind, Marc R. (HQ-NA000) <marc.r.etkind@nasa.gov>  
Sent: June 7, 2021 12:49:44 PM EDT  
Received: June 7, 2021 12:49:45 PM EDT

Hi Marc – I know you can't weigh in here, but generally on UFOs is this something we want to lean in on? My recommendation would be that we offer them a short interview with BN, but would be helpful to know what Bhavya and others are thinking on this.

Thanks!

From: Julie Zann (b) (6)  
Date: Monday, June 7, 2021 at 12:41 PM  
To: "McGuinness, Jackie (HQ-NA000)" <jackie.mcguinness@nasa.gov>  
Subject: [EXTERNAL] Discovery & Science Channel Special Event request // Administrator Bill Nelson

Dear Jackie,

Please see below for Administrator Bill Nelson, regarding the DISCOVERY CHANNEL and the SCIENCE CHANNEL's forthcoming joint television event, THE UAP REPORT (working title) on Wednesday, June 30, 2021 @ 8:00 PM – 11:00 PM ET.

As you know, in a matter of weeks, the Pentagon will deliver to Congress a first-ever report on recent, bizarre sightings by U.S. military personnel of Unidentified Aerial Phenomena, or UAPs (commonly known as UFOs). DISCOVERY and the SCIENCE CHANNEL will launch an unprecedented live television event: a summit with the world's leading minds in one forum to discuss, explain, debate and demonstrate this as-of-yet unexplained phenomena.

We would love to have Mr. Nelson join us for an interview.

I look forward to hearing your thoughts and all best,

Julie

Julie Zann

Talent Executive

On behalf of Discovery Channel's THE UAP REPORT

Cell: (b) (6)

Email: (b) (6)

&

PRESENTS A LIVE TELEVISION EVENT

## THE UAP REPORT

WEDNESDAY, JUNE 30, 2021 @ 8:00 PM – 11:00 PM ET

Dear Jackie,

This is Julie Zann writing on behalf of the DISCOVERY CHANNEL and the SCIENCE CHANNEL's forthcoming joint television event, THE UAP REPORT (working title).

As you may know, in a matter of weeks, the Pentagon will deliver to Congress a historic, first-ever report on recent, bizarre sightings by U.S. military personnel of Unidentified Aerial Phenomena, or UAPs (commonly known as UFOs). DISCOVERY and the SCIENCE CHANNEL will launch an unprecedented live television event: a summit with the world's leading minds in one forum to discuss, explain, debate and demonstrate this as-of-yet unexplained phenomena.

The question simply becomes: Are we being visited by intelligent life from other planets... or have we discovered something else? Whether we're dealing with extraordinary weather conditions playing tricks on our minds or brand-new technology operated by foreign powers, Americans need to know the truth.

To be clear, this is an elevated science-led forum, with never-before-seen footage and first-person, eye-witness accounts. Military commanders, national politicians, leading scientists, professors, authors, theologians and technical experts will all weigh in on this conversation – with the goal of determining just what exactly military pilots could be witnessing. The mission of this live summit is to relate crucial information to the public in responsible, educated, informed ways -- even if answers still remain unknown.

THE UAP REPORT airs on DISCOVERY and the SCIENCE CHANNEL as a 3-hour live event on WEDNESDAY, JUNE 30, 2021 @ 8:00 PM – 11:00 PM ET.

We would be honored to interview Administrator Bill Nelson for this special event!

We would be so grateful to set the table for the program, and the "hows and the whys" of its importance as a national security issue, as well as what the report to Congress could signify, and intelligently discuss policies on UAPs as we chart a path forward. Given the subject matter's controversial nature, we truly believe having people like Administrator Nelson will handle the material with the gravity and grounding it deserves.

## THE DETAILS FOR TAPING

### TAPE DATE:

FIRST CHOICE: IDEALLY LIVE ON SET IN LAS VEGAS ON WEDNESDAY, JUNE 30, 2021 @ 8:00 PM – 11:00 PM ET

SECOND CHOICE: LIVE VIA REMOTE STUDIO OR ZOOM

TRAVEL: IF TALENT IS WILLING TO TRAVEL, WE OFFER BUSINESS CLASS FLIGHTS, 2 NIGHTS HOTEL, PER DIEM.

HAIR & MAKE-UP IS PROVIDED ON REQUEST.

AIR DATE: WEDNESDAY, JUNE 30, 2021 @ 8:00 PM – 11:00 PM ET



We provide a full editorial brief, to ensure the nature of Mr. Nelson's participation in THE UAP REPORT.

Pilgrim Media Group (a Lionsgate Company) will executive produce THE UAP REPORT.

Please reach out to me if there is any interest.

Thank you in advance for your consideration, and please feel free to reach out to me 24/7 with questions or concerns.

All the best,

Julie

Julie Zann

Talent Executive

On behalf of Discovery Channel's THE UAP REPORT

Cell: (b) (6)

Email: (b) (6)

<<https://gcc02.safelinks.protection.outlook.com/?url=https://www.discovery.com/&data=04|01|marc.r.etkind@nasa.gov|a5a6020183194298a84908d929d440de|7005d45845be48ae8140d43da96dd17b|0|0|637586813857199617|Unknown|TWFPbGZsb3d8eyJWljoimc4wLjAwMDAiLCJQljoiv2luMzliLCJBTil6lk1haWwiLCJXVCI6Mn0=|1000&sdata=h8irwql2lYXpb0rTtqTuvH2xJoDGa8YtTka1q3nRUA=&reserved=0>>

Discovery Channel is dedicated to creating the highest quality non-fiction content that informs and entertains its consumers about the world in all its wonder, diversity, and amazement. The network, which is distributed to 88.3 million U.S. homes, can be seen in 224 countries and territories, offering a signature mix of compelling, high-end production values and vivid cinematography across genres including, science and technology, exploration, adventure, history and in-depth, behind-the-scenes glimpses at the people, places and organizations that shape and share our world. For more information, please visit [www.discovery.com](http://www.discovery.com)

<[https://gcc02.safelinks.protection.outlook.com/?url=https://r20.rs6.net/tn.jsp?f=001mFFJGbjXu9\\_HH6mDvN9\\_Rqcvv3yXLDfY-AXOf3e4gTxHpeuutNmVpolfyWc0j\\_bfo5utSneX2mw0TVPJR4iTElIKwdT9RioBFys8TgZJXThQpLOjniHULHoWwIX3RXMb12EuVpijWqIUpN6w1kSV-A==&c=vcZNU499DO1ZBKg\\_OZ7adpIKjr\\_8BTZVv7BKOWoh9FURtHI4DVpiVA==&ch=qMJlZJoBqPOaT45AgmwZkTRF6FQEmZs10nWafyqVvBb232Hv56-gw==&data=04|01|marc.r.etkind@nasa.gov|a5a6020183194298a84908d929d440de|7005d45845be48ae8140d43da96dd17b|0|0|637586813857199617|Unknown|TWFPbGZsb3d8eyJWljoimc4wLjAwMDAiLCJQljoiv2luMzliLCJBTil6lk1haWwiLCJXVCI6Mn0=|1000&sdata=mzkbqVpgTErhocDg3mCCmvkg7JAyphfaXpNAkjqV0c=&reserved=0](https://gcc02.safelinks.protection.outlook.com/?url=https://r20.rs6.net/tn.jsp?f=001mFFJGbjXu9_HH6mDvN9_Rqcvv3yXLDfY-AXOf3e4gTxHpeuutNmVpolfyWc0j_bfo5utSneX2mw0TVPJR4iTElIKwdT9RioBFys8TgZJXThQpLOjniHULHoWwIX3RXMb12EuVpijWqIUpN6w1kSV-A==&c=vcZNU499DO1ZBKg_OZ7adpIKjr_8BTZVv7BKOWoh9FURtHI4DVpiVA==&ch=qMJlZJoBqPOaT45AgmwZkTRF6FQEmZs10nWafyqVvBb232Hv56-gw==&data=04|01|marc.r.etkind@nasa.gov|a5a6020183194298a84908d929d440de|7005d45845be48ae8140d43da96dd17b|0|0|637586813857199617|Unknown|TWFPbGZsb3d8eyJWljoimc4wLjAwMDAiLCJQljoiv2luMzliLCJBTil6lk1haWwiLCJXVCI6Mn0=|1000&sdata=mzkbqVpgTErhocDg3mCCmvkg7JAyphfaXpNAkjqV0c=&reserved=0)>

<<https://gcc02.safelinks.protection.outlook.com/?url=https://www.pilgrimmediagroup.com/about/&data=04|01|marc.r.etkind@nasa.gov|a5a6020183194298a84908d929d440de|7005d45845be48ae8140d43da96dd17b|0|0|637586813857209572|Unknown|TWFPbGZsb3d8eyJWljoimc4wLjAwMDAiLCJQljoiv2luMzliLCJBTil6lk1haWwiLCJXVCI6Mn0=|1000&sdata=HAvBwpmCQzoEXAGAJlQ58KSbJIIFJAGHNI3xRTb8DEU=&reserved=0>>

<<https://gcc02.safelinks.protection.outlook.com/?url=https://www.pilgrimmediagroup.com/about/&data=04|01|marc.r.etkind@nasa.gov|a5a6020183194298a84908d929d440de|7005d45845be48ae8140d43da96dd17b|0|0|637586813857209572|Unknown|TWFPbGZsb3d8eyJWljoimc4wLjAwMDAiLCJQljoiv2luMzliLCJBTil6lk1haWwiLCJXVCI6Mn0=|1000&sdata=HAvBwpmCQzoEXAGAJlQ58KSbJIIFJAGHNI3xRTb8DEU=&reserved=0>>

<<https://gcc02.safelinks.protection.outlook.com/?url=https://www.pilgrimmediagroup.com/about/&data=04|01|marc.r.etkind@nasa.gov|a5a6020183194298a84908d929d440de|7005d45845be48ae8140d43da96dd17b|0|0|637586813857209572|Unknown|TWFPbGZsb3d8eyJWljoimc4wLjAwMDAiLCJQljoiv2luMzliLCJBTil6lk1haWwiLCJXVCI6Mn0=|1000&sdata=HAvBwpmCQzoEXAGAJlQ58KSbJIIFJAGHNI3xRTb8DEU=&reserved=0>>

<<https://gcc02.safelinks.protection.outlook.com/?url=https://www.pilgrimmediagroup.com/about/&data=04|01|marc.r.etkind@nasa.gov|a5a6020183194298a84908d929d440de|7005d45845be48ae8140d43da96dd17b|0|0|637586813857209572|Unknown|TWFPbGZsb3d8eyJWljoimc4wLjAwMDAiLCJQljoiv2luMzliLCJBTil6lk1haWwiLCJXVCI6Mn0=|1000&sdata=HAvBwpmCQzoEXAGAJlQ58KSbJIIFJAGHNI3xRTb8DEU=&reserved=0>>

Pilgrim Media Group, a Lionsgate Company, is among the industry's largest and most prolific studios, having produced award-winning content for more than 25 years. A few old favorites are American Chopper, which ran for a decade; Dirty Jobs with Mike Rowe, which ran for eight seasons and even snagged a few Emmy nominations for Best Reality

Program; and Ghost Hunters, which reigned as television's #1 paranormal franchise for 11 seasons and gave rise to two successful spinoffs. Among shows currently airing are The Ultimate Fighter which helped turn mixed martial arts (MMA) into a multi-billion dollar industry and Wicked Tuna about the cut throat high stakes business of tuna fishing.

While lauded for creating unscripted content for top distribution platforms including Netflix, National Geographic, ABC, CBS, Discovery, History, Lifetime, OWN, TLC and over a dozen other networks, Pilgrim also has established deep roots in documentary features.

The company's first feature documentary, Soufra, executive produced by Susan Sarandon, had its European premiere at Berlinale in February 2018 and was screened at the Cannes Film Festival in May 2018 where it has was nominated for a Positive Cinema Documentary award. It also garnered the Cinema for Humanity Audience Prize and Best Arabic Feature Documentary at the El Gouna Film Festival in Egypt. Tre Maison Dasan, Pilgrim's second feature documentary collaboration had its world premiere in competition at the San Francisco International Film Festival in April 2018 and its US premiere at AFI Docs in June 2018. Pilgrim's work also includes a documentary feature with Eli Roth in production at Lionsgate and Days that Shaped America, a limited series executive produced with Steven Spielberg's Amblin Entertainment for History Channel.

## Re: Upcoming UAP/UFO interagency document?

---

From: Fox, Karen C. (GSFC-1300) <karen.c.fox@nasa.gov>  
To: Etkind, Marc R. (HQ-NA000) <marc.r.etkind@nasa.gov>  
Sent: June 8, 2021 8:17:17 AM EDT  
Received: June 8, 2021 8:17:19 AM EDT

I'm set up for a meeting with them today! I think they get the reasons for doing it quickly.

--

Karen C. Fox

Senior Science Communications Officer

Office of Communications

From: "Etkind, Marc R. (HQ-NA000)" <marc.r.etkind@nasa.gov>  
Date: Tuesday, June 8, 2021 at 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), (b) (7)(E)

margaret.kieffer@nasa.gov

SIPR: (b) (6), (b) (7)(E)

JWICS: (b) (6), (b) (7)(E)

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

## RE: UAP brief

---

From: Jacobs, Bob (HQ-NA000) <bob.jacobs@nasa.gov>  
To: Cruz, Randy C. (HQ-AA000)[Affiliate] <randy.c.cruz@nasa.gov>, Etkind, Marc R. (HQ-NA000) <marc.r.etkind@nasa.gov>  
Sent: June 8, 2021 12:32:02 PM EDT  
Received: June 8, 2021 12:32:03 PM EDT

Yeah, I found because I haven't used the email system in such a long time I have to get it reset. I'll standby and let Mark's schedule dictate what he wants. I'm available.

bj

From: Cruz, Randy C. (HQ-AA000)[Affiliate] <randy.c.cruz@nasa.gov>  
Sent: Tuesday, June 8, 2021 12:24 PM  
To: Etkind, Marc R. (HQ-NA000) <marc.r.etkind@nasa.gov>; Jacobs, Bob (HQ-NA000) <bob.jacobs@nasa.gov>  
Subject: UAP brief

Gents,

I tried to send the short brief to you on JWICS, however, neither of you have an email address on the classified side. I have verified that **b6** [REDACTED]. You just don't have email addresses.

When your schedule allows, I can bring you two into the SCIF on the 6th floor and go over the brief with you. Let me know your availability and I'll have it set up. Today would be great, if you can squeeze it in. Shouldn't take more than 15 min.

V/r,  
Randy

Randy Cruz

Senior Advisor to the Administrator

NASA Headquarters

Office: (202) 358-1445

Cell: **(b) (6)**

## Re: UAP messaging

---

From: Feldstein, Karen C. (HQ-TA000) <karen.c.feldstein@nasa.gov>  
To: Cruz, Randy C. (HQ-AA000)[Affiliate] <randy.c.cruz@nasa.gov>, Etkind, Marc R. (HQ-NA000) <marc.r.etkind@nasa.gov>  
Cc: Kieffer, Margaret (HQ-TH000) <margaret.kieffer@nasa.gov>, McKay, Meredith (HQ-TA000) <meredith.mckay@nasa.gov>  
Sent: June 8, 2021 3:39:29 PM EDT  
Received: June 8, 2021 3:39:30 PM EDT

Hi Randy, I'm out this afternoon but am looping in Margaret and Meredith.

Best,

Karen

On: 08 June 2021 13:29, "Cruz, Randy C. (HQ-AA000)[Affiliate]" <randy.c.cruz@nasa.gov> wrote:

Karen/Marc,

I understand that you two are working closely on the UAP messaging efforts and I don't want to stifle or confuse anything. I was preparing share an initial classified brief from the UAP Task Force that is dated from August 2020 with Marc. It might be OBE at the this point, but wanted to let you know that we can still do that if you desire. Let me know how I can help.

V/r,

Randy

Randy Cruz

Senior Advisor to the Administrator

NASA Headquarters

Office: (202) 358-1445

Cell: (b) (6)

## RE: Talking points for UAP report

---

From: Lal, Bhavya (HQ-AA000) <bhavya.lal@nasa.gov>  
To: Quinn, Susie Perez (HQ-AH000) <susie.p.quinn@nasa.gov>, Brown, Alicia N. (HQ-VA000) <alicia.n.brown@nasa.gov>, Dalton, Bale (HQ-AH000) <bale.dalton@nasa.gov>, Etkind, Marc R. (HQ-NA000) <marc.r.etkind@nasa.gov>, McGuinness, Jackie (HQ-NA000) <jackie.mcguinness@nasa.gov>  
Sent: June 9, 2021 3:11:55 PM EDT  
Received: June 9, 2021 3:11:56 PM EDT

Ya'll need to watch the movie Europa Report (2018 I think) this weekend. It's free on the interwebs:

<https://www.youtube.com/watch?v=MLBxd2xxnZ4>

<<https://gcc02.safelinks.protection.outlook.com/?url=https://www.youtube.com/watch?v=MLBxd2xxnZ4&data=04|01|m arc.r.etkind@nasa.gov|8163c30b3417449b463e08d92b7a725b|7005d45845be48ae8140d43da96dd17b|0|0|63758862 7162622458|Unknown|TWFPbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQIjoiV2luMzliLCJBTiI6Ik1haWwiLCJXVCi6Mn0=| 1000&sdata=hs2ezJzxGUBkC8m91i2sayxRriq0LlrNOphJFeG4AKA=&reserved=0>>

From: Quinn, Susie Perez (HQ-AH000) <susie.p.quinn@nasa.gov>  
Sent: Wednesday, June 9, 2021 1:51 PM  
To: Lal, Bhavya (HQ-AA000) <bhavya.lal@nasa.gov>; Brown, Alicia N. (HQ-VA000) <alicia.n.brown@nasa.gov>; Dalton, Bale (HQ-AH000) <bale.dalton@nasa.gov>; Etkind, Marc R. (HQ-NA000) <marc.r.etkind@nasa.gov>; McGuinness, Jackie (HQ-NA000) <jackie.mcguinness@nasa.gov>  
Subject: RE: Talking points for UAP report

WOW

From: Lal, Bhavya (HQ-AA000) <bhavya.lal@nasa.gov>  
Sent: Wednesday, June 9, 2021 1:09 PM  
To: Brown, Alicia N. (HQ-VA000) <alicia.n.brown@nasa.gov>; Dalton, Bale (HQ-AH000) <bale.dalton@nasa.gov>; Etkind, Marc R. (HQ-NA000) <marc.r.etkind@nasa.gov>; Quinn, Susie Perez (HQ-AH000) <susie.p.quinn@nasa.gov>; McGuinness, Jackie (HQ-NA000) <jackie.mcguinness@nasa.gov>  
Subject: RE: Talking points for UAP report

Mark my words. This is what Europa's oceans would look like when we get there with our submarine:

From: Brown, Alicia N. (HQ-VA000) <alicia.n.brown@nasa.gov>  
Sent: Wednesday, June 9, 2021 12:01 PM  
To: Lal, Bhavya (HQ-AA000) <bhavya.lal@nasa.gov>; Dalton, Bale (HQ-AH000) <bale.dalton@nasa.gov>; Etkind, Marc R. (HQ-NA000) <marc.r.etkind@nasa.gov>; Quinn, Susie Perez (HQ-AH000) <susie.p.quinn@nasa.gov>; McGuinness, Jackie (HQ-NA000) <jackie.mcguinness@nasa.gov>  
Subject: RE: Talking points for UAP report

And the search for life was added to NASA's charter in the 2017 auth bill, that Nelson helped author.

From: Lal, Bhavya (HQ-AA000) <bhavya.lal@nasa.gov>  
Sent: Wednesday, June 9, 2021 11:55 AM  
To: Dalton, Bale (HQ-AH000) <bale.dalton@nasa.gov>; Etkind, Marc R. (HQ-NA000) <marc.r.etkind@nasa.gov>; Brown, Alicia N. (HQ-VA000) <alicia.n.brown@nasa.gov>; Quinn, Susie Perez (HQ-AH000) <susie.p.quinn@nasa.gov>; McGuinness, Jackie (HQ-NA000) <jackie.mcguinness@nasa.gov>  
Subject: RE: Talking points for UAP report

Agree 100%. We don't have to repeat what they are saying ( (b) (5) ). NASA's



charter is to discover life in the universe, and we are working hard to do that. I am fully expecting Europa to have giant squids in the under-ice ocean world!

B

From: Dalton, Bale (HQ-AH000) <bale.dalton@nasa.gov>  
Sent: Wednesday, June 9, 2021 11:52 AM  
To: Lal, Bhavya (HQ-AA000) <bhavya.lal@nasa.gov>; Etkind, Marc R. (HQ-NA000) <marc.r.etkind@nasa.gov>; Brown, Alicia N. (HQ-VA000) <alicia.n.brown@nasa.gov>; Quinn, Susie Perez (HQ-AH000) <susie.p.quinn@nasa.gov>; McGuinness, Jackie (HQ-NA000) <jackie.mcguinness@nasa.gov>  
Subject: RE: Talking points for UAP report

Marc, Team,

On initial read I find the guidance Bhavya was able to retrieve to be (b) (5) that I think (b) (6) "we are a scientific discovery agency and we will continue to fulfill all parts of our charter. Bottom line, we want to know!"

My two cents.

Thanks,

RBD

From: Lal, Bhavya (HQ-AA000) <bhavya.lal@nasa.gov>  
Sent: Tuesday, June 8, 2021 5:09 PM  
To: Etkind, Marc R. (HQ-NA000) <marc.r.etkind@nasa.gov>; Brown, Alicia N. (HQ-VA000) <alicia.n.brown@nasa.gov>; Quinn, Susie Perez (HQ-AH000) <susie.p.quinn@nasa.gov>; Dalton, Bale (HQ-AH000) <bale.dalton@nasa.gov>; McGuinness, Jackie (HQ-NA000) <jackie.mcguinness@nasa.gov>  
Subject: Talking points for UAP report

See attached.

Marc - you know Patrick. Right? Feel free to follow up.

I'll read the final clearance draft first thing tomorrow.

Bhavya Lal, Ph.D.

(b) (6)

Begin Forwarded Message:

From: "Evans, Patrick L. EOP/NSC" (b) (6)  
Subject: RE: [EXTERNAL] RE: Talking points for UAP report  
Date: 08 June 2021 17:02  
To: "Schaffer, Audrey M. EOP/NSC" (b) (6) "Lal, Bhavya (HQ-AA000)" <bhavya.lal@nasa.gov>

Cc: "Forrest, Christopher D. EOP/NSC" (b) (6)

Good afternoon Bhavya –

Attached are two docs:

1) NSC Press Guidance for UAPs

2) OSD Briefing Card for UAPs

Also Here is the email address for ODNI public affairs: (b) (6) . Monica/ODNI has the press and can speak to ODNI's talking points and the eventual rollout.

Sue Gough - (b) (6) is the lead at OSD Press Operations.

Please let me know if this is what you need. Thanks!

Patrick

Very Respectfully,

(b) (6) APR

Director for Strategic Communications and Assistant Press Secretary

National Security Council

E: (b) (6)

Office: (b) (6)

Mobile: (b) (6)

From: Schaffer, Audrey M. EOP/NSC (b) (6)

Sent: Tuesday, June 8, 2021 4:37 PM

To: Lal, Bhavya (HQ-AA000) <bhavya.lal@nasa.gov>

Cc: Forrest, Christopher D. EOP/NSC <(b) (6)> Evans, Patrick L. EOP/NSC (b) (6)

Subject: RE: [EXTERNAL] RE: Talking points for UAP report

Bhavya,

I'm looping in Patrick Evans from NSC Press. In talking with Chris Forrest, it sounds like Patrick can both send you the current EOP press guidance on UAPs and connect you with PA folks from DOD and DNI PA who would have more detailed guidance that you can pull from.

Audrey

On: 08 June 2021 14:16, "Schaffer, Audrey M. EOP/NSC" (b) (6) wrote:

Bhavya

Thanks for the follow-up – great to see you as well!

I'm looping in my colleague Chris Forrest. He is our lead for the UAP report and should be able to share what we have and/or point you to PA colleagues in DOD and DNI to work directly with.

Audrey

From: Lal, Bhavya (HQ-AA000) <bhavya.lal@nasa.gov>

Sent: Tuesday, June 8, 2021 2:07 PM

To: Schaffer, Audrey M. EOP/NSC (b) (6)

Subject: Talking points for UAP report

Hi Audrey. Great seeing you today. Wanted to coordinate NASA talking points on the UAP report with those of NSC to the extent possible. Any thoughts on that front would be most welcome! Best and come visit us at NASA! Bhavya

Bhavya Lal, Ph.D.

DUPLICATE-ALREADY PROCESSED

## Re: Talking points for UAP report

---

From: Etkind, Marc R. (HQ-NA000) </O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=CB6EE6FC64104561BE6805548BB21326-ETKIND, MAR>  
To: Brown, Alicia N. (HQ-VA000) <alicia.n.brown@nasa.gov>, Lal, Bhavya (HQ-AA000) <bhavya.lal@nasa.gov>, Dalton, Bale (HQ-AH000) <bale.dalton@nasa.gov>, Quinn, Susie Perez (HQ-AH000) <susie.p.quinn@nasa.gov>, McGuinness, Jackie (HQ-NA000) <jackie.mcguinness@nasa.gov>  
Sent: June 9, 2021 1:07:38 PM EDT  
Received: June 9, 2021 1:07:41 PM EDT

All good guidance and appreciated!

On: 09 June 2021 12:00, "Brown, Alicia N. (HQ-VA000)" <alicia.n.brown@nasa.gov> wrote:

DUPLICATE-ALREADY PROCESSED

From: Lal, Bhavya (HQ-AA000) <bhavya.lal@nasa.gov>  
Sent: Wednesday, June 9, 2021 11:55 AM

DUPLICATE-ALREADY PROCESSED

From: Dalton, Bale (HQ-AH000) <bale.dalton@nasa.gov>  
Sent: Wednesday, June 9, 2021 11:52 AM

DUPLICATE-ALREADY PROCESSED

**Fwd: [EXTERNAL] RE: Talking points for UAP report**

---

From: Lal, Bhavya (HQ-AA000) <bhavya.lal@nasa.gov>  
To: Etkind, Marc R. (HQ-NA000) <marc.r.etkind@nasa.gov>, McGuinness, Jackie (HQ-NA000) <jackie.mcguinness@nasa.gov>  
Sent: June 8, 2021 5:36:49 PM EDT  
Received: June 8, 2021 5:36:50 PM EDT  
Attachments: 2021 0603 Unidentified Aerial Phenomena.docx

Bhavya Lal, Ph.D.

DUPLICATE-ALREADY PROCESSED

Begin Forwarded Message:

From: "Evans, Patrick L. EOP/NSC" (b) (6)  
Subject: RE: [EXTERNAL] RE: Talking points for UAP report  
Date: 08 June 2021 17:32  
To: "Lal, Bhavya (HQ-AA000)" <bhavya.lal@nasa.gov>

Resending with attachment and text below.

NSC Press Guidance – Unidentified Aerial Phenomena (UAP) Report

(b) (5)

b5



###

Very Respectfully,

Patrick Evans, APR

Director for Strategic Communications and Assistant Press Secretary

National Security Council

E: (b) (6)

Office: (b) (6)

Mobile: (b) (6)

From: Lal, Bhavya (HQ-AA000) <bhavya.lal@nasa.gov>

Sent: Tuesday, June 8, 2021 5:07 PM

To: Evans, Patrick L. EOP/NSC (b) (6)

Subject: Re: [EXTERNAL] RE: Talking points for UAP report

Thanks Patrick. Can't open the first attachment. Can you pls try again?

Bhavya Lal, Ph.D.

DUPLICATE-ALREADY PROCESSED

On: 08 June 2021 17:02, "Evans, Patrick L. EOP/NSC" (b) (6) wrote:

DUPLICATE-ALREADY PROCESSED

From: Schaffer, Audrey M. EOP/NSC (b) (6)

Sent: Tuesday, June 8, 2021 4:37 PM

DUPLICATE-ALREADY PROCESSED

Audrey

From: Lal, Bhavya (HQ-AA000) <bhavya.lal@nasa.gov>  
Sent: Tuesday, June 8, 2021 2:33 PM  
To: Schaffer, Audrey M. EOP/NSC (b) (6)  
Cc: Forrest, Christopher D. EOP/NSC (b) (6)  
Subject: Re: [EXTERNAL] RE: Talking points for UAP report

Thanks Audrey! Hello Chris - Standing by for any guidance. Our administrator is getting lots of media questions (plus questions from the Hill too) and we'd like to stay coordinated if possible. Thx! Bhavya

Bhavya Lal, Ph.D.

DUPLICATE-ALREADY PROCESSED

On: 08 June 2021 14:16, "Schaffer, Audrey M. EOP/NSC" (b) (6) wrote:

DUPLICATE-ALREADY PROCESSED

From: Lal, Bhavya (HQ-AA000) <bhavya.lal@nasa.gov>  
Sent: Tuesday, June 8, 2021 2:07 PM

DUPLICATE-ALREADY PROCESSED.



## Attachment

### 1. 2021 0603 Unidentified Aerial Phenomena.docx

Type: application/vnd.openxmlformats-officedocument.wordprocessingml.document  
Size: 19 KB (20,360 bytes)

## **Attachment #1**

**2021 0603 Unidentified Aerial Phenomena.docx**

### **Original view**

2 pages (displayed on pages 7 to 8)

6/4/2021

**NSC Press Guidance – Unidentified Aerial Phenomena (UAP) Report**

(b) (5)

(b) (5)

###

## Attachment

### 1. 2021 0517 BC UAP Report to Congress v3.docx

Type: application/vnd.openxmlformats-officedocument.wordprocessingml.document  
Size: 45 KB (46,857 bytes)

### 2. 2021 0603 Unidentified Aerial Phenomena.docx

Type: application/vnd.openxmlformats-officedocument.wordprocessingml.document  
Size: 19 KB (20,360 bytes)

## **Attachment #1**

**2021 0517 BC UAP Report to Congress v3.docx**

### **Original view**

3 pages (displayed on pages 6 to 8)

REFERRED TO OSD

REFERRED TO OSD



REFERRED TO OSD

## **Attachment #2**

**2021 0603 Unidentified Aerial Phenomena.docx**

### **Original view**

2 pages (displayed on pages 10 to 11)

## Tps on economic impact

---

From: McGuinness, Jackie (HQ-NA000) <jackie.mcguinness@nasa.gov>  
To: Gulley, Bryan F. (HQ-NA000) <bryan.f.gulley@nasa.gov>, Etkind, Marc R. (HQ-NA000) <marc.r.etkind@nasa.gov>  
Sent: June 10, 2021 3:59:13 PM EDT  
Received: June 10, 2021 3:59:16 PM EDT

Hi all - Any thoughts on these for tps ahead of BN's Senate hearing next week?

Value of NASA

- b5 [REDACTED]  
[REDACTED]  
[REDACTED].

- b5 [REDACTED]:

- b5 [REDACTED]

- b5 [REDACTED]

- b5 [REDACTED]

- b5 [REDACTED]

Moon to Mars Economic Impact

- b5 [REDACTED].

- b5 [REDACTED].

- b5 [REDACTED].

Intern program

- b5 [REDACTED]

- b5 [REDACTED].

- b5 [REDACTED]  
[REDACTED].

UAP

- Central to NASA's mission is the search for life, wherever it may exist in the universe and at whatever stage.

- From potential biological life in the clouds on Venus, to squid-like creatures in Europa's oceans, to ancient, fossilized life on Mars, NASA is committed to investigating the biggest question that we face as humans: Are we alone in the universe?

- While NASA has yet to find any credible evidence of extraterrestrial life, we are not closed to the possibility that such life exists (b)(5)
- The nature of science is to better understand the unknown. When we learn of unidentified aerial phenomena, it opens up the door to new science questions to explore.

Jackie McGuinness

NASA Press Secretary

jackie.mcguinness@nasa.gov <mailto:jacqueline.f.mcguinness@nasa.gov>

C: (b) (6)

## **Re: NASA HQ IMAGE - Partial Solar Eclipse - NHQ202106100010**

---

From: Lal, Bhavya (HQ-AA000) <bhavya.lal@nasa.gov>  
To: Etkind, Marc R. (HQ-NA000) <marc.r.etkind@nasa.gov>  
Sent: June 10, 2021 8:53:23 AM EDT  
Received: June 10, 2021 8:53:24 AM EDT

Ah! Very VERY cool.

My trainers are always asking me questions. I need to always stay current and have good explanations - keeps me sharp haha. Today I got a ton of questions on the UAP stuff.

Bhavya Lal, Ph.D.

(b) (6)

On: 10 June 2021 08:50, "Etkind, Marc R. (HQ-NA000)" <marc.r.etkind@nasa.gov> wrote:

Sorry just to be clear—highest day ever for Discovery Science for the 2017 eclipse.

From: Bhavya Lal <bhavya.lal@nasa.gov>  
Date: Thursday, June 10, 2021 at 8:49 AM  
To: "Etkind, Marc R. (HQ-NA000)" <marc.r.etkind@nasa.gov>  
Subject: Re: NASA HQ IMAGE - Partial Solar Eclipse - NHQ202106100010

Right after Artemis III lands the first two women on the Moon

Seriously, that's spectacular. Public interest is good for us.

Bhavya Lal, Ph.D.

(b) (6)

On: 10 June 2021 08:45, "Etkind, Marc R. (HQ-NA000)" <marc.r.etkind@nasa.gov> wrote:

On the tv side, our highest day ever. Next one April 2024!

From: Bhavya Lal <bhavya.lal@nasa.gov>  
Date: Thursday, June 10, 2021 at 8:28 AM  
To: "Etkind, Marc R. (HQ-NA000)" <marc.r.etkind@nasa.gov>, "Quinn, Susie Perez (HQ-AH000)" <susie.p.quinn@nasa.gov>, "Dalton, Bale (HQ-AH000)" <bale.dalton@nasa.gov>, "Miller, Helen G. (HQ-AA000)" <helen.g.miller@nasa.gov>, "McGuinness, Jackie (HQ-NA000)" <jackie.mcguinness@nasa.gov>, "Brown, Alicia N. (HQ-VA000)" <alicia.n.brown@nasa.gov>, "Hunter, Reagan A. (HQ-VA000)" <reagan.a.hunter@nasa.gov>, "Lambert, Rashahra T. (HQ-AA000)" <rashahra.t.lambert@nasa.gov>, "Gulley, Bryan F. (HQ-NA000)" <bryan.f.gulley@nasa.gov>  
Subject: Re: NASA HQ IMAGE - Partial Solar Eclipse - NHQ202106100010

Yes. People love this stuff! Remember the frenzy after the solar eclipse? It was so crazy Thomas Z had to testify in Congress to explain the interest.

Bhavya Lal, Ph.D.

(b) (6)

On: 10 June 2021 08:21, "Etkind, Marc R. (HQ-NA000)" <marc.r.etkind@nasa.gov> wrote:

We live streamed as well. It's the number one topic on twitter right now and great to have NASA in the convo.

From: Bhavya Lal <bhavya.lal@nasa.gov>

Date: Thursday, June 10, 2021 at 8:18 AM

To: "Etkind, Marc R. (HQ-NA000)" <marc.r.etkind@nasa.gov>, "Quinn, Susie Perez (HQ-AH000)" <susie.p.quinn@nasa.gov>, "Dalton, Bale (HQ-AH000)" <bale.dalton@nasa.gov>, "Miller, Helen G. (HQ-AA000)" <helen.g.miller@nasa.gov>, "McGuinness, Jackie (HQ-NA000)" <jackie.mcguinness@nasa.gov>, "Brown, Alicia N. (HQ-VA000)" <alicia.n.brown@nasa.gov>, "Hunter, Reagan A. (HQ-VA000)" <reagan.a.hunter@nasa.gov>, "Lambert, Rashahra T. (HQ-AA000)" <rashahra.t.lambert@nasa.gov>, "Gulley, Bryan F. (HQ-NA000)" <bryan.f.gulley@nasa.gov>

Subject: Re: NASA HQ IMAGE - Partial Solar Eclipse - NHQ202106100010

Too cool!

Bhavya Lal, Ph.D.

(b) (6)

On: 10 June 2021 07:56, "Etkind, Marc R. (HQ-NA000)" <marc.r.etkind@nasa.gov> wrote:

Thought you might enjoy these photos the NASA photographer took this morning.

From: <nasa- <mailto:nasa-hq-image-bounces@lists.hq.nasa.gov>hq- <mailto:hq-image-bounces@lists.hq.nasa.gov>image- <mailto:image-bounces@lists.hq.nasa.gov>bounces@lists.hq.nasa.gov> on behalf of "Ingalls, Bill (HQ-NG000)[MORI ASSOCIATES INC]" <bingalls@nasa.gov>

Date: Thursday, June 10, 2021 at 7:14 AM

To: NASA HQ IMAGE RELEASE <nasa- <mailto:nasa-hq-image@lists.hq.nasa.gov>hq- <mailto:hq-image@lists.hq.nasa.gov>image@lists.hq.nasa.gov>

Subject: NASA HQ IMAGE - Partial Solar Eclipse - NHQ202106100010

CAPTION:

A partial solar eclipse is seen as the sun rises behind the Statue of Freedom atop the United States Capitol Building, Thursday, June 10, 2021, as seen from Arlington, Virginia. The annular or "ring of fire" solar eclipse is only visible to some people in Greenland, Northern Russia, and Canada. Photo Credit: (NASA/Bill Ingalls)

This image, and others, are available on Flickr:<https://flic.kr/s/aHsmVY6CMm>

<<https://gcc02.safelinks.protection.outlook.com/?url=https://flic.kr/s/aHsmVY6CMm&data=04|01|marc.r.etkind@nasa.g>

ov|c1f8b87bc78c4992c64208d92c0ebbc|7005d45845be48ae8140d43da96dd17b|0|0|637589264048269675|Unknown|TWFPbGZsb3d8eyJWljoimC4wLjAwMDAiLCJQljoiv2luMzliLCJBTil6lk1haWwiLCJXVCi6Mn0=|1000&sdata=LGBK+cUOm+eQM9p3lc7j3w3As6rehFWtUdO3pYteZmY=&reserved=0>

Cheers

Bill

-- --

Bill Ingalls

Supervisor/Senior Photographer

NASA Headquarters, Office of Communications

300 E ST., SW

Washington, DC

20546

phone: 202.358.1742

fax: 202.358.4333

email: [bingalls@nasa.gov](mailto:bingalls@nasa.gov)

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<http://www.flickr.com/photos/nasahqphoto>

<<https://gcc02.safelinks.protection.outlook.com/?url=http://www.flickr.com/photos/nasahqphoto/&data=04|01|marc.r.etkind@nasa.gov|c1f8b87bc78c4992c64208d92c0ebbc|7005d45845be48ae8140d43da96dd17b|0|0|637589264048269675|Unknown|TWFPbGZsb3d8eyJWljoimC4wLjAwMDAiLCJQljoiv2luMzliLCJBTil6lk1haWwiLCJXVCi6Mn0=|1000&sdata=inza2vRTMx/swbLHO2e1GXd58C06G744lrlxOtlXtyw=&reserved=0>>

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<http://twitter.com/nasahqphoto>

<<https://gcc02.safelinks.protection.outlook.com/?url=http://twitter.com/nasahqphoto&data=04|01|marc.r.etkind@nasa.gov|c1f8b87bc78c4992c64208d92c0ebbc|7005d45845be48ae8140d43da96dd17b|0|0|637589264048279628|Unknown|TWFPbGZsb3d8eyJWljoimC4wLjAwMDAiLCJQljoiv2luMzliLCJBTil6lk1haWwiLCJXVCi6Mn0=|1000&sdata=xh1E9kmOey6dZvB1VPTRAsLYQazwAfAR70r6j+zSg/l=&reserved=0>>

## RE: Hearing Questions and Toplines

---

From: Brown, Alicia N. (HQ-VA000) <alicia.n.brown@nasa.gov>  
To: Quinn, Susie Perez (HQ-AH000) <susie.p.quinn@nasa.gov>, Kerwin, Mary D. (HQ-IA000) <mary.d.kerwin@nasa.gov>, Belson, DaMara (HQ-IA000) <damara.m.belson@nasa.gov>, McGuinness, Jackie (HQ-NA000) <jackie.mcguinness@nasa.gov>, Etkind, Marc R. (HQ-NA000) <marc.r.etkind@nasa.gov>  
Sent: June 10, 2021 2:33:05 PM EDT  
Received: June 10, 2021 2:33:06 PM EDT

My thoughts on key issues he needs to be prepared for:

- b5 ? (b) (5)
- b5 ? (b) (5)
- b5
- b5 ?)
- UAP (does OCOM have TPs?)
- b5 ?
- b5 ?
- b5 ?)
- b5 r?

From: Quinn, Susie Perez (HQ-AH000) <susie.p.quinn@nasa.gov>  
Sent: Thursday, June 10, 2021 2:06 PM  
To: Kerwin, Mary D. (HQ-IA000) <mary.d.kerwin@nasa.gov>; Belson, DaMara (HQ-IA000) <damara.m.belson@nasa.gov>; McGuinness, Jackie (HQ-NA000) <jackie.mcguinness@nasa.gov>; Brown, Alicia N. (HQ-VA000) <alicia.n.brown@nasa.gov>; Etkind, Marc R. (HQ-NA000) <marc.r.etkind@nasa.gov>  
Subject: FW: Hearing Questions and Toplines

From: Quinn, Susie Perez (HQ-AH000)  
Sent: Wednesday, May 19, 2021 7:06 AM  
To: Nelson, Bill (HQ-AA000) <bill.nelson@nasa.gov>  
Cc: Brown, Alicia N. (HQ-VA000) <alicia.n.brown@nasa.gov>; Kerwin, Mary D. (HQ-IA000) <mary.d.kerwin@nasa.gov>; Miller, Helen G. (HQ-AA000) <helen.g.miller@nasa.gov>; Massey, Natalie (HQ-AB000) <natalie.massey@nasa.gov>; McGuinness, Jackie (HQ-NA000) <jackie.mcguinness@nasa.gov>  
Subject: Hearing Questions and Toplines

Good morning,

Please find attached a topline sheet and revised hearing questions based on yesterday's briefing.

Susie Perez Quinn



Chief of Staff

Susie.p.quinn@nasa.gov

Office of the Administrator | NASA Headquarters

300 E Street SW, Washington DC

**[EXTERNAL] We know the enduring prestige and place in all human history to be FIRST, especially if substantive. Guess which President or PM is going to be the first !!! Guess which President or PM or future world leader wants to be first?**

---

From: h6 [REDACTED]@yahoo.com>  
To: (b) (6) [REDACTED] The Moscow Times  
<general@themoscowtimes.com>, (b) (6) [REDACTED] clare.a.skelly@nasa.gov,  
(b) (6) [REDACTED] marc.r.etkind@nasa.gov, Fijitimes Com Support  
<support@fijitimes.com.fj>, Glasgowtimes Co News (b) (6) [REDACTED]  
editor@heraldandtimes.co.uk, ian.j.oneill@jpl.nasa.gov, (b) (6) [REDACTED]  
mail@indiatvnews.com, sean.potter@nasa.gov, (b) (6) [REDACTED]  
opinion@thejakartapost.com, h6 [REDACTED]  
(b) (6) [REDACTED]  
reporters@dailyrecord.co.uk, reporters@sundaymail.co.uk, Tim Buckley  
<h6 [REDACTED]>, timesnews@fijitimes.com.fj, f.light@themoscowtimes.com,  
letters@usatoday.com h6 [REDACTED].ru, Kolari Vision <h6 [REDACTED]>,  
(b) (6) [REDACTED] Skelly, Clare A. (HQ-NA020) <clare.a.skelly@nasa.gov>,  
Etkind, Marc R. (HQ-NA000) <marc.r.etkind@nasa.gov>, O'Neill, Ian J (JPL-1821)[JPL  
Employee] <ian.j.oneill@jpl.nasa.gov>, Potter, Sean (HQ-NA020)  
<sean.potter@nasa.gov>  
Sent: June 11, 2021 3:23:10 AM EDT  
Received: June 11, 2021 3:24:50 AM EDT

Forum - The Black Vault Community

<<https://gcc02.safelinks.protection.outlook.com/?url=https://www.theblackvault.com/community/forum/new-member-introductions/scoop-gimbal-footage-vs-old-earthenware-cooking-pot-art-symbols-vs-ai/&data=04|01|marc.r.etkind@nasa.gov|55b906659c0d430a233d08d92ca9fd3e|7005d45845be48ae8140d43da96dd17b|0|0|637589930907271693|Unknown|TWfPbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQIjoiV2luMzliLCJBTiI6Ik1haWwiLCJXVCi6Mn0=|2000&sdata=+QVjIUbtZr+S+NoHiw22q9R7L2WqWy5COxD96tSIhyo=&reserved=0>>

Forum - The Black Vault Community

Online message forum to discuss government secrets, UFOs and the Paranormal.

<<https://gcc02.safelinks.protection.outlook.com/?url=https://www.theblackvault.com/community/forum/new-member-introductions/scoop-gimbal-footage-vs-old-earthenware-cooking-pot-art-symbols-vs-ai/&data=04|01|marc.r.etkind@nasa.gov|55b906659c0d430a233d08d92ca9fd3e|7005d45845be48ae8140d43da96dd17b|0|0|637589930907271693|Unknown|TWfPbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQIjoiV2luMzliLCJBTiI6Ik1haWwiLCJXVCi6Mn0=|2000&sdata=+QVjIUbtZr+S+NoHiw22q9R7L2WqWy5COxD96tSIhyo=&reserved=0>>

Greetings. Great website. Disappointing Pentagon Report. Fortunately NASA, China using AI, and private research all appear to be doing more.

Scoop of the Year would be to prove the Big Report missed something really important.

Compared with the official Gimbal footage, I have been similarly fascinated by the UFO UAP Alien art and symbols on a 7000-year-old Catal Huyuk like / style 'two-handled' cooking pot.

Would an alien who visited earth say 7,000 years ago, or anytime anywhere, take a simple thing like a wet clay pot for cooking to record their visit in multiple "languages" or symbols or dimensions and (IR or AI) technologies... including 1D, 2D, 3D, 4D, 5D,..., nD, and beyond any comprehension here now.

Symbolic language, hidden meanings, heat differentials, ancient earthenware and clothes from a vanished civilization,

or useful communication depicting / recording futuristic spaceships, cloaking, space jumps / portals, and alien visitors to earth?

This 'two-handled' pot is worthy of carbon dating, linguistic, and special assessments.

Who made it, what does it communicate, when and where was it made?

For what special purposes was it made:

(a) to reach out from beyond the grave, awaken ideas of future worlds' and / or

(b) to depict a lost civilization's artifacts, architecture, events, symbols, ideas, art, and / or

(c) is it for just fine dining, brewing, storage, home decoration?

Does this old tangible clay pot present more information than the Big Report just released? Please see:

<https://www.collectorsweekly.c....atal-huyuk>

<<https://gcc02.safelinks.protection.outlook.com/?url=https://www.collectorsweekly.com/stories/244335-ufo-art-and-symbols-on-7000-bc-catal-huyuk&data=04|01|marc.r.etkind@nasa.gov|55b906659c0d430a233d08d92ca9fd3e|7005d45845be48ae8140d43da96dd17b|0|0|637589930907281647|Unknown|TWFPbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQljojV2luMzliLCJBTil6lk1haWwiLCJXVCi6Mn0=|2000&sdata=Uab5UF56+g356drsp1jIknZgG4491HM8hWVtJfBiJk=&reserved=0>>

[huyuk&data=04|01|marc.r.etkind@nasa.gov|55b906659c0d430a233d08d92ca9fd3e|7005d45845be48ae8140d43da96dd17b|0|0|637589930907281647|Unknown|TWFPbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQljojV2luMzliLCJBTil6lk1haWwiLCJXVCi6Mn0=|2000&sdata=Uab5UF56+g356drsp1jIknZgG4491HM8hWVtJfBiJk=&reserved=0](https://www.collectorsweekly.c....atal-huyuk)

<https://thevault.tothestarsaca.....com/gimbal>

<<https://gcc02.safelinks.protection.outlook.com/?url=https://thevault.tothestarsacademy.com/gimbal&data=04|01|marc.r.etkind@nasa.gov|55b906659c0d430a233d08d92ca9fd3e|7005d45845be48ae8140d43da96dd17b|0|0|637589930907291595|Unknown|TWFPbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQljojV2luMzliLCJBTil6lk1haWwiLCJXVCi6Mn0=|2000&sdata=ykUfktA7YiuUCfEr2e882rAS7EVUXBDADA615C/nA=&reserved=0>>

<https://thedebrief.org/china-c.....ask-force/>

<<https://gcc02.safelinks.protection.outlook.com/?url=https://thedebrief.org/china-confirms-it-has-its-own-ufo-task-force/&data=04|01|marc.r.etkind@nasa.gov|55b906659c0d430a233d08d92ca9fd3e|7005d45845be48ae8140d43da96dd17b|0|0|637589930907291595|Unknown|TWFPbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQljojV2luMzliLCJBTil6lk1haWwiLCJXVCi6Mn0=|2000&sdata=xjfX8sJ6NJ2D4udZpHAI2e+Hq6EVT+YXXyQSahgNIYE=&reserved=0>>

China Confirms It Has Its Own UFO Task Force - The Debrief

Tim McMillan

China confirms it has its own "UFO Task Force," said to be using AI to investigate increased UFO activity in Chi...

<<https://gcc02.safelinks.protection.outlook.com/?url=https://thedebrief.org/china-confirms-it-has-its-own-ufo-task-force/&data=04|01|marc.r.etkind@nasa.gov|55b906659c0d430a233d08d92ca9fd3e|7005d45845be48ae8140d43da96dd17b|0|0|637589930907301558|Unknown|TWFPbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQljojV2luMzliLCJBTil6lk1haWwiLCJXVCi6Mn0=|2000&sdata=WX2iun5Vdh2DdCXbE8AgMchd01l0nypLg1sH1hPK8Y=&reserved=0>>

<https://www.space.com/nasa-inv.....ill-nelson>

<<https://gcc02.safelinks.protection.outlook.com/?url=https://www.space.com/nasa-investigating-ufos-bill-nelson&data=04|01|marc.r.etkind@nasa.gov|55b906659c0d430a233d08d92ca9fd3e|7005d45845be48ae8140d43da96dd17b|0|0|637589930907301558|Unknown|TWFPbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQljojV2luMzliLCJBTil6lk1h>

aWwiLCJXVCI6Mn0=|2000&sdata=GDk4qE1e5XoNDa2sfxhiSvYxs4IHAN3VTdT6gEkZaQ=&reserved=0>

Report: NASA investigating UFO sightings, agency chief says

NASA chief Bill Nelson told CNN that he has asked agency researchers to look into the spate of UFO sightings tha...

<<https://gcc02.safelinks.protection.outlook.com/?url=https://www.space.com/nasa-investigating-ufos-bill-nelson&data=04|01|marc.r.etkind@nasa.gov|55b906659c0d430a233d08d92ca9fd3e|7005d45845be48ae8140d43da96dd17b|0|0|637589930907311512|Unknown|TWFPbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQIjojV2luMzliLCJBTiI6lk1h>  
aWwiLCJXVCI6Mn0=|2000&sdata=aKeyLsywGLjdkbyzo8j+Ihu00CSMe8TfmuSZo+DfGI=&reserved=0>

More detailed pictures, close ups and other links are available for "Scoopers." IR thermal mirrored and dude "it's rotating" video hopefully forthcoming.

As seen in the first link the old clay pot is real. The Pentagon is not so sure about UFOs UAPs Aliens. It publicly worries that China, Russia or any of us knows more and can find one soon.

Again the Scoop of the Year would be to prove the Big Report missed something really important.

The Video of the Century would be a President or Prime Minister accurately filmed meeting with one or more Aliens and discussing alien technology information, space travel, education systems, and sustainable problem solving.

We know the enduring prestige and place in all human history to be FIRST, especially if substantive. Guess which President or PM is going to be the first !!!

Guess which President or PM or future world leader wants to be first?

Thank you.

## **FW: FOR DISCUSSION: UAP plan draft**

---

From: Etkind, Marc R. (HQ-NA000) <marc.r.etkind@nasa.gov>  
To: McGuinness, Jackie (HQ-NA000) <jackie.mcguinness@nasa.gov>, Gulley, Bryan F. (HQ-NA000) <bryan.f.gulley@nasa.gov>  
Sent: June 14, 2021 6:55:17 AM EDT  
Received: June 14, 2021 6:55:17 AM EDT  
Attachments: TP 21-016 Search for Life\_UAPs.docx, UAPs draft plan.pptx

From: "Fox, Karen C. (GSFC-1300)" <karen.c.fox@nasa.gov>  
Date: Friday, June 11, 2021 at 6:12 PM  
To: "Etkind, Marc R. (HQ-NA000)" <marc.r.etkind@nasa.gov>, "Stephenson, Johnny F. (MSFC-NA000)" <johnny.f.stephenson@nasa.gov>, "Beutel, Allard (HQ-NA020)" <allard.beutel@nasa.gov>, "Thompson, Tabatha T. (HQ-NA020)" <tabatha.t.thompson@nasa.gov>, "Jacobs, Bob (HQ-NA000)" <bob.jacobs@nasa.gov>  
Cc: "O'Connor, Courtney M (HQ-1862)[MORI ASSOCIATES INC]" <courtney.m.oconnor@nasa.gov>, "Johnson, Alana R. (HQ-DG000)[ASRC FEDERAL SYSTEM SOLUTIONS]" <alana.r.johnson@nasa.gov>, "Landau, Elizabeth R (HQ-1864)[ASRC FEDERAL SYSTEM SOLUTIONS]" <elizabeth.r.landau@nasa.gov>, "Harrington, J D (HQ-NA020)" <j.d.harrington@nasa.gov>  
Subject: FOR DISCUSSION: UAP plan draft

Cheers, all –

Per our discussions earlier this week, attached please find a slide deck with thoughts on how best to amplify NASA's role with the search for extraterrestrial life in the context of the upcoming report on UAPs. (Which I'm hearing is to be delivered to Congress by June 25.)

This represents ideas from the braintrust of most of the people on this email, as well as thoughts from Thomas Zurbuchen and the head of NASA's astrobiology program, Mary Voytek.

Also attached, please find the latest talking points on UAPs. While this document will surely continue to be updated, and is meant as a more stable, internal document – it serves as a good starter background.

Happy to discuss, adjust, add, etc. Let me know your thoughts!

Thanks,

Karen

--

Karen C. Fox

Senior Science Communications Officer

Office of Communications

NASA Headquarters

Karen.fox@nasa.gov

## Attachment

### 1. TP 21-016 Search for Life\_UAPs.docx

Type: application/vnd.openxmlformats-officedocument.wordprocessingml.document  
Size: 47 KB (48,830 bytes)

### 2. UAPs draft plan.pptx

Type: application/vnd.openxmlformats-officedocument.presentationml.presentation  
Size: 11 MB (11,607,193 bytes)

## **Attachment #1**

**TP 21-016 Search for Life\_UAPs.docx**

### **Original view**

10 pages (displayed on pages 4 to 13)

TP: 21-016

June 4, 2021

**SUBJECT: Search for Life, Technosignatures & Unidentified Aerial Phenomenon( UAP)/ Unidentified Flying Objects (UFOs)**

**BACKGROUND**

Public and media interest in the topic of UAP/UFOs has seen an uptick in recent weeks following reports related to the Department of Defense's release of three unclassified U.S. Navy videos. Likewise, the 2021 Intelligence Authorization Act, signed in December 2020, stipulated that the government had 180 days to gather and analyze data from disparate agencies. The report is expected to be released in early June.

DOD released a [statement](#) confirming its authorized release of three unclassified Navy videos, one taken in November 2004 and the other two in January 2015, which have been circulating in the public domain after unauthorized releases in 2007 and 2017.

On May 26, [The Washington Post](#) published an opinion piece written by Ravi Kopparapu, a planetary scientist at NASA's Goddard Space Flight Center.

***We Need To Put Science At The Center Of The UFO Question***

*"...With a government report due in June on unidentified aerial phenomena (UAP) and a recent '60 Minutes' story on U.S. Navy pilots' sightings and videos of mysterious images, prominent people in politics, the military and national intelligence are finally asking: What are we looking at?"*

**STATEMENT**

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.

**KEY POINTS**

- One of NASA's key goals is the search for life in the universe. Although we have yet to find signs of extraterrestrial life, NASA is exploring the solar system and beyond to help us answer fundamental questions, including whether we are alone in the universe.
- From studying water on Mars, probing promising "oceans worlds," such as Titan and Europa, to looking for biosignatures in the atmospheres of planets outside our solar system, NASA's science missions are working together with a goal to find unmistakable signs of life beyond Earth.
- To date, NASA has yet to find any credible evidence of extraterrestrial life, but we are not closed to the possibility that such life exists and might have visited Earth. 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.



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- The nature of science is to better understand the unknown. When we learn of unidentified aerial phenomena, (UAP, or more commonly known as unidentified flying objects or UFOs), it opens up the door to new science questions to explore.
- Most UAP sightings result in very limited data, usually video recordings from a single angle that can only be cross-validated with eyewitness testimony. The language of scientists is data. Without access to an extensive set of data, it is nearly impossible to verify or explain any observation. The lack of robust data, including the lack of access to some existing data, is the central problem for scientific study of UAPs.
- In a sense, the discovery of technology from beyond Earth or the signatures of technology on other worlds would constitute the ultimate biosignature.

### QUESTIONS AND ANSWERS

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The 2021 Intelligence Authorization Act, signed in December 2020, stipulated that the government had 180 days to gather and analyze data about UAPs from disparate agencies. The report is expected to be released in early June. Has

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A large rectangular area of the document is redacted with a solid grey fill.

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**ADDITIONAL INFORMATION**

**Exoplanet background**

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- An exoplanet is a planet outside our solar system. Exoplanets are too far away to visit but can be studied with space telescopes.
- So far, we've confirmed more than 4,300 exoplanets in our galaxy, which probably holds trillions. Thousands more are likely to be confirmed in the years ahead.
- About a fifth of the planets confirmed so far are in Earth's size range, some in the "habitable zone," the distance from the star that could allow liquid water on the planet's surface.
- We also know that the building blocks of life are present throughout the solar system and the cosmos, including water.
- Despite these encouraging signs, we have yet to find evidence of life anywhere but planet Earth, in our solar system or beyond. We also haven't yet found a planet like Earth orbiting a star like the Sun, with a "year" comparable to our own.
- We're now on the cusp of a potential revolution in the study of exoplanets: detecting their atmospheres and searching for chemical signatures that could indicate the presence of life.
- In the near-term, the James Webb Space Telescope, and the next generation of ground-based telescopes, extremely will be able to spread the light from a small sample of Earth-sized exoplanets into a spectrum, potentially revealing the presence of atmospheric gases.
- We'll probably begin with large, gaseous worlds unlikely to be habitable, but that will pave the way for future instruments that could look in on a small, rocky world – perhaps even one similar to our own.
- We might see signs of oxygen, methane and carbon dioxide in such a planet's atmosphere – in other words, an atmosphere that reminds us of home.

### Past Missions

#### **Viking Project: 1 & 2**

- *NASA's Viking Project was the first mission to reach the martian surface and the first to search for evidence of life on Mars. Viking was NASA's first attempt to search for life on another planet, and was thereby the **first** mission dedicated to astrobiology. The project found a place in history when it became the first U.S. mission to land a spacecraft safely on the surface of Mars and return images of the surface.*
  - Two identical spacecraft, each consisting of a lander and an orbiter, were built. Each orbiter-lander pair flew together and entered Mars orbit; the landers then separated and descended to the planet's surface.
  - The landers conducted three biology experiments designed to look for possible signs of life.
    - These experiments:
      - Discovered unexpected and enigmatic chemical activity in the Martian soil, but provided no clear evidence for the

## INTERNAL DISTRIBUTION ONLY

presence of living microorganisms in soil near the landing sites.

- Taught scientists a great deal about how little we knew about life on Earth and how to detect it.
- Continue to shape the development of life detection strategies and equipment at NASA and other international agencies.
- NASA's Viking Project took place before NASA's Astrobiology Program was founded, but many scientists from its precursor, NASA's Exobiology Program, participated in the mission.

### **Kepler and K2 Mission**

- *Kepler was a space observatory designed to survey a specific portion of our region of the Milky Way galaxy. An important part of Kepler's work was the identification of Earth-size planets that orbit in the habitable zone of their host star. Such observations are directly relevant to the study of life's potential in the Universe, and the search for life beyond Earth. Kepler discovered more than 2,600 exoplanets!*
  - Amongst the Kepler discoveries is Kepler-186f, the first validated Earth-size planet in the habitable zone of a star other than the Sun. The vast amount of data collected by Kepler will continued to be analyzed and used to help to guide the future direction of astrobiology science.
  - Astrobiologists use this data to:
    - Develop new techniques for studying exoplanets in greater and greater detail.
    - Help inform future missions to characterize exoplanets and exomoons, and possibly identify signs of life by analyzing attributes of these distant worlds, such as atmospheric composition.

### **Current Missions**

#### **MAVEN**

- *Data from MAVEN provides insight into the history of Mars' atmosphere, climate, liquid water, and planetary habitability. An important aspect of the MAVEN mission is studying how early Mars lost much of its atmosphere.*
- *This atmospheric loss may have been partially responsible for Mars' transition from a planet capable of supporting liquid surface water to the dry, desert world we know today.*

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- Astrobiologists are working with data from the MAVEN mission in order to understand how atmospheric loss led to the loss of liquid water on the surface of the planet.
- This work is important in constraining how and when Mars lost its water and identifying periods in Mars' history when habitable environments were most likely to exist at the planet's surface.

### **Mars Odyssey**

- *Mars Odyssey provides detailed maps of Mars that are used to determine the evolution of the Mars environment and its potential for life.*
  - Astrobiologists were directly involved in the development of the Thermal Emission Imaging System (THEMIS) instrument onboard Mars Odyssey. Visible and infrared observations by THEMIS are used to identify the distribution of minerals on Mars, allowing astrobiologists to study how the mineralogy of the planet relates to the landforms.
  - Astrobiologists also use data from Mars Odyssey to study the geochemical makeup of Mars. This information is useful for:
    - Studying the evolution of Mars' environment
    - Identifying locations that may have been habitable for life in the past
    - Finding astrobiology-relevant landing sites for future Mars missions.

### **Mars Reconnaissance Orbiter**

- *While other Mars missions have shown that water flowed across the surface in Mars' history, it remains a mystery whether water was ever around long enough to provide a habitat for life.*
  - Data from MRO:
    - Is essential to astrobiologists studying the potential for habitable environments on past and present Mars.
    - Provides invaluable data used in selecting landing sites for future Mars missions.
    - Is important in building climate models for Mars, and for use in comparative planetology studies performed by astrobiologists who study the potential habitability of exoplanets that orbit distant stars.

### **Mars Exploration Rovers (MER) Spirit & Opportunity**

- *NASA's twin Mars Exploration Rovers, Spirit and Opportunity, were designed to last for 90 martian days, however both robotic explorers far outlasted their original missions and spent years collecting data at the surface of Mars. Spirit's sent data back for over six years, while Opportunity returned data for an incredible fifteen years.*

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- MER mission was to search for and characterize a wide range of rocks and soils that hold clues to past water activity on Mars. Studying the history of water on Mars is essential in determining whether or not the planet once supported environments that could have been habitable for life as we know it.
- MER data has been used to identify environments that may have supported conditions suitable for life in Mars' past and will guide the future of Mars exploration for decades to come.

### **Mars Science Laboratory (Curiosity Rover)**

- *MSL's Curiosity rover is studying whether or not Mars ever had environments capable of supporting microbial life. Data from MSL will be used to develop future missions to collect samples of the martian surface in the hopes of identifying signs of past or present life.*
  - The Curiosity rover is advancing the field of astrobiology by investigating Mars' habitability, studying its climate and geology.
  - Curiosity has provided evidence that liquid water once flowed at the surface of Mars in Gale Crater.
  - The rover also discovered a site dubbed 'Yellowknife bay,' which once supported an environment that was habitable for microbial life.

### **Mars 2020 Mission to Mars: Perseverance Rover**

- *Mars 2020 is the next step in NASA's robotic exploration of Mars, a primary target of astrobiology research in the Solar System, and will build on the accomplishments of MSL. Many researchers supported by elements of the Astrobiology Program are involved in the design and development of the Mars 2020 mission and its scientific goals.*
  - The rover Perseverance is providing important data relevant to astrobiology research, along with a vast amount of geological information about the landing site and the planet at large that will help put the astrobiological data into context.
  - One of the missions primary goal is to explore the geology of Jezero Crater in order to assess past habitability.
    - Jezero Crater is a geologically rich terrain, with many features and minerals formed by water that may date back as far as 3.6 billion years ago.
    - Studying the geology and mineralogy of this site will provide a window into the planet's climate history, and allows astrobiologists to determine if sites like these were persistent habitable environments that could have supported life in the past.

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- Perseverance will not be looking for organisms living on Mars today. However, the rover is collecting data that could be used to identify biosignatures of ancient microbial life.
  - Previous missions, from Pathfinder to Curiosity, have helped astrobiologists determine that habitable environments were present on Mars in the planet's ancient past.
  - While these environments may have been habitable, we do not know if they were inhabited (i.e. if life was ever present).
- Perseverance will be collecting a suite of samples to be returned to Earth via a Mars Sample Return mission. The return samples from another planet will allow our researchers to interrogate them with all of the sophistication and thoroughness of Earth-based instrumentation, and will provide an immense opportunity to dramatically advance our scientific understanding of Mars.
- Many of the goals for the Mars 2020 mission are directly relevant to Astrobiology. These include:
  - Determine whether life ever arose on Mars
  - Seeking signs of past life (biosignatures) in the geological record
  - Characterize the climate of Mars
  - Characterize the geology of Mars

### **TESS Mission**

- NASA's Transiting Exoplanet Survey Satellite is an all-sky survey mission that will discover thousands of exoplanets around nearby bright stars.
- TESS launched April 18, 2018 aboard a SpaceX Falcon 9 rocket.
- To date, TESS has discovered more than 120 confirmed exoplanets and more than 2,600 planet candidates
- TESS has identified, and will continue to find, exoplanets targets that Webb will study in further detail

### **Upcoming Missions**

#### ***Dragonfly Mission to Titan***

- *This revolutionary mission concept includes the capability to explore diverse locations to characterize the habitability of Titan's environment, to investigate how far prebiotic chemistry has progressed, and even to search for chemical signatures that could indicate water-based and/or hydrocarbon-based life.*
- *The NASA Astrobiology Program supports scientists involved at all stages of the mission. Projects supported by the program have helped to define Titan as prime target for astrobiology research in the Solar System.*



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- Analog research on Earth and comparative planetology studies in order to better understand the environment of Titan and to identify sites of astrobiological interest.
- Development of instrumentation that can be used to perform scientific investigations at Titan.
- Research in areas of prebiotic chemistry that inform our knowledge of organic chemistry on the moon.

### ***Europa Clipper Mission to Europa***

- *The Europa Clipper mission will place a spacecraft in orbit around Jupiter in order to perform a detailed investigation of the giant planet's moon Europa.*
  - Europa shows strong evidence for an ocean of liquid water beneath its icy crust and some astrobiologists believe that it could host conditions favorable for life.
  - Astrobiologists are involved in the definition of science goals for Europa Clipper and the design of scientific instruments for the mission.

### ***James Webb Space Telescope (Webb)***

- *Webb will be the premier space-based observatory of the next decade. Webb is a large infrared telescope with a 6.5-meter primary mirror. Data from Webb will be used to study the formation and evolution of habitable worlds, and will be invaluable in understanding processes that have shaped habitability in our own Solar System.*
- *Webb will be capable of making detailed observations that might allow astrobiologists to identify signatures of life on Earth-like planets beyond our Solar System.*
  - Webb observations will be used to study:
    - Every phase in the history of the Universe, including the evolution of the Solar System
    - The formation of distant solar systems capable of supporting life on Earth-like exoplanets.
    - Observe the formation of stars from the first stages to the formation of planetary systems
    - Measure the physical and chemical properties of planetary systems and investigate the potential for life in those systems

### **PAOs:**

- HQ: Alana Johnson, [alana.r.johnson@nasa.gov](mailto:alana.r.johnson@nasa.gov) / 202-358-1501
- HQ: Karen Fox, [karen.fox@nasa.gov](mailto:karen.fox@nasa.gov)/301-286-6284
- HQ: Liz Landau, [elizabeth.r.landau@nasa.gov](mailto:elizabeth.r.landau@nasa.gov)

### **Concurrences:**

- HQ: Mary Voytek, Senior Scientist for NASA Astrobiology
- HQ: Lori Glaze, Planetary Science Division director



## **INTERNAL DISTRIBUTION ONLY**

- HQ: Michael New, Deputy AA for Research, Science Mission Directorate
- HQ: Eric Smith, JWST Program Scientist

## **Attachment #2**

**UAPs draft plan.pptx**

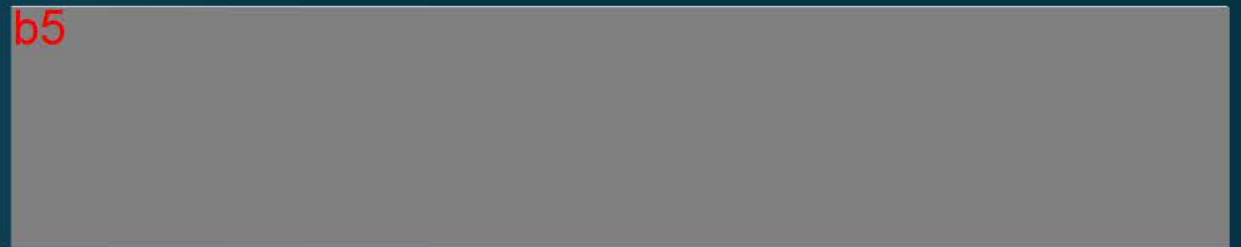
**Original view**

8 pages (displayed on pages 15 to 22)



# UAP PLANNING

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## SHORT TERM: Catching the wave on the UAP report

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## Media

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- Eg. Bill Nelson, Thomas Zurbuchen, Michelle Thaller, Jim Green

• b5

- Eg. Ravi Kopparapu, Laura Kerber, Shawn Donegal - Goldeman

• b5

- <http://astrobiology.com/2020/06/new-study-to-search-universe-for-signs-of-technological-civilizations.html> (Adam Frank, U of Rochester – solid science communicator)
- A search for technosignatures around newly discovered exoplanets (Jean-Luc Margot, UCLA – Solid science communicator)

A dark blue background with a large, light blue circular arc on the left side. Inside the arc, there are images of the Earth, the Moon, Mars, and Saturn. The background also features a bright yellow sun in the bottom left corner and a blue nebula in the top left corner.

## Social

- Tumblr: Current and upcoming NASA missions looking for life
- Reddit AMA or Twitter Spaces with SMEs answering questions

## Printed Products

- Set up a FAQ on NASA's search for life that we can point to whenever needed via social, for media etc.
- Feature/evergreen content on current and upcoming NASA missions looking for life

## Cleaning house

- Need to update this page (a top page when you search "NASA UFO"):  
<https://sservi.nasa.gov/?question=ufo-sightings>





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(b) (5)

The background of the slide is a dark blue space-themed image. On the left side, there is a vertical strip showing a bright yellow sun at the bottom, followed by the blue and white horizon of Earth, a grey cratered moon, a reddish-brown planet (Mars), and a yellow planet with a ring (Saturn) at the top. The rest of the slide has a solid dark blue background.

## LONG TERM: Continuing the Conversation

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A large, solid grey rectangular box covers the majority of the lower half of the slide, redacting the content. The text 'b5' is written in red at the top left corner of this box.





## POTENTIAL LARGER ACTIVITIES

- WORKSHOP/NASA SOCIAL: b5  
Workshop between scientists/astronauts/rocket engineers and science fiction writers. b5
- SOCIAL: Humans of NASA vignettes  
b5 (Hoping to lean into those b5 but would depend on what we get.)
- VIDEO SERIES: b5  
A series of 4-5 videos or recorded shows b5
- LIVE SHOTS CAMPAIGN



## Re: FOR DISCUSSION: UAP plan draft

---

From: Etkind, Marc R. (HQ-NA000) <marc.r.etkind@nasa.gov>  
To: Fox, Karen C. (GSFC-1300) <karen.c.fox@nasa.gov>, Stephenson, Johnny F. (MSFC-NA000) <johnny.f.stephenson@nasa.gov>, Beutel, Allard (HQ-NA020) <allard.beutel@nasa.gov>, Thompson, Tabatha T. (HQ-NA020) <tabatha.t.thompson@nasa.gov>, Jacobs, Bob (HQ-NA000) <bob.jacobs@nasa.gov>  
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Sent: June 14, 2021 6:55:13 AM EDT  
Received: June 14, 2021 6:55:13 AM EDT

Thanks Karen, good stuff... and excited you're pitching the great research/great scientists NASA has. I know there was some talk about adding studies—is there anything new that we are doing that we can add to the convo?

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Date: Friday, June 11, 2021 at 6:12 PM  
To: "Etkind, Marc R. (HQ-NA000)" <marc.r.etkind@nasa.gov>, "Stephenson, Johnny F. (MSFC-NA000)" <johnny.f.stephenson@nasa.gov>, "Beutel, Allard (HQ-NA020)" <allard.beutel@nasa.gov>, "Thompson, Tabatha T. (HQ-NA020)" <tabatha.t.thompson@nasa.gov>, "Jacobs, Bob (HQ-NA000)" <bob.jacobs@nasa.gov>  
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Subject: FOR DISCUSSION: UAP plan draft

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This represents ideas from the braintrust of most of the people on this email, as well as thoughts from Thomas Zurbuchen and the head of NASA's astrobiology program, Mary Voytek.

Also attached, please find the latest talking points on UAPs. While this document will surely continue to be updated, and is meant as a more staid, internal document – it serves as a good starter background.

Happy to discuss, adjust, add, etc. Let me know your thoughts!

Thanks,

Karen

--

Karen C. Fox

## Re: FOR DISCUSSION: UAP plan draft

---

From: Fox, Karen C. (GSFC-1300) <karen.c.fox@nasa.gov>  
To: Etkind, Marc R. (HQ-NA000) <marc.r.etkind@nasa.gov>, Stephenson, Johnny F. (MSFC-NA000) <johnny.f.stephenson@nasa.gov>, Beutel, Allard (HQ-NA020) <allard.beutel@nasa.gov>, Thompson, Tabatha T. (HQ-NA020) <tabatha.t.thompson@nasa.gov>, Jacobs, Bob (HQ-NA000) <bob.jacobs@nasa.gov>  
Cc: O'Connor, Courtney M (HQ-1862)[MORI ASSOCIATES INC] <courtney.m.oconnor@nasa.gov>, Johnson, Alana R. (HQ-DG000)[ASRC FEDERAL SYSTEM SOLUTIONS] <alana.r.johnson@nasa.gov>, Landau, Elizabeth R (HQ-1864)[ASRC FEDERAL SYSTEM SOLUTIONS] <elizabeth.r.landau@nasa.gov>, Harrington, J D (HQ-NA020) <j.d.harrington@nasa.gov>, McGuinness, Jackie (HQ-NA000) <jackie.mcguinness@nasa.gov>, Gulley, Bryan F. (HQ-NA000) <bryan.f.gulley@nasa.gov>  
Sent: June 14, 2021 3:13:00 PM EDT  
Received: June 14, 2021 3:13:03 PM EDT

I now believe that Thomas does not **b5**, as he learned that **b5** funding in its portfolio.

That having been said – the next round **b5** will come this summer, and there is a chance **b5** (though no one knows for sure yet as the decisions haven't been made).

That would be a nice hook to amplify if so, and I will keep tracking it.

--

Karen C. Fox

Senior Science Communications Officer

Office of Communications

From: "Etkind, Marc R. (HQ-NA000)" <marc.r.etkind@nasa.gov>  
Date: Monday, June 14, 2021 at 6:55 AM  
To: "Fox, Karen C. (GSFC-1300)" <karen.c.fox@nasa.gov>, "Stephenson, Johnny F. (MSFC-NA000)" <johnny.f.stephenson@nasa.gov>, "Beutel, Allard (HQ-NA020)" <allard.beutel@nasa.gov>, "Thompson, Tabatha T. (HQ-NA020)" <tabatha.t.thompson@nasa.gov>, "Jacobs, Bob (HQ-NA000)" <bob.jacobs@nasa.gov>  
Cc: "O'Connor, Courtney M (HQ-1862)[MORI ASSOCIATES INC]" <courtney.m.oconnor@nasa.gov>, "Johnson, Alana R. (HQ-DG000)[ASRC FEDERAL SYSTEM SOLUTIONS]" <alana.r.johnson@nasa.gov>, "Landau, Elizabeth R (HQ-1864)[ASRC FEDERAL SYSTEM SOLUTIONS]" <elizabeth.r.landau@nasa.gov>, "Harrington, J D (HQ-NA020)" <j.d.harrington@nasa.gov>, "McGuinness, Jackie (HQ-NA000)" <jackie.mcguinness@nasa.gov>, "Gulley, Bryan F. (HQ-NA000)" <bryan.f.gulley@nasa.gov>  
Subject: Re: FOR DISCUSSION: UAP plan draft

Thanks Karen, good stuff... and excited you're pitching the great research/great scientists NASA has. I know there was some talk about adding studies—is there anything new that we are doing that we can add to the convo?

From: "Fox, Karen C. (GSFC-1300)" <karen.c.fox@nasa.gov>  
Date: Friday, June 11, 2021 at 6:12 PM  
To: "Etkind, Marc R. (HQ-NA000)" <marc.r.etkind@nasa.gov>, "Stephenson, Johnny F. (MSFC-NA000)" <johnny.f.stephenson@nasa.gov>, "Beutel, Allard (HQ-NA020)" <allard.beutel@nasa.gov>, "Thompson, Tabatha T.

## **FW: FOR DISCUSSION: UAP plan draft**

---

From: Etkind, Marc R. (HQ-NA000) <marc.r.etkind@nasa.gov>  
To: McGuinness, Jackie (HQ-NA000) <jackie.mcguinness@nasa.gov>, Gulley, Bryan F. (HQ-NA000) <bryan.f.gulley@nasa.gov>  
Sent: June 13, 2021 3:44:50 PM EDT  
Received: June 13, 2021 3:45:22 PM EDT  
Attachments: TP 21-016 Search for Life\_UAPs.docx, UAPs draft plan.pptx

From: "Fox, Karen C. (GSFC-1300)" <karen.c.fox@nasa.gov>  
Date: Friday, June 11, 2021 at 6:12 PM  
To: "Etkind, Marc R. (HQ-NA000)" <marc.r.etkind@nasa.gov>, "Stephenson, Johnny F. (MSFC-NA000)" <johnny.f.stephenson@nasa.gov>, "Beutel, Allard (HQ-NA020)" <allard.beutel@nasa.gov>, "Thompson, Tabatha T. (HQ-NA020)" <tabatha.t.thompson@nasa.gov>, "Jacobs, Bob (HQ-NA000)" <bob.jacobs@nasa.gov>  
Cc: "O'Connor, Courtney M (HQ-1862)[MORI ASSOCIATES INC]" <courtney.m.oconnor@nasa.gov>, "Johnson, Alana R. (HQ-DG000)[ASRC FEDERAL SYSTEM SOLUTIONS]" <alana.r.johnson@nasa.gov>, "Landau, Elizabeth R (HQ-1864)[ASRC FEDERAL SYSTEM SOLUTIONS]" <elizabeth.r.landau@nasa.gov>, "Harrington, J D (HQ-NA020)" <j.d.harrington@nasa.gov>  
Subject: FOR DISCUSSION: UAP plan draft

Cheers, all –

Per our discussions earlier this week, attached please find a slide deck with thoughts on how best to amplify NASA's role with the search for extraterrestrial life in the context of the upcoming report on UAPs. (Which I'm hearing is to be delivered to Congress by June 25.)

This represents ideas from the braintrust of most of the people on this email, as well as thoughts from Thomas Zurbuchen and the head of NASA's astrobiology program, Mary Voytek.

Also attached, please find the latest talking points on UAPs. While this document will surely continue to be updated, and is meant as a more stable, internal document – it serves as a good starter background.

Happy to discuss, adjust, add, etc. Let me know your thoughts!

Thanks,

Karen

--

Karen C. Fox

Senior Science Communications Officer

Office of Communications

NASA Headquarters

Karen.fox@nasa.gov

## Attachment

### 1. TP 21-016 Search for Life\_UAPs.docx

Type: application/vnd.openxmlformats-officedocument.wordprocessingml.document  
Size: 47 KB (48,830 bytes)

### 2. UAPs draft plan.pptx

Type: application/vnd.openxmlformats-officedocument.presentationml.presentation  
Size: 11 MB (11,607,193 bytes)

## **Re: Personal question-- coffee meet up (tomorrow?)**

---

From: Fox, Karen C. (GSFC-1300) <karen.c.fox@nasa.gov>  
To: Etkind, Marc R. (HQ-NA000) <marc.r.etkind@nasa.gov>  
Sent: June 14, 2021 10:19:26 PM EDT  
Received: June 15, 2021 7:17:03 AM EDT

Marking my calendar!

--

Karen C. Fox

Senior Science Communications Officer

Office of Communications

From: "Etkind, Marc R. (HQ-NA000)" <marc.r.etkind@nasa.gov>  
Date: Monday, June 14, 2021 at 7:06 AM  
To: "Fox, Karen C. (GSFC-1300)" <karen.c.fox@nasa.gov>  
Subject: Re: Personal question-- coffee meet up (tomorrow?)

Cool. Let's aim for Friday the 25th if that works for you.

From: "Fox, Karen C. (GSFC-1300)" <karen.c.fox@nasa.gov>  
Date: Friday, June 11, 2021 at 6:02 PM  
To: "Etkind, Marc R. (HQ-NA000)" <marc.r.etkind@nasa.gov>  
Subject: Re: Personal question-- coffee meet up (tomorrow?)

And unfortunately I can't do next week because I'm headed into Goddard bright and early to support the Sun Stamps roll out. . . But happy to do the Friday after that, or even Monday or Tuesday of this coming week. (b6  
.)

Either way, I hope you have a great weekend!

UAP plan coming through in my next email. Happy to discuss, re-work, adjust etc. The good news is that we are doing SO SO much in the search for life. Less stuff on actual UFOs.

--

Karen C. Fox

Senior Science Communications Officer

Office of Communications

From: "Etkind, Marc R. (HQ-NA000)" <marc.r.etkind@nasa.gov>  
Date: Thursday, June 10, 2021 at 9:04 PM  
To: "Fox, Karen C. (GSFC-1300)" <karen.c.fox@nasa.gov>  
Subject: Re: Personal question-- coffee meet up (tomorrow?)

Thanks Karen, I can't do tomorrow but should we aim for next Friday?

From: "Fox, Karen C. (GSFC-1300)" <karen.c.fox@nasa.gov>  
Date: Thursday, June 10, 2021 at 11:25 AM  
To: "Etkind, Marc R. (HQ-NA000)" <marc.r.etkind@nasa.gov>  
Subject: Re: Personal question-- coffee meet up (tomorrow?)

Oh – and one other thing – I was going to ask if you wanted to meet for coffee one morning bright and early at [REDACTED] b6 [REDACTED]. I'm not sure whether you're working from home any days, or going in everyday – but I could meet you there at 7:30 or 8 one morning.

(Indeed. . . I could do it tomorrow morning and can bring you up to speed on both the exciting and the less exciting aspects of NASA and UAPs. Have talked to many people, have some good ideas, have some other places where we don't have as much as one might like. . . Either way, planning to have suggestions for you tomorrow.)

--

Karen C. Fox

Senior Science Communications Officer

Office of Communications

From: "Fox, Karen C. (GSFC-1300)" <karen.c.fox@nasa.gov>  
Date: Thursday, June 10, 2021 at 9:43 AM  
To: "Etkind, Marc R. (HQ-NA000)" <marc.r.etkind@nasa.gov>  
Subject: Re: Personal question

So I never answered this because I recently switched and am not [REDACTED] b6 [REDACTED] b6 I had about trying to solve that problem.

That having been said, I have worked for years with a team of housekeepers [REDACTED] b6 [REDACTED] b6 [REDACTED] and [REDACTED] b6 [REDACTED]. I'm happy to connect you to them if that's interesting to you!

--

Karen C. Fox

Senior Science Communications Officer

Office of Communications

From: "Etkind, Marc R. (HQ-NA000)" <marc.r.etkind@nasa.gov>  
Date: Monday, June 7, 2021 at 8:39 AM  
To: "Fox, Karen C. (GSFC-1300)" <karen.c.fox@nasa.gov>  
Subject: Personal question

Hey curious if you had a cleaning person? Thought you might know of someone who works in the neighborhood. Thx

Marc Etkind



Associate Administrator, Communications

NASA Headquarters

## **FW: FOIA Awareness (21-HQ-F-00542 and 21-HQ-F-00546)**

---

From: McGuinness, Jackie (HQ-NA000) <jackie.mcguinness@nasa.gov>  
To: Quinn, Susie Perez (HQ-AH000) <susie.p.quinn@nasa.gov>, Dalton, Bale (HQ-AH000) <bale.dalton@nasa.gov>  
Cc: Etkind, Marc R. (HQ-NA000) <marc.r.etkind@nasa.gov>  
Sent: June 16, 2021 4:41:24 PM EDT  
Received: June 16, 2021 4:41:25 PM EDT  
Attachments: 21-HQ-F-00542 FOIA request.pdf, 21-HQ-F-00546 FOIA Request.pdf

Hi Susie and Bale – Flagging the attached for your awareness. BN has been FOIA'd for emails about UFOs. I will keep you updated on their findings (the FOIA group will provide us with whatever they are going to release a day or so before release).

Jackie

From: "Fox, Stephanie K. (HQ-NA040)" <stephanie.k.fox@nasa.gov>  
Date: Wednesday, June 16, 2021 at 4:21 PM  
To: "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>, "McGuinness, Jackie (HQ-NA000)" <jackie.mcguinness@nasa.gov>, "Cremins, Tom (HQ-AJ000)" <tom.cremins-1@nasa.gov>, "Beutel, Allard (HQ-NA020)" <allard.beutel@nasa.gov>  
Cc: "Gramian, Nikki N. (HQ-NA040)" <nikki.n.gramian@nasa.gov>  
Subject: FOIA Awareness (21-HQ-F-00542 and 21-HQ-F-00546)

Good afternoon,

For your awareness, we received the attached FOIA requests from two individual requesters. Request 21-HQ-F-542 seeks the Senator's emails from 5/3/21 – 6/13/21 with specific keywords (UAP, UFO, unknown, and Rubio); and request 21-HQ-F-546 seeks emails, memos and any other records from 4/28/21 – 6/15/21 regarding any instructions or order made by Senator Nelson for NASA staff to investigate UFOs/UAPs.

While these requesters are simply interested citizens who do not represent media or interest groups, because the requests seek Senator Nelson's correspondence and involve a topic of current media interest, we wanted you to be aware. We've already initiated searches in the A-suite, IT (which will search the Senator's email account), and SMD. Kindly let me know if you have any questions about this matter.

Thank you,

Stephanie K. Fox

FOIA Team Lead

NASA Headquarters

## Attachment

### 1. 21-HQ-F-00542 FOIA request.pdf

Type: application/pdf  
Size: 106 KB (108,665 bytes)

### 2. 21-HQ-F-00546 FOIA Request.pdf

Type: application/pdf  
Size: 160 KB (164,433 bytes)

**Attachment #1**

**21-HQ-F-00542 FOIA request.pdf**

**Original view**

1 page

**From:** [noreply@nasa.gov](mailto:noreply@nasa.gov) on behalf of [NASA.gov](https://www.nasa.gov)  
**To:** [hq-foia@nasa.gov](mailto:hq-foia@nasa.gov)  
**Subject:** NASA FOIA request  
**Date:** Monday, June 14, 2021 12:02:59 AM

---

Submitted on Sunday, June 13, 2021 - 23:02

Submitted values are:

Name: Travis Roberts

Address:

(b) (6)

Phone:

Fax:

Email: (b) (6)

--Request Details--

Select a Center: Headquarters

Select type of document that you are requesting: Other

Enter Description: Emails from NASA chief Bill Nelson with key words "UAP" "UFO" "UNKNOWN" "RUBIO" Dated May, 3, 2021 through June, 13, 2021.

--Fee Category--

Select the following category to assist us in determining your fee category: Other

Enter description and purpose: Curious individual, with no scientific or media category.

--Assess Costs--

Enter maximum cost amount that you are willing to pay: \$200.00

If you are requesting a fee waiver, please check this box:

If you are requesting expedited processing, please check this box:

Additional comments: Thank you. I assume it has been very busy lately.

## **Attachment #2**

**21-HQ-F-00546 FOIA Request.pdf**

**Original view**

1 page

**Fox, Stephanie K. (HQ-NA040)**

---

**From:** noreply@nasa.gov on behalf of NASA.gov <noreply@nasa.gov>  
**Sent:** Monday, June 7, 2021 6:02 PM  
**To:** hq-foia@nasa.gov  
**Subject:** NASA FOIA request

**Categories:** Forwarded

Submitted on Monday, June 7, 2021 - 17:01 Submitted values are:

Name: Steve Theofanis  
Address:

(b) (6)

Phone: (b) (6)

Fax:

Email: (b) (6)

--Request Details--

Select a Center: Headquarters

Select type of document that you are requesting: Other

Enter Description: All emails, memos and any other records from April 28, 2021 to June 15, 2021 regarding any requests, instructions or orders made by Mr. Bill Nelson, NASA's Administrator, for NASA's staff to investigate, study or analyze unidentified flying objects (or UFOs) or unidentified aerial phenomena (or UAP).

--Fee Category--

Select the following category to assist us in determining your fee category: Other

Enter description and purpose: i am an individual person (not associated with any media, commercial, nor educational entity). I am interested to understand the subject matter out of personal interest.

--Assess Costs--

Enter maximum cost amount that you are willing to pay: \$40.00

If you are requesting a fee waiver, please check this box:

If you are requesting expedited processing, please check this box:

Additional comments: thank you!

## **Fwd: [EXTERNAL] UAP's off of Florida's SpaceCoast**

---

From: Nelson, Bill (HQ-AA000) <bill.nelson@nasa.gov>  
To: Quinn, Susie Perez (HQ-AH000) <susie.p.quinn@nasa.gov>, Etkind, Marc R. (HQ-NA000) <marc.r.etkind@nasa.gov>  
Sent: June 19, 2021 9:51:33 AM EDT  
Received: June 19, 2021 9:51:48 AM EDT  
Attachments: MUFON CASE 87314 (copy to Rubio).pdf

Begin Forwarded Message:

From: "(b) (6)"  
Subject: [EXTERNAL] UAP's off of Florida's SpaceCoast  
Date: 18 June 2021 16:54  
To: "Nelson, Bill (HQ-AA000)" <bill.nelson@nasa.gov>

Mr. Nelson,

First congratulations on your appointment with NASA. Your genuine enthusiasm, experience and desire for success is encouraging for NASA's future. I am a retired (b) (6) --I did get to meet you a few times in (b) (6) through the years at the (b) (6) facility when Governor Bush used to move around the state and hold meetings, and at a few other local functions. Thank you for your years of service in Florida's and the US congress and senate.

I am writing to you as I had captured some anomalies on VHS video in 1994 20 miles offshore fishing, between KSC and Sebastian inlet, and read the sun article (link below) on your interests to find out what these UAP's are. I held this video (who wanted to say out loud they had video of UFO's?) and never shared outside of my family until a few years ago after I saw what appeared to be a similar thing zip by as a space x on the pad exploded into flames. I digitized the original VHS tape and this allowed me to zoom in on the objects--which sent chills throughout my body. I felt compelled to share as a matter of civic duty I shared the attached pdf with info with Senator Rubio and met with one of his staff members well prior to his announcement that we need to learn more about these UAP's. I at least like to think I assisted him in his seeking more info and truths on what could be the most important revelation in man-kinds history, if not just technologically speaking. I have attached all of the documentation I sent to him and the intelligence committee about the matter. My concern is they are not benevolent and not sharing what I captured and saw when the objects were zoomed in on. Getting the detail I did when zoomed in also means these were uncomfortably closer to me than I had realized before as well. The zoomed in object is clearly a technology we are not familiar with. it is fuzzy--my apologies--however its from a VHS tape from my moving boat in the Atlantic ocean--so taking that into account, its not bad as it shows definite structures ( I termed these "cluster crafts" as they seem to be composed of several spherical crafts) flying without technologies which we are accustomed to. Most disconcerting is the 2016 on pad space x explosion with the same anomaly flying by, meaning these are not our friends, whomever is flying these.

I'm glad to answer any questions by you or your staff, but I think the attached info covers most.

Thank you for taking these issues seriously,

(b) (6)



(b) (6)

Your recent article that lead me to contact you.

<https://www.the-sun.com/news/3020852/nasa-bill-nelson-ufo-investigating>  
<<https://gcc02.safelinks.protection.outlook.com/?url=https://www.the-sun.com/news/3020852/nasa-bill-nelson-ufo-investigating/&data=04|01|marc.r.etkind@nasa.gov|ef4f7896ff0c4b8800d208d9332959b6|7005d45845be48ae8140d43da96dd17b|0|0|637597075086921356|Unknown|TWfPbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQljojV2luMzliLCJBTiI6lk1haWwiLCJXVCi6Mn0=|1000&sdata=KxSMpqz5YqMhQw7judfzePpKDjG8W7VW0gVdVa9dlaQ=&reserved=0>>

## Attachment

### 1. MUFON CASE 87314 (copy to Rubio).pdf

Type: application/pdf  
Size: 1 MB (1,371,470 bytes)

**Attachment #1**

**MUFON CASE 87314 (copy to Rubio).pdf**

**Original view**

10 pages (displayed on pages 5 to 14)

[REDACTED]

# SENATOR RUBIO, THESE ARE REAL—THE TECHNOLOGY IS THERE—THERE IT IS. NOT PHOTOSHOPPED NOT FABRICATED. NOT FLARES OR HELICOPTERS

## CONCERNS

1) I felt after seeing and zooming in on these to learn more—the air force lied to the Florida Today and has ignored several FOIA's by MUFON. There was a C-130 flying low prior to the video I assumed looking for survivors of a Cuban exodus by raft at that time in 94—please see full video of these and fishing earlier that afternoon.

2) I am coming to you due to Fox News 35 in Orlando's story—I had no idea that was happening---I am concerned as I believe there is a strong chance these are NOT benevolent. See video of Feb 2018 space X—next slides and two weeks ago offshore North Carolina—similar sighting.

I believe I would be remiss to NOT give you this further info as a citizen for you to investigate. I am NOT saying these are crafts from elsewhere than earth—I believe these are likely technologies another countries or “a group” possibly unfriendly to us. I say as the space x explosion is suspect in my opinion based on what I captured in 94, as well as what both Ben Rich of skunk works and Dr. Von Braun stated on their deathbeds (will provide on request).

[REDACTED]

(b) (6)

[REDACTED]

# VIDEO OF CRAFTS AT SUNSET 15-20 MILES NE OF SEBASTIAN INLET



Copy was made direct from the original VHS using a Walmart off the shelf VHS to DVD

ON b6

(b) (6)



# MUFON CASE

b6

## Mufon Case

b6

**MUFON Case Management System - SEARCH**

The search result is limited to max 50 returned Sighting Reports

Cases Found = 1

Date Submitted	Date/Time of Event	Short Description	Location of Event	Long Description	Attachments
1 2017-10-13	1994-08-31 8:30PM	(cak) First noted with seven lights which grew to groups of 2-4 then faded out just as they appeared	Indianatlantic, FL, US	<a href="#">VIEW</a>	

[ANOTHER SEARCH](#) [BACK TO MUFON SITE](#)

**LONG DESCRIPTION OF SIGHTING REPORT - Google Chrome**

Secure | [https://mufoncms.com/cgi-bin/report\\_handler.pl?req=view\\_long\\_desc&id=87314&rnd=](https://mufoncms.com/cgi-bin/report_handler.pl?req=view_long_desc&id=87314&rnd=)

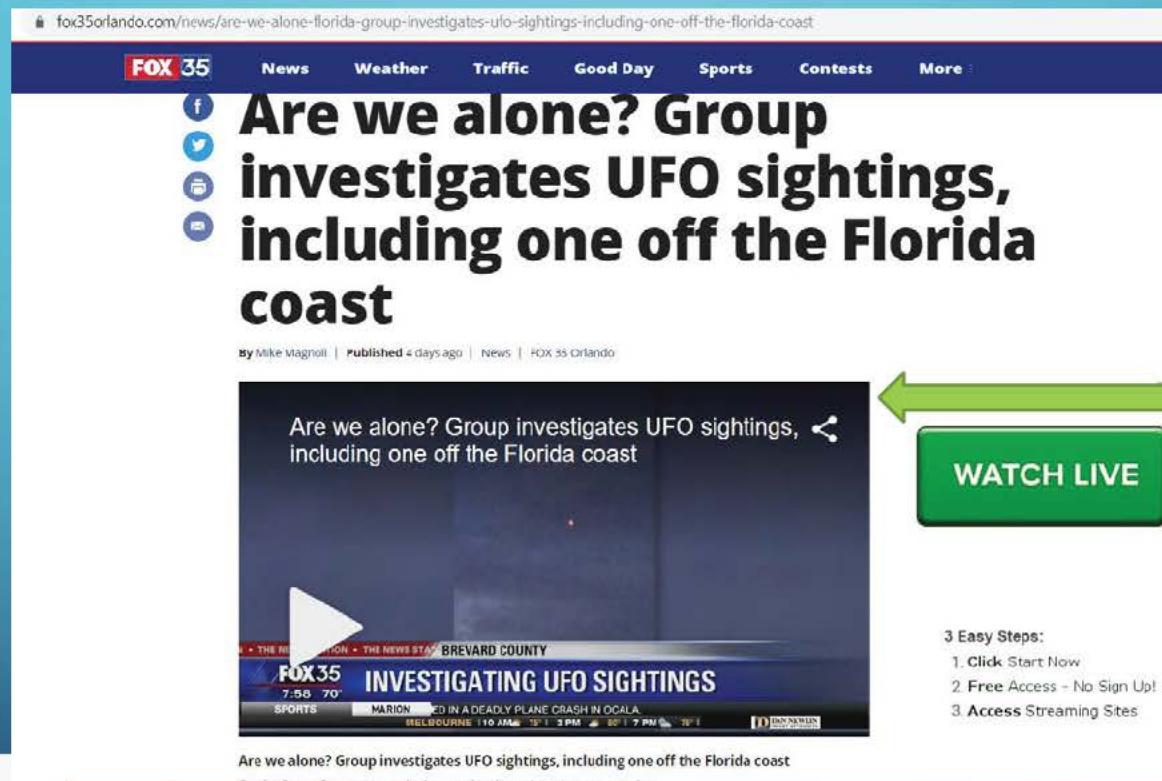
**Long Description of Sighting Report**

I have a video I took in the early 90's of what the air force said the next day in the Florida Today were helicopters off of indianatlantic 20 miles offshore dropping flares in an exercise by a squadron that didn't exist any longer. Many people along the beaches apparently called in to the police. The issue with that story is I have video of the incident from 20 miles offshore- time and date documented as well as loran coordinates ( before gps). The video shows the loran, the afternoon fishing activities, and clusters (5 clusters I believe) of 2-4 bright lights materializing and disappearing- fading in and out. There were no helicopters anywhere and I know what flares look like, these had no parachutes, no smoke trails and did not lose altitude -- they were not falling. I never shared publicly - I mean claim the airforce was lying??... and still don't want scoffing or ridicule... however this video clearly shows it's NOT what the Air Force reported that day with an air force squadron that was disparaged years before as publicly announced in The Florida Today Sept 1 1994. I can't say what it was, but shows what it wasn't. An hour or so earlier there was a C-130 making low passes and circling in another area. I did not video that -- we were fishing. I suspect the military did know what this was, but flares they are not, or helicopters. These lights are in the same config as many other lights and sightings including the Phoenix lights and reports going back hundreds and thousands of years.

[CLOSE WINDOW](#)

Information requests (FOIA) made by MUFON have been ignored by the air force

# 1994 AUGUST 31 CRAFTS OFF MELBOURNE BEACH

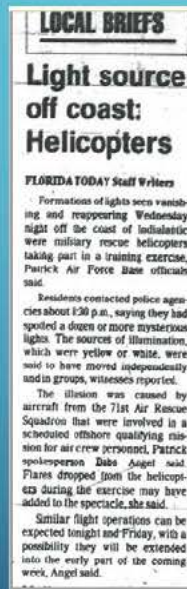


The screenshot shows a news article on the FOX 35 Orlando website. The URL in the address bar is [fox35orlando.com/news/are-we-alone-florida-group-investigates-ufo-sightings-including-one-off-the-florida-coast](http://fox35orlando.com/news/are-we-alone-florida-group-investigates-ufo-sightings-including-one-off-the-florida-coast). The article title is "Are we alone? Group investigates UFO sightings, including one off the Florida coast". The byline is "by Mike Magnoli" and it was published "4 days ago". Below the title is a video player with a play button and the text "Are we alone? Group investigates UFO sightings, including one off the Florida coast". To the right of the video player is a green button that says "WATCH LIVE". Below the button is a section titled "3 Easy Steps:" with the following instructions: "1. Click Start Now", "2. Free Access - No Sign Up!", and "3. Access Streaming Sites".

Click-hyperlinked to  
FOXNews 35 in  
Slideshow mode—or  
Click link below

<https://www.fox35orlando.com/news/are-we-alone-florida-group-investigates-ufo-sightings-including-one-off-the-florida-coast>

# 9-1-1994 FLORIDA TODAY NEWS CLIP



This article was in the Florida Today as a release by the airforce

Many witnesses called police from on shore viewing. The crafts Were 20 miles offshore and at dusk/sunset and the air force reply made it for the newspaper morning edition, which is questionable?

Three FOI's made by MUFON have been ignored the last 2 years.

The next photos were taken from the video (VHS) and zoomed in Using an just an I-phone 7 camera. Whatever these crafts are they are not flares and helicopters. No smoke —no movement-faded in and out over a 20+ minute or so period. Spheres in clusters with protruding structures like antennae



# LOCATION OF VIDEO AND STILL FROM VIDEO



We were on our way in to b6 from an b6 f approx. 20 miles offshore when the crafts were recorded. b6 can coordinates to lat and long yet b6 55 as it's not visible with throttles in the way.

# STILLS TAKEN FROM VIDEO AND ZOOMED IN –IPHONE 7



Screen shot from digital  
And slightly zoomed in  
Shot on iPhone 7

No filtering, no photo  
Shop.

\*Note dark circles on  
Bottom of spheres now  
visible in this shot

# BREAK DOWN AND ZOOM IN OF CRAFTS

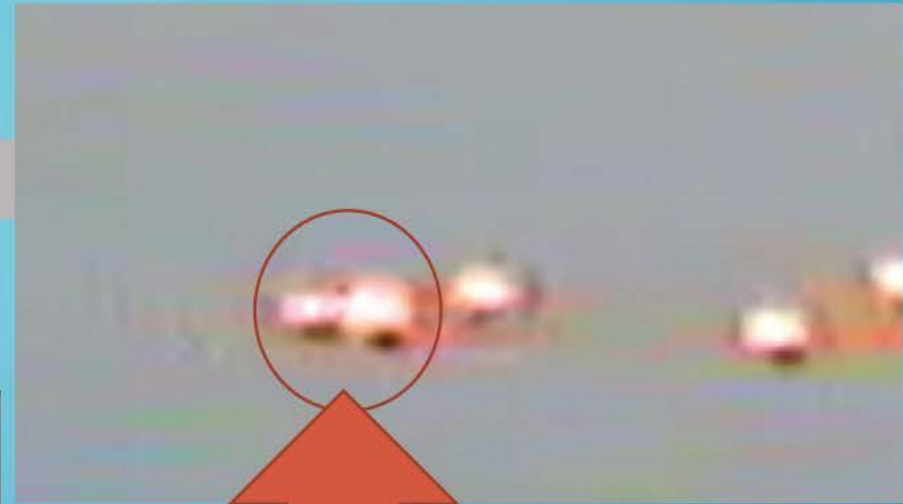
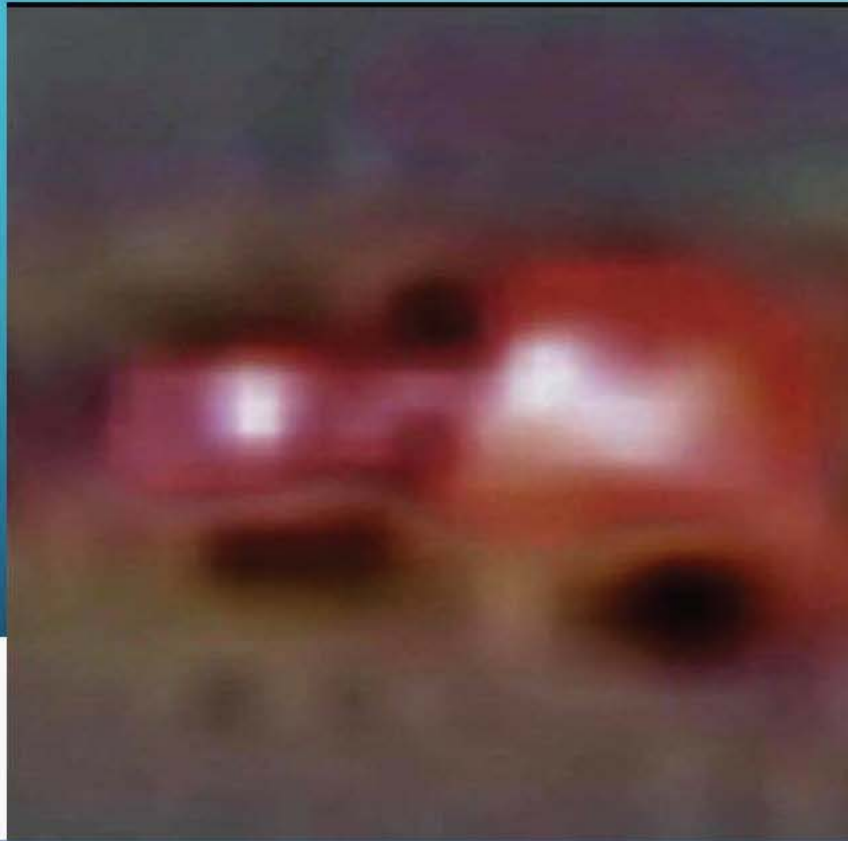


Note structure and shape of additional spheres now visible clustered together as these were zoomed in stills on my Iphone7 ---no editing or photoshop—  
The lighting was filtered slightly on these which reduced glare from the normal iphone 7 feature--



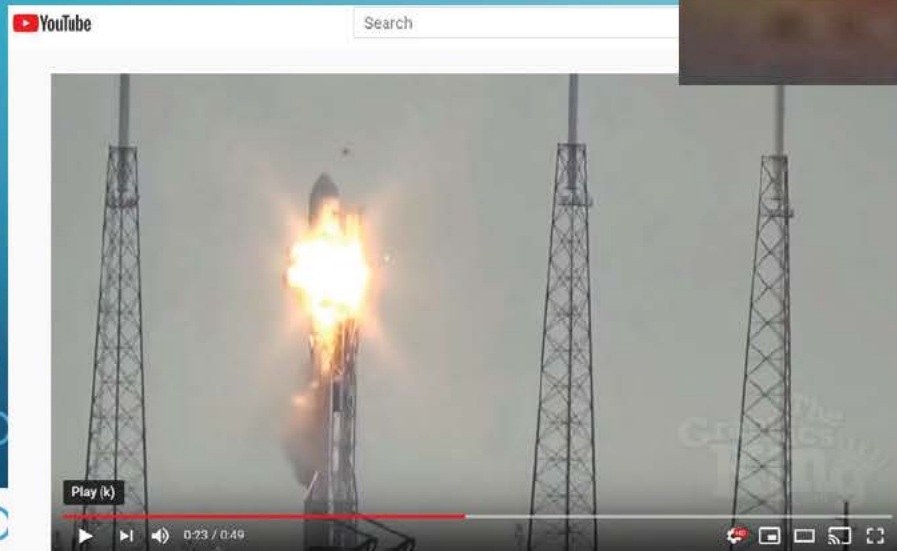


THERE THEY ARE—NOT FLARES  
NOT HELICOPTERS. WHOSE  
TECHNOLOGY IS THIS?  
WHAT IS THE PURPOSE?



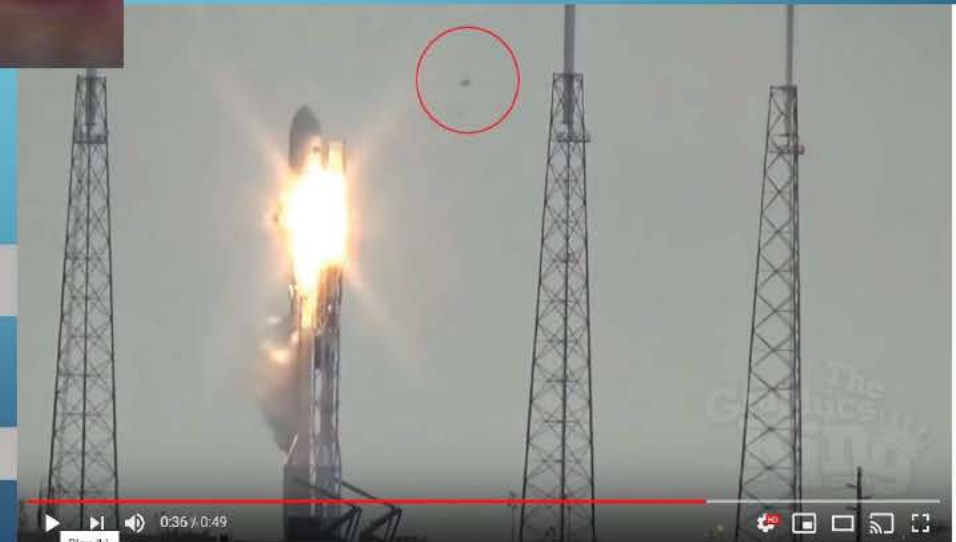
This is further zoomed in and light filtered in the same method on the iphone 7. No smoke not moving, no parachutes, no helicopters. Clearly crafts of undisclosed technologies out of the realm of aerodynamic design. With better equipment than off of the shelf Walmart VHS to DVD and an iphone 7—these should be able to be made more definitive and clearer.

# SPACE X EXPLOSION SEPT 1 2016 BENEVOLENT CRAFTS?



SpaceX UFO Explosion - Slow Motion!

<https://www.youtube.com/watch?v=cric1NlItvV0>



## Re: National Academy review of UAP report

---

From: Etkind, Marc R. (HQ-NA000) <marc.r.etkind@nasa.gov>  
To: Lal, Bhavya (HQ-AA000) <bhavya.lal@nasa.gov>  
Sent: June 20, 2021 6:36:41 PM EDT  
Received: June 20, 2021 6:36:41 PM EDT

Sure. My two cents... I like where he's headed—seems like a scientific approach, and the rigor that Spergel suggests, can add much to the discussion.

From: Bhavya Lal <bhavya.lal@nasa.gov>  
Date: Sunday, June 20, 2021 at 6:31 PM  
To: "Etkind, Marc R. (HQ-NA000)" <marc.r.etkind@nasa.gov>  
Subject: Re: National Academy review of UAP report

Thomas has asked to take point. Should we hand off to him? We have plenty on our plates. Thoughts?

Bhavya Lal, Ph.D.

(b) (6)

On: 20 June 2021 18:29, "Etkind, Marc R. (HQ-NA000)" <marc.r.etkind@nasa.gov> wrote:

Just getting caught up and thanks for sharing... what's the next step?

From: Bhavya Lal <bhavya.lal@nasa.gov>  
Date: Tuesday, June 15, 2021 at 5:52 AM  
To: "Etkind, Marc R. (HQ-NA000)" <marc.r.etkind@nasa.gov>, "Brown, Alicia N. (HQ-VA000)" <alicia.n.brown@nasa.gov>, "Quinn, Susie Perez (HQ-AH000)" <susie.p.quinn@nasa.gov>, "Dalton, Bale (HQ-AH000)" <bale.dalton@nasa.gov>  
Subject: Fwd: National Academy review of UAP report

See below. Let's discuss! I think we should also talk to the authors of the report to understand how much of the data can be declassified.

Bhavya Lal, Ph.D.

(b) (6)

Begin Forwarded Message:

From: "Zurbuchen, Thomas H. (HQ-DA000)" <thomas.h.zurbuchen@nasa.gov>  
Subject: RE: National Academy review of UAP report  
Date: 14 June 2021 23:27  
To: "Lal, Bhavya (HQ-AA000)" <bhavya.lal@nasa.gov>

Bhavya – we need to decide what we want to do. The Academy has struggled, over time, to be forward leaning and I

worry that asking too early for an Academy study would actually miss the point. It is not quite clear what we would want them to do- this is not a data-rich field. About data: here is my worry about the UAP work by the Intel community:

(b) (5)

(b) (5)

I do not know whether h5

Instead, I would like to focus on h5. I would like to pull together a group of experts within NASA and describe a h5 discussed in the UAP report. It might also make sense to do an h5 to see whether there is anything interesting there. My hope would be to turn this into a data-rich field. I would not be opposed to take that plan and let it be reviewed by the Academy and perhaps even h5".

For reference, I am attaching two white papers that I had leading scholars write indepdently. One of them is perhaps the most influential Astrophysicist in the US, Dave Spergel, and the other one is perhaps the most forward leaning in the field, Avi Loeb. Google both if you want to know more. You see how much they overlap! Again – let's make this data-rich!

You could ask, finally: why do anything? I would answer in three ways

1. Why miss a chance to demonstrate the power of science and the power of data to address a tough problem?
2. I DO want NASA to be a place where we focus on high-risk/high-impact science. We do not just walk away when something is sounding controversial
3. The administrator sounds like he would like us to do something

Best,

Thomas

From: Lal, Bhavya (HQ-AA000) <bhavya.lal@nasa.gov>  
Sent: Monday, June 14, 2021 10:36 AM  
To: Zurbuchen, Thomas H. (HQ-DA000) <thomas.h.zurbuchen@nasa.gov>  
Subject: RE: National Academy review of UAP report

Thoughts on an Academies study on this topic?

From: Turner, Ron (HQ-UA000)[MIPSS SME] <ron.turner@nasa.gov>  
Sent: Thursday, June 10, 2021 11:54 AM  
To: Lal, Bhavya (HQ-AA000) <bhavya.lal@nasa.gov>  
Cc: Turner, Ron h6  
Subject: National Academy review of UAP report

Bhavya, I enjoyed our discussion this morning. Here are some thoughts about a NASA-sponsored, National Academy-led study following the release of the UAP report.

The public is going to be very interested in following up on the findings of the UAP report after it is released to Congress. A general concern with the classified nature of the report may be a sense that the government is still "hiding something". I think there will be a natural expectation that NASA would respond in some fashion.

One possible response would be for NASA to direct the National Academies to do an independent review of the findings of the UAP report. NASA, working with the Academies, is uniquely positioned as a source of trust, imparting a

healthy dose of skepticism while open to hearing from the more eager advocates. It would be a way to establish confidence in the findings and to see if there is anything in the observations that warrant further examination or could improve future observations. It would be staffed by objective academic and industry experts who could bring a critical eye to the data and the limits of the available observations.

The task statement will evolve, as the report is released and in negotiation with Congress. But some specific objectives could be:

(b) (5)

I would be happy to continue to work with you to formulate a work statement. Let me know if I can help.

Hope to see you some time!

Ron T.



## RE: National Academy review of UAP report

---

From: Quinn, Susie Perez (HQ-AH000) <susie.p.quinn@nasa.gov>  
To: Lal, Bhavya (HQ-AA000) <bhavya.lal@nasa.gov>, Etkind, Marc R. (HQ-NA000) <marc.r.etkind@nasa.gov>, Brown, Alicia N. (HQ-VA000) <alicia.n.brown@nasa.gov>, Dalton, Bale (HQ-AH000) <bale.dalton@nasa.gov>  
Sent: June 15, 2021 6:37:12 AM EDT  
Received: June 15, 2021 6:37:13 AM EDT

Two cents. Like his approach. Am curious why this hasn't been done before and how to also ensure we are not encroaching on current DOD or other agency activities. Also if there is room to coordinate w a civilian agency tho not sure who that would be.

From: Lal, Bhavya (HQ-AA000) <bhavya.lal@nasa.gov>  
Sent: Tuesday, June 15, 2021 5:51 AM  
To: Etkind, Marc R. (HQ-NA000) <marc.r.etkind@nasa.gov>; Brown, Alicia N. (HQ-VA000) <alicia.n.brown@nasa.gov>; Quinn, Susie Perez (HQ-AH000) <susie.p.quinn@nasa.gov>; Dalton, Bale (HQ-AH000) <bale.dalton@nasa.gov>  
Subject: Fwd: National Academy review of UAP report

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Bhavya Lal, Ph.D.

(b) (6)

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From: "Zurbuchen, Thomas H. (HQ-DA000)" <thomas.h.zurbuchen@nasa.gov>  
Subject: RE: National Academy review of UAP report  
Date: 14 June 2021 23:27  
To: "Lal, Bhavya (HQ-AA000)" <bhavya.lal@nasa.gov>

**Duplicate email already processed**

## Attachment

### 1. Microsoft Word - Extraterrestrial or Terrestrial origin.docx.pdf

Type: application/pdf  
Size: 867 KB (887,863 bytes)

### 2. Thomas\_Zurbuchen\_AL.pdf

Type: application/pdf  
Size: 229 KB (234,621 bytes)

## **Attachment #1**

**Microsoft Word - Extraterrestrial or Terrestrial origin.docx.pdf**

### **Original view**

3 pages (displayed on pages 6 to 8)

## Thoughts on UFOs

David Spergel

The recent publication of observations of unidentified flying objects (UFOs) has stimulated a revived interest in the possibility of extraterrestrial visitors. This note describes possible hypotheses about the nature of UFOs, outlines key observables, and then suggests possible observing programs with an emphasis on approaches that will lead to interesting science even if UFOs have terrestrial origin.

### What are they?

The most conservative hypothesis is that these UFOs are built by humans: experimental vehicles under development by the US military or by foreign militaries. In the past, famous UFO sites (e.g., Area 51) have turned out to be test sites for advanced technologies. Some of the “triangular shaped” objects that are capable of rapid accelerations and high speeds do seem remarkably similar to descriptions of hypersonic vehicles that are currently under development by the Army, [Navy](#), [Air Force](#), [DARPA](#) and the [NSA](#). The [Indian](#), [Chinese](#) and [Russian](#) military are all developing their own hypersonic vehicles. DARPA’s HTV-2 had test flights over a decade ago so that the recent appearance of flying triangular shaped objects that can reach high speeds seems consistent with this hypothesis. There is also extensive work on developing [drone swarms](#) by many nations (including even Armenia) whose properties match some UFO reports.



Image of the Indian HGV-2, one of many hypersonic vehicles that are being tested and deployed.

Another possible explanation for some of the events are natural phenomena such as [Ball lightning](#) or St. Elmo Fire. Plasma physicists and atmospheric physicists are still struggling to fully understand these phenomena. Recent work associates these events with lightning induced quasi-stable plasma effects (see e.g., [Skyrmion origin of ball lightning](#)). Some of the events could be optical illusions due to multiple reflections in airplane windows or atmospheric effects.

The most exciting hypothesis is that some of the UFOs are extraterrestrials visiting the Earth and studying the planet and its life forms. Aliens capable of interstellar space travel are not likely to be using technologies that are familiar to us (e.g., solar sails or hypersonic airbreathing vehicles). They would only be detectable if they wished to be seen. For example, they would likely want to miniaturize their probes and not likely to have familiar-looking vehicles. Given astronomical timescales, alien life is likely either a billion years less advanced than human life or a billion years more advanced technologically. As [Clarke's third law](#) states, "any sufficiently advanced technology is indistinguishable from magic".

### **Observables**

What are the observables that can distinguish between these hypotheses? We would like to characterize the UFO events: What is their duration? What is the amplitude of the observed accelerations and velocities? How frequent are these events? Are they associated with weather phenomena? Where do the events occur? What are the properties of the objects? Do they have a surface or are they a plasma? Observations that can answer these questions can help identify the UFOs.

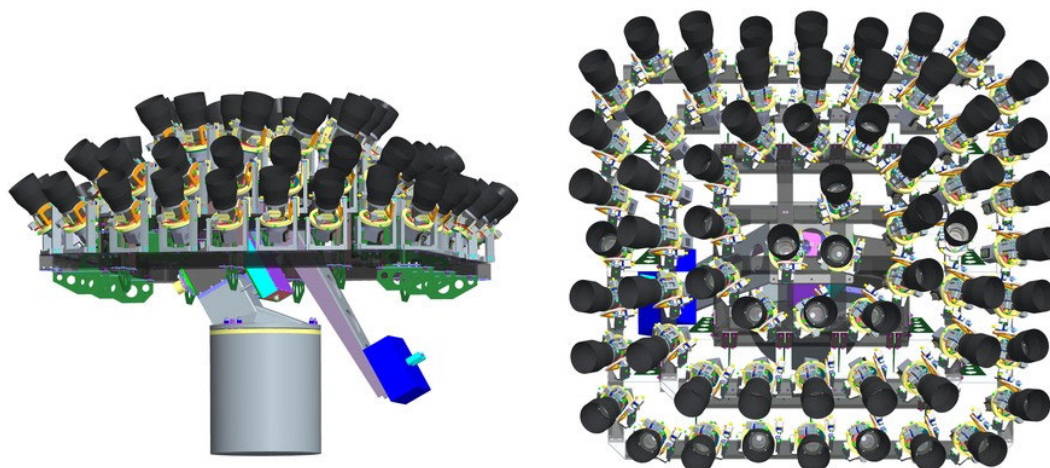
### **Potential observational program**

An observational program that monitors the sky for rapidly moving objects and for time-variability would likely be able to help address the origin of these UFOs. Ideally, these telescopes would be monitoring much of the sky continuously so that they could simultaneously observe the events reported by pilots.

There are several existing observing programs that could be used to extrapolate to an all-sky monitoring program. In the optical, the [ASAS](#) telescope and the [HATPI](#) project monitor a significant fraction of the sky. ASAS operates a network of telescopes in South Africa, Texas, Hawaii, and Chile. HATPI uses a series of small cameras to monitor most of the sky visible from Chile. Currently, HATPI cover  $\frac{3}{4}$  of the visible sky and detects 1% variations in 13<sup>th</sup> magnitude stars within 30 seconds. The approximate cost of HATPI was ~\$5 million, so that a program of making multiple copies of HATPI would not be overwhelmingly costly. This network would complement the Vera Rubin Observatory by enabling constant monitoring of transients, would detect transiting planets, and would be able to observe UFOs in clear weather. The telescopes are currently designed to operate at night and there would need to be significant modifications in the software for day-time operations. The biggest cost for these telescopes would be developing the software optimized for detecting fast moving objects and the ability to sort

through enormous databases and not be dominated by planes, birds, and human-made satellites.

Model of HATPI telescope



Microwave observations would be able to detect the thermal emission from objects in orbit or in the upper atmosphere. For example, consider a 0.5m telescope operating at 2mm with modern detectors. A one-meter diameter object at 20 km moving at 10 km/s subtends  $10''$  and moves  $2'$  in a millisecond. With a temperature of 300K, the UFO would appear as a 0.1K source. [Modern detectors](#) have noise variances of  $\sim 1 \text{ (mK)}^2 \text{ s}$ , so sources are  $> 10$  sigma in a single detector in 1 millisecond. It would potentially be possible to build a set of small microwave telescopes that could monitor the sky and detect any moving satellite or plane. If these were also equipped with polarizers, they could be used for CMB polarization measurements. In the past year, CMB experiments have been repurposed to look for [astrophysical transients](#) and [planet IX](#). They have not been used to look for rapidly moving objects.

Another possibility would be to monitor the sky at radio wavelengths using observatories based on the design of [CHIME](#) or [HIRAX](#). These radio telescopes are already monitoring much of the sky (from Canada and eventually from South Africa) searching for [fast radio bursts](#).

Downward-looking satellites could also monitor the earth's atmosphere for fast moving events. One potential approach would be to design "hitchhiker" instruments for satellites that could be downward looking. There are likely national reconnaissance organization capabilities that can already monitor the Earth for fast moving planes and rockets and existing earth science observations likely contain data that could be used to look for anomalous fast-moving objects.

For all these observational approaches, one of the challenges would be to balance the desire to protect national security with the desire to reassure the public that all the relevant information on UFOs was being revealed. Any observing program that could detecting UFO would also detect other flying objects including many classified satellites.

## **Attachment #2**

**Thomas\_Zurbuchen\_AL.pdf**

### **Original view**

2 pages (displayed on pages 10 to 11)

# Scientific Study of UAPs and Techno-Signatures

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By Avi Loeb on June 5, 2021

**A** report on Unidentified Aerial Phenomena (UAP) is expected to be delivered by the Pentagon and various intelligence agencies to Congress this month. The reality of UAPs is beyond doubt but their nature requires further scientific study. It is therefore an opportune time for NASA and the scientific community to take a closer look at UAP by collecting and analyzing new data with state-of-the-art instrumentation and computers.

The new data can be collected by cameras, telescopes and audio sensors, with capabilities far exceeding the equipment that provided the existing UAP data. This program provides a unique opportunity for demonstrating the power of science in resolving a question that is of great interest to society, namely: *“is the nature of UAP natural, human-made or extraterrestrial?”* Finding a clear answer on the basis of open data will establish confidence from the general public in evidence-based knowledge, as well as in the transparency and integrity of NASA and the federal government. The societal appreciation of science will double up on the successful development of a messenger-RNA vaccine that triggered the desired immune response to COVID-19 using a synthetic chemical.

Currently, the UAP mystery surrounding the inconclusive findings of the Pentagon report fuels unsubstantiated speculations. A decisive scientific experiment that would clarify the nature of UAPs will demonstrate the power of scientific research in clarifying the fog on a subject of huge importance to society.

The required instrumentation will likely include state-of-the-art cameras installed on wide-field telescopes that scan the sky. The data stream will be processed by an advanced computer system that will store only the essential variable features. The focus on near-field aerial phenomenon is different from astronomical surveys of distant sources, such as the upcoming Legacy Survey of Space and Time (LSST) on the Vera C. Rubin Observatory.

The intriguing nature of UAP implies that irrespective of whether their origin is terrestrial or extraterrestrial, we will learn something new and exciting. Therefore, this research program is a win-win proposition.

The recommended instrumentation and observing plan will be defined by a scientific advisory committee, operating within a budgetary envelope defined by NASA.



The proposed initial members of the “*UAP Task Force*” are as follows:

Avi Loeb (Task Force Chair)

Pieter van Dokkum (Yale, optical/IR observer with expertise in wide field cameras)

Wendy Freedman (U. Chicago; former director of the Carnegie Observatories)

Andrea Ghez (UCLA; Optical/IR observer, adaptive optics expert; Nobel Laureate)

Andrew Howard (Caltech, optical/IR observer with interest in SETI)

Zeljko Ivezic (U. Washnigton, science director at LSST/VRO)

Vicky Kaspi (McGill; radio observer; Shaw Prize Laureate)

Ed Turner (Princeton, general purpose observer with interest in SETI)

Tony Tyson (LSST/VRO Chief Scientist)

Ravi Vikram (Caltech, radio observations with interest in SETI)

Shelley A. Wright (UCSD, optical/IR observer with interest in SETI)

In parallel to the effort to understand the nature of UAPs, a funding program should be established to explore technological signature of extraterrestrial civilizations. Novel research directions that can be explored in this program include:

- Flyby photography of unusual interstellar objects like ‘Oumuamua
- Artificial lights on nightside of planets
- Unusual reflectance on the dayside of planets
- Search for artificial megastructures around other stars
- Search for industrial pollution in planetary atmospheres

An extensive overview of the scientific background underlying these studies is provided in a new (1,061 pages long) textbook, titled: “[\*Life In the Cosmos\*](#)”, by Manasvi Lingam and Avi Loeb, to be published on June 29, 2021, by Harvard University Press.

## ABOUT THE AUTHOR



### Avi Loeb

Avi Loeb is the founding director of Harvard University's Black Hole Initiative, director of the Institute for Theory and Computation at the Harvard-Smithsonian Center for Astrophysics, and the former longest-serving chair of the astronomy department at Harvard University (2011-2020). He chairs the advisory board for the Breakthrough Starshot project, and is a former member of the President's Council of Advisors on Science and Technology and a former chair of the Board on Physics and Astronomy of the National Academies. He is the bestselling author of “[\*Extraterrestrial: The First Sign of Intelligent Life Beyond Earth\*](#)”.

## Re: National Academy review of UAP report

---

From: Lal, Bhavya (HQ-AA000) <bhavya.lal@nasa.gov>  
To: Etkind, Marc R. (HQ-NA000) <marc.r.etkind@nasa.gov>  
Sent: June 12, 2021 12:08:02 PM EDT  
Received: June 12, 2021 12:08:03 PM EDT

You can tell Bill it's a good idea :-). Reading now though **b5** my weekend.

Bhavya Lal, Ph.D.

**(b) (6)**

On: 12 June 2021 11:55, "Etkind, Marc R. (HQ-NA000)" <marc.r.etkind@nasa.gov> wrote:

Love this idea of study. LMK how I can help support. Btw, thought this was a good read...

<https://www.cnet.com/news/that-ufo-report-has-us-thinking-all-wrong-about-the-military>  
<<https://gcc02.safelinks.protection.outlook.com/?url=https://www.cnet.com/news/that-ufo-report-has-us-thinking-all-wrong-about-the-military&data=04|01|marc.r.etkind@nasa.gov|bbc56243c1e64a7d616608d92dbc4177|7005d45845be48ae8140d43da96dd17b|0|0|637591108838333222|Unknown|TWFpbGZsb3d8eyJWljoIMC4wLjAwMDAiLCJQIjoiV2luMzliLCJBTiI6I1haWwiLCJXVCi6Mn0=|1000&sdata=ayEYXvAsby4v2pbcV+JL41hLNDXD8YBy7MX5IZxEeYo=&reserved=0>>

From: "Quinn, Susie Perez (HQ-AH000)" <susie.p.quinn@nasa.gov>  
Date: Thursday, June 10, 2021 at 2:14 PM  
To: Bhavya Lal <bhavya.lal@nasa.gov>, "Brown, Alicia N. (HQ-VA000)" <alicia.n.brown@nasa.gov>, "Dalton, Bale (HQ-AH000)" <bale.dalton@nasa.gov>, "Etkind, Marc R. (HQ-NA000)" <marc.r.etkind@nasa.gov>, "McGuinness, Jackie (HQ-NA000)" <jackie.mcguinness@nasa.gov>  
Subject: RE: National Academy review of UAP report

Bill will ask for input from Thomas Z- do you want to ask him for views?

From: Lal, Bhavya (HQ-AA000) <bhavya.lal@nasa.gov>  
Sent: Thursday, June 10, 2021 1:14 PM  
To: Quinn, Susie Perez (HQ-AH000) <susie.p.quinn@nasa.gov>; Brown, Alicia N. (HQ-VA000) <alicia.n.brown@nasa.gov>; Dalton, Bale (HQ-AH000) <bale.dalton@nasa.gov>; Etkind, Marc R. (HQ-NA000) <marc.r.etkind@nasa.gov>; McGuinness, Jackie (HQ-NA000) <jackie.mcguinness@nasa.gov>  
Subject: FW: National Academy review of UAP report

As I had mentioned this am, see below. Would BN be interested in such a study? Brings NASA in more centrally, and also the scientific community.

From: Turner, Ron (HQ-UA000)[MIPSS SME] <ron.turner@nasa.gov>  
Sent: Thursday, June 10, 2021 11:54 AM  
To: Lal, Bhavya (HQ-AA000) <bhavya.lal@nasa.gov>  
Cc: Turner, Ron <Ron.Turner@anser.org>  
Subject: National Academy review of UAP report

## **RE: National Academy review of UAP report**

---

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Sent: June 10, 2021 2:18:41 PM EDT  
Received: June 10, 2021 2:18:43 PM EDT

I'll text him...

From: Quinn, Susie Perez (HQ-AH000) <susie.p.quinn@nasa.gov>  
Sent: Thursday, June 10, 2021 2:15 PM  
To: Lal, Bhavya (HQ-AA000) <bhavya.lal@nasa.gov>; Brown, Alicia N. (HQ-VA000) <alicia.n.brown@nasa.gov>; Dalton, Bale (HQ-AH000) <bale.dalton@nasa.gov>; Etkind, Marc R. (HQ-NA000) <marc.r.etkind@nasa.gov>; McGuinness, Jackie (HQ-NA000) <jackie.mcguinness@nasa.gov>  
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Cc: Turner, Ron **b6** >  
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The task statement will evolve, as the report is released and in negotiation with Congress. But some specific

## DAILY REPORT 6-22-21 (draft)

---

From: Thompson, Tabatha T. (HQ-NA020) <tabatha.t.thompson@nasa.gov>  
To: Beutel, Allard (HQ-NA020) <allard.beutel@nasa.gov>, Brown, Brittany A. (HQ-NA030) <brittany.a.brown@nasa.gov>, Brown, Katherine M. (HQ-NA020) <katherine.m.brown@nasa.gov>, Dunbar, Brian (HQ-NA020) <brian.dunbar@nasa.gov>, Gramian, Nikki N. (HQ-NA040) <nikki.n.gramian@nasa.gov>, Hautaluoma, Grey (HQ-NA020) <grey.hautaluoma-1@nasa.gov>, HQ-DL-news-chiefs <news-chiefs@lists.hq.nasa.gov>, Jacobs, Bob (HQ-NA000) <bob.jacobs@nasa.gov>, Stephenson, Johnny F. (MSFC-NA000) <johnny.f.stephenson@nasa.gov>, Etkind, Marc R. (HQ-NA000) <marc.r.etkind@nasa.gov>, NORTHON, KAREN M. (HQ-NA020) <karen.northon@nasa.gov>, Odom, Brian C. (MSFC-CS20) <brian.c.odom@nasa.gov>, Potter, Sean (HQ-NA020) <sean.potter@nasa.gov>, Steele, Cindy (HQ-NA001) <cindy.steele-1@nasa.gov>, Wilson, Jim (HQ-NA020) <jim.wilson@nasa.gov>, Hill, Aubree N. (HQ-NA020) <aubree.hill@nasa.gov>, Greene, Tylar J. (HQ-NA020) <tylar.j.greene@nasa.gov>, Bielling, Patricia A. (KSC-PXC00) <patricia.a.bielling@nasa.gov>, Witt, Monica J. (HQ-NA020) <monica.j.witt@nasa.gov>, Kamlet, Matthew R. (AFRC-111) <matthew.r.kamlet@nasa.gov>, Vinas Garcia, Maria-jose (GSFC-606.4)[TELOPHASE CORP] <maria-jose.vinasgarcia@nasa.gov>, Johnson, Alana R. (HQ-DG000)[ASRC FEDERAL SYSTEM SOLUTIONS] <alana.r.johnson@nasa.gov>, Landau, Elizabeth R (HQ-1864)[ASRC FEDERAL SYSTEM SOLUTIONS] <elizabeth.r.landau@nasa.gov>, McGuinness, Jackie (HQ-NA000) <jackie.mcguinness@nasa.gov>, Hunter, Reagan A. (HQ-VA000) <reagan.a.hunter@nasa.gov>, Fox, Karen C. (HQ-1300) <karen.c.fox@nasa.gov>, Gulley, Bryan F. (HQ-NA000) <bryan.f.gulley@nasa.gov>  
Sent: June 21, 2021 6:41:36 PM EDT  
Received: June 21, 2021 6:41:51 PM EDT  
Attachments: DAILY REPORT 06-22-2021.docx

All – attached and below, please find the draft Communications Daily Report, detailing scheduled activities and content for Tuesday. Please send me any changes with Rob and Sean copied. Thank you!

### NASA Communications Daily Report

Tuesday, June 22

#### Activities

·12:30 to 1:30 pm – NBC interview on NASA's search for life with Planetary Sciences Division Director Lori Glaze

oNBC's Tom Costello will interview Lori Glaze on NASA's ongoing work and research in the search for life beyond our own planet.

·3pm – NASA Administrator Bill Nelson live interview with Newsmax on vision for NASA

·Aviation Week interviews with Webb experts

o4:30 pm – Sandra Irish, Webb lead structures engineer; Begoña Vila, Webb instrument systems engineer; Bill Ochs, Webb project manager at Goddard; Scott Willoughby, Webb program manager at Northrop Grumman interview with Irene Klotz of Aviation Week at Northrop Grumman

o5 to 6 pm – Aviation Week interview of Webb team members Scott Willoughby and Bill Ochs

·7 to 8 pm – Virtual Tour: Space Environments Complex at Glenn

oVirtual tour followed by live Q&A with expert for registered guests. The SEC is home to the world's largest and most powerful Space Simulation Vacuum Chamber, which measures 100 ft. in diameter by 122 ft. high. It also boasts the Reverberant Acoustic Test Facility, which can simulate the noise of a spacecraft launch up to 163 decibels; and the Mechanical Vibration Facility, the world's most powerful spacecraft shaker system, which subjects test articles to the rigorous conditions of launch.

·Deutsche Welle interview with Dr. Ravi Kumar Kopparapu of Goddard for story on the UFO/UAP report.

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·Astronaut Jessica Meir for Emory University and Children's Healthcare of Atlanta

oResults of SpaceX's 20th Resupply Mission Research "How Growing Cardiac Stem Cells in Space Can Benefit our Cardiac Kids" in Atlanta.

·Astronaut Kate Rubins with Fox 40 Sacramento on her recent mission to the space station

#### NASA Television

##### On Air

·No new programming scheduled

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##### Social Media ActivitY

##### Agency

·Live coverage of Administrator Nelson's testimony before the House Science Committee on NASA's FY2022 Budget will air beginning at 10 a.m. EDT. Programming will air on NASA TV, the NASA App, [nasa.gov/live](https://nasa.gov/live) and will be promoted on flagship social media accounts.

·Women@NASA posts with flagship amplification to commemorate science fiction author Octavia E. Butler's birthday. In March, NASA named the landing site of the Perseverance rover "Octavia E. Butler Landing," after the author.

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·Flagship social media accounts will amplify posts for the Ask an Astrobiologist live show featuring Goddard scientist Heather Graham. The program will stream live at 1 p.m. EDT to the NASA Astrobiology Facebook page.

##### Other

·NASA Knowledge: The Golden Record in English / Johnson

##### HQ Products

## Media Advisory

·NASA to Air Third Spacewalk to Install New Station Solar Arrays

·Northrop Grumman CRS-15 departure coverage advisory

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·10 am – Artemis I LVSA Foaming and Integration / Kennedy

oBlog post on Artemis I Launch Vehicle Stage Adapter (LVSA) will be mated atop the core stage upon completion of thermal protection system (TPS) foaming.

·2 pm – Ingenuity Flight 8 Recap / JPL

oOperations lead Teddy Tzanetos recaps the flight from Sunday, June 20.

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oCommercial Crew Program image and short blog post on Rosie the Rocketeer inside the OFT-2 Starliner spacecraft with link to a longer feature by Boeing.

### Image/Video

·UTM close-out image feature / Ames

oA multi-image feature marks the close-out of the Unmanned Aircraft Systems Traffic Management project, or UTM. One photo is featured from each year of testing for the four technical capability levels achieved.

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·10 am – EPSCoR Feature / JPL

oFeature highlighting NASA's Established Program to Stimulate Competitive Research program with an overview of two of the recently funded projects.

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oThe sky isn't falling, but scientists have found the upper atmosphere is gradually dropping in response to rising human-produced greenhouse gas emissions. Combined data from three NASA satellites have produced the first long-term record that reveals a particular layer of the atmosphere, the mesosphere, is both cooling and shrinking.

Tabatha Tomes Thompson

Office of Communications

NASA Headquarters

300 E Street SW, Washington D.C. 20546

O: (202) 358-1052 | M: (b) (6)

## Attachment

### 1. DAILY REPORT 06-22-2021.docx

Type: application/vnd.openxmlformats-officedocument.wordprocessingml.document  
Size: 44 KB (45,799 bytes)



## **Attachment #1**

**DAILY REPORT 06-22-2021.docx**

### **Original view**

3 pages (displayed on pages 7 to 9)

# NASA Communications Daily Report

Tuesday, June 22

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## ACTIVITIES

- 12:30 to 1:30 pm – NBC interview on NASA's search for life with Planetary Sciences Division Director Lori Glaze
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  - A multi-image feature marks the close-out of the Unmanned Aircraft Systems Traffic Management project, or UTM. One photo is featured from each year of testing for the four technical capability levels achieved.

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  - The sky isn't falling, but scientists have found the upper atmosphere is gradually dropping in response to rising human-produced greenhouse gas emissions. Combined data from three NASA satellites have produced the first long-term record that reveals a particular layer of the atmosphere, the mesosphere, is both cooling and shrinking.

## **New draft -- UAP talking points**

---

From: Fox, Karen C. (HQ-1300) <karen.c.fox@nasa.gov>  
To: Etkind, Marc R. (HQ-NA000) <marc.r.etkind@nasa.gov>, McGuinness, Jackie (HQ-NA000) <jackie.mcguinness@nasa.gov>  
Sent: June 24, 2021 12:57:26 PM EDT  
Received: June 24, 2021 12:57:56 PM EDT  
Attachments: Talking Points Search for Life\_UAPs\_v 2.docx

Chers, Marc and Jackie –

As we discussed, here is a draft of the updated talking points. Still some edits going around -- but this is close enough to final that I can share for your awareness at this point.

Thanks,

Karen

--

Karen C. Fox

Senior Science Communications Officer

Office of Communications

NASA Headquarters

Karen.fox@nasa.gov

## Attachment

### 1. Talking Points Search for Life\_UAPs\_v 2.docx

Type: application/vnd.openxmlformats-officedocument.wordprocessingml.document  
Size: 52 KB (53,593 bytes)

## **Attachment #1**

**Talking Points Search for Life\_UAPs\_v 2.docx**

**Original view**

10 pages (displayed on pages 4 to 13)

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TP: XX-XXX

Date , 2021

**SUBJECT: NASA's Interest in UAP/UFOs**

**BACKGROUND**

Public and media interest in the topic of UAP/UFOs has seen an uptick in recent weeks following reports related to the Department of Defense's release of three unclassified U.S. Navy videos as well as an upcoming Congressional report led by Naval Intelligence on UAPs. The unclassified report is expected to be shared with Congress by Friday, June 25.

**STATEMENT**

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 – there is no data to support that UAPs or UFOs are evidence of alien technologies.

**KEY POINTS**

- Most UAP sightings result in very limited data, usually video recordings from a single angle that can only be cross-validated with eyewitness testimony.
- The language of scientists is data. Without access to an extensive set of data, it is nearly impossible to verify or explain any observation. The lack of robust data, including the lack of access to some existing data, is the central problem for scientific study of UAPs.
- Exploring the unknown in space is at the heart of who we are. The nature of science is to better understand the unknown. Through our Earth-observing satellites, NASA collects extensive data about Earth's atmosphere, often in collaboration with the other space agencies of the world. While these data are not specifically collected to identify UAPs, they are publicly available and could be used by anyone to search our atmosphere.
- One of NASA's key goals is the search for life in the universe. Although we have yet to find signs of extraterrestrial life, NASA is exploring the solar system and beyond to help us answer fundamental questions, including whether we are alone in the universe.
- From studying water on Mars, probing promising "oceans worlds," such as Titan and Europa, to looking for biosignatures in the atmospheres of planets outside our solar system, NASA's science missions are working together with a goal to find unmistakable signs of life beyond Earth. We look for life in any form, not just intelligent life.



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- 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. To date, NASA has yet to find any credible evidence of extraterrestrial life.
- NASA efforts include search for biosignatures (signs of biology) and technosignatures (signs of technology). Given that a planet might support life for billions of years before intelligent life evolves to create technology that can be spotted from other solar systems – our own planet has only been creating detectable technosignatures for a little over a century, for example – we have a much better chance of finding life by looking at a broad spectrum of biosignatures.

## QUESTIONS AND ANSWERS

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**ADDITIONAL INFORMATION**

**Exoplanet background**

- An exoplanet is a planet outside our solar system. Exoplanets are too far away to visit but can be studied with space telescopes.
- So far, we've confirmed more than 4,300 exoplanets in our galaxy, which probably holds trillions. Thousands more are likely to be confirmed in the years ahead.
- About a fifth of the planets confirmed so far are in Earth's size range, some in the "habitable zone," the distance from the star that could allow liquid water on the planet's surface.
- We also know that the building blocks of life are present throughout the solar system and the cosmos, including water.
- Despite these encouraging signs, we have yet to find evidence of life anywhere but planet Earth, in our solar system or beyond. We also haven't yet found a planet like Earth orbiting a star like the Sun, with a "year" comparable to our own.
- We're now on the cusp of a potential revolution in the study of exoplanets: detecting their atmospheres and searching for chemical signatures that could indicate the presence of both microbial and more advanced or even intelligent life.
- In the near-term, the James Webb Space Telescope, and the next generation of ground-based telescopes, will be able to spread the light from a small sample of Earth-sized exoplanets into a spectrum, potentially revealing the presence of atmospheric gases.
- We'll probably begin with large, gaseous worlds unlikely to be habitable, but that will pave the way for future instruments that could look in on a small, rocky world – perhaps even one similar to our own.

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- We might see signs of oxygen, methane and carbon dioxide in such a planet's atmosphere – in other words, an atmosphere that reminds us of home.

### Past Missions

#### ***Viking Project: 1 & 2***

- *NASA's Viking Project was the first mission to reach the martian surface and the first to search for evidence of life on Mars. Viking was NASA's first attempt to search for life on another planet, and was thereby the **first** mission dedicated to astrobiology. The project found a place in history when it became the first U.S. mission to land a spacecraft safely on the surface of Mars and return images of the surface.*
  - Two identical spacecraft, each consisting of a lander and an orbiter, were built. Each orbiter-lander pair flew together and entered Mars orbit; the landers then separated and descended to the planet's surface.
  - The landers conducted three biology experiments designed to look for possible signs of life.
    - These experiments:
      - Discovered unexpected and enigmatic chemical activity in the Martian soil, but provided no clear evidence for the presence of living microorganisms in soil near the landing sites.
      - Taught scientists a great deal about how little we knew about life on Earth and how to detect it.
      - Continue to shape the development of life detection strategies and equipment at NASA and other international agencies.
  - NASA's Viking Project took place before NASA's Astrobiology Program was founded, but many scientists from its precursor, NASA's Exobiology Program, participated in the mission.

#### ***Kepler and K2 Mission***

- *Kepler was a space observatory designed to survey a specific portion of our region of the Milky Way galaxy. An important part of Kepler's work was the identification of Earth-size planets that orbit in the habitable zone of their host star. Such observations are directly relevant to the study of life's potential in the Universe, and the search for life beyond Earth. Kepler discovered more than 2,600 exoplanets!*
- *Kepler's observations suggest that there may be nearly 2 billion potentially habitable planets in our galaxy around Sun-like stars. Not all of them may be*

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*habitable, or inhabited, but the sheer number of them makes it likely that there could be life on worlds.*

- Amongst the Kepler discoveries is Kepler-186f, the first validated Earth-size planet in the habitable zone of a star other than the Sun. The vast amount of data collected by Kepler will continued to be analyzed and used to help to guide the future direction of astrobiology science.
- Astrobiologists use this data to:
  - Develop new techniques for studying exoplanets in greater and greater detail.
  - Help inform future missions to characterize exoplanets and exomoons, and possibly identify signs of life by analyzing attributes of these distant worlds, such as atmospheric composition.

### Current Missions

#### MAVEN

- *Data from MAVEN provides insight into the history of Mars' atmosphere, climate, liquid water, and planetary habitability. An important aspect of the MAVEN mission is studying how early Mars lost much of its atmosphere.*
- *This atmospheric loss may have been partially responsible for Mars' transition from a planet capable of supporting liquid surface water to the dry, desert world we know today.*
  - Astrobiologists are working with data from the MAVEN mission in order to understand how atmospheric loss led to the loss of liquid water on the surface of the planet.
  - This work is important in constraining how and when Mars lost its water and identifying periods in Mars' history when habitable environments were most likely to exist at the planet's surface.

#### Mars Odyssey

- *Mars Odyssey provides detailed maps of Mars that are used to determine the evolution of the Mars environment and its potential for life.*
  - Astrobiologists were directly involved in the development of the Thermal Emission Imaging System (THEMIS) instrument onboard Mars Odyssey. Visible and infrared observations by THEMIS are used to identify the distribution of minerals on Mars, allowing astrobiologists to study how the mineralogy of the planet relates to the landforms.
  - Astrobiologists also use data from Mars Odyssey to study the geochemical makeup of Mars. This information is useful for:
    - Studying the evolution of Mars' environment

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- Identifying locations that may have been habitable for life in the past
- Finding astrobiology-relevant landing sites for future Mars missions.

### **Mars Reconnaissance Orbiter**

- *While other Mars missions have shown that water flowed across the surface in Mars' history, it remains a mystery whether water was ever around long enough to provide a habitat for life.*
  - Data from MRO:
    - Is essential to astrobiologists studying the potential for habitable environments on past and present Mars.
    - Provides invaluable data used in selecting landing sites for future Mars missions.
    - Is important in building climate models for Mars, and for use in comparative planetology studies performed by astrobiologists who study the potential habitability of exoplanets that orbit distant stars.

### **Mars Exploration Rovers (MER) Spirit & Opportunity**

- *NASA's twin Mars Exploration Rovers, Spirit and Opportunity, were designed to last for 90 martian days, however both robotic explorers far outlasted their original missions and spent years collecting data at the surface of Mars. Spirit's sent data back for over six years, while Opportunity returned data for an incredible fifteen years.*
  - MER mission was to search for and characterize a wide range of rocks and soils that hold clues to past water activity on Mars. Studying the history of water on Mars is essential in determining whether or not the planet once supported environments that could have been habitable for life as we know it.
  - MER data has been used to identify environments that may have supported conditions suitable for life in Mars' past and will guide the future of Mars exploration for decades to come.

### **Mars Science Laboratory (Curiosity Rover)**

- *MSL's Curiosity rover is studying whether or not Mars ever had environments capable of supporting microbial life. Data from MSL will be used to develop future missions to collect samples of the martian surface in the hopes of identifying signs of past or present life.*
  - The Curiosity rover is advancing the field of astrobiology by investigating Mars' habitability, studying its climate and geology.
  - Curiosity has provided evidence that liquid water once flowed at the surface of Mars in Gale Crater.

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- The rover also discovered a site dubbed 'Yellowknife bay,' which once supported an environment that was habitable for microbial life.

### **Mars 2020 Mission to Mars: Perseverance Rover**

- *Mars 2020 is the next step in NASA's robotic exploration of Mars, a primary target of astrobiology research in the Solar System, and will build on the accomplishments of MSL. Many researchers supported by elements of the Astrobiology Program are involved in the design and development of the Mars 2020 mission and its scientific goals.*
  - The rover Perseverance is providing important data relevant to astrobiology research, along with a vast amount of geological information about the landing site and the planet at large that will help put the astrobiological data into context.
  - One of the missions primary goal is to explore the geology of Jezero Crater in order to assess past habitability.
    - Jezero Crater is a geologically rich terrain, with many features and minerals formed by water that may date back as far as 3.6 billion years ago.
    - Studying the geology and mineralogy of this site will provide a window into the planet's climate history, and allows astrobiologists to determine if sites like these were persistent habitable environments that could have supported life in the past.
  - Perseverance will not be looking for organisms living on Mars today. However, the rover is collecting data that could be used to identify biosignatures of ancient microbial life.
    - Previous missions, from Pathfinder to Curiosity, have helped astrobiologists determine that habitable environments were present on Mars in the planet's ancient past.
    - While these environments may have been habitable, we do not know if they were inhabited (i.e. if life was ever present).
  - Perseverance will be collecting a suite of samples to be returned to Earth via a Mars Sample Return mission. The return samples from another planet will allow our researchers to interrogate them with all of the sophistication and thoroughness of Earth-based instrumentation, and will provide an immense opportunity to dramatically advance our scientific understanding of Mars.
  - Many of the goals for the Mars 2020 mission are directly relevant to Astrobiology. These include:
    - Determine whether life ever arose on Mars
    - Seeking signs of past life (biosignatures) in the geological record

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- Characterize the climate of Mars
- Characterize the geology of Mars

### **TESS Mission**

- NASA's Transiting Exoplanet Survey Satellite is an all-sky survey mission that will discover thousands of exoplanets around nearby bright stars.
- TESS launched April 18, 2018 aboard a SpaceX Falcon 9 rocket.
- To date, TESS has discovered more than 120 confirmed exoplanets and more than 2,600 planet candidates
- TESS has identified, and will continue to find, exoplanets targets that Webb will study in further detail

### **Upcoming Missions**

#### **Dragonfly Mission to Titan**

- *This revolutionary mission concept includes the capability to explore diverse locations to look for prebiotic chemical processes common on both Titan and Earth. Titan is an analog to the very early Earth, and can provide clues to how prebiotic chemistry under these conditions may have progressed.*
- *The NASA Astrobiology Program supports scientists involved at all stages of the mission. Projects supported by the program have helped to define Titan as prime target for astrobiology research in the Solar System.*
  - Analog research on Earth and comparative planetology studies in order to better understand the environment of Titan and to identify sites of astrobiological interest.
  - Development of instrumentation that can be used to perform scientific investigations at Titan.
  - Research in areas of prebiotic chemistry that inform our knowledge of organic chemistry on the moon.

#### **Europa Clipper Mission to Europa**

- *The Europa Clipper mission will place a spacecraft in orbit around Jupiter in order to perform a detailed investigation of the giant planet's moon Europa.*
  - Europa shows strong evidence for an ocean of liquid water beneath its icy crust and some astrobiologists believe that it could host conditions favorable for life.
  - Astrobiologists are involved in the definition of science goals for Europa Clipper and the design of scientific instruments for the mission.

#### **James Webb Space Telescope (Webb)**

- *Webb will be the premier space-based observatory of the next decade. Webb is a large infrared telescope with a 6.5-meter primary mirror. Data from Webb will be used to study the formation and evolution of habitable worlds, and will be*



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*invaluable in understanding processes that have shaped habitability in our own Solar System.*

- *Webb will be capable of making detailed observations that might allow astrobiologists to identify some potential signatures of life on Earth-like planets beyond our Solar System.*
  - Webb observations will be used to study:
    - Every phase in the history of the Universe, including the evolution of the Solar System
    - The formation of distant solar systems capable of supporting life on Earth-like exoplanets.
    - Observe the formation of stars from the first stages to the formation of planetary systems
    - Measure the physical and chemical properties of planetary systems and investigate the potential for life in those systems

### PAOs:

- HQ: Alana Johnson, [alana.r.johnson@nasa.gov](mailto:alana.r.johnson@nasa.gov) / 202-358-1501
- HQ: Karen Fox, [karen.fox@nasa.gov](mailto:karen.fox@nasa.gov)/301-286-6284
- HQ: Liz Landau, [elizabeth.r.landau@nasa.gov](mailto:elizabeth.r.landau@nasa.gov)

### Concurrences:

- HQ: Mary Voytek, Senior Scientist for NASA Astrobiology
- HQ: Lori Glaze, Planetary Science Division director
- HQ: Michael New, Deputy AA for Research, Science Mission Directorate
- HQ: Eric Smith, JWST Program Scientist

## Fwd: UAP report is out

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From: Etkind, Marc R. (HQ-NA000) </O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=CB6EE6FC64104561BE6805548BB21326-ETKIND, MAR>  
To: Massey, Natalie (HQ-AB000) <natalie.massey@nasa.gov>  
Sent: June 25, 2021 6:09:51 PM EDT  
Received: June 25, 2021 6:09:52 PM EDT

Begin Forwarded Message:

From: "Fox, Karen C. (HQ-1300)" <karen.c.fox@nasa.gov>  
Subject: UAP report is out  
Date: 25 June 2021 17:17  
To: "Etkind, Marc R. (HQ-NA000)" <marc.r.etkind@nasa.gov>, "McGuinness, Jackie (HQ-NA000)" <jackie.mcguinness@nasa.gov>, "Thompson, Tabatha T. (HQ-NA020)" <tabatha.t.thompson@nasa.gov>, "Beutel, Allard (HQ-NA020)" <allard.beutel@nasa.gov>, "Jacobs, Bob (HQ-NA000)" <bob.jacobs@nasa.gov>, "Brown, Brittany A. (HQ-NA030)" <brittany.a.brown@nasa.gov>

Cheers, all—

Just letting you know that the Congressional report on UAPs is out:

<https://www.dni.gov/files/ODNI/documents/assessments/Preliminary-Assessment-UAP-20210625.pdf>

<[https://gcc02.safelinks.protection.outlook.com/?url=https://www.dni.gov/files/ODNI/documents/assessments/Preliminary-Assessment-UAP-](https://gcc02.safelinks.protection.outlook.com/?url=https://www.dni.gov/files/ODNI/documents/assessments/Preliminary-Assessment-UAP-20210625.pdf&data=04|01|marc.r.etkind@nasa.gov|5049aefc2d5f48ed495608d9381eb0ae|7005d45845be48ae8140d43da96dd17b|0|0|637602526722146401|Unknown|TWFpbGZsb3d8eyJWljoIMC4wLjAwMDAiLCJQIjoiV2luMzliLCJBTiI6Ikl1haWwiLCJXVCi6Mn0=|1000&sdata=RH/5WrwD7P5Mrhim1ImW/C2e/ltVXDmv1yOPJ059Izs=&reserved=0)

20210625.pdf&data=04|01|marc.r.etkind@nasa.gov|5049aefc2d5f48ed495608d9381eb0ae|7005d45845be48ae8140d43da96dd17b|0|0|637602526722146401|Unknown|TWFpbGZsb3d8eyJWljoIMC4wLjAwMDAiLCJQIjoiV2luMzliLCJBTiI6Ikl1haWwiLCJXVCi6Mn0=|1000&sdata=RH/5WrwD7P5Mrhim1ImW/C2e/ltVXDmv1yOPJ059Izs=&reserved=0>

I have not spotted a mention of NASA, and it is very focused on Earth-driven (whether natural or human-made) reasons for such phenomena.

We're still poised for media inquiries -- and have also posted both a feature <<https://www.nasa.gov/feature/nasa-s-search-for-life-astrobiology-in-the-solar-system-and-beyond>> on how NASA looks for life, as well as a FAQ <<https://www.nasa.gov/feature/faq-unidentified-aerial-phenomena-uapsufos/>> on UAPs.

Thanks,

Karen

## RE: UAP report is out

---

From: Jacobs, Bob (HQ-NA000) <bob.jacobs@nasa.gov>  
To: Beutel, Allard (HQ-NA020) <allard.beutel@nasa.gov>, Fox, Karen C. (HQ-1300) <karen.c.fox@nasa.gov>, Etkind, Marc R. (HQ-NA000) <marc.r.etkind@nasa.gov>, McGuinness, Jackie (HQ-NA000) <jackie.mcguinness@nasa.gov>, Thompson, Tabatha T. (HQ-NA020) <tabatha.t.thompson@nasa.gov>, Brown, Brittany A. (HQ-NA030) <brittany.a.brown@nasa.gov>  
Sent: June 25, 2021 5:37:08 PM EDT  
Received: June 25, 2021 5:37:10 PM EDT

You're all awesome. I needed to clear my cache.

From: Beutel, Allard (HQ-NA020) <allard.beutel@nasa.gov>  
Sent: Friday, June 25, 2021 5:27 PM  
To: Jacobs, Bob (HQ-NA000) <bob.jacobs@nasa.gov>; Fox, Karen C. (HQ-1300) <karen.c.fox@nasa.gov>; Etkind, Marc R. (HQ-NA000) <marc.r.etkind@nasa.gov>; McGuinness, Jackie (HQ-NA000) <jackie.mcguinness@nasa.gov>; Thompson, Tabatha T. (HQ-NA020) <tabatha.t.thompson@nasa.gov>; Brown, Brittany A. (HQ-NA030) <brittany.a.brown@nasa.gov>  
Subject: RE: UAP report is out

Bob, it's currently in the #2 spot on the homepage.

From: Jacobs, Bob (HQ-NA000) <bob.jacobs@nasa.gov>  
Sent: Friday, June 25, 2021 5:25 PM  
To: Fox, Karen C. (HQ-1300) <karen.c.fox@nasa.gov>; Etkind, Marc R. (HQ-NA000) <marc.r.etkind@nasa.gov>; McGuinness, Jackie (HQ-NA000) <jackie.mcguinness@nasa.gov>; Thompson, Tabatha T. (HQ-NA020) <tabatha.t.thompson@nasa.gov>; Beutel, Allard (HQ-NA020) <allard.beutel@nasa.gov>; Brown, Brittany A. (HQ-NA030) <brittany.a.brown@nasa.gov>  
Subject: RE: UAP report is out

Just as the plan... probably need to get the feature to the front of NASA.gov. Maybe not toe #1 slot... guess we can chat about that, if needed... but up there. It looks great. And posted quickly! And, no, there was no mention of NASA, as expected. However, it also gives us an opportunity to talk about exactly what everyone discussed.

And you're right. There may be additional Earth science discussions, opportunities.

From: Fox, Karen C. (HQ-1300) <karen.c.fox@nasa.gov>  
Sent: Friday, June 25, 2021 5:18 PM  
To: Etkind, Marc R. (HQ-NA000) <marc.r.etkind@nasa.gov>; McGuinness, Jackie (HQ-NA000) <jackie.mcguinness@nasa.gov>; Thompson, Tabatha T. (HQ-NA020) <tabatha.t.thompson@nasa.gov>; Beutel, Allard (HQ-NA020) <allard.beutel@nasa.gov>; Jacobs, Bob (HQ-NA000) <bob.jacobs@nasa.gov>; Brown, Brittany A. (HQ-NA030) <brittany.a.brown@nasa.gov>  
Subject: UAP report is out

Cheers, all—

Just letting you know that the Congressional report on UAPs is out:

<https://www.dni.gov/files/ODNI/documents/assessments/Preliminary-Assessment-UAP-20210625.pdf>

<[https://gcc02.safelinks.protection.outlook.com/?url=https://www.dni.gov/files/ODNI/documents/assessments/Preliminary-Assessment-UAP-](https://gcc02.safelinks.protection.outlook.com/?url=https://www.dni.gov/files/ODNI/documents/assessments/Preliminary-Assessment-UAP-20210625.pdf&data=04|01|marc.r.etkind@nasa.gov|447c2c8b6972450c7a5f08d9382162a8|7005d45845be48ae8140d)

[20210625.pdf&data=04|01|marc.r.etkind@nasa.gov|447c2c8b6972450c7a5f08d9382162a8|7005d45845be48ae8140d](https://gcc02.safelinks.protection.outlook.com/?url=https://www.dni.gov/files/ODNI/documents/assessments/Preliminary-Assessment-UAP-20210625.pdf&data=04|01|marc.r.etkind@nasa.gov|447c2c8b6972450c7a5f08d9382162a8|7005d45845be48ae8140d)

## RE: UAP report is out

---

From: Brown, Brittany A. (HQ-NA030) <brittany.a.brown@nasa.gov>  
To: Jacobs, Bob (HQ-NA000) <bob.jacobs@nasa.gov>, Fox, Karen C. (HQ-1300) <karen.c.fox@nasa.gov>, Etkind, Marc R. (HQ-NA000) <marc.r.etkind@nasa.gov>, McGuinness, Jackie (HQ-NA000) <jackie.mcguinness@nasa.gov>, Thompson, Tabatha T. (HQ-NA020) <tabatha.t.thompson@nasa.gov>, Beutel, Allard (HQ-NA020) <allard.beutel@nasa.gov>  
Sent: June 25, 2021 5:26:22 PM EDT  
Received: June 25, 2021 5:26:24 PM EDT  
Attachments: Homepage.JPG

Hi Bob,

How does the current nasa.gov placement (#2 slot) look?

Happy to make any desired changes!

--

Brittany Brown

From: Jacobs, Bob (HQ-NA000) <bob.jacobs@nasa.gov>  
Sent: Friday, June 25, 2021 5:25 PM  
To: Fox, Karen C. (HQ-1300) <karen.c.fox@nasa.gov>; Etkind, Marc R. (HQ-NA000) <marc.r.etkind@nasa.gov>; McGuinness, Jackie (HQ-NA000) <jackie.mcguinness@nasa.gov>; Thompson, Tabatha T. (HQ-NA020) <tabatha.t.thompson@nasa.gov>; Beutel, Allard (HQ-NA020) <allard.beutel@nasa.gov>; Brown, Brittany A. (HQ-NA030) <brittany.a.brown@nasa.gov>  
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Subject: UAP report is out

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<[https://gcc02.safelinks.protection.outlook.com/?url=https://www.dni.gov/files/ODNI/documents/assessments/Preliminary-Assessment-UAP-](https://gcc02.safelinks.protection.outlook.com/?url=https://www.dni.gov/files/ODNI/documents/assessments/Preliminary-Assessment-UAP-20210625.pdf&data=04|01|marc.r.etkind@nasa.gov|84b9d692874248b5644b08d9381fe198|7005d45845be48ae8140d43da96dd17b|0|637602531843054563|Unknown|TWfPbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQljojV2luMzliLCJB)

20210625.pdf&data=04|01|marc.r.etkind@nasa.gov|84b9d692874248b5644b08d9381fe198|7005d45845be48ae8140d43da96dd17b|0|637602531843054563|Unknown|TWfPbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQljojV2luMzliLCJB

## Attachment

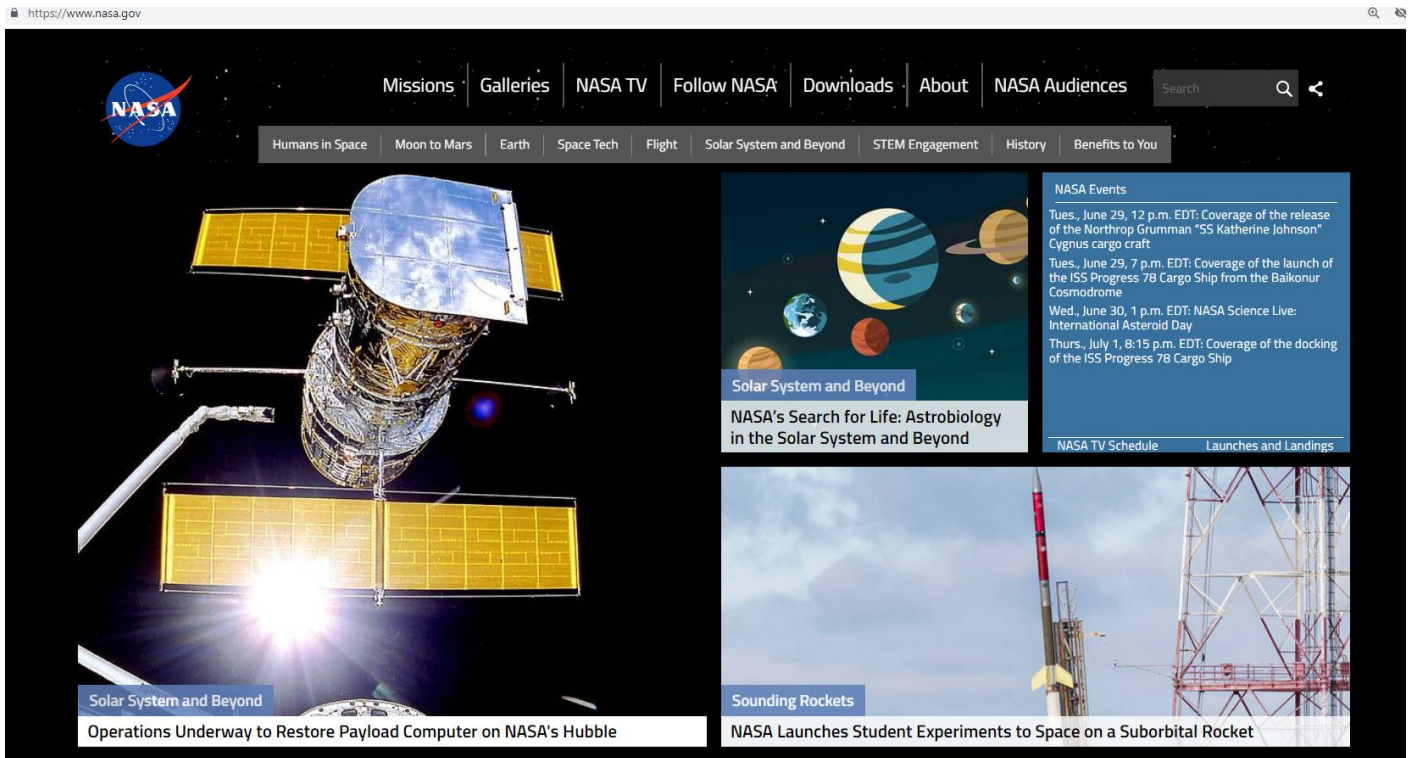
### 1. Homepage.JPG

Type: image/jpeg  
Size: 201 KB (206,424 bytes)

# Attachment #1

## Homepage.JPG

### Image



## UAP Report

---

From: Etkind, Marc R. (HQ-NA000) <marc.r.etkind@nasa.gov>  
To: Melroy, Pamela A. (HQ-AB000) <pamela.a.melroy@nasa.gov>  
Sent: June 25, 2021 7:23:52 PM EDT  
Received: June 25, 2021 7:23:52 PM EDT

Hi Pam

The Unclassified UAP Report was released late this afternoon and the link below.

<https://www.dni.gov/files/ODNI/documents/assessments/Preliminary-Assessment-UAP-20210625.pdf>

Marc Etkind

Associate Administrator, Communications

NASA Headquarters

## Re: UAP Report

---

From: Lal, Bhavya (HQ-AA000) <bhavya.lal@nasa.gov>  
To: Etkind, Marc R. (HQ-NA000) <marc.r.etkind@nasa.gov>, Cruz, Randy C. (HQ-AA000)[Affiliate] <randy.c.cruz@nasa.gov>  
Cc: McGuinness, Jackie (HQ-NA000) <jackie.mcguinness@nasa.gov>  
Sent: June 25, 2021 3:57:07 PM EDT  
Received: June 25, 2021 3:57:08 PM EDT

Ok. Using the time to reread the report.

Bhavya Lal, Ph.D.

(b) (6)

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

<<https://gcc02.safelinks.protection.outlook.com/?url=https://aka.ms/o0ukef&data=04|01|marc.r.etkind@nasa.gov|f71511513e50427eebcd08d938136970|7005d45845be48ae8140d43da96dd17b|0|0|637602478282234391|Unknown|TWFPbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQljojV2luMzliLCJBTiI6Ik1haWwiLCJXVCI6Mn0=|1000&sdata=NhFVeadrOZ3XrKtAy7CIWSMvtVq1uRSpiiRxPYWP1Xg=&reserved=0>>

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.

## RE: UAP Report

---

From: Cruz, Randy C. (HQ-AA000)[Affiliate] <randy.c.cruz@nasa.gov>  
To: Etkind, Marc R. (HQ-NA000) <marc.r.etkind@nasa.gov>  
Sent: June 25, 2021 10:17:38 AM EDT  
Received: June 25, 2021 10:17:39 AM EDT

(b) (6)

From: Etkind, Marc R. (HQ-NA000) <marc.r.etkind@nasa.gov>  
Sent: Friday, June 25, 2021 10:17 AM  
To: Cruz, Randy C. (HQ-AA000)[Affiliate] <randy.c.cruz@nasa.gov>  
Subject: Re: UAP Report

Sorry misspoke. Wasn't the administrator who asked. I'm traveling today. Can I call you. Lmk the number.

On: 25 June 2021 10:11, "Cruz, Randy C. (HQ-AA000)[Affiliate]" <randy.c.cruz@nasa.gov> wrote:

I'm in. Shall I come down to your office?

Vr,

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.

## **Re: USA TODAY request: Response to Congressional UFO report**

---

From: McGuinness, Jackie (HQ-NA000) <jackie.mcguinness@nasa.gov>  
To: Fox, Karen C. (HQ-1300) <karen.c.fox@nasa.gov>  
Cc: Etkind, Marc R. (HQ-NA000) <marc.r.etkind@nasa.gov>, Handal, Joshua A. (HQ-DG000)[ASRC FEDERAL SYSTEM SOLUTIONS] <joshua.a.handal@nasa.gov>  
Sent: June 28, 2021 2:08:31 PM EDT  
Received: June 28, 2021 2:08:32 PM EDT

Hi Karen – Thank you for checking in. We're going to tap out of the UAP stories for now, so Ravi is good to take it!

Best,  
Jackie

From: "Fox, Karen C. (HQ-1300)" <karen.c.fox@nasa.gov>  
Date: Monday, June 28, 2021 at 2:07 PM  
To: "McGuinness, Jackie (HQ-NA000)" <jackie.mcguinness@nasa.gov>  
Cc: "Etkind, Marc R. (HQ-NA000)" <marc.r.etkind@nasa.gov>, "Handal, Joshua A. (HQ-DG000)[ASRC FEDERAL SYSTEM SOLUTIONS]" <joshua.a.handal@nasa.gov>  
Subject: FW: USA TODAY request: Response to Congressional UFO report

Cheers, Jackie –

USA Today has reached out to Ravi K. about Friday's UAP report. Goddard is asking USA Today for more info about the scope and to let them know that regardless it's not NASA's job to comment on the report -- but we can certainly share information about what NASA does to search for life (and that we would need a lot more good data to study UAPs and that so far there's no evidence that they are extraterrestrial).

Regardless, is this an interview that the Administrator would like to take? Or leave it with Ravi?

Thanks,

Karen

--

Karen C. Fox

Senior Science Communications Officer

Office of Communications

From: "Shekhtman, Lonnie (GSFC-690.0)[ADNET SYSTEMS INC]" <lonnie.shekhtman@nasa.gov>  
Date: Monday, June 28, 2021 at 12:48 PM  
To: "Fox, Karen C. (HQ-1300)" <karen.c.fox@nasa.gov>  
Cc: "Hautaluoma, Grey (HQ-NA020)" <grey.hautaluoma-1@nasa.gov>, "Gutro, Rob (GSFC-1300)" <robert.j.gutro@nasa.gov>, "Jones, Nancy N. (GSFC-1300)" <nancy.n.jones@nasa.gov>  
Subject: USA TODAY request: Response to Congressional UFO report

Hi team,

Should we do USA Today or does HQ want it?

Lonnie

--

Lonnie Shekhtman  
Senior Science Writer

Solar System Exploration

NASA's Goddard Space Flight Center

(b) (6)

----- Forwarded message -----

From: Kopparapu, Ravi Kumar (GSFC-6990) <ravikumar.kopparapu@nasa.gov>

Date: Mon, Jun 28, 2021, 12:37 PM

Subject: Re: [EXTERNAL] USA TODAY request: Response to Congressional UFO report

To: Barnes, Dustin <(b) (6)>

Cc: Lonnie Shekhtman <lonnie.shekhtman@gmail.com>, Gran, Rani C. (GSFC-1300) <rani.c.gran@nasa.gov>

Hi Dustin,

I am copying our Public Affairs Office representatives, Lonnie Shekhtman and Rani Gran to co-ordinate. I am available until 5pm today.

Best

Ravi

From: "Barnes, Dustin" <(b) (6)>

Date: Monday, June 28, 2021 at 12:33 PM

To: "Kopparapu, Ravi Kumar (GSFC-6990)" <ravikumar.kopparapu@nasa.gov>

Subject: [EXTERNAL] USA TODAY request: Response to Congressional UFO report

Good afternoon, Dr. Kopparapu,

I'm a reporter with USA TODAY and am working on a follow up story on the release of the congressional UFO report last Friday.

I wanted to reach out to see if you could talk with me about your perspective on the unclassified findings that were released. If so, I'd love to set up an interview with you over the phone today, or if you prefer, I could send over some questions via email.

Thank you for your time, and I hope to talk soon.

Dustin Barnes

NOW Reporter

h6

(b) (6)

----- Forwarded message -----

From: Kopparapu, Ravi Kumar (GSFC-6990) <ravikumar.kopparapu@nasa.gov>

Date: Mon, Jun 28, 2021, 12:37 PM

Subject: Re: [EXTERNAL] USA TODAY request: Response to Congressional UFO report

To: Barnes, Dustin <(b) (6)>

Cc: Lonnie Shekhtman <lonnie.shekhtman@gmail.com>, Gran, Rani C. (GSFC-1300) <rani.c.gran@nasa.gov>

Hi Dustin,

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Best

Ravi

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Date: Monday, June 28, 2021 at 12:33 PM

To: "Kopparapu, Ravi Kumar (GSFC-6990)" <ravikumar.kopparapu@nasa.gov>

Subject: [EXTERNAL] USA TODAY request: Response to Congressional UFO report

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Thank you for your time, and I hope to talk soon.

Dustin Barnes

NOW Reporter

b6

(b) (6)

## DAILY REPORT 6-29-21 (draft)

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From: Thompson, Tabatha T. (HQ-NA020) <tabatha.t.thompson@nasa.gov>  
To: Beutel, Allard (HQ-NA020) <allard.beutel@nasa.gov>, Brown, Brittany A. (HQ-NA030) <brittany.a.brown@nasa.gov>, Brown, Katherine M. (HQ-NA020) <katherine.m.brown@nasa.gov>, Dunbar, Brian (HQ-NA020) <brian.dunbar@nasa.gov>, Gramian, Nikki N. (HQ-NA040) <nikki.n.gramian@nasa.gov>, Hautaluoma, Grey (HQ-NA020) <grey.hautaluoma-1@nasa.gov>, HQ-DL-news-chiefs <news-chiefs@lists.hq.nasa.gov>, Jacobs, Bob (HQ-NA000) <bob.jacobs@nasa.gov>, Stephenson, Johnny F. (MSFC-NA000) <johnny.f.stephenson@nasa.gov>, Etkind, Marc R. (HQ-NA000) <marc.r.etkind@nasa.gov>, NORTHON, KAREN M. (HQ-NA020) <karen.northon@nasa.gov>, Odom, Brian C. (MSFC-CS20) <brian.c.odom@nasa.gov>, Potter, Sean (HQ-NA020) <sean.potter@nasa.gov>, Steele, Cindy (HQ-NA001) <cindy.steele-1@nasa.gov>, Wilson, Jim (HQ-NA020) <jim.wilson@nasa.gov>, Hill, Aubree N. (HQ-NA020) <aubree.hill@nasa.gov>, Greene, Tylar J. (HQ-NA020) <tylar.j.greene@nasa.gov>, Bielling, Patricia A. (KSC-PXC00) <patricia.a.bielling@nasa.gov>, Witt, Monica J. (HQ-NA020) <monica.j.witt@nasa.gov>, Kamlet, Matthew R. (AFRC-111) <matthew.r.kamlet@nasa.gov>, Vinas Garcia, Maria-jose (GSFC-606.4)[TELOPHASE CORP] <maria-jose.vinasgarcia@nasa.gov>, Johnson, Alana R. (HQ-DG000)[ASRC FEDERAL SYSTEM SOLUTIONS] <alana.r.johnson@nasa.gov>, Landau, Elizabeth R (HQ-1864)[ASRC FEDERAL SYSTEM SOLUTIONS] <elizabeth.r.landau@nasa.gov>, McGuinness, Jackie (HQ-NA000) <jackie.mcguinness@nasa.gov>, Hunter, Reagan A. (HQ-VA000) <reagan.a.hunter@nasa.gov>, Fox, Karen C. (HQ-1300) <karen.c.fox@nasa.gov>, Gulley, Bryan F. (HQ-NA000) <bryan.f.gulley@nasa.gov>  
Sent: June 28, 2021 7:13:47 PM EDT  
Received: June 28, 2021 7:14:05 PM EDT  
Attachments: DAILY REPORT 06-29-2021.docx

All –

Attached and below, please find the draft Communications Daily Report for Tuesday, June 29, detailing scheduled activities and events. Please send any changes to Sean, Rob, and me. Thanks.

Tabatha

NASA Communications Daily Report

Tuesday, June 29

### Activities

·9 am – Sen. Nelson at Best Places to Work Event

·10:30 am – Sen. Nelson Interview with Bloomberg TV on commercialization

·10:30 to 11 am – Phil McAlister, director of commercial spaceflight development, interview with AP's Marcia Dunn about the agency's efforts to grow a strong low-Earth orbit economy

·11 am – Sen. Nelson records NASA Science Live video for Asteroid Day and KSC Indian River Bridge video

·11 am to 1 pm – Kathy Lueders Artemis update to National Academy of Engineering

·12:25 pm – Northrop Grumman CRS-15 Cygnus departure from International Space Station; live coverage on NASA TV begins at 12 pm.

·2:00 pm – Sen. Nelson Interview with Discovery on UAP report

·7:27 pm – Progress 78 launch from Baikonur Cosmodrome in Kazakhstan; live coverage on NASA TV begins at 7 pm

·Astronaut Mike Barratt for 16th Annual Space Life Sciences Summer Institute in Houston

·Launch of SpaceX Transporter-2 with NASA CubeSats

oSpaceX Transporter-2 rideshare mission will launch from Cape Canaveral Space Force Station in Florida. Includes the TROPICS pathfinder CubeSat, as well as two technology demonstration missions – PACE-1, and TILE-3, that will fly on CubeSat platforms.

·Webb presentations at the European Astronomical Society

·Anniversary: Launch of first nuclear powered satellite (Transit 4A) (1961)

#### Social Media Activity

#### Agency

·Pride Month – New edition of Faces of NASA web feature released for Pride month.

#### Humans in Space

·Live coverage of the release of the Northrop Grumman “SS Katherine Johnson” Cygnus Cargo Craft from the International Space Station is scheduled for release at 12:25 pm. Coverage will be airing on NASA TV, the NASA App, nasa.gov/live and NASA flagship social media accounts.

·Live coverage of the launch of the ISS Progress 78 Cargo Ship to the International Space Station from the Baikonur Cosmodrome in Kazakhstan launch scheduled for 7:27 pm, airing on NASA TV, the NASA App, and nasa.gov/live.

#### Moon to Mars

·Flagship social media accounts will share communications products for the conclusion of the Purposeful Passengers – Name the Artemis Moonikin Challenge. Products include a news release and a Tumblr post.

#### Space Tech

·Flagship will amplify Space Tech social media products surrounding the newest edition of NASA’s Software catalog.

#### NASA Television

#### On Air

·12 pm – Coverage of the Release of the Northrop Grumman “SS Katherine Johnson” Cygnus Cargo Craft from the International Space Station (release scheduled at 12:25 p.m. EDT)

·7 pm – Coverage of the Launch of the ISS Progress 78 Cargo Ship to the International Space Station from the Baikonur Cosmodrome in Kazakhstan (Launch scheduled at 7:27 p.m. EDT)

## In Production

·10:30 am – Sen. Nelson interview with Bloomberg

·11 am – Record Teleprompter Message for NASA Science Live

·11:15 am – Record Teleprompter Message for Indian River Bridge Award

·2 pm – Sen. Nelson interview with Discovery

## HQ Products

### Release

·Available for Download, NASA Software Benefits Earth

oNASA's computational innovations are readily available for applications beyond space, including benefiting our home planet. The agency's latest software catalog has dozens of new codes available for free download.

·Public Names 'Moonikin' Flying Around Moon on NASA's Artemis I Mission

### Web Article

·9 am – After 60 Years, Nuclear Power for Spaceflight is Still Tried and True

oSix decades after the launch of the first nuclear-powered space mission, Transit IV-A, NASA is embarking on a bold future of human exploration and scientific discovery. This future builds on a proud history of safely launching and operating nuclear-powered missions in space.

·11 am – Abnormally High Alcohol, Mystery Heat Source Detected on Comet Wirtanen

oA study using Keck Observatory data finds that Comet 46P/Wirtanen was releasing an unusual amount of alcohol as it made its historic flyby of Earth two and a half years ago.

·12 pm – Black Holes Make Tsunamis in Computer Simulations

## Center Products

### Image / Video

·11:30 – Surface Water and Ocean Topography Spacecraft Arrives in France / JPL

oThe Surface Water and Ocean Topography (SWOT) spacecraft will help researchers understand and track the volume and location of water around the world, making NASA's first truly global survey of the planet's surface water. Set for launch in 2022, it recently moved from the assembly facility at JPL to a facility in France. The short image feature is coordinated with one from CNES.

### Web Articles

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oScientists closer to settling the question: Why do some instruments detect methane on Mars while others don't?

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·[TENTATIVE] 3:30 pm – NASA Launches First of Six Tiny Satellites to Keep a Near-constant Eye / Goddard

oNASA launched a test satellite or Pathfinder, ahead of a constellation of six small satellites that will work together to provide near hourly updates of hurricanes and tropical cyclones. Also tied to Transporter-2 rideshare launch.

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oUsing machine learning, swarms of SmallSats buzzing around Earth could coordinate amongst themselves to collect data on important weather patterns at different times of the day or year, and from multiple angles. Such swarms could revolutionize scientists' understanding of weather and climate changes.

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oThe sky isn't falling, but scientists have found the upper atmosphere is gradually dropping in response to rising human-produced greenhouse gas emissions. Combined data from three NASA satellites have produced the first long-term record that reveals a particular layer of the atmosphere, the mesosphere, is both cooling and shrinking.

Tabatha Tomes Thompson

Office of Communications

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## Attachment

### 1. DAILY REPORT 06-29-2021.docx

Type: application/vnd.openxmlformats-officedocument.wordprocessingml.document  
Size: 44 KB (45,882 bytes)

## **Attachment #1**

**DAILY REPORT 06-29-2021.docx**

### **Original view**

3 pages (displayed on pages 7 to 9)

# NASA Communications Daily Report

Tuesday, June 29

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## ACTIVITIES

- 9 am – Sen. Nelson at Best Places to Work Event
- 10:30 am – Sen. Nelson Interview with Bloomberg TV on commercialization
- 10:30 to 11 am – Phil McAlister, director of commercial spaceflight development, interview with AP's Marcia Dunn about the agency's efforts to grow a strong low-Earth orbit economy
- 11 am – Sen. Nelson records NASA Science Live video for Asteroid Day and KSC Indian River Bridge video
- 11 am to 1 pm – Kathy Lueders Artemis update to National Academy of Engineering
- 12:25 pm – Northrop Grumman CRS-15 Cygnus departure from International Space Station; live coverage on NASA TV begins at 12 pm.
- 2:00 pm – Sen. Nelson Interview with Discovery on UAP report
- 7:27 pm – Progress 78 launch from Baikonur Cosmodrome in Kazakhstan; live coverage on NASA TV begins at 7 pm
- Astronaut Mike Barratt for 16th Annual Space Life Sciences Summer Institute in Houston
- Launch of SpaceX Transporter-2 with NASA CubeSats
  - SpaceX Transporter-2 rideshare mission will launch from Cape Canaveral Space Force Station in Florida. Includes the TROPICS pathfinder CubeSat, as well as two technology demonstration missions – PACE-1, and TILE-3, that will fly on CubeSat platforms.
- Webb presentations at the European Astronomical Society
- Anniversary: Launch of first nuclear powered satellite (Transit 4A) (1961)

## SOCIAL MEDIA ACTIVITY

### Agency

- Pride Month – New edition of Faces of NASA web feature released for Pride month.

### Humans in Space

- Live coverage of the release of the Northrop Grumman “SS Katherine Johnson” Cygnus Cargo Craft from the International Space Station is scheduled for release at 12:25 pm. Coverage will be airing on NASA TV, the NASA App, [nasa.gov/live](https://nasa.gov/live) and NASA flagship social media accounts.
- Live coverage of the launch of the ISS Progress 78 Cargo Ship to the International Space Station from the Baikonur Cosmodrome in Kazakhstan launch scheduled for 7:27 pm, airing on NASA TV, the NASA App, and [nasa.gov/live](https://nasa.gov/live).

## **Moon to Mars**

- Flagship social media accounts will share communications products for the conclusion of the Purposeful Passengers – Name the Artemis Moonikin Challenge. Products include a news release and a Tumblr post.

## **Space Tech**

- Flagship will amplify Space Tech social media products surrounding the newest edition of NASA's Software catalog.

## **NASA TELEVISION**

### **On Air**

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### **In Production**

- 10:30 am – Sen. Nelson interview with Bloomberg
- 11 am – Record Teleprompter Message for NASA Science Live
- 11:15 am – Record Teleprompter Message for Indian River Bridge Award
- 2 pm – Sen. Nelson interview with Discovery

## **HQ PRODUCTS**

### **Release**

- Available for Download, NASA Software Benefits Earth
  - NASA's computational innovations are readily available for applications beyond space, including benefiting our home planet. The agency's latest software catalog has dozens of new codes available for free download.
- Public Names 'Moonikin' Flying Around Moon on NASA's Artemis I Mission

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## OIIR Weekly Update

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From: Feldstein, Karen C. (HQ-TA000) <karen.c.feldstein@nasa.gov>  
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>, McKay, Meredith (HQ-TA000) <meredith.mckay@nasa.gov>, Swails, Casey L. (HQ-LE030) <casey.l.swails@nasa.gov>  
Sent: July 18, 2021 5:44:33 PM EDT  
Received: July 18, 2021 5:44:36 PM EDT

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 withdraw 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

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