



# governmentattic.org

*"Rummaging in the government's attic"*

Description of document: National Aeronautics and Space Administration (NASA)  
Emails with the words DRONE or DRONES in the email  
account of Cheryl Warner, News Chief, NASA HQ Public  
Affairs Office, Dec 2024 - Jan 2025

Requested date: 16-December-2024

Release date: 29-January-2025

Posted date: 10-February-2025

Source of document: FOIA Request  
Government Information Specialist  
c/o NASA Headquarters  
MS 5-R30, 300 E Street, SW  
Washington, DC 20546  
Email: [hq-foia@mail.nasa.gov](mailto:hq-foia@mail.nasa.gov)  
[Online FOIA Portal](#)  
[FOIA.gov](#)

The governmentattic.org web site ("the site") is a First Amendment free speech web site and is noncommercial and free to the public. The site and materials made available on the site, such as this file, are for reference only. The governmentattic.org web site and its principals have made every effort to make this information as complete and as accurate as possible, however, there may be mistakes and omissions, both typographical and in content. The governmentattic.org web site and its principals shall have neither liability nor responsibility to any person or entity with respect to any loss or damage caused, or alleged to have been caused, directly or indirectly, by the information provided on the governmentattic.org web site or in this file. The public records published on the site were obtained from government agencies using proper legal channels. Each document is identified as to the source. Any concerns about the contents of the site should be directed to the agency originating the document in question. GovernmentAttic.org is not responsible for the contents of documents published on the website.

National Aeronautics and Space Administration



**Headquarters**  
Washington, DC 20546-0001

January 29, 2025

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

Re: FOIA Tracking Number **25-00309-F-HQ**

This is our final response to your Freedom of Information Act (FOIA) request to the National Aeronautics and Space Administration (NASA), dated [December 14, 2024, and received in this office on December 16, 2024. Your case has been assigned the above tracking number. You seek the following information:

*“A copy of records (reports, memos, emails, etc.) since December 1, 2024 regarding drone sightings on the East Coast of the United States (New Jersey, Maryland, Virginia, Massachusetts, New York, etc.). Please limit this request to NASA Headquarters..”*

In an email, dated January 6, 2025, you agreed to narrow your request to only include emails with the word DRONE or the word DRONES in the email account of Ms. Cheryl Warner, during December 2024.

In response to your request, we had NASA’s Office of the Chief Information Officer conduct a search of Ms. Cheryl Warner’s email account using the search terms “Drone” or “Drones.” That search identified records responsive to your request. We reviewed the responsive records under the FOIA to determine whether they may be disclosed to you. Based on that review, this office is providing the following:

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

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

---

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

### **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 cell phone numbers and email addresses.

### **Fees**

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

### **Appeal**

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

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

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

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

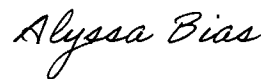
If you have any questions, please feel free to contact me at [Alyssa.k.bias@nasa.gov](mailto:Alyssa.k.bias@nasa.gov). For further assistance and to discuss any aspect of your request you may also contact:

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

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

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

Sincerely,

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

Alyssa Bias  
Government Information Specialist

**From:** [Warner, Cheryl {she, her} \(HQ-NA020\)](#)  
**To:** [Taveau, Jessica C. \(HQ-NA020\)\[NCS\]](#)  
**Cc:** [Dooren, Jennifer M. \(HQ-NA020\)](#)  
**Subject:** Re: [EXTERNAL] NewsNation Interview  
**Date:** Friday, December 20, 2024 1:05:49 PM  
**Attachments:** [image002.png](#)

---

Jennifer - did Rob get a final, approved drone statement too?

---

**From:** Taveau, Jessica C. (HQ-NA020)[NCS] <[jessica.c.taveau@nasa.gov](mailto:jessica.c.taveau@nasa.gov)>  
**Sent:** Friday, December 20, 2024 2:01:38 PM  
**To:** Warner, Cheryl {she, her} (HQ-NA020) <[cheryl.m.warner@nasa.gov](mailto:cheryl.m.warner@nasa.gov)>  
**Cc:** Dooren, Jennifer M. (HQ-NA020) <[jennifer.m.dooren@nasa.gov](mailto:jennifer.m.dooren@nasa.gov)>  
**Subject:** RE: [EXTERNAL] NewsNation Interview

Perfect, and thank you!



*Jessica Taveau (She/Her)*  
Communication Strategist  
NASA Communication Services Contract  
NASA Headquarters  
Washington, D.C. 20546  
C: (b) (6)  
Chat with me on [Teams](#)

**From:** Warner, Cheryl {she, her} (HQ-NA020) <[cheryl.m.warner@nasa.gov](mailto:cheryl.m.warner@nasa.gov)>  
**Sent:** Friday, December 20, 2024 2:01 PM  
**To:** Taveau, Jessica C. (HQ-NA020)[NCS] <[jessica.c.taveau@nasa.gov](mailto:jessica.c.taveau@nasa.gov)>  
**Cc:** Dooren, Jennifer M. (HQ-NA020) <[jennifer.m.dooren@nasa.gov](mailto:jennifer.m.dooren@nasa.gov)>  
**Subject:** Re: [EXTERNAL] NewsNation Interview

Hi - we can let them know he no longer works at NASA, and that they will have to connect with him through other means.

Thanks!

---

**From:** Taveau, Jessica C. (HQ-NA020)[NCS] <[jessica.c.taveau@nasa.gov](mailto:jessica.c.taveau@nasa.gov)>  
**Sent:** Friday, December 20, 2024 1:59:11 PM  
**To:** Warner, Cheryl {she, her} (HQ-NA020) <[cheryl.m.warner@nasa.gov](mailto:cheryl.m.warner@nasa.gov)>  
**Cc:** Dooren, Jennifer M. (HQ-NA020) <[jennifer.m.dooren@nasa.gov](mailto:jennifer.m.dooren@nasa.gov)>  
**Subject:** FW: [EXTERNAL] NewsNation Interview

Cheryl –

Understanding Michael Gold no longer works at NASA, and seeing that Katherine Rohloff is on leave, please see the NewsNation request below to interview Mr. Gold about drones. Please also let me

know if I should route this to another team member.

Thank you!

Jessica



*Jessica Taveau (She/Her)*

Communication Strategist

NASA Communication Services Contract

NASA Headquarters

Washington, D.C. 20546

C: (b) (6)

Chat with me on [Teams](#)

**From:** Breahon Jones (b) (6)  
**Sent:** Friday, December 20, 2024 1:51 PM  
**To:** HQ-Media <[hq-media@mail.nasa.gov](mailto:hq-media@mail.nasa.gov)>  
**Subject:** [EXTERNAL] NewsNation Interview

**CAUTION:** This email originated from outside of NASA. Please take care when clicking links or opening attachments. Use the "Report Message" button to report suspicious messages to the NASA SOC.

Good afternoon, this is Breahon Jones, Booking Producer for NewsNation and the show "Prime" news show airing 7 pm – 10 pm ET on Saturday and Sunday with host Natasha Zouves.

I'm requesting for Mr. Michael Gold to join our show "Prime" live this Saturday or Sunday evening to discuss the recent "unidentified drones" that have been seen in the skies over American cities.

NewsNation has studios throughout the country, but if that's not an option we can also do a Zoom/Skype interview.

Please contact me for availability at (b) (6) or (b) (6).  
Looking forward to your earliest and most favorable correspondence as well as thanking you in advance, Breahon Jones.

Breahon Jones  
Booking Producer  
NewsNation  
2501 West Bradley Place  
Chicago, IL, 60618  
Office (b) (6)  
(b) (6)

[www.newsnationnow.com](http://www.newsnationnow.com)

NewsNation has been rated the most **neutral/unbiased** and **most reliable news organization** by independent, media research groups. We're also now in more households than MSNBC.

**For more information on “NEWSNATION,” please visit:**

Website: <https://www.newsnationnow.com>

YouTube: <https://www.youtube.com/c/NewsNationNow/videos>

Twitter: @NewsNation

Facebook: <https://www.facebook.com/NewsNationNow/>

Instagram: <https://www.newsnationnow.com/instagram/>

Find us on TV: <http://www.newsnationnow.com/JoinUs>

**Download app: via App Store & Google Play**



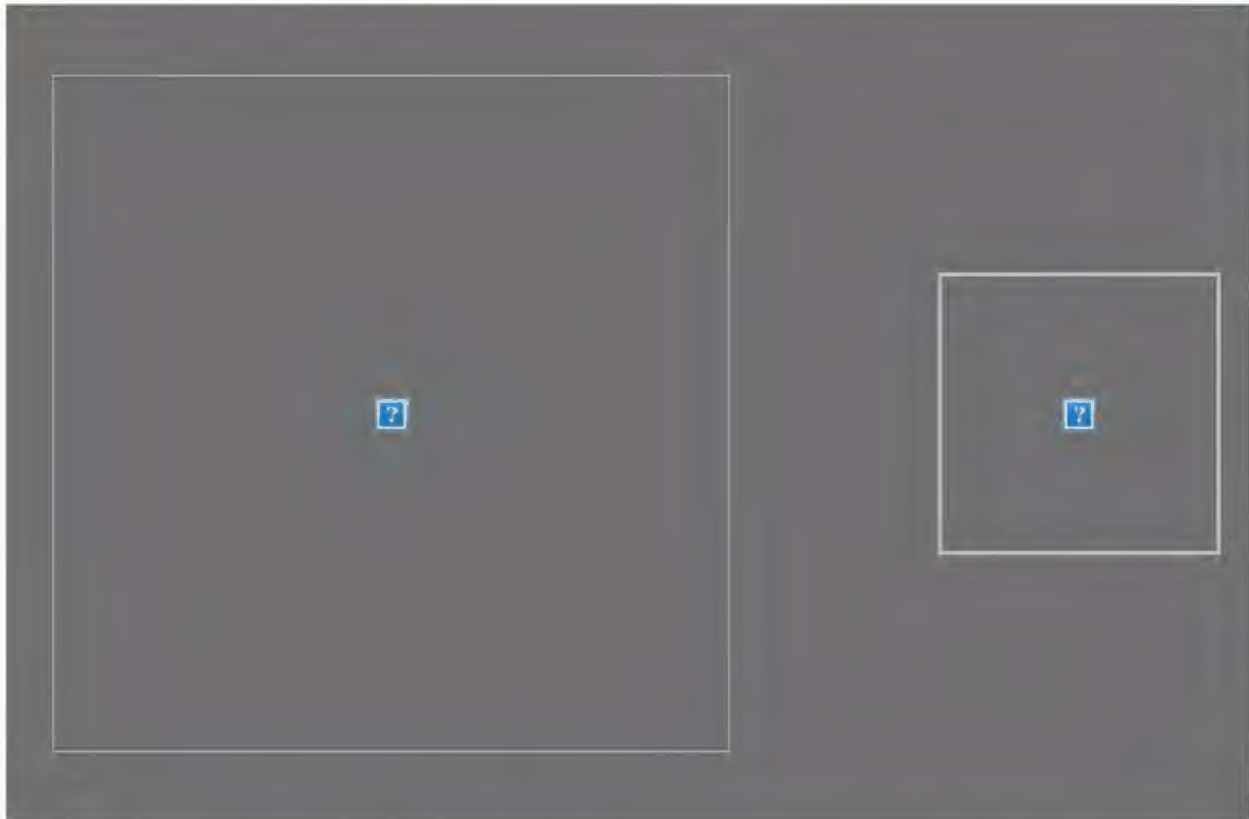
NewsNation does not discriminate in advertising contracts on the basis of race, ethnicity or gender and further requires that in the performance of all NewsNation advertising agreements, NewsNation requires that each party not discriminate on the basis of race or ethnicity.

This e-mail and any files transmitted with it are the property of Nexstar Broadcasting, Inc., are confidential, and are intended solely for the use of the individual or entity to whom this email is addressed and/or as indicated in the applicable file. If you are not one of the named recipient(s) or otherwise have reason to believe that you have received this message in error, please notify the sender and delete this message immediately from your computer. Any other use, retention, dissemination, forwarding, printing, or copying of this e-mail is strictly prohibited.



**From:** [AW Intelligence](#)  
**To:** [Warner, Cheryl {she, her} \(HQ-NA020\)](#)  
**Subject:** [EXTERNAL] Aerospace DAILY: F-35 Contract Delay; China's Mineral Ban; Japan's MQ-9Bs - Dec. 4  
**Date:** Tuesday, December 3, 2024 11:27:03 PM  
**Attachments:** [ASD\\_12\\_04\\_2024.pdf](#)

**CAUTION:** This email originated from outside of NASA. Please take care when clicking links or opening attachments. Use the "Report Message" button to report suspicious messages to the NASA SOC.



The Business Daily of the Global Aerospace and Defense Industry Since 1963

**December 04, 2024**

[DOWNLOAD PDF](#)

### [Daily Briefs](#)

SUBARU BELL 412EPX gets EASA nod... ELBIT gets wide-ranging drone order... GA-EMS to mature LRMP prototype...

### [Israel, Argentina Discuss Defense Cooperation](#)

Argentina and Israel are looking for ways to tighten defense cooperation, including in uncrewed air systems.



### [Lockheed Martin CFO Warns Of Delay In F-35 Contract Action](#)

Lockheed Martin does not expect to sign the contract for two lots of F-35 production before year-end, although it could incur costs and book revenue.

### [Japan's Future MQ-9Bs Selected To Offset P-1 Fleet Reduction](#)

General Atomics has confirmed the Japanese Navy's decision to buy 23 MQ-9Bs as part of a program to reduce purchases of crewed maritime patrol aircraft.

### [South Korea Wraps Up L-SAM Development](#)

The South Korean ministry of national defense did not provide specifications of the missile's performance.

### [Heart X1 Electric Demonstrator To Fly At Upstate New York Airport In 2025](#)

The Heart X1, set to fly next year at Plattsburgh International Airport, will be representative in size of the ES-30, designed to carry 30 passengers.

### [Embraer Tightens Relations With Dutch Industry After C-390 Purchase](#)

Embraer has signed agreements with Dutch companies to support the country's acquisition of C-390 Millennium airlifters.

### [China Bans Export To U.S. Of Critical A&D Minerals](#)

China banned the export of gallium, germanium and antimony to the U.S. on Dec. 3, targeting critical minerals integral to the aerospace and defense industry.

### [Toulouse's Hydrogen Technocampus At Francazal Airport Gets Green Light](#)

Construction of the Hydrogen Technocampus research and technology center at Toulouse Francazal airport has been approved.

### [India Approves Su-30 EW Upgrade, Helicopter Funding](#)

The Indian government has given the green light to buy new electronic-warfare equipment for the country's Sukhoi Su-30MKI fighters and Coast Guard helicopters.

### [Archer Signals Confidence Despite Stellantis CEO Departure](#)

Archer says it is pressing forward with its planned strategic partnership with Stellantis despite the resignation of CEO Carlos Tavares.

### [Babcock, KAI Team Up On European Flight Training Opportunity](#)

British defense company Babcock is working with Korea Aerospace Industries to explore whether the two can partner on military flying training in Europe.

### [Vertical CEO Spells Out Fundraising Plans Following Mudrick Deal](#)

Vertical's near-term funding concerns were resolved on Nov. 25.

[View full issue](#)

---

To make the most of your subscription, access Aerospace Daily & Defense Report online. Simply visit [awin.aviationweek.com](http://awin.aviationweek.com) to login. Online, you can:

- Access essential news, data and intelligence throughout the business day
- Create alerts that enable you to keep up-to-date on the programs, organizations, etc. most important to you and your workflow
- Search through an Aerospace Daily & Defense Report archive that goes back over 15 years

If you would like to find out more about your online access, or have any other questions about your Aerospace Daily & Defense Report subscription, contact our customer support team at +1.561.279.4661 or email [tech\\_assistance@aviationweek.com](mailto:tech_assistance@aviationweek.com).

---

COPYRIGHT © 2024  
All rights reserved



The Business Daily of the Global Aerospace and Defense Industry Since 1963

December 4, 2024

## Inside:

### FUNDING & POLICY

China Bans Export To U.S.  
Of Critical A&D Minerals..... **PAGE 2**

Toulouse's Hydrogen Technocampus At  
Francazal Airport Gets Green Light..... **PAGE 4**

India Approves Su-30 EW  
Upgrade, Helicopter Funding..... **PAGE 5**

### PROGRAMS

Japan's Future MQ-9Bs Selected  
To Offset P-1 Fleet Reduction..... **PAGE 3**

South Korea Wraps Up  
L-SAM Development..... **PAGE 4**

Heart X1 Electric Demonstrator To Fly  
At Upstate New York Airport In 2025..... **PAGE 5**

### BUSINESS

Archer Signals Confidence  
Despite Stellantis CEO Departure..... **PAGE 3**

Babcock, KAI Team Up On  
European Flight Training Opportunity..... **PAGE 6**

Vertical CEO Spells Out Fundraising Plans  
Following Mudrick Deal..... **PAGE 7**

## Israel & Argentina

Argentina and Israel are looking for ways to tighten defense cooperation, including in uncrewed air systems, the Israeli Defense Ministry says. The defense ministers of the two countries—Argentina's Luis Alfonso Petri and Israel's Israel Katz—discussed the deepening of bilateral ties that could also cover cyber defense, border protection and satellite technology, the Israeli government said Dec. 2. Petri was on his first visit to Israel as defense minister. The two sides also agreed to explore contracts in areas such as communications technology, small arms and ammunition, the Israel Defense Ministry said.

## Daily Briefs

**SUBARU BELL** 412EPX received European Union Aviation Safety Agency certification and can begin flight operations throughout the European Union.

**ELBIT SYSTEMS** has Israeli defense ministry contracts totaling \$40m for drone and mini-drone systems for intel collection, seek & strike swarming, advanced ISR, urban operations.

**GENERAL ATOMICS ELECTROMAGNETIC SYSTEMS** will further mature/demonstrate Long Range Maneuvering Projectile using fielded 155 mm artillery under U.S. Navy Other Transaction Authority contract.

**RED CAT HOLDINGS** chief technology officer, TEAL DRONES founder George Matus, is departing, to be replaced by Chris Rill, currently director of partner integration.

**HELICITY SPACE** (in-space propulsion and power technology based on fusion) appointed former NASA associate administrator Jim Reuter and former U.S. Air Force Space Command chief Gen. Willie Shelton to its strategic advisory board.

### PROGRAMS

## Lockheed Martin CFO Warns Of Delay In F-35 Contract Action

ROBERT WALL, [robert.wall@aviationweek.com](mailto:robert.wall@aviationweek.com)

**Lockheed Martin does not expect to sign the contract for two lots of F-35 production before year-end, though it could secure a so-called "undefinitized" contract action that would enable the manufacturer to incur costs and book revenue on the program, CFO Jay Malave says.**

The company, in its third-quarter earnings call, warned that a delay in securing the contract for Lots 18 to 19 could shift some full-year sales into 2025.

"It is unlikely that between now and the end of the year we'll have a definitized contract," Malave said Dec. 3 at a UBS investor event. He added, though, that he is bullish the company and Pentagon will agree on the interim contract arrangement.

"We are doing everything that we can with our customer to get this undefinitized contract action completed here in the year," Malave said. But he noted if that happens, it may come too late for the company to turn billings into cash.

Malave said he expects the federal fiscal 2025 budget to not be completed until the first quarter of next year, with an extension likely in the continuing resolution that expires this month. The congressional delay in finalizing the 2025 budget, along with a change in administration, could push the release of the fiscal 2026 budget request beyond March, he explained.

LOCKHEED MARTIN, P. 2

## FUNDING &amp; POLICY

## China Bans Export To U.S. Of Critical A&D Minerals

MATTHEW FULCO, [matt.fulco@aviationweek.com](mailto:matt.fulco@aviationweek.com)

**China banned the export of gallium, germanium and antimony to the U.S. on Dec. 3, directly targeting critical minerals integral to the aerospace and defense industry.**

Gallium nitride technology—known for its ability to outperform silicon in terms of speed, power handling and resistance to extreme temperatures—is used in a wide array of military radars and defense systems. These include Raytheon's Patriot, GhostEye and SPY-6 as well as TPY-2, the primary radar in Lockheed Martin's Terminal High Altitude Area Defense system.

Germanium has applications in night-vision and thermal-sensing devices in platforms such as Abrams main battle tanks, BAE Systems Bradley Fighting Vehicles, Boeing Apache helicopters and naval systems.

Antimony is used in everything from tungsten steel and the hardening of lead bullets to night-vision goggles and infrared sensors.

China's Ministry of Commerce said in a statement that gallium, germanium, antimony and superhard materials are no longer permitted to be exported to U.S. "as an overall principle," adding it will implement a more stringent end-use review on dual-use products involving graphite.

The state-run China Daily, citing the Ministry of Commerce, said Washington has "overgeneralized the concept of national security; politicized and weaponized economic, trade and technological issues; abused export control measures, and imposed unwarranted restrictions on the export of certain products to China in recent years."

The statement appeared to reference U.S. sanctions on China's semiconductor sector, the newest of which the Biden administration unveiled Dec. 2.

The tripartite critical mineral ban is Beijing's boldest move yet in a 17-month gambit that began with the imposition of restrictions on the export of gallium and germanium in July 2023. Until Dec. 3, it was possible for the U.S. to source the minerals from

Chinese suppliers if they obtained export licenses.

Yet as technology, trade and geopolitical frictions have intensified between the world's two largest economies, each has tried to assert control over strategic supply chains it controls. While the U.S. leads in advanced semiconductors—and has curbed Beijing's access to related technology to impede its military modernization—China dominates global production and processing of the 17 rare-earth elements and other critical minerals crucial for defense systems.

A shortage of any of these elements could disrupt the U.S. defense-industrial base, which has limited domestic production ability and small or nonexistent strategic stockpiles. In a report published Nov. 15, U.S. Geological Survey researchers found America's GDP could fall by \$3.4 billion in the event of a total Chinese ban on gallium and germanium exports. The researchers estimate gallium prices could jump about 150% and germanium by a more modest 26% under this scenario.

Efforts to diversify critical mineral suppliers are certain to accelerate now. Yet progress is likely to be incremental, while working with allies and partners will be paramount. Japan, South Korea and Germany produce small amounts of primary gallium. Canada's Teck Resources is North America's top producer of germanium, extracted from its Trail smelter in British Columbia.

Australia, meanwhile, is exploring the possibility of extracting gallium and germanium as byproducts of mining operations. The project aims to "inform strategic decision-making regarding the production of gallium, germanium and indium [another critical mineral used in A&D]," the Australian government said in an Oct. 15 statement.

Within the U.S., a project in Idaho led by Perpetua Resources has been awarded \$59.4 million to restart long-dormant domestic production of antimony, but the mine is not scheduled to open until about 2028.

In the meantime, the U.S. must source antimony from overseas. The No. 2 producer of the critical mineral is Tajikistan, which accounted for 26% of global production in 2023, despite its small reserves. Since China dominates overall production, Tajikistan still exports most of its antimony to Beijing for refining.

---

**LOCKHEED MARTIN, from P. 1**

"We are going to be living, I think, under a little bit of an area of uncertainty" related to the budget, Malave said.

The CFO said it was too early to speculate how defense spending will shift once Donald Trump returns to the White House on Jan. 20. "There will be different priorities in this administration," he said, but noted Lockheed would be able to

adjust as it has in prior changes of administrations.

Malave said supply chain issues also have improved and recovered to roughly pre-Covid pandemic levels. However, he said, even in 2018 and 2019 there were supply chain issues, so the company continues to work with suppliers to improve delivery times and quality.



PROGRAMS

## Japan's Future MQ-9Bs Selected To Offset P-1 Fleet Reduction

STEVE TRIMBLE, [steve.trimble@aviationweek.com](mailto:steve.trimble@aviationweek.com)

**General Atomics has confirmed the Japanese Navy's decision to buy 23 MQ-9B SeaGuardians after 2028 as part of a program to reduce purchases of crewed maritime patrol aircraft.**

The Japanese Maritime Self-Defense Forces selected the medium-altitude uncrewed aircraft system following a 1.5-year evaluation that included flight trials with MQ-9Bs last summer from Kanoya Air Base on the southern tip of Kyushu island.

The trials simulated maritime patrols over the East China Sea, a Ministry of Defense (MoD) spokesman told local reporters Aug. 27.

The MoD released a request for proposals on Aug. 21 and

received one bid based on the MQ-9B on Oct. 1. The ministry announced the selection decision Nov. 15. The selection is part of a larger effort to reduce manpower requirements by using uncrewed platforms to replace crewed systems.

Implementation of an "equipment optimization" strategy released by the MoD earlier this year would link the acquisition of MQ-9Bs to a plan to reduce the number of Kawasaki P-1 maritime patrol aircraft that the Navy buys.

The Navy operates 34 P-1s, but had planned to buy 26 more by 2034, according to Aviation Week's Fleet Discovery Military database. The turbofan-powered P-1s are replacing an aging fleet of Lockheed P-3C Orions that are expected to be retired over the next decade.

Japan's Coast Guard also operates a small number of MQ-9Bs to patrol fisheries.

BUSINESS

## Archer Signals Confidence Despite Stellantis CEO Departure

BEN GOLDSTEIN, [ben.goldstein@aviationweek.com](mailto:ben.goldstein@aviationweek.com)

**Archer says it is pressing forward with its planned strategic partnership with Stellantis despite the abrupt resignation of Carlos Tavares, the automaker's CEO and a vocal supporter of the air taxi startup.**

Announced Dec. 2, the departure of Tavares comes amid a particularly challenging period for Stellantis, which has grappled with slowing vehicle sales and a plummeting share price for most of 2024.

A major supporter of Archer, Tavares oversaw Stellantis' initial \$150 million investment in the startup through a private placement in early 2023, followed by multiple rounds of share purchases on the open market. As of early November, the automaker held over 59 million shares of Archer stock, according to data from Fintel, giving it a roughly 15% ownership stake in the startup.

In early August, the two companies announced a strategic agreement that would see Stellantis fund close to \$400 million in labor and production costs at Archer's mass production facility in Covington, Georgia. Archer's shareholders will be asked to approve that agreement, which would compensate Stellantis with

shares and warrants, at a special shareholder meeting scheduled for Dec. 20.

Following the surprise announcement of Tavares' departure, Archer expressed confidence that Stellantis will continue to support it under new leadership. The company has not named a successor yet, although a 10-person interim executive committee has been appointed to run the company in the meantime.

"We want to thank Carlos for his leadership in helping grow our relationship from just an idea into what it is today," Archer founder and CEO Adam Goldstein said in a statement. "We're excited to continue our partnership with Stellantis as we ramp manufacturing together and work toward commercialization next year. We don't expect these changes to impact what's ahead for us."

Commenting on the move, industry watcher Sergio Cecutta from SMG Consulting noted that the transition team at Stellantis includes some executives who were strong supporters of the Archer partnership. But he also cautioned that streamlining the company could have downstream effects on the commitment to Archer.

"We should not underestimate the fact that a new CEO will need to focus on pruning their automotive portfolio—too many brands at times competing with each other—and bring sales back," Cecutta says, adding that eVTOLs "could be seen as a distraction."

**FleetDiscovery**

Aircraft Insight to Grow Your Business

Fleet Discovery offers dynamic access to in-depth fleet intelligence on over 220,000 commercial and business aviation aircraft, spanning more than 170 engine and 840 aircraft types.

Learn More About Fleet Discovery  
Visit [aviationweek.com/FDintel](http://aviationweek.com/FDintel) to schedule your demo.  
Or call Melissa Crum at (913)284-2951  
[melissa.crum@aviationweek.com](mailto:melissa.crum@aviationweek.com)

**AVIATION WEEK NETWORK**



PROGRAMS

## South Korea Wraps Up L-SAM Development

CHEN CHUANREN, [chuanren.chen@informa.com](mailto:chuanren.chen@informa.com)

**The South Korean ministry of national defense (MND) said Nov. 29 that it has officially completed the 10-year development of its L-SAM anti-ballistic missile system.**

Designed in collaboration with the Agency for Defense Development, Hanwha Systems, and LIG Nex1, L-SAM forms the outer layer of a multi-tiered air defense system to protect South Korea against North Korean missile threats.

MND did not provide specifications of the missile's performance. But it said the system operates at a higher altitude than the MIM-104 Patriot PAC-3 and locally developed M-SAM II of 40 km (24.8 mi.). Reports estimate the interception range at between 60-70 km.

The mobile firing unit measures 19 m (62.3 ft.) in length, carrying six L-SAM missile tubes totaling 66 tons. The L-SAM

missile comprises three stages, including the "kill vehicle."

The MND says the kill vehicle is guided by an infrared image seeker and digital automatic control system to provide quick thrust vector in thin atmosphere. The seeker also is protected by a clamp shroud that protects the seeker from frictional heat and separates just before interception.

Serial production will begin in 2025 and be deployed by the middle of the decade.

MND said the L-SAM program's success "opens up a new horizon of missile defense capabilities." Seoul is in the process of developing the next generation L-SAM II high-altitude interceptor, M-SAM III, as well as a naval version of the L-SAM.

The L-SAM milestone comes as the Republic of Korea Navy took delivery of its first 8,200-ton KDX III Batch II Aegis destroyer Jeongo the Great. Fitted with Mk41 vertical launch system for the Standard family missiles, it is also designed with the domestic KVLS launch system to carry South Korea munitions like the K-SAAM and K-ASROC anti-submarine missile.

FUNDING & POLICY

## Toulouse's Hydrogen Technocampus At Francazal Airport Gets Green Light

THIERRY DUBOIS, [thierry.dubois@aviationweek.com](mailto:thierry.dubois@aviationweek.com)

**LYON—Following an environmental review, the French central government representative in Occitania has approved the Hydrogen Technocampus research and technology center at Toulouse Francazal airport, which will offer test facilities for ongoing and future hydrogen propulsion projects.**

Coming at a cost of €65 million (\$69 million) including buildings and equipment, the Technocampus will cover 9,000 m<sup>2</sup> (97,000 ft.<sup>2</sup>) and have a focus on aircraft propulsion in line with sustainability goals.

In addition to Airbus, two startups in Toulouse are studying hydrogen aircraft. Beyond Aero is designing a hydrogen-electric business twinjet and Blue Spirit Aero is working on a light training aircraft featuring external hydrogen propulsion pods. Safran and Liebherr Aerospace will use the new test facilities as well, the Occitania region says.

Occitania is leading the Technocampus project and partners include the INP Toulouse group of engineering schools. Four


existing laboratories will have teams on the site: the Laplace plasma and energy conversion laboratory; the Cirimat material research center; the LGC chemical process engineering laboratory; and the IMFT fluid dynamics institute. The delivery of the Technocampus site is planned in two phases, in 2025 and 2026, according to local newspaper La Depeche.

Approval for construction comes after a legal process for the project that included a public inquiry which garnered an unfavorable response in July. The principal investigator recommended that environmental approvals should not be granted to the Technocampus. While approving in principle research on hydrogen applications as a fuel, the investigator had pointed to safety issues, including the potential for fatalities when dealing with the highly combustible element. Moreover, the public had not been properly informed, the investigator said.

In his approval dated Nov. 22, the French central government representative in Occitania said a liquid hydrogen storage installation had been removed from the project, thus reducing risks. Prevention measures had been strengthened, he added. Finally, the authorization mandates the creation of a local information commission to exist for at least five years to address any concerns as they arise.

AVIATION WEEK  
**Intelligence**  
NETWORK

The Smarter, Faster Way  
to Grow Your Business



Learn More.  
[aviationweek.com/  
AWINinfo](http://aviationweek.com/AWINinfo)

**AVIATION WEEK**  
NETWORK



**Staff**

**EDITORIAL**

2121 K Street, NW, Suite 210, Washington, DC 20037  
+1-202-517-1100 [awin.aviationweek.com](http://awin.aviationweek.com)

**EDITORIAL STAFF**

**Editor in Chief** Jefferson Morris  
**Assistant Editor** Andy Savoie  
**Copy Editor** Guy Ferneyhough  
**Editorial Director** Joseph C. Anselmo  
**Executive Editor, Defense & Space** Robert Wall  
**Military Reporters** Michael Bruno, Bill Carey, Brian Everstine, Guy Norris, Tony Osborne, Steve Trimble, Graham Warwick  
**Space Reporters** Mark Carreau, Irene Klotz, Vivienne Machi, Garrett Reim  
**Associate Producers** Heidi Carcella, Donna Thomas-High

**DATA & ANALYTICS**

**Senior Director, Forecasts & Aerospace Insights** Brian Kough  
**Senior Director, Data Operations and Solutions** Terra Deskins  
**Head, Defense Markets and Data** Craig Caffrey  
**Senior Military Program Analyst** Mathew Jouppi  
**Manager, Military Fleets** Samuel Archer  
**Senior Data Engineer** Nigel Howarth  
**Senior Defense Analysts** Sonny Butterworth, Haleigh Kling, Brandon Patrick, Anna Sliwon-Stewart  
**Defense Analyst** Edy McEvoy  
**Manager, Defense Market Intelligence** Rachel Hutchinson

**SUBSCRIBER SERVICES**

Customer Service, New/Renewal Sales  
Aerospace Daily & Defense Report,  
22701 W 68th, Ste 100, Shawnee, KS 66226-9806  
Tel: +1-877-369-3706 (within the U.S.)  
Tel: +1-913-850-6930 (outside the U.S.)  
Fax: +1-800-455-3145  
Email: [tech\\_assistance@aviationweek.com](mailto:tech_assistance@aviationweek.com)

**INTELLIGENCE AND DATA SERVICES**

**Senior VP, Intelligence, Data and Media** Anne McMahon  
Tel: +1-646-469-1564, [anne.mcmahon@aviationweek.com](mailto:anne.mcmahon@aviationweek.com)  
**Senior Director, Intelligence and Data** Matt Holdreith  
Tel: +1-917-703-0920, [matt.holdreith@aviationweek.com](mailto:matt.holdreith@aviationweek.com)

Discounted rates for multiple users and enterprise access available. Custom packages and additional services available including Intelligence/Research, Fleet Data, Forecasts.

**ADVERTISING & USER ENGAGEMENT**

**Marketing Director** Melissa Crum  
Tel: +1-913-284-2951, [melissa.crum@aviationweek.com](mailto:melissa.crum@aviationweek.com)  
**Senior Director, NA Media** Rob Howlett

**REPRINTS**

Wright's Media  
Tel: 1-877-652-5295 (within U.S.)  
Tel: 1-281-419-5725 (outside U.S.)  
[informa@wrightsmedia.com](mailto:informa@wrightsmedia.com)

Published daily except Saturdays, Sundays and holidays by Aviation Week, 2121 K Street, NW, Suite 210, Washington, DC 20037. (ISSN No. 0193-4597).  
Gregory Hamilton President, Aviation Week.

COPYRIGHT © 2024 by Informa Markets, a trading division of Informa, PLC. All rights reserved. None of the content of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means (electronic, mechanical, photocopying, recording or otherwise) without the prior written permission of the publisher. Available in online and email editions.

Vol. 290 • No. 45



an informa business



**FUNDING & POLICY**

## India Approves Su-30 EW Upgrade, Helicopter Funding

ROBERT WALL, [robert.wall@aviationweek.com](mailto:robert.wall@aviationweek.com)

**The Indian government has given the green light to buy new electronic-warfare equipment for the country's Sukhoi Su-30MKI fighters and Coast Guard helicopters.**

The Su-30 funding will buy self-protection pods, next-generation radar-warning receivers and other related equipment, the Indian Defense Acquisition Council said in a Dec. 3 statement. "This system will enhance the operational capabilities of the Su-30 MKI and protect it from enemy radars and related weapon systems while carrying out a mission against enemy targets protected by air-defense systems," the council noted.

The government also authorized funding for engines for the Sukhoi fighters.

The council also said it approved funding for six Dhruv Advanced Light Helicopters for the Coast Guard to bolster the service's ability to carry out surveillance.

The acquisitions are part of a financing package that also provides money for tanks and naval vessels.

**PROGRAMS**

## Heart X1 Electric Demonstrator To Fly At Upstate New York Airport In 2025

THIERRY DUBOIS, [thierry.dubois@aviationweek.com](mailto:thierry.dubois@aviationweek.com)

**LYON—Heart Aerospace, a Swedish start-up company developing the hybrid-electric ES-30 regional passenger aircraft, has announced that its all-electric X1 demonstrator will make its first flight at Plattsburgh International Airport in upstate New York in 2025.**

With its 32-m (105 ft.) wingspan, the Heart X1 will be representative in size of the ES-30, designed to carry 30 passengers. While the ES-30 is planned to offer a 200 km (108 nm) range in battery-electric mode and 400 km with thermal engines as range extenders, the X1 will be powered by electric motors only. The X1 will validate the capabilities of Heart's innovative electric propulsion technology, the company said.

The choice of Plattsburgh is a step toward materializing Heart's pledge in September, when it said it would ship the X1 to the U.S. and fly it within the next six months from an airport still to be determined. Heart is focused on a 30-seat regional aircraft now, after it abandoned the company's initial mission of a fully electric 19-seater. Heart hopes the larger aircraft will have greater market appeal and will make the company sustainably profitable.

"Electric commercial airplanes have the potential to lower operating costs for U.S. airlines, creating a powerful opportunity to reestablish regional air routes that stimulate local economies, boost tourism and enhance access to urban hubs," said Heart Aerospace's co-founder and CEO Anders Forslund. "We're impressed by the leadership shown by New York's North Country region in the support of next-generation airplanes." Plattsburgh airport also hosts Beta Technologies, which has test facilities for its Alia electric conventional- and vertical-takeoff vehicles. Another of Heart's criteria in choosing Plattsburgh was low air traffic density.

The Heart X1, unveiled in September, is undergoing ground testing at Save Airport near Gothenburg, Sweden. The company plans to bring it to Plattsburgh early in 2025 and fly that same year. In September, the inaugural sortie was more precisely scheduled for the second quarter. The follow-on X2 will be operated in hybrid mode. Heart envisions entry into service in 2029.





BUSINESS

## Babcock, KAI Team Up On European Flight Training Opportunity

TONY OSBORNE, [tony.osborne@aviationweek.com](mailto:tony.osborne@aviationweek.com)

**LONDON—British defense company Babcock is working with Korea Aerospace Industries (KAI) to explore whether the two can partner on military flying training in Europe.**

A memorandum of understanding announced by Babcock on Nov. 29 is one of several agreements the London-based company signed with South Korean industrials, including shipbuilder Hanwha Ocean.

Babcock's arrangement with KAI will "explore military flying training, air base support and engineering opportunities targeted in Central, Eastern and Southern Europe," potentially opening up export opportunities for KAI's T-50 and KT-1 trainers.

Babcock is one of the partners in the Ascent Flight Training joint venture with Lockheed Martin, which runs the Military

Flying Training System (UKMFTS). Babcock also provides the Mentor1 flight training service for the French Air Force.

KAI has ambitions to sell more T-50s into Europe and sees market opportunities to replace aging training aircraft service with European air forces. In recent days, the UK Royal Air Force chief has said he would like to replace the BAE Systems Hawk T2. There are also expectations that France will need a new generation of jet trainers ahead of the introduction of a crewed fighter that will form the Future Combat Air System. At present, French fighter pilots transition directly from the PC-21 to the Dassault Rafale.

Babcock said the partnership with KAI would "bring together Babcock and KAI's military aviation experience."

"These agreements will help to grow these exciting strategic partnerships, leveraging our respective capabilities to pursue global prospects and to deliver impactful results for our customers," Babcock CEO David Lockwood said.

PROGRAMS

## Embraer Tightens Relations With Dutch Industry After C-390 Purchase

TONY OSBORNE, [tony.osborne@aviationweek.com](mailto:tony.osborne@aviationweek.com)

**Embraer has signed agreements with Dutch companies to support the country's acquisition of C-390 Millennium airlifters.**

The Brazilian company says it is enhancing its presence in the Netherlands through arrangements with the Fokker Services Group, the Royal Netherlands Aerospace Center (NLR), Multisim and Rheinmetall.

Fokker Services is expected to deliver an extended modification package for the aircraft including turnkey engineering, certification and modification services, Embraer announced on Nov. 21. The modifications are designed to prepare the C-390s for use in

military and humanitarian missions.

The agreement with NLR is designed to support development of technologies for aircraft maintenance, while Multisim will support virtual training system development in conjunction with Rheinmetall. Dutch suppliers have also been selected to provide components for the C-390's full-mission simulator that the Netherlands will acquire.

"Our collaboration with the Dutch Armed Forces, defense industry and research organizations is an integral part of Embraer's vision that aims to build fruitful relationships with quality partners," said Bosco Da Costa Jr., president and CEO of Embraer Defense and Security. The Netherlands is acquiring the five C-390s for its air force and helping to support the Austrian Air Force's procurement of four aircraft.

### MROProspector

**Aftermarket Opportunities at Your Fingertips**

The only solution dedicated to commercial aftermarket professionals, MRO Prospector contains accurate and reliable MRO data and intelligence so you can find new opportunities.



Data on thousands of contracts covering 37,000 aircraft and 60,000 engines.



Discover maintenance opportunities, including component repairs by ATA Chapter.



Research operator's fleets by tail number, including age, hours, cycles and lease status.

Visit [aviationweek.com/MROP](http://aviationweek.com/MROP) to schedule your demo.

Or call:  
Melissa Crum (913) 284-2951  
[melissa.crum@aviationweek.com](mailto:melissa.crum@aviationweek.com)



## BUSINESS

## Vertical CEO Spells Out Fundraising Plans Following Mudrick Deal

BEN GOLDSTEIN, [ben.goldstein@aviationweek.com](mailto:ben.goldstein@aviationweek.com)

**For the better part of two years now, Vertical Aerospace has grappled with a chronic funding shortfall that plummeted its stock price as investors fretted over the company's narrow cash runway.**

Vertical's near-term funding concerns were resolved on Nov. 25, when existing shareholder and self-described distressed-asset investor Mudrick Capital agreed to invest up to \$50 million into the company, extending its liquidity runway through the end of 2025.

But beyond the immediate cash infusion, the deal's greater significance centers around a provision that converts half of Mudrick's debt notes into equity. Valued at roughly \$130 million, the shares will convert at a price of \$2.75, while the other remaining \$130 million in debt notes will convert at \$3.50, with maturity for the second tranche extended through December 2028.

Having removed the uncertainty around the conversion rate—which had effectively dashed any hopes for substantial fundraising for the past several years—the company now feels confident to aggressively pursue capital raises in 2025, explains Stuart Simpson, Vertical's CEO.

Simpson says the company has big fundraising plans next year, including a capital raise in the first quarter, a capital markets day in the second quarter, and further raises in the back half of the year. The company had \$57 million in cash and cash equivalents as of Sept. 30; prior to the recently announced Mudrick deal, management said it needed \$78 million in new funding to get through 2025.

"Before this deal, we couldn't go out and raise funds because this \$260 million [in convertible notes] was not priced," Simpson tells Aviation Week. "If it was priced at \$10 per share, [Mudrick founder Jason Mudrick] would get 26 million shares, but if it was \$1 per share, then he would get 260 million shares. I've met with investors, banks, suppliers and customers—none of them would invest as long as those convertible notes were hanging over the company."

"Now having cleared that up and fixed the balance sheet, I'm in a position where I can credibly go to the financial markets and tell Vertical's story, which we really have not done since the SPAC [special purpose acquisition company in 2021]," Simpson adds. "We've been an underdog; no one was talking about us in the discussion with Archer and Joby. But now, we've got a plan and we've got a balance sheet. We're going to be out on the

front foot raising money constantly, and keeping that flywheel going on the back of technical progress and certification programs."

The deal with Mudrick had been in the works for the better part of a year, according to Simpson, who said the ongoing negotiations were the reason why Vertical founder and Chairman Stephen Fitzpatrick held off on investing a \$25 million funding tranche that he committed to earlier this year. The transaction with Mudrick will allow the founder to go ahead with that payment, Simpson says, although it is not clear whether he will.

Following conversion of the notes, Mudrick will control roughly 70% of Vertical's ordinary voting shares, while Fitzpatrick's stake has been reduced from 70% to 20%. As a result, Jason Mudrick was made a director on the board, while Fitzpatrick has lost his veto power. But despite the appearance of acrimony between the two shareholders in recent regulatory filings, Simpson insists that Fitzpatrick and Mudrick are aligned on strategy and vision, and he does not expect any change in direction as a result of the ownership change.

"You never want these things to play out in public, but we are a public company, and people do things as a way of getting a bit of leverage and energy going," Simpson says. "But behind the scenes, Jason and Stephen are joined at the hip and want to work together ... They actually make a great team, because Stephen has that entrepreneurial drive and vision, while Jason brings this amazing track record and knowledge of financial markets in the U.S."

With a resolution now to its immediate funding needs, Simpson says Vertical is ready for a strategic "reset" to share its vision with the investment community. Toward that end, the company unveiled its Flightpath 2030 strategic plan in early November, spelling out an aggressive set of goals related to production, deliveries and profitability. Alongside the strategic plan, the company also pushed out its planned certification target from 2026 to 2028, a timeline that Simpson describes as "more realistic."

In the meantime, Simpson says the company's priorities for the coming year are fundraising, continuing to expand the flight envelope of its piloted VX4 prototype, and pushing forward on its certification plans.

"This is the relaunch of Vertical Aerospace," Simpson says. "We've been hidden away too long, written off as underdogs, left out of the discussion. We've got a lot going for us—a brilliant team, a great product and a lean and efficient business model with huge barriers to entry. Now, we're finally ready to go out and tell our story."



**From:** [White House Press Office](#)  
**To:** [Warner, Cheryl {she, her} \(HQ-NA020\)](#)  
**Subject:** [EXTERNAL] [BULK] Remarks by APNSA Jake Sullivan on Fortifying the U.S. Defense Industrial Base  
**Date:** Thursday, December 5, 2024 10:27:54 PM

---

The White House Logo



**FOR IMMEDIATE RELEASE**

NATIONAL SECURITY COUNCIL

REMARKS BY NATIONAL SECURITY ADVISOR JAKE SULLIVAN  
ON FORTIFYING THE U.S. DEFENSE INDUSTRIAL BASE

Center for Strategic and International Studies  
Washington, D.C.

(December 4, 2024)

MR. SULLIVAN: Well, good afternoon. And thank you, John. It's a pleasure for me to be here, and it's a pleasure for me to come talk about what is, yes, a technical topic, but also a deeply strategic topic for the future of U.S. defense and deterrence and for the future of American statecraft.

Earlier this week, President Biden signed his 71st security assistance package for Ukraine. It was the latest step in a massive effort, on a scale not seen since the Second World War, to equip a partner with the military capability it needs to defend its sovereignty, independence, and territorial integrity against a brutal invasion by a larger neighbor.

And in the process of providing that support, we have also modernized our own arsenal. With every package, the Department of Defense provides Ukraine older equipment it has on the shelf, and then uses congressionally appropriated funding to purchase new, more modern equipment for our own stockpiles. This approach has enabled Ukraine to stand up against an adversary with an economy 10 times larger, a population three times bigger, and a military once ranked the second best in the world.

But at no stage was this historic undertaking a sure thing. In fact, in a matter of eight weeks of war in 2022, Ukraine burned through a year's worth of U.S. 155-millimeter artillery production.

I hold a daily meeting on Russia and Ukraine in my office at the White House, and in those early months, in those daily meetings, we reviewed Ukraine's run rate in excruciating detail, and we confronted a startling reality: The American arsenal of democracy was fundamentally underequipped for the task at hand. So, President Biden issued a straightforward order: Exponentially ramp up the production of 155-millimeter artillery munitions. It turned out, executing on that was not so straightforward.

At a stretch, we could only immediately add about 400 rounds on top of the 14,000 rounds we produced each month, enough for Ukraine to defend itself for a few extra hours. Our industrial capacity simply wasn't there. We lacked supplies of critical precursor materials. We had to dig ourselves out of a deep hole.

Now, to offset their early munition shortage, Ukraine began to leverage drones and autonomous systems. And this is the second part of the story, one that continues to evolve today on the frontlines. They used off-the-shelf technology and cheap, mass-produced platforms to rapidly build an army of drones.

But even as Ukraine demonstrated success on the battlefield with these new systems, we were behind the curve in innovating, acquiring, and fielding those types of systems ourselves, and that was just the tip of the iceberg. The deeper we looked, the clearer it became that we needed larger stocks of many critical munitions and weapons platforms, both to maintain U.S. readiness and to equip a partner under attack.

Now, the men and women of our national security and defense communities are extraordinary, and they can pull rabbits out of hats. I've seen it done. But decades of under-investment and consolidation had seriously eroded our defense industrial base, and there was no way around it.

Now, in some respects, we had recognized this challenge from the moment we entered office, and in fact, we started taking steps to fix it in the President's very first budget request. But Russia's war against Ukraine sharpened the stakes and clarified the scope of the challenge. It was a strategic warning.

America's defense industrial base, the one we inherited, was not up to the task that we face in a new age of strategic competition, including how we have to prepare for and deter future conflicts in Europe, the Middle East, and the Indo-Pacific.

So we had to act, and we did act. We did so thanks to the President's clear direction, the able leadership of Secretary Austin and Deputy Secretary Hicks, and strong bipartisan congressional support.

By the time we leave office, our defense industrial base will be producing 55,000 155-millimeter artillery rounds per month, almost a 400 percent increase, and we've put it on track to double again, reaching 100,000 per month by early 2026.

But this effort extends way beyond 155-millimeter ammunition rounds. As we've drawn down our older stockpiles to support Ukraine of other weapons, we've invested in new weapons and platforms to replace them. Industry has responded and reoriented to meet our demand signal. New production lines have opened and increased output. We're now building more javelins in Alabama and Arizona; tanks in Ohio; armored vehicles in Michigan, Pennsylvania, and Wisconsin; HIMARS in Arkansas; rockets in West Virginia. And our investments, all told, reach dozens of states.

We've galvanized defense industries, commercial companies, startups, and venture capital firms to focus increasingly on developing low-cost, uncrewed systems for our allies, and countering those of our adversaries and competitors.

The story also extends well beyond Ukraine, from our efforts to revitalize the submarine industrial base to a groundbreaking initiative with Canada and Finland to spur the production of polar icebreakers.

All told, the Biden administration has made major investments across four defense budgets and multiple supplemental funding bills to strengthen the U.S. defense industrial base, devoting almost \$1.3 trillion to the research, development, and acquisition of capabilities that is driving production and driving industrial capacity.

In real dollars spent, this is more than the United States investment in procurement and R&D in any four-year period throughout the entire Cold War.

But this challenge is not one that can be met in a single term in office. There is still so much work to do. This has to be a generational project.

So, today I want to do two things. First, I want to share the steps that we've taken to modernize, invigorate, and expand our defense industrial base. And then, second, I want to offer a roadmap for the next Congress and the next administration to carry

this work forward on a bipartisan basis.

But let me provide a little bit of context.

Over the past several years, we've seen a tectonic shift in the global landscape. We've seen the rise of a peer competitor in the PRC. We've seen patterns of cooperation deepen between the PRC, Russia, North Korea, and Iran. We've seen the proliferation of low-cost lethal technologies to a number of state and non-state actors across multiple continents.

Against this backdrop, a strong defense industrial base is essential to effective statecraft. This means not just more investment, but smarter investment, production, innovation, and integration with allies.

A stronger defense industrial base is necessary for us to deter military aggression against NATO or our Indo-Pacific allies and partners. It's necessary for us to equip our partners when they come under attack. It's necessary for us to respond to threats to the global commons, including freedom of navigation. And it's necessary to strengthen our hand at the negotiating table as we pursue diplomacy to end conflicts like we recently have done with the war that raged across the border between Israel and Lebanon.

In the Cold War era, our DIB was formidable, but it took a long time to build up. We understood then, almost intuitively, that our production capacity was central to our military capability and, therefore, to our deterrence. When the Iron Curtain fell, we turned the page. In the decades that followed, we enjoyed a brief moment without a peer competitor to pace us, and our defense enterprise atrophied.

In part due to the urging from the government, mergers collapsed significant defense companies into each other, from 50 to the five major prime contractors that we have today. Factories closed. Production lines shut down. Our skilled workforce declined. The number of defense suppliers shrank. And many of our supply lines migrated overseas.

Now, I'm not suggesting we need to retool for a new Cold War, but we once again face a dangerous, complex, and contested global landscape. Our adversaries and competitors are taking more risks, and importantly, they're working together to strengthen each other's defense capacity.

So, today, once again, we need to heed the maxim that industrial might is deterrence. Given the DIB we inherited, our task has been to reverse years of decline while simultaneously increasing agility, innovation, and integration.

So we've made three big pushes to try to strengthen our defense industrial base:

First, as I've described, by boosting production of munitions and weapons platforms and creating the infrastructure to sustain that boost in production. This has meant new factories, new lines, accelerated delivery times on the weapons and munitions we need most.

The Department of Defense released its first-ever National Defense Industrial Strategy. We're strengthening supply chain resilience and increasing stockpiles of key inputs, like the solid rocket motors that power our most advanced missiles. We've made notable progress on our air defenses, another critical component of our global defense architecture, which is in high and increasing demand across Europe, the Middle East, and the Pacific.

Germany, the Netherlands, Romania, and Spain are working together to procure almost \$6 billion worth of Patriot missiles that are now being produced through a joint venture between a U.S. and German company.

At the same time, we're working to expand joint production deals with Japan to strengthen our air defense umbrella in the Indo-Pacific.

On long-range fires, another essential element of deterrence in the modern era, we've made big strides towards modernization. We're investing heavily in the next generation of ground attack missiles, what we call PrSM, to rapidly increase production capacity.

We're taking similar steps to expand production of several kinds of anti-ship missiles across a variety of ranges.

And we've made significant investments across the American shipbuilding supply chain -- that entire supply chain. The challenge there on shipbuilding has been especially immense. We've sought to recover from an erosion that actually traces its decline to decades of erosion in the overall American manufacturing base.

Over the last 40 years, in the submarine industrial base alone, five shipyards closed, the workforce shrank, suppliers left the market. Our approach to production was built on post-Cold War assumptions about a global security environment and just-in-time supply chains that, frankly, have not borne out.

To give you a sense of the scale of the problem, we need an additional 140,000 more skilled workers -- 140,000 -- machinists, welders, pipe fitters, electricians -- than we currently have to meet submarine production demand over the next 10 years.

Now, we can't fix four decades of challenges in four years, but we have surged to invest in our submarine industrial base. With billions of dollars in new funding, we're developing new suppliers across more than 30 states to reduce bottlenecks, expand the use of robotics and additive manufacturing, and upgrade and expand



shipyards.

These investments will leave the submarine industrial base in a stronger position, but frankly, more is needed. And so, we're seeking more funds from Congress, especially for more manufacturing technology, for more infrastructure improvements, and for wage increases to ensure we can retain the workers we have while we work to hire thousands more.

The second big push we've made is to try to leverage and unleash the potential of innovative technologies and the power and speed of our commercial sector.

On the battlefield in Ukraine, we're seeing the character of war evolve before our eyes as Ukraine pairs artificial intelligence with low-cost drones to create powerful and cheap alternatives to precision-guided munitions.

Ukraine's missile and drone manufacturers are among the most innovative on the planet, a product of both necessity and Ukrainian resolve and ingenuity. They bring groundbreaking, state-of-the-art capabilities to the fight at costs that are an order of magnitude lower than our traditional munitions.

By facilitating collaboration between American and Ukrainian industry, we're ensuring that our own companies are pioneering new technologies to complement our more exquisite capabilities. Our firms are learning what technologies work best and how to use them and iterate them during conflict.

We're creating a feedback loop that prizes and enshrines innovation. And that way, the American military can get to and remain on the cutting edge of these new forms of warfighting technology.

Here at home, the Department of Defense's Replicator initiative is just one example of how we're trying to adapt more institutionally to the future character of warfare. Through Replicator, DOD is procuring and fielding ~~attributable~~ [attributable] autonomous capabilities at speed and scale -- thousands of systems across air, land, and sea -- in less than 24 months.

And we're establishing the processes to be able to adopt and scale new technologies as needed in the future, including from non-traditional defense companies and from the commercial sector, because we need to keep pushing the envelope in terms of speed and scale.

Recognizing the power of responsible AI to transform the way militaries fight, we released our first-ever National Security Memorandum on Artificial Intelligence. It provides a blueprint for harnessing the power and managing the risks of AI to advance our national security.

Now, all this we're doing at home, but we recognize that we can't and shouldn't do this alone. As strategic competition intensifies, as the global environment becomes more contested, we have to take bold steps in concert with our allies and partners to integrate and strengthen deterrence across the major theaters of the Indo-Pacific, Europe, and the Middle East.

And that leads to the third big push we've been making: laying the foundation to build an integrated defense industrial base for the free world.

In the first year of our administration, we launched one of the most ambitious defense projects in modern history, the trilateral security partnership, AUKUS. Under AUKUS, we joined forces with the UK and Australia to support Australia's acquisition of a conventionally armed, nuclear-powered submarine capability in ways that will strengthen our collective submarine industrial bases.

And we're creating opportunities for innovation and collaboration through AUKUS on cutting-edge technologies in advanced cyber, undersea capabilities, electronic warfare, quantum, AI, and hypersonics.

Just this year, we held trilateral exercises in Australia, with Japan in attendance, conducting tests on the collective use of autonomous and uncrewed systems in maritime operations.

And this push for an integrated DIB for the free world extends way beyond AUKUS. Over the past four years, we've ramped up efforts to expand and accelerate what we call global defense production, a catch-all term for co-development, co-production, and co-sustainment of platforms and munitions with allies and partners.

Similarly, we've worked with our NATO Allies to follow our example and overhaul their defense industrial bases. And this was a major line of effort and set of outcomes at the NATO Summit President Biden hosted here in Washington for the 75th anniversary of NATO this summer.

As part of this effort, we've had to rethink our strategic technology controls to account for today's realities. The fact is our non-proliferation and export control regimes, especially when it comes to allies, were formulated in a different era. The risks were different. The nature of technology diffusion was different. These outdated restrictions have actually caused us to withhold critical technologies from close partners and close allies. And without a significant change in the way we do business, our friends could be left behind as our adversaries march forward with deeper technology-sharing among themselves. So we can't let that happen.

Through AUKUS, we began the hard work of driving major reforms in our export control regime to strengthen cooperation with Australia and the UK.

And now, our team is finalizing a National Security Memorandum on Missile Technology Exports to modernize our implementation of the MTCR, the Missile Technology Control Regime.

We will renew our commitment to a strong non-proliferation regime to keep these technologies out of the hands of bad actors, but we will also add flexibility to transfer this technology to certain partners with strong export control systems. That means we can now boost our friends' production of advanced missiles to increase the global availability and interoperability of long-range and precision-guided munitions that can strengthen our collective deterrence.

And this cooperation with our allies and partners enhances not just our national security but, frankly, our joint economic prosperity. We're creating jobs for American workers, opening new markets for American businesses, all while reaping the clear national security benefits of this work.

Those are the three big pushes, and we've made progress over the last four years. But frankly, we need progress over the next 40. We need a roadmap for the future that builds on what we've done, because there is still a lot left to do. I'm not here to report that the job is finished. I'm here to report the job has started, and now it needs to continue in a big and sustained and bipartisan way.

Now, there will be important debates over the size of the defense budget in the new administration and the new Congress. Wherever the defense topline lands, I see at least four critical pieces of work that demand the sustained effort of the next administration, the next Congress, the armed forces, and industry all working in common purpose.

First, and most fundamentally, we've got to keep ramping up and accelerating production and procurement of the things that we need most. This includes long-range critical munitions, vital air defense capabilities, and attritable and autonomous systems that are shaping the future of warfare. Because no budget will be unlimited, this is going to require that we make hard trade-offs, prioritizing these key capabilities in particular.

The bottom line here is that we've got to keep growing our magazine depth. Future conflicts are going to consume munitions and equipment at a rate we have not seen in a very long time. That means stockpiling both the vital munitions we know we'll need in sufficient quantities and the components needed to produce them on short notice.

We actually asked Congress for a critical munitions acquisition fund that would have guaranteed an ongoing demand signal to industry and enabled us to stockpile munitions that are in high demand, both at home and among our partners.

Despite bipartisan support for that fund, Congress didn't ultimately come through with the appropriation. I urge Congress to work with the next administration to get this done.

When it comes to funding our defense needs, we also need Congress to return to regular order. The practice of relying on continuing resolutions to equip our forces creates uncertainty and instability for both DOD and the industries we rely on.

Pentagon leaders, and leaders from both parties across multiple administrations, have continually raised the alarm about this. On a bipartisan basis, Congress should fund the defense enterprise -- and, frankly, the rest of the U.S. government -- responsibly and on time.

And we also need industry to do its part to grow our magazine depth, by moving beyond the current cycle in which they hedge against uncertainty and do just enough to meet current demand, even when DOD is prepared to sign multiyear contracts.

This calls for a new era of public-private partnership to build and sustain more commercial facilities, to maintain warm production lines, and to invest in a long-term effort to shore up our DIB workforce so that we have surge capacity when we need it.

And while we're doing that, we need to expand the shipyards, the armories, and the plants owned by DOD as well, to make our defense industrial base more resilient.

Second, we need to accelerate major acquisition reform at DOD to prize innovation agility and to encourage a degree of risk taking. This requires rethinking our requirements process to ensure that even tech companies outside the traditional defense orbit can understand and provide what DOD needs. It requires adapting our system to allow flexibility for innovation mid-cycle in the development of a new system or platform.

We also need to make it even easier for the defense enterprise to absorb more technological solutions from the commercial sector, and to do so quickly and at scale.

Today, collaboration among DOD, Silicon Valley, and America's wider innovation ecosystem is better than it's been in decades. And that's been met with significant bipartisan funding and support from Congress. We've got to keep up this virtuous cycle.

Two years ago, Congress created a bipartisan commission that examined ways to improve the Pentagon's six-decade-old process for how it plans budgets and spends. They put forward dozens of smart recommendations that DOD is already in the process of implementing. But to really make that report work, we need new authorities from Congress too. The critical munitions acquisition fund is one example of that. Providing DOD with department-wide

resources that can be used to meet emergent requirements is another.

Third, we have to institutionalize the work we're doing, in concert with our allies and partners, to integrate our defense industrial bases.

Working together boosts our collective readiness. It allows us to dramatically expand our total production. It creates resilience in our supply chains and manufacturing bases. And most importantly, it strengthens deterrence as our adversaries learn that they will have to deal with the combined industrial might and fighting capacity of the U.S. and our allies and partners around the world.

And finally, we can produce all the military hardware in the world, but it will mean nothing without our people, the talented men and women of the joint force. They are the ones who ensure the equipment we buy translates into the capability we need. They underwrite our deterrence and security, and we have to continue to invest in them and ensure that we're recruiting and retaining the talent and leadership that we rely on to field the best military in the world, the best military in history.

Now, none of this will be easy. We don't know what the future holds. But we do know that the best way to preserve peace and protect American interests is to maintain a force that is strong enough to deter a future conflict. That has been at the front of the President's mind for nearly four years, and it will have to remain so for the next administration as well.

We've laid the foundation to renew our great arsenal of democracy, but the work will have to continue to ensure we have the munitions and capabilities we need to navigate a myriad of contingencies. After all, history teaches us that the adversary rarely chooses to start the war that we are most prepared for, but it also teaches us that when we galvanize the collective power of American national security and defense communities, American workers, American businesses, and American ingenuity, we will prevail.

Thank you for listening to me on what can be a dense subject but I believe a subject of profound consequence for hearing now both on what we have done and what we need to do. And I look forward to taking a few questions. Thank you very much. (Applause.)

MR. JONES: Thank you. And for those who have not read the FDR speech on the arsenal of democracy, it is well worth going back and rereading that from the early days of World War Two.

Thanks for coming to CSIS. I wanted to start, actually, not with our industrial base -- defense industrial base, but with the Chinese defense industrial base. Part of the need, I think, for a strong industrial base is that we have adversaries that are building their own.

So I wonder if you could start off with your sense of where the Chinese are at on their defense industrial base. What is of particular concern? Where do you see vulnerabilities? The new DOD report on China also highlights major corruption within the Chinese industrial base. So how would you characterize the industrial base? And what's the significance, then, as we look at continuing to build ours?

MR. SULLIVAN: So, first, China has been growing its defense budget year on year, closing the gap in terms of their outlays and ours. Second, because they have a state-directed system with state-owned enterprises working hand in glove with the PLA, with their military, they're able to direct production and expand production at rates much more rapidly than we historically have been able to.

And they've also increased their innovation capacity, going beyond merely stealing technology, and then copying it, to developing new systems.

So I think we have to take the overall industrial base capacity of China very seriously, and it is a key factor in the way that we think about what we've got to tool up to do ourselves and along with our allies and partners.

At the same time, I think that there are three areas where the U.S. has inherent advantages. One of them is: The same state-owned enterprises that are able to very rapidly send the demand signal and generate the production of key munitions and weapons platforms, they're also -- they can put brakes on or limits around innovation.

And so we continue, I believe, to have an edge. And watching how Ukraine in particular has dealt with this uncrewed, autonomous system issue, this is something that the U.S. is uniquely capable of being able to iterate, evolve, adapt over time, and that's an advantage of ours that we need to continue to nurture.

Second is this corruption problem you described. I think it is -- the reports that you're referring to and other public reporting on this has shown that throughout the entire PLA, you have major problems of corruption in terms of the acquisition, the testing, and the reporting on the defense capabilities that they have, which raise real questions about whether there's a gap between reality and advertisement.

And then, the third goes to the issue of workforce and people, both the people operating the systems and the people building the systems. And the United States has always had a huge advantage when it comes to people. Now, we have a shortage of them, but the ones we have are the best in the world and the most tested in the world, because they've had to go through building the systems, having them end up in conflict, and then learning lessons from them, adapting them, and so forth. The PLA really hasn't, and the

entire Chinese defense industrial base really hasn't had to do that.

So we've got to double down on our advantages. And where they have the single biggest advantage, the sheer scope and scale of production, we have to close the gap in the ways that I describe by increasing our magazine depth.

The final point I'll make is that God forbid we end up in a full-scale war with the PRC, but any war with a country like the PRC, a military like the PRC, is going to involve the exhaustion of munition stockpiles very rapidly. So, a big part of the answer to a healthy defense industrial base over time is the ability to regenerate, to surge, to build during a conflict, not just to build before to prepare for a conflict. And that's got to be a key lesson that we take away from what we've seen over the last three years on the battlefield in Ukraine.

MR. JONES: So, one follow-up on this. Your sense and level of concern as we've seen greater integration or coordination of the industrial bases of the North Koreans, the Iranians, the Russians, and the Chinese. What does that say about cooperation between them and their industrial bases? And what's the implication then for us?

MR. SULLIVAN: I'm glad you mention that. And when you asked the question, I made a mental note in my head to get to that point, because it's a critical point. I didn't do so, although I spoke about it in my remarks.

We are seeing concerning flows of capability and know-how among these various actors. You've got Iranian drones going to Russia; now Russia is indigenizing that capability. You've got North Korean munitions going to Russia, and in return, Russia is sending back know-how and capacity in some of the more high-end capabilities that North Korea is trying to develop. Going both ways between Russia and the PRC, you see both dual-use capacity going from the PRC to Russia that is helping fuel Russia's war machine, and Russia is reciprocating by providing certain types of technological capabilities to China that they've been behind on.

So this is something that is going to be a feature of the landscape as we go forward, and it means we're going to have to get better ourselves, and we're going to have to get more integrated with our allies and partners so that our collective industrial might exceeds that of our competitors and adversaries. And then we are also going to have to look for ways, through sanctions, export controls, and other restrictive measures, to try to put a drag on or reduce or restrict or disrupt that flow that I just described among these actors.

But this is a feature of the modern landscape that, in my view, only reinforces the various calls to action that I made in my remarks today.



MR. JONES: One of the issues that you mentioned in your remarks is on the subject of munition stockpiles. And if you look at some of the war games that have happened, whether it's here at CSIS or some of the ones that have happened within the Pentagon, one of the things that's interesting with current stockpiles is that with, say, some of our long-range anti-ship missiles, LRASMs, or our extended-range JASSMs, we run out pretty quickly in a conflict.

So, two questions along those lines. And again, you mentioned this a little bit earlier, but how serious of an issue is this? How are you thinking about addressing and dealing with addressing it? And, you know, along the latter lines too, how does this impact deterrence if we're not effectively able to increase those stockpiles?

MR. SULLIVAN: This is, I think, a significant learning experience for all of us. And, by the way, that goes for the U.S., our friends, and our adversaries, out of what we've seen unfold in the course of the war against Ukraine.

First, it means that we need deeper magazine depth now, which means accelerating and ramping production and trying to reduce what are, kind of, eye-poppingly long timelines to generate what you and I might not think are a huge number of these high-end systems, LRASMs or JASSMs or what have you, or PrSM, for that matter, which I referred to in my remarks. So we've got to build the stockpile, build the magazine depth.

Second, and the point I made just a minute ago, we have to have the production lines and the skilled workforce ready for surge capacity so that, in a conflict situation, we've got a warm, kind of turn-key ability to dramatically increase production on demand.

I started my speech by talking about our desire to do that with 155-millimeter artillery production. On demand was another 400 rounds a month. I mean, we didn't have it. So part of the defense industrial base has to build that.

Third, we have to recognize, as the Ukrainians did, that we're also going to need substitutes for the highest and most exquisite capabilities, and those substitutes will be cheaper autonomous systems that just come in much greater scale, quantity that can actually be, to a certain extent, a fill-in for delivering effects, battlefield effects that aren't identical to what an LRASM could deliver, but at sufficient quantity can help sustain the fight even as you're drawing down your magazine depth.

Fourth, we have to think not just about the most high-end, most exquisite capabilities. We also have to think about cheap, attritable stuff; more dumb munitions, frankly, as part of any conflict going forward; and get out of a mindset that says everything has to be the most whiz-bang thing ever.

And then the final point that I would make is that another key lesson from Ukraine is the EW environment, the electronic warfare environment in which all of this is happening, and the way in which this is a very dynamic, iterative game where defense gets better, then offense adjusts to overwhelm it, then defense gets better.

And so, the other thing we have to think about across all of the four lines I just described -- stockpile, surging, attritable systems, dumb munitions -- we have to think about how are we building a feedback loop so that everything we built doesn't get neutralized, we actually can adapt it to overcome whatever defenses that we happen to be up against. That has been another critical lesson from Ukraine.

MR. JONES: Yeah, it was interesting, my last trip a few months ago to Ukraine. As several folks in Zelenskyy's office were briefing on the speed with which the battlefield was rapidly evolving on the electronic warfare, the UAV -- counter-UAV dimension, just the speed with which things were changing was dramatic, and, you know, the need to be very adaptive in how to respond.

One of the issues you mentioned in your talk was the submarine industrial base. We had -- a couple of months ago, we had Mike Waltz and Senator Kelly; it was a bipartisan discussion on the maritime industrial base. And one of the issues that they have highlighted, and others have as well, is more broadly shipbuilding.

So I want to read you just briefly the bipartisan congressional report, just one sentence from it, sort of the topline conclusions: "Decades of neglect by the U.S. government and private industry had weakened our shipbuilding capacity and maritime workforce, contributing to a declining U.S. flag-shipping fleet to bring American goods to market and support the U.S. military during wartime."

There have been other assessments. The U.S. Office of Naval Intelligence, unclassified assessment: The Chinese have 230 times the shipbuilding capacity of the United States. That's one assessment. That's not how much they're producing; that's a capacity issue.

So where do we stand on the broader shipbuilding side, not just the submarine base? And where do we have to go?

MR. SULLIVAN: Well, first, just diagnosing the problem, a big part of the problem is a skilled workforce issue, where we've just lost a skilled workforce in shipbuilding that we need to rebuild, and this administration has put a series of initiatives in place to begin to build that back.

Second, we have a huge supply chain problem. Suppliers of the necessary components for ships have disappeared from the United

States, and -- or there's one, and we have to rely on that one for any shipbuilding we do, whether it's a U.S. flag commercial carrier, of which we build very, very few, or it's a ship that we're building for a defense requirement.

And then, third, there are major problems we have in being able to adjust to changes in design over the course of the life of a -- you know, of a ship line, and our ability to just, like, have a design, execute it, and churn it out. This is something the Chinese are very good at. We have not proven to be very good at this.

Now, part of this is so fundamental and so structural, and it goes back to the early 1980s when the bottom fell out of the American shipbuilding industry, commercial shipbuilding industry. That's not going to reverse overnight. But there are steps that we can take to push back against unfair practices. We, the Biden administration, accepted a petition for a 301 investigation of Chinese shipbuilding practices that are putting downward pressure on our ability to compete effectively.

And then part of it is pick spots where you can get wins and build step by step to get back some of that lost ground over the last few decades. I mentioned very briefly in my remarks something called the ICE Pact, which we entered into with Norway -- I'm sorry, with Finland and with Canada. Finland and Canada are at the cutting edge of polar icebreaker construction and production. The United States has one producer producing, basically, one cutter for our Coast Guard.

We have the capacity to do so much more than that on something that, for our allies and partners, the other places they can go are Russia and China; where we really could build this out in concert with Finland and Canada, and, for that specialty capability, reinvigorate an aspect of the American shipbuilding base that then we could take to other specialty areas, and over time build back a larger capability that would have amazing knock-on effects for our capacity to do naval shipbuilding much more rapidly, at much greater scale and at cheaper cost.

Because anyone who knows, you know, when we contract for a given ship or line of ships, by the third one being turned out, the cost has gone up dramatically for a variety of reasons that get to supply chain, workforce, and other things. But part of it is we don't have the backbone of a healthy commercial shipbuilding base to rest our naval shipbuilding on top of. And that's part of the fragility of what we're contending with and why this is going to be such a generational project to fix.

We've taken these beginning steps on it, and particularly focused on the submarine industrial base because of the centrality of that to our deterrence. But it is a larger issue that Secretary Del Toro has been passionate about, Secretary Austin.

I have dug into the details of workforce development initiatives in

this area because it's something that's so core to our national security over time.

MR. JONES: So, last question before we get to a few audience questions here. Role of other allies and partners. If you look at the shipbuilding industry, both the Koreans and the Japanese have major capabilities. We've got some regulations, we've got some congressional acts, including the Jones Act, that make some of that more difficult. Should we rethink make it easier for us to collaborate with some of our partners? That's the first question.

And two is, AUKUS -- how do you think about expanding -- or do you think about expanding AUKUS to include more than just the UK and Australia in the future?

MR. SULLIVAN: So, on the first question, I think, you know, I'll leave it to others to debate the relative merits of some of the, kind of, domestic regulations.

I'll just make one, I think, really important point, which is: In semiconductors, in clean energy technologies, we've developed a suite of industrial policy tools that are stimulating a revolution in the manufacturing capacity of the United States in these critical sectors. I believe that those same tools, in some cases those same pots of money, could actually attract a Hanwa or another Korean or Japanese shipbuilder to the United States the same way that we've attracted a Samsung or an LG to the United -- or a Hyundai to the United States.

And so, we should have a theory of stimulating American shipbuilding that is in part about attracting our allies to invest here in building out their capabilities.

How we then get into the regulatory landscape for what will work and what wouldn't in the puts and takes of that is harder for me to speak to, but I think the overall theory of the case that we've applied in these other critical sectors could be applied to shipbuilding. There are some green shoots of that in the maritime initiative that Secretary Del Toro has underway. We really need to build on that because that, ultimately, is going to be an important part of the long-term answer to revitalizing the American shipbuilding industry.

MR. JONES: Yeah, and I think it is an area where I think we've got to close that gap with the Chinese.

So, one question --

MR. SULLIVAN: Oh, you said AUKUS. We don't have any plans to expand pillar one of AUKUS, which is the conventionally armed nuclear-powered subs.

MR. JONES: Subs. Yeah.

MR. SULLIVAN: We do see other partners coming in to work with us on pillar two, which are all these other advanced --

MR. JONES: I've seen the aperture already start to open a bit. Yeah.

On -- questions for the audience. This has nothing to do with the subject of the discussion here, the industrial base. But first question here from someone in the audience is: "South Korea's president declared martial law, which he then lifted. What has been the White House response? It looked a little slow from our vantage point." How would you -- I mean, what has been your response? How concerned have you been with the unfolding events in South Korea?

MR. SULLIVAN: You know, it's -- you know you're living in a modern information age when an entire episode like this unfolds over the course of less than a day, and the characterization of the White House response is slow. (Laughs.)

MR. JONES: Too slow. Yes.

MR. SULLIVAN: But it's a fair question.

I mean, we were not consulted in any way. We learned about this from the announcement on television the same way the rest of the world did. It raised deep concern for us, this declaration of martial law. The National Assembly worked according to constitutional processes and procedures. The president retracted martial law. Now there's, you know, a series of procedures in place to kind of react to what happened there, and they'll be toing and froing between the main parties in Korea.

What we want to see is just the proper functioning of the democratic institutions of the ROK. And after this rather dramatic announcement that raised alarm bells everywhere, including here in Washington, we have seen those processes and procedures work. South Korea's democracy is robust and resilient, and we're going to continue to speak out publicly and engage privately with South Korean counterparts to reinforce the importance of that continuing as we go forward.

MR. JONES: Thanks.

This question is about the industrial base, which -- and it's an interesting one because it deals with critical minerals. "China has banned exports to the U.S. of gallium, germanium, antimony, which have significant military applications in the industrial base. How significant are these actions? And probably more importantly, what are U.S. options to decrease reliance from China on critical minerals?"

MR. SULLIVAN: The most important thing about this is that it is a continuing reminder of the need of the United States to have



diverse and resilient supply chains for critical minerals with national security applications, and not to be reliant on any single country, especially a competitor like the PRC. We knew that. We know that. We are reminded of that when they take steps like this.

Now, we, in particular, anticipated this step because they had already moved to restrict germanium and gallium in the past, before taking the full move this week to say no more exports to the United States. There are other sources of germanium and gallium in the world. But as we look at the wider aperture of critical minerals, not just for military purposes, but for strategic purposes -- semiconductor manufacturing, clean energy transition technologies, et cetera -- we need to get together with likeminded producers, processors, and users of these critical minerals for a high-standards critical mineral marketplace that ensures that China can't, for example, crash the price of a given critical mineral, drive mines out of business, reduce the overall global supply, and operate as a chokehold. That's, ultimately, the logic we need to break.

We've taken some really important steps on this in the last few years. It has allowed us to diversify and make more resilient our supply chains. But that, too, just like the defense industrial base, is a work in progress, and we need the next administration to continue it, working with the Congress and private industry. And I will be the biggest cheerleader of that ongoing effort, because it's something we've devoted a lot of attention to over the last four years and something that is going to take, you know, at least the next decade to get ourselves in a position where we can really breathe a sigh of relief.

We're there. We're doing better. We have solutions to a lot of these issues, but this is going to be a highly contested space, and there's a lot more work to be done.

MR. JONES: Thanks.

And last question. Can be brief. From Time Magazine: "Is DOGE friend or foe in an effort to revitalize the defense industrial base?" I mean, what would you say to an effort to look at the Elon Musk initiative?

MR. SULLIVAN: I just don't know. I mean, I've read, but I don't know what it actually is. Do we need more government efficiency? Of course, we can all use more government efficiency. So at a very macro level, finding ways, as I described in my speech, to modernize, streamline, make more effective procurement and all of the decades-long rules and regulations of the Defense Department. I laid out a whole list of things in the speech that we should do. Whether this initiative is about that or about something else, I just don't know, so it's hard for me to speak to.

MR. JONES: Well, thank you.

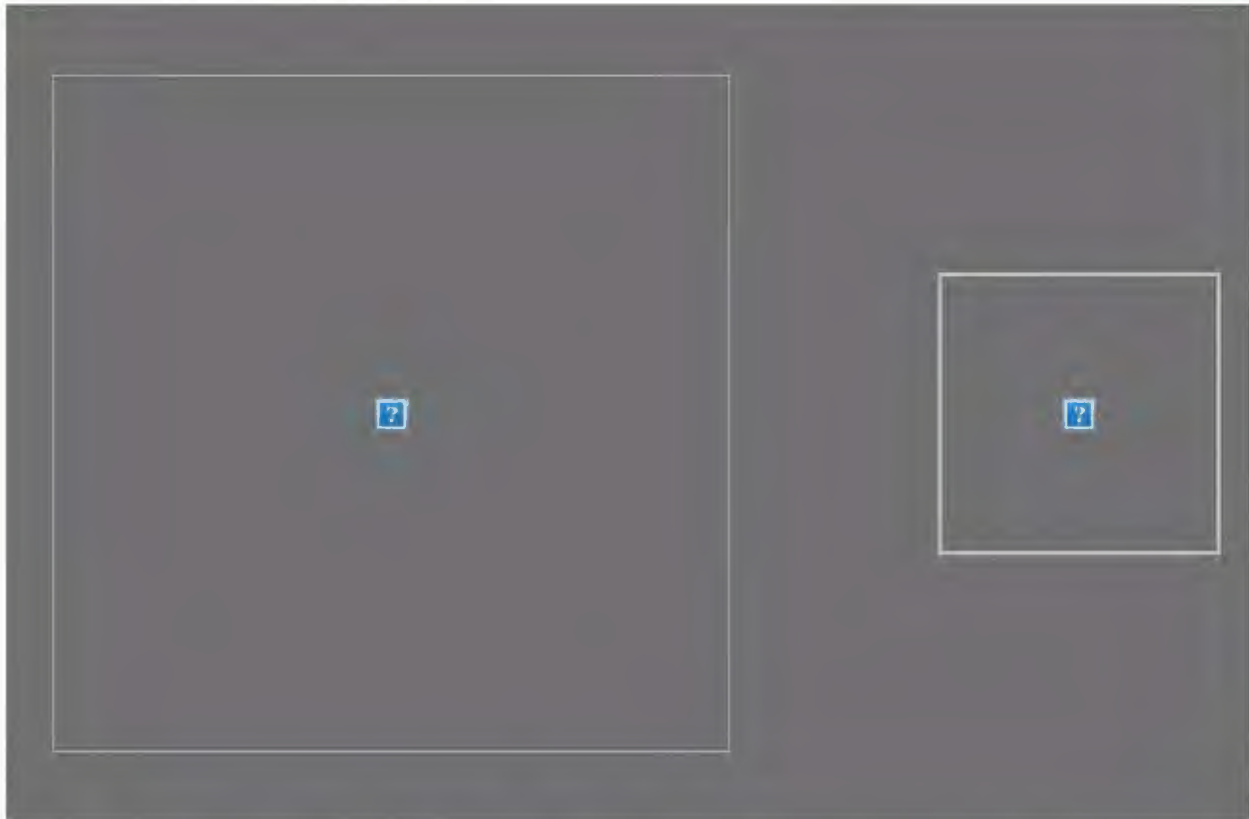
If you can all join me in thanking Jake for coming to CSIS.  
(Applause.) And if you could briefly just stay put as we get out,  
that'd be great. Just 30 seconds or so. Really appreciate  
everyone taking the time to come. Thanks.

[Privacy Policy](#) | [Unsubscribe](#)

White House Press Office · 1600 Pennsylvania Ave NW · Washington, DC 20500-0003 · USA · 202-456-  
1111

**From:** [AW Intelligence](#)  
**To:** [Wamer, Cheryl \(she, her\) \(HQ-NA020\)](#)  
**Subject:** [EXTERNAL] Aerospace DAILY: Ukraine's Missile Push; Scaled's "Old School"; Talon Update - Dec. 9  
**Date:** Friday, December 6, 2024 10:04:47 PM  
**Attachments:** [asd\\_12\\_09\\_2024.pdf](#)

**CAUTION:** This email originated from outside of NASA. Please take care when clicking links or opening attachments. Use the "Report Message" button to report suspicious messages to the NASA SOC.



The Business Daily of the Global Aerospace and Defense Industry Since 1963

**December 09, 2024**

[DOWNLOAD PDF](#)

### [Ukraine Unveils Local Missile Production Ramp-Up](#)

The Ukrainian government has revealed production plans for two long-range drone missiles, highlighting a campaign to strengthen the national defense industry.

### [Daily Briefs](#)

PRATT teams with Polish Air Force University... VERTEX gets C-12 support award... EM WEAPONS market seen booming...

### [In Brief: German Air Force Fires MBDA Meteor](#)

News in brief.

### [Scaled: UAS Demand Brought 'Old School' Back To Life](#)

Scaled Composites brings back its "Old School" test platform seven years after its last flight.

### [Australia Shortlists PrSM, NSM For Second Long-Range Strike Regiment](#)

Australia has shortlisted the Lockheed Martin PrSM and the Kongsberg NSM to form the country's second long-range fires regiment.

### [Akaer Chosen As Structures Supplier For Portuguese Transport Aircraft](#)

Portugal's EEA Aircraft and Maintenance is selecting suppliers for the country's first indigenously produced aircraft, naming Akaer as structures supplier.

### [Stratolaunch Set For Reusable Hypersonic Test Within Weeks](#)

Stratolaunch says it is receiving its final rounds of approvals to conduct its first reusable test flight of the Talon A hypersonic testbed by Dec. 31.

### [SatVu Gets £20 Million From Funding Round, Insurance Payout](#)

SatVu, a London-based startup infrared satellite company, has received an infusion of £20 million (\$25.4 million) from a funding round and an insurance payout.

### [FAA Approves Joby's eVTOL Training Academy](#)

Joby Aviation has ticked two more boxes on its journey toward launching commercial electric air taxi service in the U.S.

### [Europe's Launch Efforts Rebound With Vega-C Flight Return](#)

Arianespace on Dec. 4 returned the Vega-C rocket to flight after a more than two-year hiatus following a mission failure in 2022.

### [UAV Power-Beaming Development Planned By 2025](#)

The U.S. Defense Department is funding an uncrewed air vehicle (UAV) laser power-beaming development project.

### [Anduril, ChatGPT-Creator OpenAI Developing Counter-UAS Systems](#)

Anduril Industries and OpenAI have formed a "strategic partnership" to develop artificial intelligence systems for national security missions.

### [Fleet Snapshot: Latin American Fighter Aircraft Fleets + Deliveries 2025-2034](#)

For more information about Aviation Week Intelligence Network's (AWIN) 2024 Military Fleet & MRO Forecast and other Aviation Week data products, please see:

<https://pgs.aviationweek.com/forecast>

### [Upcoming Events](#)

Conferences and events for professionals in the aerospace and defense community.

### [View full issue](#)

---

To make the most of your subscription, access Aerospace Daily & Defense Report online.

Simply visit [awin.aviationweek.com](http://awin.aviationweek.com) to login. Online, you can:

- Access essential news, data and intelligence throughout the business day
- Create alerts that enable you to keep up-to-date on the programs, organizations, etc. most important to you and your workflow
- Search through an Aerospace Daily & Defense Report archive that goes back over 15 years

If you would like to find out more about your online access, or have any other questions about your Aerospace Daily & Defense Report subscription, contact our customer support team at +1.561.279.4661 or email [tech\\_assistance@aviationweek.com](mailto:tech_assistance@aviationweek.com).

---

COPYRIGHT © 2024  
All rights reserved





The Business Daily of the Global Aerospace and Defense Industry Since 1963

December 9, 2024

## Inside:

### PROGRAMS

Scaled: UAS Demand Brought  
'Old School' Back To Life..... **PAGE 2**

Australia Shortlists PrSM, NSM  
For 2nd Long-Range Strike Regiment..... **PAGE 2**

Stratolaunch Set For Reusable  
Hypersonic Test Within Weeks..... **PAGE 5**

### BUSINESS

SatVu Gets £20 Million From  
Funding Round, Insurance Payout..... **PAGE 3**

### OPERATIONS

Europe's Launch Efforts Rebound  
With Vega-C Flight Return..... **PAGE 4**

### TECHNOLOGY

UAV Power-Beaming Development  
Planned By 2025..... **PAGE 4**

### FLEET SNAPSHOT

Latin American Fighter Aircraft  
Fleets + Deliveries 2025-2034..... **PAGES 7-8**

## Meteor Test

The German Air Force has taken a big step in its introduction into service of the MBDA Meteor beyond-visual-range air-to-air missile with the first firing of the ramjet-powered weapon by a Luftwaffe-operated Eurofighter Typhoon. The test took place in Lossiemouth, Scotland, to take advantage of the available airspace over the Atlantic, the Luftwaffe said Dec. 5. Firing a missile with the Meteor's range would not have been possible at home, it added. Germany plans to use the Meteor in conjunction with both the short-range IRIS-T infrared guided air-to-air missile, made by Diehl, and RTX's medium-range Amraam. The trial was part of Germany's effort to reach full operational capability with the Meteor, the service said.

## Daily Briefs

**VERTEX AEROSPACE** has \$300m U.S. Air Force indefinite-delivery/indefinite-quantity contract for worldwide C-12 contractor logistics support.

**PRATT & WHITNEY** signed letter of intent with Polish Air Force University to create opportunities for cadets to learn about design/manufacturing/production of F-16 F100 engines and F-35 F135 engines.

**RAYTHEON** has \$25.1m U.S. Navy contract modification for Global Positioning System-Based Positioning, Navigation and Timing Service software support.

**BAE SYSTEMS** has \$26.7m U.S. Air Force indefinite-delivery contract for F-16 sustainment.

**ELECTROMAGNETIC WEAPONS MARKET** reached \$350m globally in 2020, and is projected to reach \$2.06b by 2030, for a CAGR of 19.7% from 2021 to 2030, according to **ALLIED MARKET RESEARCH**.

### FUNDING & POLICY

## Ukraine Unveils Local Missile Production Ramp-Up

STEVE TRIMBLE, [steve.trimble@aviationweek.com](mailto:steve.trimble@aviationweek.com)

**The Ukrainian government revealed production plans for two long-range drone missiles over three days this month, highlighting a campaign to strengthen the national defense industry and deliver 30,000 "deep-strike" drones in 2025.**

Ukrainian President Volodymyr Zelenskyy displayed the 700-km-range (435-mi.) Peklo, meaning "hell," missile drone on Dec. 6, saying the turbojet-powered munition has been used in combat, with the first batch still in production.

"Now the task is to further increase their production and use," Zelenskyy said.

Ukraine unveiled the Peklo munition two days after announcing that the Palianytsia drone missile with a similar range also recently entered series production. The government unveiled Palianytsia, the name for a popular Ukrainian bread, last August.

Both munitions are part of a government drive to reduce reliance on foreign governments for long-range munitions.

A Resilience Plan for next year includes an initiative to deliver 30,000 drones for deep-strike missions, Defense Minister Rustem Umerov said Dec. 6.

The drones also leverage foreign partnerships. In 2023, Ukraine signed an agreement with Czech Republic-based PBS Velka Bites to jointly develop new turbojets for long-range drones and missiles.

UKRAINE, P. 2

## PROGRAMS

## Scaled: UAS Demand Brought 'Old School' Back To Life

BRIAN EVERSTINE, [brian.everstine@aviationweek.com](mailto:brian.everstine@aviationweek.com)

**Increasing demand to test payloads for medium-altitude, long-endurance uncrewed aircraft systems prompted Scaled Composites to bring back its "Old School" test platform seven years after its last flight.**

Scaled announced in October it flew the Model 355 medium-altitude, long-endurance aircraft at its Mojave Air & Space Port location.

The model was on display to a small group of reporters during a visit Dec. 5, next to the company's Model 281 Proteus high-altitude test aircraft.

Scaled Composites President Greg Morris said the decision to bring it back to flight was in response both to customer interest and an internal understanding that there will be an increased need to test the systems for emerging, medium-altitude UAS.

At the envelope of up to 25,000 ft. and at a slower speed, Old School can be a "very good surrogate you might see on some smaller platforms," Morris says.

The aircraft first flew in 2010. It is designed to be outfitted

quickly with new payloads, which are installed in a "low-single digit" number of days, Morris says. Its flight safety equipment is federated from anything that may touch the payload, making it easier to test, he says.

"Everybody's seeing the same challenges. . . . As we've seen over the last couple years, I don't think it's news to anybody that we've seen significant changes in what we expect, especially small autonomous platforms to bring to future conflict," he says.

Scaled also displayed its new V-tail Model 437 prototype, which flew for the first time on Aug. 29.

The small, single-engine crewed aircraft has not yet flown again. Morris says Scaled intentionally flew the aircraft before all of its systems were complete. For example, during the first flight the landing gear did not retract because it did not have the hydraulic systems.

Scaled parent company Northrop Grumman says the 437 is a "Digital Pathfinder," serving as a demonstration for a quickly digitally designed and built aircraft.

After the first flight, Northrop said the model is proving a design that is targeted for the increasing demand for autonomous collaborative platforms—including the Air Force's Collaborative Combat Aircraft.

## PROGRAMS

## Australia Shortlists PrSM, NSM For 2nd Long-Range Strike Regiment

CHEN CHUANREN, [chuanren.chen@informa.com](mailto:chuanren.chen@informa.com)

**The Australian Defense Department has shortlisted the Lockheed Martin Precision Strike Missile (PrSM) and the Kongsberg Naval Strike Missile (NSM) for the country's second long-range fires regiment, with the mission to protect the country's "northern approaches" from threats.**

The PrSM will be fired from the High Mobility Artillery Rocket System (Himars), while the NSM will deploy from the Thales StrikeMaster launcher vehicle.

The department says the evaluation will take place throughout 2025. It builds on recommendations in the 2024 National Defense Strategy to bolster land-based long-range strike capabilities rather than the Korean-made K-9 howitzers, known locally as the AS9.

Despite the aim to be deployed in the north, the long-range fires regiments will be based on the other side of the continent at the Edinburgh Defense Precinct in South Australia.

The regiment will not be limited to operating from Aus-

tralian shores, but instead will be highly mobile and likely involved in "island hopping" operations in Southeast Asia or the Pacific.

Australia also has an ongoing order for 42 Himars, with deliveries expected to start from the 2025 first quarter through to the end of 2026. Since 2021, Canberra has spent A\$70 million on the PrSM Increment 2 program and pledged its commitment to Increments 3 and 4.

Kongsberg also broke ground on Nov. 6 for a new NSM assembly facility in Williamstown, Australia, that will start producing NSM and Joint Strike Missiles starting in 2027. The NSM is in service with the Australian Navy, with the JSM soon set to equip the air force's F-35As.

---

### UKRAINE, from P. 1

The internal production ramp-up builds on new companies and older enterprises, such as the Lyuch Design Bureau. The latter, a Soviet-era company, produced the Neptune anti-ship cruise missiles that sank the Moskva cruiser, the flagship of the Russian Navy's Baltic Sea fleet, in 2022.

## PROGRAMS

## Akaer Chosen As Structures Supplier For Portuguese Transport Aircraft

TONY OSBORNE, [tony.osborne@aviationweek.com](mailto:tony.osborne@aviationweek.com)

**Portugal's EEA Aircraft and Maintenance has begun selecting suppliers for the country's first indigenously produced aircraft.**

Brazil's Akaer will produce structures for the high-wing twin-turboprop LUS-222 regional aircraft, which EEA is developing for the commercial and military market, Akaer announced Dec. 5.

EEA Aircraft and Maintenance is producing the LUS-222 through an initiative called Aero.Next Portugal, which was set up to build and strengthen the country's aeronautical engineering capabilities and create the country's first aircraft manufacturer.

Akaer will manufacture the fuselage, complete wing, horizontal and vertical stabilizers and all the platform's control surfaces in Brazil, with production of the components planned for its São José dos Campos facilities from early 2025.

"Portugal and Brazil have a very successful partnership path in the aeronautical sector, first and foremost, the KC-390 program, in which the Brazilian industry, involving partners from Portugal, developed an aircraft that was integrated by the Portuguese Air Force, so perhaps we can now replicate it, in the opposite direction, with the LUS-222 aircraft," said Miguel

Braga, president of the board of directors of EEA Aircraft and Maintenance.

### EASA standards

According to the initiative, the LUS-222—which will be built to European Union Aviation Safety Agency Part 23 standards for commuter aircraft—will be capable of carrying 19 passengers or a 2,000-kg (4,409-lb.) payload and be able to fly 2,000 km (1,243 mi.).

While the aircraft initially will be designed to use conventional turboprop engines, engineers are building in the capacity to integrate alternative propulsion methods, including hybrid and electric options.

First flight is planned for 2027.

Engineering efforts are headquartered in Evora, Portugal, while production will take place at a site in Ponte de Sor in the country's central region.

While the LUS-222 will enter a highly contested market, Portuguese industry anticipates that the country's links to Africa and Latin America could sustain sales.

EEA Aircraft and Maintenance was spun off out of Portuguese engineering company CEiiA to work on the aircraft.

Akaer has previously supported development of Embraer's KC-390 airlifter, the Saab Gripen E combat aircraft, in conjunction with Saab, and the supersonic Hurjet advanced jet trainer being developed by Turkish Aerospace Industries.

## BUSINESS

## SatVu Gets £20 Million From Funding Round, Insurance Payout

GARRETT REIM, [garrett.reim@aviationweek.com](mailto:garrett.reim@aviationweek.com)

**SatVu, a London-based startup infrared satellite company, has received an infusion of £20 million (\$25.4 million) from a funding round and an insurance payout.**

The company raised £10 million by selling equity to venture capital firms in a recent funding round and received another £10 million from unspecified "insurance proceeds," it said Nov. 28.

The funding round was co-led by Adara Ventures and Molten Ventures, with participation from prior investors Lockheed Martin, NOA, Ridgeline, Seraphim and Stellar Ventures.

The startup did not disclose the event that triggered its insurance payout.

"The £20 million injection will accelerate the build and launch

of HotSat-2 and HotSat-3, both of which are expected to ship for launch in 2025," SatVu says.

"These satellites will provide critical, near real-time thermal data, essential for understanding energy transition, monitoring infrastructure and economic activity, and driving targeted action toward climate mitigation and resilience, contributing to vital decision-making as the world progresses toward net-zero."

SatVu's initial satellite, HotSat-1, was launched in 2023. The company says the satellite has demonstrated a thermal-image pixel resolution of 3.5 m at nadir—when it is directly above an observed point on the ground. The startup's satellites use a mid-wave infrared sensor.

The company is promoting its satellite's thermal-imaging data as useful for monitoring natural environments, economic activity and areas of national security concern.



## OPERATION

## Europe's Launch Efforts Rebound With Vega-C Flight Return

ROBERT WALL, robert.wall@aviationweek.com

**Arianespace on Dec. 5 returned the Vega-C rocket to flight after a more than two-year hiatus following a mission failure in 2022, marking an important milestone for Europe's 2024 space ambition to revitalize its launch capabilities.**

The Avio-made rocket lifted off from the European spaceport in Kourou, French Guiana, at 6:20 p.m. local time and deployed its payload about 104 min. later.

The mission, VV25, placed the European Sentinel-1C radar satellite in Sun-synchronous orbit, restoring the two-satellite Copernicus radar constellation after the Sentinel-1B came to an early end because of a technical fault with the spacecraft in August 2022. Europe expects to launch Sentinel-1D in 2025 also using a Vega-C to replace the first of the radar satellites, which—by next year—will have been in orbit for more than a decade.

The Sentinel-1A is equipped with a C-band radar that provides spatial resolution of up to 5 m (16 ft.) and can acquire imagery at swaths of 20 km (3 mi.) up to 400 km. It also features an automatic identification system to help track shipping. The European Space Agency (ESA) expects the satellite to undergo around

three months of on-orbit checks before it becomes operational, Simonetta Cheli, director of ESA's Earth observation program, told reporters during a pre-launch briefing.

The Vega-C has been adapted with a nozzle redesign to address the material issues that caused the previous mission to fail. During VV22, a carbon-carbon insert in the nozzle of the second-stage Zefiro 40 engine degraded prematurely. The partners completed two ground tests this year of the novel design, which uses a new material and supplier and also yields slightly improved performance.

The mission marked the second major rocket milestone for ESA this year after the inaugural launch of the Ariane 6 in July, also from Kourou, which restored Europe's heavy-lift rocket capability. Arianespace was hoping to complete the second launch of an Ariane 6 this year, though that mission has now been rescheduled to no earlier than mid-February 2025, in part to address a problem that occurred with the auxiliary power unit of the rocket's upper stage, the launch service provider has said. Rocket production issues and other factors also contributed to the delay.

"With Vega-C back in flight and the inaugural launch of Ariane 6 in July, we are in a great place going forward," said ESA Director of Space Transportation Toni Tolker-Nielsen.

## TECHNOLOGY

## UAV Power-Beaming Development Planned By 2025

GARRETT REIM, garrett.reim@aviationweek.com

**The U.S. Defense Department is funding an uncrewed air vehicle (UAV) laser power-beaming development project, with a demonstration planned by the fall of 2025.**

The Power Transferred Over Laser project is being led by U.S. Central Command with up to \$5 million coming from the Defense Department's Operational Energy Innovation Directorate.

PowerLight, a power-beaming company in Kent, Washington, is to integrate and demonstrate its laser-based system charging a KL1000ULE fixed-wing drone while in flight. It's a Group 2 UAV made by Kraus Hamdani Aerospace. That long-endurance, solar-powered UAV can fly for up to 24 hr. continuously.

PowerLight's ground-based, 5-kW laser system would deliver up to 800 W of continuous electric output to the UAV at 5,000 ft. altitude. The power-beaming system could recharge the K1000ULE from about 50% battery charge in about 90 min., said PowerLight CEO Richard Gustafson.

"Critically, aerial recharging enables the platform to continue performing its [intelligence, surveillance and reconnaissance]

and/or comms mission; limits the number of [UAVs] required to perform a given mission by removing need for landing to recharge, and limits the associated ground support infrastructure and risk to personnel," he says.

Gustafson acknowledges clouds and moisture in the air could reduce the power-beaming system's efficiency. He says the system's end-to-end electrical efficiency is about 12%, depending on conditions. The company foresees a path to reaching 30% end-to-end efficiency on future iterations.

"Although electrical efficiency is an important scaling metric, the systems today are not necessarily optimized to prioritize end-to-end electrical efficiency, they are optimized for operational efficiency of safe power delivery performance," Gustafson says.

"By addressing a gap in distributing power to autonomous vehicles, for example, we could dramatically boost their operational value. The inefficiencies are driven by, for example, swapping batteries at scale and having to land to power up on charging stations," Gustafson adds. "One sound bite shared with us from the DoD [is] that they spend 20,000 gal. of diesel fuel using [a] KC-130 tanker to deliver 500 gal. of diesel fuel to soldiers on the ground for generators."

**Staff**

**EDITORIAL**

2121 K Street, NW, Suite 210, Washington, DC 20037  
 +1-202-517-1100 [awin.aviationweek.com](http://awin.aviationweek.com)

**EDITORIAL STAFF**

**Editor in Chief** Jefferson Morris  
**Assistant Editor** Andy Savoie  
**Copy Editor** Guy Ferneyhough  
**Editorial Director** Joseph C. Anselmo  
**Executive Editor, Defense & Space** Robert Wall  
**Military Reporters** Michael Bruno, Bill Carey, Brian Everstine, Guy Norris, Tony Osborne, Steve Trimble, Graham Warwick  
**Space Reporters** Mark Carreau, Irene Klotz, Vivienne Machi, Garrett Reim  
**Associate Producers** Heidi Carcella, Donna Thomas-High

**DATA & ANALYTICS**

**Senior Director, Forecasts & Aerospace Insights** Brian Kough  
**Senior Director, Data Operations and Solutions** Terra Deskins  
**Head, Defense Markets and Data** Craig Caffrey  
**Senior Military Program Analyst** Mathew Jouppi  
**Manager, Military Fleets** Samuel Archer  
**Senior Data Engineer** Nigel Howarth  
**Senior Defense Analysts** Sonny Butterworth, Haleigh Kling, Brandon Patrick, Anna Sliwon-Stewart  
**Defense Analyst** Edy McEvoy  
**Manager, Defense Market Intelligence** Rachel Hutchinson

**SUBSCRIBER SERVICES**

Customer Service, New/Renewal Sales  
 Aerospace Daily & Defense Report,  
 22701 W 68th, Ste 100, Shawnee, KS 66226-9806  
 Tel: +1-877-369-3706 (within the U.S.)  
 Tel: +1-913-850-6930 (outside the U.S.)  
 Fax: +1-800-455-3145  
 Email: [tech\\_assistance@aviationweek.com](mailto:tech_assistance@aviationweek.com)

**INTELLIGENCE AND DATA SERVICES**

**Senior VP, Intelligence, Data and Media** Anne McMahon  
 Tel: +1-646-469-1564, [anne.mcmahon@aviationweek.com](mailto:anne.mcmahon@aviationweek.com)  
**Senior Director, Intelligence and Data** Matt Holdreth  
 Tel: +1-917-703-0920, [matt.holdreth@aviationweek.com](mailto:matt.holdreth@aviationweek.com)

Discounted rates for multiple users and enterprise access available. Custom packages and additional services available including Intelligence/Research, Fleet Data, Forecasts.

**ADVERTISING & USER ENGAGEMENT**

**Marketing Director** Melissa Crum  
 Tel: +1-913-284-2951, [melissa.crum@aviationweek.com](mailto:melissa.crum@aviationweek.com)  
**Senior Director, NA Media** Rob Howlett

**REPRINTS**

Wright's Media  
 Tel: 1-877-652-5295 (within U.S.)  
 Tel: 1-281-419-5725 (outside U.S.)  
[informa@wrightsmedia.com](mailto:informa@wrightsmedia.com)

Published daily except Saturdays, Sundays and holidays by Aviation Week, 2121 K Street, NW, Suite 210, Washington, DC 20037. (ISSN No. 0193-4597).  
 Gregory Hamilton President, Aviation Week.

COPYRIGHT © 2024 by Informa Markets, a trading division of Informa, PLC. All rights reserved. None of the content of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means (electronic, mechanical, photocopying, recording or otherwise) without the prior written permission of the publisher. Available in online and email editions.

Vol. 290 • No. 48



informa 41000101



**PROGRAMS**

# Stratolaunch Set For Reusable Hypersonic Test Within Weeks

BRIAN EVERSTINE, [brian.everstine@aviationweek.com](mailto:brian.everstine@aviationweek.com)

**MOJAVE, CALIFORNIA**—Stratolaunch says it is receiving its final rounds of approvals to conduct its first reusable test flight of the Talon A hypersonic testbed by the end of the month.

The awaited test of its TA-2 will come about nine months after the first Talon A powered flight, which ended in a planned crash into the ocean. Stratolaunch CEO Zachary Krevor says the company “essentially has those approvals” to land TA-2 at Vandenberg SFB, California.

Speaking to reporters at the company’s Mojave headquarters before leaving for Vandenberg on Dec. 5, Krevor said the TA-2 flight will be the first under its five-flight block buy with the U.S. Navy Multi-Service Hypersonic Advanced Capability Hypersonics Test Bed (MACH-TB) program. The next step in that program, potentially a follow-on contract, is close to being announced, he says. The company has said if TA-2 lands successfully, it could be re-inspected and re-flown ahead of the following TA-3 flight expected in the second half of 2025. Stratolaunch showed TA-3 in the final stages of assembly at its production facility here, along with early production pieces of the next TA-4.

Stratolaunch’s goal is to increase its pace of hypersonic flight tests to once or twice per month, starting at Mojave with its massive, twin-fuselage Roc launch aircraft. Ahead of TA-2’s flight, the company has increased its pace of Roc envelope expansion tests to be able to launch the aircraft from about 35,000 ft.

Talon A will carry instrumentation, sensors, optical windows or any other technology on its leading edge and windward surfaces that the Defense Department wants to test for its hypersonic programs. While Krevor could not say which specific systems, he said in its contract for MACH-TB, the tests focus on the Navy’s Conventional Prompt Strike and Army’s Long-Range Hypersonic Weapon. These two co-developed systems share the Common Glide Body.

Additionally, Stratolaunch is planning to use Talon A as a surrogate for government organizations that need to detect and track hypersonic systems. While the company could not say specifically, Krevor said there will be a contract announced soon on a “new initiative here for Stratolaunch that reflects that specific mission.”

While initial tests will be hosted on the unique Roc aircraft, Stratolaunch acquired and is modifying a Boeing 747, the “Spirit of Mojave,” to be able to increase its pace of tests and be more mobile in where they can be hosted.

The aircraft previously served as Virgin Galactic’s Cosmic Girl to air-launch space vehicles. Stratolaunch is moving the 747’s pylon to carry Talon A from under the wing near the left inboard engine to directly underneath the aircraft’s belly.

Stratolaunch is set to have a unique relationship with the incoming administration of President-elect Donald Trump, who said Dec. 3 he plans to nominate Stephen Feinberg to be the deputy Defense secretary. Feinberg is co-founder of Stratolaunch owner Cerberus Capital Management.

Krevor says he is confident conflict-of-interest rules would prevent any preferential treatment, in fact he compared the situation to that of a parent coaching a sports team with a child on it. It could make Pentagon leadership more critical of Stratolaunch, he argues. While the Pentagon is likely to increase its need for hypersonic test, Krevor says the company is looking back to the first Trump term for hints of incoming need.





## BUSINESS

## FAA Approves Joby's eVTOL Training Academy

GRAHAM WARWICK, [graham.warwick@aviationweek.com](mailto:graham.warwick@aviationweek.com)

**Joby Aviation has ticked two more boxes on its journey toward launching commercial electric air taxi service in the U.S.**

The startup has received an FAA Part 141 certificate for its pilot training school, and the voluntary safety management system (SMS) for its air operations under Part 135 has been accepted by the FAA.

Joby received its Part 135 air operator certificate in May 2022 and has been operating a fixed-wing Cirrus SR22 on internal shuttle flights to exercise its operating procedures and systems while it works toward FAA type certification of the S4 electric vertical-takeoff-and-landing (eVTOL) air taxi, expected in 2026.

The Part 141 certificate allows the Joby Aviation Academy to deliver streamlined pilot training, enabling the startup to begin developing a pipeline of qualified pilots in advance of commercial operations. Approval is a step toward establishing a Part 142 training center for Joby and external customer pilots.

"We're pleased to be ticking two more items off our operations checklist as we continue to lead the industry toward commercialization of electric air taxis," says Bonny Simi, Joby's president of operations.

Under the FAA's Special Federal Aviation Regulation (SFAR) for powered-lift aircraft, finalized in October, eVTOL developers are allowed to begin training an initial cadre of pilots ahead of aircraft certification.

During type certification, instructor pilots at the OEM will develop the training curriculum. The instructors will then adminis-

ter the curriculum to the manufacturer's test pilots.

Once the test pilots meet the hourly requirements of the SFAR, the instructors will provide the same training program to the FAA's Flight Standardization Board pilots. The FAA pilots will then be able to administer the practical test for the powered-lift ratings to the OEM's test and instructor pilots.

Equipped with a training program and the initial commercially certified powered-lift pilots, the OEM can then begin training the first group of Part 135 operator, 141 training school or 142 training program pilots to that same curriculum, starting the pipeline of pilots required for commercial operations.

FAA acceptance of the air operations voluntary SMS under Part 135 is another key step on Joby's operations checklist. Such systems represent a formal, top-down, organization-wide approach to managing safety and ensuring the effectiveness of risk controls.

"We are also building a strong safety foundation for our planned operations with the FAA acceptance of our [SMS] governing air operations under our Part 135 operation, Joby Elevate," Simi says. The air operations SMS is part of Joby's enterprise SMS now being developed, which will cover the aircraft, manufacturing, operations, maintenance and flight training.

Along with the the recent regulatory approvals, Joby also announced it has completed a training program with the U.S. Air Force covering maintenance of the S4. As part of that effort, several Air Force service members, including a flight test pilot and aircraft maintainers, were trained over a four-week period on the specifics of inspecting and maintaining the S4. The program covered classroom instruction as well as hands-on inspections and pre-flight checks using Joby's production prototype aircraft.

## TECHNOLOGY

## Anduril, ChatGPT-Creator OpenAI Developing Counter-UAS Systems

GARRETT REIM, [garrett.reim@aviationweek.com](mailto:garrett.reim@aviationweek.com)

**Anduril Industries and OpenAI, the developer of ChatGPT, have formed a "strategic partnership" to develop artificial intelligence systems for national security missions.**

Initially, the two companies plan to develop AI models to synthesize time-sensitive counter-uncrewed aircraft systems (CUAS), Anduril said Dec. 4. The models will use Anduril's library of data on CUAS threats for training.

OpenAI is the developer of ChatGPT, an AI chatbot based on a large language model that was trained on a variety of data, including nearly all the text on the internet. The company also

develops other forms of AI, such as text-to-image generator DALL-E and text-to-video generator Sora. OpenAI allows companies to use its AI models via an API product.

Anduril has developed a variety of military systems, including command-and-control, loitering munitions, rocket motors, quadcopters, loyal-wingman aircraft and submarines.

The company's Lattice is an AI software program designed to ingest and analyze data from sensors to be used for situational awareness and command-and-control. Per the recent agreement, Lattice would be combined with undisclosed "advanced models" from OpenAI.

The two companies say their national security AI collaboration "will be guided by technically informed protocols emphasizing trust and accountability."

**Fleet Snapshot**

**Latin American Fighter Aircraft Fleets + Deliveries  
 2025-2034**

FAMILY	TYPE	SUB-MISSION	CURRENT FLEET	DELIVERIES
<b>ARGENTINE AIR FORCE</b>				
F-16	F-16AM (MLU)	Multi-role	0	16 <sup>T</sup>
	F-16BM (MLU)	Multi-role	0	8 <sup>T</sup>
<b>ARGENTINE NAVY</b>				
Etendard	Super Etendard	Multi-role	0	2 <sup>R</sup>
<b>BRAZILIAN AIR FORCE</b>				
Gripen	JAS 39E	Multi-role	9	51
	JAS 39F	Multi-role	0	12
<b>CHILEAN AIR FORCE</b>				
F-16	F-16AM (MLU)	Multi-role	28	
	F-16BM (MLU)	Multi-role	7	
	F-16C Block 50+	Multi-role	5	
	F-16D Block 50+	Multi-role	4	
<b>COLOMBIAN AIR FORCE</b>				
Mirage 3/5	Kfir	Multi-role	16	
Type Indeterminate	Fighter Requirement	Multi-role	0	16
<b>CUBAN REVOLUTIONARY AIR AND AIR DEFENSE FORCE</b>				
MiG-21	MiG-21bis L	Air Combat	8	
	MiG-21UM	Training Version	2	

**\*Note:** Delivery figures represent new builds unless marked with "T", which indicates a transfer from a previous operator, or "R", indicating a return from storage. Both contracted and projected deliveries included.

**Source:** Aviation Week Intelligence Network (AWIN) 2025 Military Fleet & MRO Forecast. For more information about the 2025 Forecast and other Aviation Week data products, please see: <https://pgs.aviationweek.com/forecast>

-Prepared by Samuel Archer

Continued, P. 8

**AVIATION WEEK**  
*Laureates*  
**MARCH 6, 2025**  
 Washington, DC • National Building Museum  
**JUST ANNOUNCED – THE 2025 WINNERS**  
VIEW THE COMPLETE LIST  
 Attend the Industry's Most Illustrious Event! | [laureates.aviationweek.com](https://laureates.aviationweek.com) | #AWLAUR



**Fleet Snapshot**

**Latin American Fighter Aircraft Fleets + Deliveries  
 2025-2034 (Continued)**

FAMILY	TYPE	SUB-MISSION	CURRENT FLEET	DELIVERIES
<b>MEXICAN AIR FORCE</b>				
Type Indeterminate	Fighter Requirement	Multi-role	0	24 <sup>T</sup>
<b>PERUVIAN AIR FORCE</b>				
Mirage 2000	Mirage 2000E	Multi-role	7	
	Mirage 2000ED	Multi-role	2	
MiG-29/35	MiG-29SM-P	Multi-role	3	
	MiG-29UBP	Training Version	2	
Su-25	Su-25	Ground Attack	6	
	Su-25UB	Combat Capable Trainer	6	
Type Indeterminate	Fighter Requirement	Multi-role	0	24
<b>VENEZUELAN AIR FORCE</b>				
Su-27	Su-30MKV	Multi-role	21	
F-16	F-16A Block 1-15	Multi-role	8	
	F-16B Block 1-15	Multi-role	1	
Type Indeterminate	F-16 Replacement	Multi-role	0	12
<b>Grand Total</b>			<b>135</b>	<b>165</b>

**\*Note:** Delivery figures represent new builds unless marked with "T", which indicates a transfer from a previous operator, or "R", indicating a return from storage. Both contracted and projected deliveries included.

**Source:** Aviation Week Intelligence Network (AWIN) 2025 Military Fleet & MRO Forecast. For more information about the 2025 Forecast and other Aviation Week data products, please see: <https://pqs.aviationweek.com/forecast>

-Prepared by Samuel Archer

AVIATION WEEK

# MRO

LATIN AMERICA

**February 4-5, 2025**  
 Panama City, Panama  
 #MROLA

Host Sponsor

## Forging Forward: MRO Growth in Latin America

**Content Coverage Includes:**

- MRO Latin America Market Forecast
- Best Practices for Enhancing MRO Operations
- Offshoring: U.S. Maintenance to LATAM
- Enhancing Efficiency and Predictive Maintenance: Transforming the Industry Using AI

**Source 50+ Suppliers  
 in the MRO Showcase**

*Register by December 13 for best rates*  
[mrolatinamerica.aviationweek.com](http://mrolatinamerica.aviationweek.com)

## Calendar

To list an event, send information in calendar format to [aero.calendar@aviationweek.com](mailto:aero.calendar@aviationweek.com). For a complete list of Aviation Week Network's upcoming events, and to register, visit [www.aviationweek.com/events](http://www.aviationweek.com/events) (Bold type indicates new calendar listing.)

**Dec. 10-12**—Spacepower Conference, Hilton Orlando, Orlando, FL.  
<https://ussfa.org/spacepower-2024/>

**Dec. 11-13**—GAD World, Marriott Hotel City West, Munich, Germany,  
<https://events.aviationweek.com/en/home.html>

**Dec. 11-13**—61st Annual AOC International Symposium & Convention, National Harbor, MD.  
<https://crows.org/events/annual-convention-symposium/>

**Dec. 19-22**—Vietnam International Defence Expo 2024. Gia Lam Airport, Hanoi, Vietnam. <https://vietnamdefence.vdi.org.vn/>

### 2025

**Jan. 27, 2025**—Engine Leasing, Trading and Finance Americas, co-located with Aero Americas, <https://events.aviationweek.com/en/home.html>

**Jan. 28-29, 2025**—Aero Engines Americas, co-located with Engine Leasing, Trading and Finance Americas, <https://events.aviationweek.com/en/home.html>

**Feb. 4-5, 2025**—MRO Latin America, Panama City, Panama, <https://events.aviationweek.com/en/home.html>

**Feb. 10-11, 2025**—MRO Middle East, Dubai, UAE, <https://events.aviationweek.com/en/home.html>

**Feb. 10-12, 2025**—Routes Americas 2025, Nassau & Paradise Island, Bahamas, <https://events.aviationweek.com/en/home.html>

**Feb. 17-21**—International Defense Exhibition & Conference. Abu Dhabi National Exhibition Center, Abu Dhabi.  
<https://www.idxuae.ae>

**Feb. 20-25**—Singapore Airshow, Changi Exhibition Center, Singapore.  
<https://www.singaporeairshow.com>

**Feb. 21-22**—EBAA Air Ops., Brussels, BE.  
<https://www.ebaa.org/events/air-ops-europe-2024/>

**March 10-13, 2025**—VERTICON 2025, Kay Bailey Hutchison Convention Center, Dallas, TX,  
<https://compass.onpeak.com/e/42HAIHE2025HIR/0>

**Mar. 12-13, 2025**—Aviation Week's SupplyChain Conference, Southlake, TX,  
<https://events.aviationweek.com/en/home.html>

**Mar. 25-27, 2025**—Routes Asia 2025, Perth, Australia,  
<https://events.aviationweek.com/en/home.html>

**Mar. 25-27, 2025**—2025 NBAA Schedulers & Dispatchers Conference (SDC2025), New Orleans, LA, <https://nbaa.org/events/2025-schedulers-dispatchers-conference/>

**Apr. 2-3, 2025**—GAD Americas, Cayman Islands,  
<https://events.aviationweek.com/en/home.html>

**Apr. 7-9, 2025**—ACSF Safety Symposium, Daytona Beach, FL,  
<https://www.acsf.aero/acsf-safety-symposium/>

**Apr. 8-10, 2025**—GAD Americas, Atlanta, GA,  
<https://events.aviationweek.com/en/home.html>

**Apr. 8-10, 2025**—Military Aviation Logistics & Maintenance Symposium, Atlanta, GA, <https://events.aviationweek.com/en/home.html>

**Apr. 8-10, 2025**—Routes Europe 2025, Seville, Spain,  
<https://events.aviationweek.com/en/home.html>

**Apr. 23-24, 2025**—Aero-Engines Asia Pacific, Hong Kong,  
<https://events.aviationweek.com/en/home.html>

**May 13-14, 2025**—Aviation Week's Defense Conference, Washington, DC, <https://events.aviationweek.com/en/home.html>

**May 14-15, 2025**—Baltics & Eastern European Region, Prague, Czech Republic,  
<https://events.aviationweek.com/en/home.html>



**From:** [White House Press Office](#)  
**To:** [Warner, Cheryl {she, her} \(HQ-NA020\)](#)  
**Subject:** [EXTERNAL] [BULK] Remarks by APNSA Jake Sullivan at the 2024 Reagan National Defense Forum  
**Date:** Sunday, December 8, 2024 8:30:24 PM

---

The White House Logo



**FOR IMMEDIATE RELEASE**

December 8, 2024

NATIONAL SECURITY COUNCIL

REMARKS BY NATIONAL SECURITY ADVISOR JAKE SULLIVAN  
AT THE 2024 REAGAN NATIONAL DEFENSE FORUM

The Ronald Reagan Presidential Library  
Simi Valley, California

(December 7, 2024)

MS. BREAM: And thank you, Jake. I'm glad you made it here this year. I know you've had to cancel in the past, and it's a very busy time, so we appreciate your time that you were able to make it here today.

MR. SULLIVAN: Well, thank you for having me.

MS. BREAM: Okay, so let's start with the headlines. Obviously, minute by minute, there are new advances by rebel forces in Syria. Did the administration see this coming? Assad doesn't seem to have the support he would have 10 years ago from the likes of Russia and



Hezbollah and Iran, who have been weakened. What's your take on the current state?

MR. SULLIVAN: Well, it's important to start by observing why this is happening, and it's really happening for two reasons.

First, Assad has been brutal and repressive to his own people and totally intransigent in terms of actually trying to provide a better life or better future for the people of Syria, and so the people of Syria are fed up.

Second, Assad's backers -- Iran, Russia, and Hezbollah -- have all been weakened and distracted, and so he has not had the support from those three actors that he expected to be able to count on, and has been left basically naked. His forces are hollowed out.

And so, while we saw preparations for a rebel offensive, the speed and scale of it and the fact that it's moving so rapidly through the country, this is a feature of having lost the support of these backers, because each of them -- Iran having been exposed and weakened; Hezbollah having been badly degraded by Israel; and Russia being ground down in a war of attrition in the east in Ukraine -- none of them are prepared to provide the kind of support to Assad that they provided in the past. So here we are.

MS. BREAM: So the primary group leading the insurgency has been classified as a terrorist group by the U.S. How worried are you about what comes next?

MR. SULLIVAN: Well, it is a source of concern. I mean, this is a group, HTS, that has been designated by terrorist -- as a terrorist organization by the United States, that has had elements affiliated with groups that have American blood on their hands.

We really think that there are three things we have to be particularly focused on.

One, that the fighting in Syria not lead to the resurgence of ISIS. And we are going to take steps ourselves directly, and working with the Syrian Democratic Forces, the Kurds, to ensure that does not happen.

Two, that our friends in the region -- Israel, Jordan, Iraq, others who border Syria, or who would potentially face spillover effects from Syria -- are strong and secure, and we're in touch with them every day.

And three, that this not lead to a humanitarian catastrophe, both in terms of civilians' access to lifesaving necessities and in terms of the protection of religious and ethnic minorities in Syria.

And we're going to work with all the players in the region to try to make sure that we are accomplishing those three goals which are

in the interests and consistent with the values of the United States.

MS. BREAM: Of course there's a lot of instability in the region, so how worried are you about this spilling over the borders? You mentioned those bordering countries there.

MR. SULLIVAN: It is a concern. I mean, we've seen, obviously over the course of the Syrian civil war, spillovers and refugee flows. And at its worst, we saw the explosion of ISIS onto the scene, which not only led to the fall of cities in Syria, but the fall of cities in Iraq and pressure on some of our closest partners in the region.

So, whether it's from the border with Jordan to the Golan Heights, to trying to maintain a fragile ceasefire in Lebanon, to that long border between Syria and Iraq, these are all areas that we have to pay close attention to, that we have to coordinate closely with our friends on, and stay vigilant to try to ensure that we contain the potential violence and instability, that we protect our friends, and that we ensure that ISIS not get new oxygen out of this that could lead them to become a greater threat to the United States or our friends.

MS. BREAM: What about our troops in the region, the impact on them?

MR. SULLIVAN: So, we have a presence, both in Iraq and in Syria. That presence in Syria is there to work hand in hand with local partners, to continue to suppress the threat that ISIS has posed, going back many years now. And we've had significant progress in that fight, just even in the last few months. Major players taken off the battlefield. Large-scale degradation of those ISIS forces.

But of course, an event like this happens, and ISIS immediately looks to take advantage. And we have seen reports of ISIS trying, out in the Syrian Badiya, the desert, to try to reconstitute to a certain extent.

So we will continue to take action against that. And we will continue to make sure that force protection, the protection of our service members who are serving at a range of bases in eastern Syria, is the paramount concern from the President on down.

Now, the threat to those service members is not just from ISIS or from this violence; it is also from Iranian-backed Shia militia groups who themselves could try to take advantage of this.

And so, we are also doing what we believe we need to do to prepare for, deter, and protect against any potential attacks from that group of actors, which, of course, we have seen over the course of the past few years, and which we, under the Biden administration, have responded to at several points with direct strikes against

those forces, both in Syria and in Iraq.

MS. BREAM: So, a lot of the conversation this week is about the transition to a new administration, a second Trump administration. He's weighed in on social media, as he often likes to do. I'll get you to the all-caps part of this post in which he says, "THE UNITED STATES SHOULD HAVE NOTHING TO DO WITH IT. THIS IS NOT OUR FIGHT. LET IT PLAY OUT. DO NOT GET INVOLVED!"

So, you've referenced ways that we could be aware and preparing for the situation, responding as we can. But what is our role, or isn't our role, with regard to Syria?

MR. SULLIVAN: Well, first I would note -- and I was a little bit struck by it -- earlier in the post, he said part of the reason this is happening is because of Russia's war against Ukraine. And I think he even referenced the sheer scale of the casualties that Russia has suffered in Ukraine, and for that reason, they're not in a position to defend their client, Assad. And on that point, we're in vigorous agreement.

Equally, the United States is not going to dive into the middle -- militarily dive into the middle of a Syrian civil war. What we are going to do is focus on the American national security priorities and interests. And I name the three of them that I see.

The first, critically, is: Do not let this allow for the resurgence of ISIS. And we are going to take steps to make sure that that happens. That's not about the move down the highway from Hama to Homs to Damascus. That's about what's happening out in the east, and we will remain critically focused on it.

Second, we do have a profound interest in shoring up the security of our partners, and we'll -- in the region: Israel, Jordan, Iraq, others. We'll do that.

And third, we will attend to the humanitarian situation because we believe that we have an obligation to do that. And frankly, attending to the humanitarian situation, defending religious and ethnic minorities, that was a feature of the Obama policy in Syria, the Trump policy in Syria, the Biden policy in Syria, and I would expect that to continue as well.

MS. BREAM: So, it's a very long post, but you mentioned his wording here about the loss of 600,000 soldiers for Russia and how they're stretched very thin and tied up in other areas. He also, though, in this post, not in all caps, says, "This is where former President Obama refused to honor his commitment of protecting the RED LINE IN THE SAND, and all hell broke out," and that's when Russia stepped in. You were part of that administration. So how do you respond to that?

MR. SULLIVAN: Well, first, I think, you know, going back to the

entire set of events that unfolded in Syria, from the outbreak of the civil war through to the Russian involvement, an incredibly complex set of factors came into play. No one thing led from point A to point B.

Equally, President Obama made clear he did not want to see the United States directly militarily involved in the middle of the civil war. That is precisely what President Trump is saying at the end of his post today. So it seems to me that on that point they agree.

Ultimately, the future of Syria should be up to the Syrian people. That has been true from the moment this civil war broke out. It's been true across multiple administrations.

What is amazing about the moment we find ourselves in right now, though, is that Iran, Hezbollah, and Russia are all in a position of relative weakness in the Middle East. And our core security partner in the region, Israel, is in a position of relative strength in the region. And we believe that the United States has taken steps over the course of the past year, through military deployments, through diplomacy, and through engagement with all of our partners that have helped to bring about this set of conditions.

Now, there are positives in that, and there are risks in that, and we've just talked about some of those risks. So what we have to do is try to take advantage of those positives and manage those risks as best as we can through a handoff back to the Trump administration in just a few weeks' time that's got to be as seamless as possible. And for that reason, I'm in contact with my successor. Our Middle East team is in contact with their successors to make sure that we have transparency, coordination, and that the baton gets passed smoothly, because we don't want to miss anything between January 19th and January 21st.

MS. BREAM: How is that going, the coordination between incoming and outgoing?

MR. SULLIVAN: It has been professional, it has been substantive, and frankly, it has been good. Obviously, we don't see eye to eye on every issue, and that's no secret to anybody. But there is a deep conviction on the part of the incoming national security team that we are dealing with -- including my successor, and, on our part, directed from President Biden -- that it is our job, on behalf of the American people, to make sure this is a smooth transition. And we are committed to discharging that duty as relentlessly and faithfully as we possibly can.

That's true in every transition, but I think it's more true in this transition because you have a war in Ukraine that requires a very smooth handoff, you have the ongoing conflicts in the Middle East that require a very smooth handoff, and then, frankly, you have the continuing pacing challenge of China and events unfolding there on

a day-to-day basis that requires smooth handoff.

So, the nature of the world we find ourselves in today only elevates our responsibility to be engaged, to talk regularly, to meet regularly, to be transparent, to share, and to make sure it's an effective transition. And we are doing all we can to live up to that responsibility.

MS. BREAM: So, you know, Reagan does a national defense survey every year where they ask people about a lot of these really pressing topics. In one of them, they were asked about the increased economic and military cooperation between Iran, Russia, North Korea, and China. Eighty-six percent of Americans have significant concerns about that.

So how do you answer critics who say this alliance of bad guys has actually gotten tighter and, you know, in a way, more solidified under this administration?

MR. SULLIVAN: Well, look, I think there is no doubt that there is increasing alignment among these four actors. That is true. And it's something actually I've spoken about, we've pointed out. We have a national security memorandum that we are in the closing phases of pulling together that is memorializing the work we have done within the U.S. government over the course of the past four years, across defense, diplomacy, development, all aspects of American power, to deal with what is an emerging reality.

But why has this happened? It has not happened because these countries are so strong. It has happened out of necessity because these countries are under pressure.

Russia, under pressure in Ukraine, had to turn to Iran for munitions and North Korea for personnel.

Iran, under pressure, tried to turn to Russia to get help because its attacks against Israel were defeated and its own air defenses were badly degraded.

And so -- and if you look at China, when we came into this administration, the prevailing storyline was: China will surpass the United States in economic strength by the end of this decade. Now there's a lot of people who say it will never happen. When we came into this administration, serious people said China is going to dominate the future of AI. Now that script has been flipped.

So, you look at these countries and the relative challenges that they are facing, all four of them, and then you look on the other side of the ledger at America's alliances, and they have never been stronger. NATO is bigger, more unified, more purposeful than ever before, and NATO Allies are paying their fair share. When we came into office, nine NATO Allies were paying 2 percent; now it's 23. And the remaining nine have all committed to get to 2 percent and have a path to do it.

You look at the Indo-Pacific. We've started AUKUS. We've elevated and institutionalized the Indo-Pacific Quad. Our alliances with Japan and Korea are at an all-time high, and our trilateral cooperation with Japan and Korea is at an all-time high. And you just saw the resilience of South Korean democracy after this declaration of martial law and its retraction by President Yoon.

India, the Philippines, Vietnam -- we have new partnerships that are dynamic and effective.

So, on the one hand, you've got the American alliance system and the free world strong, vibrant, coordinated, organized. On the other hand, you do have this increase in convergence, but among a group of actors that is facing serious challenges, serious pressures, and serious strategic dilemmas. And even within that group, this Russia-North Korea cooperation is not something that sits very well in Beijing. So there are internal contradictions that are problematic on their side of the ledger that we will continue to look at and see how we can deal with from a strategic perspective going forward.

The final point I will make: If you look at the hand we are passing off in terms of just the basic foundation of American power at home, our economic and technological engine, arresting the slide in our defense industrial base, diversifying and making more resilient our supply chains -- these are steps where we feel that the United States has a foundation of national power domestically that is healthy and strong at a time when the Russian economy, the Chinese economy, and the Iranian economy are all in various states of disrepair.

So, for all of these reasons, it's a challenging world. It's a complex world. The post-Cold War era is over. A strategic competition is underway to determine what comes next. But America has a good hand to play, and it is a hand that we believe we have made stronger when we pass it off to the next administration.

MS. BREAM: I want to go back to Iran, since there's some news this week. An intelligence report out from the DNI office this week says that they now have enough fissile material to make more than a dozen nuclear weapons. And so, when you talk about them being worsened, there are critics who will say sanctions waivers, unfreezing assets and giving them access to that. It was a top Treasury Department official, Wally Adeyemo, who himself said that if they get their hands on cash, they're going to use it for nefarious reasons, admitting things are fungible. And that -- you know, the Reagan Defense Survey also shows Americans think it is time for us to actually get tougher with Iran and that this administration hasn't been tough enough.

MR. SULLIVAN: What I find odd about that argument is Iran's major proxy in the region, Hezbollah, is absolutely weakened, shattered.



Iran's own capacity to project conventional military capacity in the region has been exposed and defeated directly by the United States, working with Israel and other countries. Iran's economy is in absolute shambles, and Iran is nowhere to be found in defending its main client state, Assad, as rebels take city after city on the way to Damascus.

So, is Iran in good shape? I would say they are not. Has American policy over the course of the past four years and over the course of the past year contributed to the circumstances Iran finds itself in? I would submit to you that it has.

Now, the nuclear program in Iran remains a source of immense concern. President Biden made the same commitment President Trump made and President Obama made, that we will never allow to get Iran a nuclear weapon. That is a promise we intend to keep till every last day in our administration, and I presume the incoming administration will also do what is necessary.

They have advanced their nuclear program. They've done so because the nuclear deal that was in place that put enormous restraint on the program was removed by the last administration, and because we haven't been willing to just lift sanctions to get back into it. In fact, we have not lifted sanctions. We've imposed more sanctions on Iran over the course of the past four years.

The Middle East right now is in a period of considerable transformation. But one thing is for sure: Iran is in a weaker state today than they were when we took office, and that creates both opportunities, but it also does create risks, including the need for us to continue to constrain and deter their move should they choose to make it as a matter of policy towards a nuclear weapon.

MS. BREAM: But to be clear, there were some sanctions waivers.

MR. SULLIVAN: Well, for example, we did authorize the movement of \$6 billion for humanitarian purchases, which was a policy of the previous administration that money in certain bank accounts could be spent down by Iran for food, medicine, and other approved humanitarian transactions. We used that same mechanism that Secretary Pompeo put into place as part of a deal to get American citizens who had been held for years -- predating our own administration -- in Iran, in part because some of those Americans were getting -- were facing significant health challenges. After October 7th, we froze that. So those \$6 billion were frozen in Qatar; have not, in fact, been used.

But this President has shown a willingness to take tough decisions to get Americans home. He stands by those decisions. And in this case, we actually ended up freezing the \$6 billion in place in Qatar.

MS. BREAM: I want to give you a chance to respond to a critic from

within your own party. This comes from Senator Chris Van Hollen. He says, in an op-ed piece in The Washington Post, "Nothing will haunt President Joe Biden's foreign policy legacy as much as his failed policies in the Middle East. For too long, President Biden has been unwilling to uphold our values and enforce our interests in the Middle East." What do you say to him?

MR. SULLIVAN: Well, the main point that he was making in that op-ed was that we should have cut off weapons from Israel because of what they were doing in Gaza. That's his view. I would guess that there are many people in this audience who would take the exact opposite view and say, "Actually, the problem with the Biden administration was you paused the 2,000-pound bombs because you were worried about their use in densely populated civilian areas. You shouldn't have done that."

So we have critics on one side saying you should have cut off weapons -- the Van Hollen argument; critics on the other side who said -- or you should have cut off all offensive weapons. Critics on the other side who say you shouldn't have cut off or paused any shipments of any particular munition. And this is faced with a very difficult situation where we are going to back our partner to the hilt to take out a murderous terrorist organization like Hamas, but we also care about protecting civilians and the humanitarian situation in Gaza.

We chose a course of making sure Israel had what it needed to beat its enemies, backed up by American power, including American aircraft carriers, fighter squadrons, and other capabilities in the region. But we were going to take certain steps, like saying, "You do not need to drop 2,000-pound bombs in densely populated areas because you are going to kill too many civilians, and you can take out the terrorists without them," which Israel has.

That's the position we've taken. That's going to draw criticism. We're willing to take that criticism because we believe that we have alighted on a course that has stood up for our ally, has stood against our common enemies, and at the same time has done our best to alleviate the humanitarian suffering in Gaza.

MS. BREAM: What's the latest on negotiations over a ceasefire and getting the hostages out? Are you hopeful that will help -- that will happen on the Biden administration watch, before January 20th?

MR. SULLIVAN: I have now learned not to use the word "hopeful" and "Middle East" in the same sentence. (Laughter.) So, I will not do that.

There are ongoing talks. We are going to use every day we have an office to try to get a ceasefire and hostage deal in place. I meet regularly with the families of the American hostages, both those still living and those who have tragically -- either were killed on October 7th or, like Hersch, were murdered, gunned down in tunnels during the conflict in Gaza.

It is just a paramount priority of ours to make this happen, to get this in place. We're coordinating with the incoming team on it. We're coordinating with the Israelis on it. I can't make any predictions about whether it will or won't happen. I can only tell you that we're going to use every ounce of effort and every last hour to see -- to try to push this across the finish line.

MS. BREAM: So when people were asked here in the survey, Reagan Defense Survey, what's the biggest threat to the U.S., they far and away had China as the number one on that list, followed by Russia, North Korea, and then Iran. How would you assess that? Does that line up with what the Biden administration thinks the current threat assessment is?

MR. SULLIVAN: Well -- and I think you heard this from Secretary Austin -- China is the pacing challenge and threat to the United States for a very simple reason: It's the only power with the capacity and, frankly, the aim of displacing the United States as the world's leading military, economic, technological, and diplomatic power. And we are determined to make sure that never happens.

And I think if you rack and stack where we are today from where we were four years ago, the picture looks strong from the point of view of the United States' leadership position in the world, the health of our alliance systems, the health of our economy, the health of our technological advantage, and increasingly, the health of our military capacity, including in areas like the submarine industrial base, which we've invested heavily in after decades of decline in that capability, and also bringing new concepts to the fore, like AUKUS.

So, I think China is the challenge of the next quarter century. It is a challenge we are prepared for and a challenge that I will be proud to hand off to the next team a strategy that we have been executing against, I think quite effectively, so that America is in a position to succeed in that competition.

MS. BREAM: Second on the list was Russia. And of course, with Ukraine, there's a lot of polling information, too, from the survey about that. How people think this will end: The largest group said that Russia is going to take some territory from Ukraine, and that's going to be part of wrapping it up. What do you think? How does it come together to an end?

MR. SULLIVAN: Well, President Zelenskyy himself has said that this war has to end at the negotiating table, and our job has been to try to put Ukraine in the strongest possible position on the battlefield so that it's in the strongest possible position at the negotiating table. And that has required us to mobilize the largest effort of security assistance since the Second World War and flow massive quantities of munitions to Ukraine.

And they are taking that fighting courageously, innovating themselves, particularly in the drone space. I cannot predict exactly how the war will end, nor can I dictate to President Zelenskyy or the Ukrainians how it should end. Our job is to take that 50-nation coalition of countries that we built from scratch and continue to surge capability until we're out of here.

And President Biden has directed me, and I have directed all of our agencies in our national security enterprise, to do a massive surge of assistance and to up the economic pressure on Russia. And if you look at Russia's economy right now, just in the last few weeks, you've seen the warning bells begin ringing much more strongly, and Russia really has mortgaged its economic future. All of this can help build the kind of pressure that can be put to bear at the negotiating table to generate an outcome consistent with Ukraine's future as a sovereign, free, independent state that can deter future aggression, backed by its partners like the United States.

MS. BREAM: Okay. And one last chance to answer some critics -- again, from your own party -- with respect to Ukraine.

Top Democrats like Senators Coons and Blumenthal, Congressman Gregory Meeks over on the House side, they disagreed with hesitation, they say, from the White House, first to provide equipment or materials, but then to limit the use of it. They say it's been too little too late with respect to Ukraine. How do you answer that critique?

MR. SULLIVAN: Well, first, I very much respect the bipartisan support from the Congress. But we have spent every dollar that Congress has given to us, and we've been waiting for Congress to give us more money, not the other way around.

So the idea of too little too late, we have surged everything that we've had forward. Now, there are certain capabilities that people have --

MS. BREAM: The limitations on weapons.

MR. SULLIVAN: -- have mentioned. I'd identify two that our military raised questions about whether the limited dollars that we had should be spent on them. One was Abrams tanks. The other was F-16s.

When it comes to Abrams tanks, we have sent Abrams tanks to Ukraine. Those Abram tanks units are actually undermanned because it's not the most useful piece of equipment for them in this fight, exactly as our military said. When it comes to F-16s, President Biden authorized the sending of F-16s to Ukraine last May. It's now December of 2024, and we've had a limited number of pilots train not because we're not prepared to train them -- we are, as many as possible -- but because the Ukrainians do not have the pilots to be able to build a full F-16 capability in time.

So I think this focus on these types of capabilities misses the point, which is this war is about munitions. And we have surged munitions to an unbelievable degree, as fast as humanly possible. Air defense capabilities. And we have gone so far as to take the extraordinary step of asking everyone who buys air defense from the United States: Wait in line; we're sending it all to Ukraine.

These were not things that Congress or critics asked of us. These are things we developed and we did.

Third was making sure they had cluster munitions and now land mines so they could defend their territory effectively. Again, critical capabilities they need that we generated; not something that we were being told by critics or Congress or anyone else to do, but stuff we went and did, with some controversy.

And then finally, on the question of ATACMS long-range strike: The issue there has always been both the size of the U.S. arsenal, the shot volume capable, and here too, when we were able to develop a sufficient number of these to send, we sent them for their use. And then, when the Russians took certain actions, we authorized their use inside Russian territory, which has happened now.

But I would just say to everyone: Anyone who thinks that is a silver bullet for this war does not understand what is happening in this war. It is not a silver bullet. It's one additional capability. But where this war is really being fought is on basic munitions and then the question of manpower, which is something Ukraine has been trying to surge over the course of the past few months.

At the end of the day, I think when history actually records what we have done predating the war, building the supply line and capacity; what Secretary Austin has done, building the UDCG, 50 nations flowing munitions in; and how we have been able to execute that over the last two and a half years, it is an extraordinary feat of logistics, production capacity, and delivery capability from the United States.

And first reason Ukraine is where it is is because of the bravery of the Ukrainians. Second reason is because of the munitions provided by the United States of America. And I'm damn proud of what we have done to help Ukraine stand up for its freedom.

MS. BREAM: Well, in the midst of all of that -- (applause) -- yes -- thank you for taking a break from all of that. You're never really taking a break -- for giving us a few minutes. So I'll leave you with one last question. What are you looking forward to most as a semi-retired -- I don't know -- a congressional spouse?

MR. SULLIVAN: (Laughs.) I think I get a pin, actually.

MS. BREAM: Oh, okay.

MR. SULLIVAN: Which would be cool if that's true. I'm not actually sure if that's true or not.

But mainly I'm looking forward to sleeping. (Laughter.)

MS. BREAM: That's true. Well, thank you for taking a break from all of that, and your nap, for us. Thank you. (Applause.)

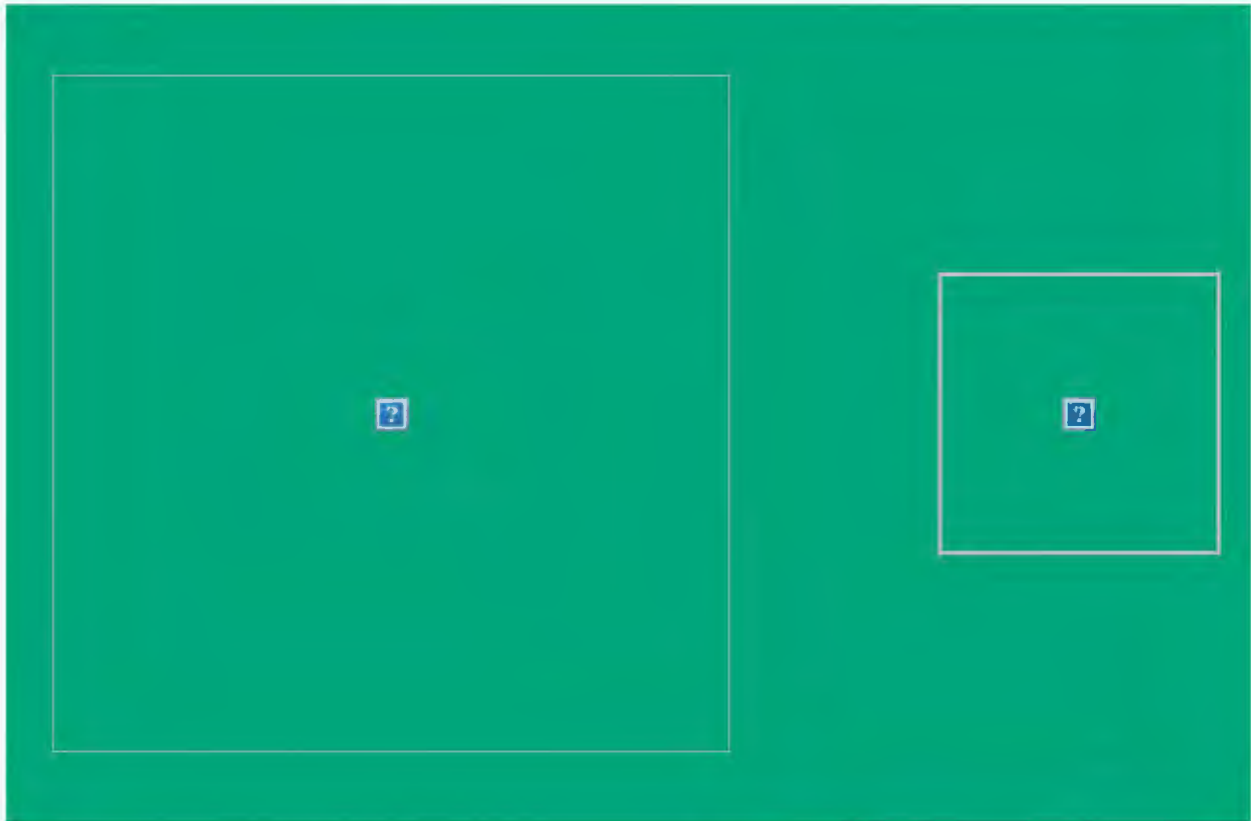
[Privacy Policy](#) | [Unsubscribe](#)

White House Press Office · 1600 Pennsylvania Ave NW · Washington, DC 20500-0003 · USA · 202-456-1111



**From:** [AW Intelligence](#)  
**To:** [Wamer, Cheryl {she, her} \(HQ-NA020\)](#)  
**Subject:** [EXTERNAL] AAM Report: Beta Leases to Air New Zealand; AI meets batteries? - 12/11/2024  
**Date:** Wednesday, December 11, 2024 7:33:23 AM  
**Attachments:** [aam\\_12\\_11\\_2024.pdf](#)

**CAUTION:** This email originated from outside of NASA. Please take care when clicking links or opening attachments. Use the "Report Message" button to report suspicious messages to the NASA SOC.



Intelligence on the evolving advanced air mobility ecosystem

**December 11, 2024**

[DOWNLOAD PDF](#)

### [Air NZ Leases Beta Alia For Electric Aircraft Familiarization](#)

Air New Zealand is to lease an electric CX300 Alia CTOL aircraft from Beta Technologies next year for in-country familiarization ahead of all-cargo operation.

### [Lilium Marks Continued Progress Despite Insolvency](#)

Lilium insists things are business as usual while the German insolvency process plays out, as it continues to pursue customer deals.

### [Eve Helicopters Inc. Sign Letter Of Intent For Up To 50 eVTOLs](#)

Eve Air Mobility and Helicopters Inc. have signed a letter of intent for up to 50 electric-vertical-takeoff-and-landing (eVTOL) aircraft.

### [China's Aviage Establishes Subsidiary For AAM Avionics](#)

Aviage Systems, the joint venture between Avic and GE Aerospace that supplies avionics for the Comac C919, has formed a subsidiary to develop AAM systems.

### [ARC Aerosystems Seeks Buyer For C600 Heavy-Lift Drone](#)

UK startup ARC Aerosystems has put its C600 heavy-lift hybrid-electric vertical-takeoff-and-landing (VTOL) cargo drone program up for sale.

### [Prospects Diverge For European, U.S. eVTOL Startups](#)

Electric vertical-takeoff-and-landing (eVTOL) air taxis have been hailed as a major breakthrough in electric aviation and urban mobility.

### [AI-Driven Battery Startup Aionics Begins eVTOL Push](#)

Aionics is seeking to replicate the AI approach for developing new and custom battery cell chemistries targeted at specific uses, including EVs and aviation.

### [Switzerland's Smartflyer Rolls Out Electric Four-Seater](#)

Switzerland's Smartflyer rolled out its SFX1 prototype electric aircraft at Grenchen Airport on Nov. 6.

### [China's Zero Gravity Adds Funding For eVTOL Development](#)

Chinese startup Zero Gravity Aircraft Industry has raised more than ¥100 million (\$13.8 million) in a Series A+ financing round.

### [Joby, Jetex Partner On FBOs In Dubai](#)

Joby and Jetex have formed a strategic partnership to integrate Joby's S4 electric air taxis into Jetex facilities at major UAE airports.

### [FAA Approves Joby's eVTOL Training Academy](#)

Joby Aviation has ticked two more boxes on its journey toward launching commercial electric air taxi service in the U.S.

### [AAM Infrastructure Reality Index, Oct. 2024](#)

A ranking of different AAM vertiport startups according to SMG Consulting.

### [AAM Briefs](#)

The latest news of products and services in the Advanced Air Mobility industry.

### [View full issue](#)

---

To make the most of your subscription, access Advanced Air Mobility Report online. Simply visit [awin.aviationweek.com](http://awin.aviationweek.com) to login. Online, you can:

- Access essential news, data and intelligence throughout the business day
- Create alerts that enable you to keep up-to-date on the programs, organizations, etc. most important to you and your workflow

If you would like to find out more about your online access, or have any other questions about your Advanced Air Mobility Report subscription, contact our customer support team at +1.561.279.4661 or email [tech\\_assistance@aviationweek.com](mailto:tech_assistance@aviationweek.com).

---

COPYRIGHT © 2024  
All rights reserved





## Intelligence on the evolving advanced air mobility ecosystem

December 11, 2024

FOR THE LATEST UPDATES, GO TO  
AVIATIONWEEK.COM/ADVANCEDAIRMOBILITYREPORT

### Inside:

#### TECHNOLOGY

AI-Driven Battery Startup  
Alonics Begins eVTOL Push..... **PAGE 3**

#### FINANCE & INVESTMENT

China's Zero Gravity Adds Funding  
For eVTOL Development..... **PAGE 4**

#### BUSINESS

Lilium Marks Continued  
Progress Despite Insolvency..... **PAGE 5**

#### INFRASTRUCTURE

Joby, Jetex Partner  
On FBOs In Dubai..... **PAGE 6**

#### REGULATORY

FAA Approves Joby's eVTOL  
Training Academy..... **PAGE 7**

#### BUSINESS

## Air NZ Leases Beta Alia For Electric Aircraft Familiarization

GRAHAM WARWICK, [graham.warwick@aviationweek.com](mailto:graham.warwick@aviationweek.com)

**Air New Zealand is to lease an electric CX300 Alia CTOL aircraft from Beta Technologies next year for in-country familiarization ahead of operation for a planned cargo-only service beginning in 2026.**

In December 2023, following an 18-month evaluation, the airline selected the conventional-takeoff-and-landing (CTOL) Alia as the first purchase under its Mission Next Gen Aircraft program. Air New Zealand placed a firm order for one Alia aircraft, with options for two more and rights to a further 20.

The airline will operate the aircraft initially in partnership with New Zealand Post, flying between Wellington and Marlborough on a route crossing the Cook Strait separating the North and South Islands.

The latest agreement adds the six-month lease of an Alia CTOL as a technology demonstrator to be delivered in 2025 to provide familiarization for pilots and maintainers as well as the airline's route planning, operations and ground support teams. The demonstrator will be a new-build aircraft off Beta's Burlington, Vermont, production line.

AIR NZ, P. 2

#### ANALYSIS

## Prospects Diverge For European, U.S. eVTOL Startups

BEN GOLDSTEIN, [ben.goldstein@aviationweek.com](mailto:ben.goldstein@aviationweek.com)

**Electric vertical-takeoff-and-landing (eVTOL) air taxis have been hailed as a major breakthrough in electric aviation and urban mobility.**

But as the leading air taxi startups progress through the type certification process, a worrying trend is emerging along geographic lines.

In the U.S., market leaders Archer, Beta Technologies and Joby are pushing ahead with certification and production road maps and looking ahead to flight testing with conforming aircraft in the next year.

While many eVTOL startups have struggled to raise funds amid tight capital markets, the three companies have each raised hundreds of millions of dollars. Beta closed over \$300 million in an October Series C fundraising round. Archer closed \$230 million in a private investment in public equity round in August.

Additionally, both Archer and Joby have struck deals with their

automaker backers—Stellantis and Toyota, respectively—to subsidize hundreds of millions of dollars in labor and production costs in the coming years. The fundraising success means all three startups are well positioned to finance the path to FAA type certification.

The three companies are also progressing with their planned mass production facilities. Beta's factory in South Burlington, Vermont, opened in late 2023, while Archer's facility in Covington, Georgia, is set to open before the year end, and Joby expects its facility in Dayton, Ohio, to come online in early 2025. Beta says its factory has an initial capacity for up to 300 aircraft per year, while Archer's facility can handle up to 650 aircraft per year, and Joby up to 500.

Beta expects to certify its electric conventional-take-off-and-landing (eCTOL) aircraft by late 2025, with the eVTOL version expected to follow in 2026. Archer and Joby both believe

PROSPECTS, P. 2



**AIR NZ, From P. 1**

Beta is aiming for FAA type certification in 2025.

Air New Zealand also has added Beta's electric aircraft chargers to its order, including one Charge Cube for permanent installation and several mobile MiniCube chargers to expand the network footprint in New Zealand. The Alia is planned to be used on routes around 150 km (95 mi.), flying at 270 kph (165 mph)

and altitudes of 5,000-10,000 ft., with a full recharge expected to take 40-60 min.

Selecting the Alia CTOL, Air New Zealand at the time said the aircraft would not replace anything in its existing fleet but would act as a catalyst for change and help accelerate the airline's decarbonization.

**PROSPECTS, From P. 1**

they can certify by late 2026, although they also hope to launch initial passenger services in the United Arab Emirates by late 2025.

The October publication of the FAA's Special Federal Aviation Regulation on powered-lift pilot licensing and operations has resolved key issues related to energy reserve requirements and eVTOL pilot training processes to the industry's satisfaction, removing a key source of uncertainty about the sector's future operations and workforce development efforts.

That mostly optimistic outlook among U.S. eVTOL companies stands in stark contrast to Europe and the UK, where three of the most high-profile startups all face uncertain futures.

Germany's Lilium, which raised over \$1.4 billion since emerging from stealth in 2017, filed for insolvency in October after a last-ditch attempt to get government loan guarantees fell through. While the company remains operational as part of the German self-administration process, its future remains uncertain as the court-appointed administrator attempts to sell off the business in whole or in part.

Fellow German startup Volocopter has fared only somewhat better. Like Lilium, the company is running out of cash, and its attempt to get government funding was similarly shot down. Type certification of its two-seater Volocity is still expected as soon as early-to-mid-2025. But Volocopter's cash reserves are depleting fast, and Chinese automaker Geely is reportedly considering a deal to acquire up to 85% of the company for a valuation of under \$100 million. Whether that deal will go through—and what it means for the startup's future—is unclear.

In the UK, Bristol-based Vertical Aerospace is also in dire

financial straits. Following a boardroom fight that spilled into public view in November, self-described distressed asset investor Mudrick Capital has agreed to inject up to \$50 million in fresh funding as part of a deal that will award the group an ownership stake of around 70%, while founder Stephen Fitzpatrick's share will fall to 20%.

Vertical says the transaction deleverages its balance sheet by converting half of Mudrick's debt notes into equity, while also providing additional certainty for future fundraising attempts. But despite its lean spending profile, continuing to fund the program to its planned certification in 2028 will be an uphill climb.

In Brazil, meanwhile, Embraer spinoff Eve continues to press its development program forward, with plans to make the first flight of its eponymous air taxis in early 2025. The company managed to raise \$96 million in equity over the summer, in addition to nearly \$200 million in bank loans from the Brazil National Development Bank and Citibank this autumn. A recently opened factory in Taubate, Sao Paulo, will be capable of rolling out up to 120 aircraft per year initially. But with slow progress—Eve has still never flown a prototype—the company achieving its goal to certify in 2026 appears unlikely.

Certifying an eVTOL can cost up to \$2 billion, according to SMG Consulting, and few startups have the wherewithal to go the distance. Increasingly, scarce investment dollars appear to be consolidating in a small number of well-capitalized startups in the U.S., leaving European startups especially vulnerable.

If that gulf between regions widens in 2025, it is not unlikely that U.S. manufacturers will come to dominate the European market in coming years.

AVIATION WEEK  
**Intelligence**  
NETWORK

The Smarter, Faster Way  
to Grow Your Business

Learn More.  
aviationweek.com/  
AWINinfo

AVIATION WEEK  
NETWORK



## TECHNOLOGY

## AI-Driven Battery Startup Aionics Begins eVTOL Push

BEN GOLDSTEIN, [ben.goldstein@aviationweek.com](mailto:ben.goldstein@aviationweek.com)

**In recent years, AI has increasingly been used in the pharmaceutical industry's drug discovery process as a means to sort through voluminous amounts of data to identify potential molecules and compounds for new medications.**

That approach leverages one of AI's key strengths: identifying patterns that exist in large datasets that would be difficult—if not impossible—for humans to sort through manually. Now, a new startup called Aionics is seeking to replicate that approach for developing new and custom battery cell chemistries targeted at specific use cases, including EVs and aviation.

Based in Palo Alto, California, the company's recent push into aviation—helped by a new partnership with an undisclosed electric vertical-take-off-and-landing (eVTOL) company and the addition of Wisk Chairman Gary Gysin to its board—is to use its AI-software platform to develop custom battery formulas for electric aviation. As part of that effort, the company recently closed a funding round led by Trousedale Ventures and UP.Partners with additional backing from the University of Michigan's MINTS startup incubator and Avila VC. It did not disclose the amount raised.

By using AI and machine learning to accelerate the identification of new and custom battery electrolyte formulas, Aionics says it can significantly reduce the time and cost associated with developing new generations of batteries. Faster and cheaper iterations of battery tech would be a huge boon for range- and payload-limited eVTOLs, which are planned for going to market mainly using lithium-ion batteries with specific energy in the range of 250-350 Wh/kg.

Aionics was founded in 2020 by battery scientists Austin Sendek and Lenson Pellouchoud, both Ph.D. students at Stanford, along with Venkat Viswanathan, an associate professor of aerospace engineering at the University of Michigan. Sendek is CEO, Pellouchoud was formerly chief technology officer and is now an advisor, and Viswanathan is chief scientist.

Aionics does not aspire to manufacture its own battery cells. Rather, it plans to partner with existing manufacturers to take existing battery cells, engineer improvements and take them to market.

"We're trying to solve the problem of how to build a battery that gives you the performance you need with the smallest amount of additional manufacturing time and cost and overhead," Sendek tells Aviation Week. "The conventional wisdom is that new battery chemistry takes a billion dollars and 10 years to get to market. Using simulation and AI modeling, we can screen zillions of candidate designs, take the best ones, put them in a lab, test them and work with our partners to manufacture them."

"We say there is depth and breadth to this approach," Sendek says. "The depth is the ability to predict for any given electrolyte formulation how that battery is going to react. But there's also the breadth, which is that those models now need to be able to screen everything that's possibly out there, which is like

10 billion-plus materials. So given the huge number of possible formulations, using AI can help us build these data-centric models and identify patterns which today have to be teased out in the brain of a battery scientist."

While Aionics' first commercial foray was in the EV sector through a partnership with Porsche subsidiary Cellforce, it is now tuning its sights to aviation, having recently partnered with the undis-

closed eVTOL developer.

Sendek identifies several requirements specific to aviation for a custom battery formula. First is range, for which improvements are "very expensive and coming very slowly," he says. But in the meantime, there are other items that he feels are easier to tackle such as safety and flammability, particularly as they relate to thermal runaway, ensuring sufficient peak power for takeoffs and landings for eVTOLs, decreasing charging time and extending cycle life.

"I think those are really the key pieces of this puzzle that can be solved relatively quickly and using existing technology," he says.

Not surprisingly, Sendek takes an upbeat view about the outlook for eclectic aviation.

"I'm very optimistic, because we're seeing rapid innovation in batteries, where you can imagine a future—very soon, I think—where you can actually run the duty cycle you need," Sendek says.

"In the coming years, you'll be able to get across the city, or get 100 mi. from Los Angeles toward San Francisco or San Diego, and do it safely and reliably with fast charge times, scalability and repeatability," he adds.

**"We're trying to solve the problem of how to build a battery that gives you the performance you need with the smallest amount of additional manufacturing time and cost and overhead."**

FINANCE & INVESTMENT

## China's Zero Gravity Adds Funding For eVTOL Development

GRAHAM WARWICK, graham.warwick@aviationweek.com

**Chinese startup Zero Gravity Aircraft Industry has raised more than 100 million yuan (\$13.8 million) in a Series A+ financing round, taking the total raised to date to more than 400 million yuan.**

The funds will be used for certification work on the ZG-One two-seat multicopter electric vertical-takeoff-and-landing (eVTOL) aircraft and full-scale flight testing of the ZG-T6 six-seat tiltrotor eVTOL.

As is common in China, the lead investor in the Series A+ round is a state-owned entity, in this case, Feixi Industrial Investment, established by the government of Feixi County in Anhui Province to develop the local economy. Encouraged by strong support from the central government, several Chinese provinces and cities are investing in development of the low-altitude economy, China's term for advanced air mobility.

Founded in 2021, Zero Gravity has been flight-testing a full-scale version of the ZG-One since 2023. In November, the company unveiled an improved version of the aircraft with an extended, more

streamlined fuselage and a completely redesigned propeller array.

The original ZG-One design had six lift propellers on a branching structure above the fuselage. The new design has 12 propellers on a much larger structure, under which is mounted a fixed horizontal stabilizer—an arrangement similar to Volocopter's VoloCity eVTOL.

Elsewhere in China, startup Beifly has unveiled a subscale prototype of its planned TW5000, a piloted, five-passenger eVTOL. The aircraft has four lift propellers on booms plus two propellers on outer wing panels that tilt between vertical and horizontal flight. Its range is 300 km (185 mi.) at 300 kph (185 mph).

Beijing-based drone manufacturer FlightWin has completed a full-scale prototype of its Strike Eagle 2000 hybrid-electric tiltrotor aircraft. The 1,500-kg-class (3,300-lb.) aircraft is designed to carry five people or 500 kg of cargo 700 km at 300 kph.

Another Chinese startup, Muyutian Aviation Technology, has unveiled a 1,300-kg hybrid eVTOL uncrewed cargo aircraft, AT1300. Already flying, the AT1300 can carry up to 500 kg over a range of 1,000 km, increasing to 4,500 km with a 50-kg payload.

## Engineering Solutions for the Future of Aerospace, Aviation, and Beyond



 eVTOL	 AVIATION & AEROSPACE	 STATIONARY POWER	 DEFENSE & COMMERCIAL	 MARINE
--	---	---	---	---

As a legacy automotive company, we have a wealth of knowledge and expertise in powertrain development that matches today's requirements. As a result, we are well equipped to meet the challenges of aerospace validation and testing.



SCAN FOR TAKE OFF

www.avl.com



## Staff

### EDITORIAL

2121 K Street, NW, Suite 210, Washington, DC 20037  
+1-202-517-1100 [awin.aviationweek.com](mailto:awin.aviationweek.com)

### EDITORIAL STAFF

**Managing Editor** Ben Goldstein  
**Executive Editor** Graham Warwick  
**Contributing Editors** Michael Bruno, Bill Carey, Thierry Dubois, Molly McMillin, Guy Norris, Tony Osborne, Garrett Reim  
**Group Editorial Director** Joseph C. Anselmo  
**Contributing Partner** SMG Consulting, Sergio Cecutta  
**Associate Producer** Heidi Carcella, Donna Thomas-High

### DATA & ANALYTICS

**Director, Fleet and Forecasts** Dan Williams  
**Sustainability Data Analyst** William Moore

### SUBSCRIBER SERVICES

Customer Service, New/Renewal Sales  
Aviation Daily, 22701 W 68th, Ste 100,  
Shawnee, KS 66226-9806  
Tel: +1-877-369-3706 (within the U.S.)  
Tel: +1-913-850-6930 (outside the U.S.)  
Fax: +1-800-455-3145  
Email: [ech\\_assistance@aviationweek.com](mailto:ech_assistance@aviationweek.com)

### INTELLIGENCE AND DATA SERVICES

**Senior Vice President** Anne McMahon  
Tel: +1-646-469-1564, [anne.mcmahon@aviationweek.com](mailto:anne.mcmahon@aviationweek.com)

Discounted rates for multiple users and enterprise access available. Custom packages and additional services available including Intelligence/Research, Fleet Data, Forecasts.

**User Engagement** Melissa Crum, Tel: +1-913-284-2951  
[melissa.crum@aviationweek.com](mailto:melissa.crum@aviationweek.com)

Online access to Advanced Air Mobility Report is available at [awin.aviationweek.com](http://awin.aviationweek.com)

### ADVERTISING

**Sales Director** Elizabeth Zlitrn  
Tel: +1-212-600-3713, [elizabeth.zlitrn@aviationweek.com](mailto:elizabeth.zlitrn@aviationweek.com)

### REPRINTS

**Wright's Media**  
Tel: 1-877-652-5295 (within U.S.)  
Tel: 1-281-419-5725 (outside U.S.)  
[informa@wrightsmedia.com](mailto:informa@wrightsmedia.com)

Published each Wednesday, except holidays by Aviation Week, 2121 K Street, NW, Suite 210, Washington, DC 20037 (ISSN No. 0193-4597).  
**Gregory Hamilton**, President, Aviation Week

COPYRIGHT © 2024 by Informa Markets, a trading division of Informa, PLC. All rights reserved. None of the content of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means (electronic, mechanical, photocopying, recording or otherwise) without the prior written permission of the publisher. Available in online and email editions.

Vol. 4 • No. 50



## BUSINESS

# Lilium Marks Continued Progress Despite Insolvency

BEN GOLDSTEIN, [ben.goldstein@aviationweek.com](mailto:ben.goldstein@aviationweek.com)

**Following Lilium's insolvency filing, many watchers of the advanced air mobility industry wrote the German startup off as dead.**

But Lilium insists it is business as usual while the insolvency process plays out. Roughly similar to Chapter 11 bankruptcy in the U.S., the German self-administration process is designed to allow companies to continue their normal business activities under existing management while a court-appointed administrator seeks a buyer for the business or its assets.

The mergers and acquisitions process is being led by KPMG's Deal Advisory team, which Lilium says is conducting an "open, fair and transparent" process.

In the meantime, Lilium is pushing forward with development of the first full-scale Lilium Jet, which it still expects to make its first crewed flight next year. The latest progress toward that effort was the successful completion of a series of landing gear drop tests performed in partnership with MA Group in Naples, Italy, in the presence of members from Lilium's compliance verification team. The tests will count for certification credit with the European Union Aviation Safety Agency (EASA).

Additionally, Lilium says EASA recently carried out its second Design Organization Approval audit, which demonstrated the company continues to comply with the agency's organizational safety standards.

On the commercial side, Lilium continues to pursue customer deals, although those efforts appear to be slowing. The company recently announced eight firm orders and six options from Dutch startup Ambitious Group, which plans to operate executive charter services with electric vertical-takeoff-and-landing (eVTOL) aircraft out of Amsterdam and Marbella, Spain. Eventually, the company aspires to operate eVTOL aircraft on interisland routes in the Caribbean "ABC" islands of Aruba, Bonaire and Curacao.

The orders from Ambitious Group build on an existing memorandum of understanding (MOU) signed in March 2024. Lilium says the deal is subject to its successful emergence from the insolvency process. Including the latest sale, Lilium says its orderbook now includes 108 firm orders, 82 options and MOUs covering nearly 600 aircraft.

Along with the sale announcement, Lilium disclosed that charter and cargo operator ASL Group has cancelled an order for six aircraft, although it says the two companies have agreed to re-engage following a successful completion of the insolvency process.

Lilium also says it plans to implement a new software solution for management of flight and aircraft operations, including planning, scheduling, flight tracking, work order planning and maintenance event scheduling. The software was developed in partnership with UK aviation software specialist Myairops.

While Lilium continues to work toward its first crewed flight next year, its future remains uncertain. Industry watchers have grown increasingly pessimistic since the insolvency filing in October, but others appear to be hedging their bets for now.

"Lilium is in the ICU, but they're not in the morgue," remarks Sergio Cecutta from SMG Consulting. "It won't be easy, but there is still hope there."



INFRASTRUCTURE

## Joby, Jetex Partner On FBOs In Dubai

BEN GOLDSTEIN, [ben.goldstein@aviationweek.com](mailto:ben.goldstein@aviationweek.com)

**Joby and executive aviation specialist Jetex have formed a strategic partnership to integrate Joby's S4 electric air taxis into Jetex's facilities at major airports in the United Arab Emirates (UAE).**

Jetex operates fixed-base operators (FBO) at more than 50 locations worldwide, including a flagship terminal at Dubai's Al Maktoum International Airport and a facility at Al Bateen Executive Airport in Abu Dhabi. Those sites will be integrated into Joby's air taxi networks in both cities, starting with Dubai, where Joby plans to launch service in late 2025.

As part of the new agreement, Joby also will install its proprietary General Electric Aviation Charging Systems at Jetex's FBO facilities.

The new agreement will leverage Joby's existing partnership with the Dubai Roads and Transport Authority and Skyports Infrastructure, the latter of which has already begun construction

of the first vertiport in Joby's Dubai network, located at Dubai International Airport.

Additionally, Joby has a multilateral agreement with Abu Dhabi's Municipalities and Transport Department, as well as the Abu Dhabi Economic Development and Culture and Tourism departments, to launch air taxi services in the emirate.

FBOs are important to developers of passenger-carrying electric vertical-takeoff-and-landing (eVTOL) vehicles, which plan to launch airport shuttle trips as an early service offering. Both Joby and its rival Archer plan to launch service in the UAE as their first market as soon as late next year, even before they receive type certification from the FAA, currently expected in late 2026.

Joby's latest partnership in the UAE continues a pattern of tit-for-tat commercial developments between the startup and its U.S. rival Archer, which last week announced a multi-party agreement with several groups in Abu Dhabi, including regulators, operators and training and maintenance specialists. While Joby appears to be mainly focusing on Dubai initially, Archer is concentrating on Abu Dhabi, although both companies plan to launch service in both emirates.

BUSINESS

## Eve, Helicopters Inc. Sign Letter Of Intent For Up To 50 eVTOLs

GARRETT REIM, [garrett.reim@aviationweek.com](mailto:garrett.reim@aviationweek.com)

**SAN FRANCISCO—Eve Air Mobility and Helicopters Inc. have signed a letter of intent for up to 50 electric vertical-take-off-and-landing (eVTOL) aircraft.**

The agreement also includes service support and access to Eve's urban air traffic management software, named Vector, Eve announced Dec. 4. Helicopters Inc. also will have access to Eve TechCare, an eVTOL customer support and operations software program.

Helicopters Inc. operates in more than 35 metropolitan areas in the U.S. The company flies helicopters on behalf of police departments, TV news outlets, movie productions and utilities, in addition to chartering flights. Its helicopter fleet comprises Bell JetRangers, LongRangers and 407s; as well as Airbus AS350s.

Eve and Helicopters Inc. previously worked together to

simulate eVTOL operations in Chicago in 2022. Eve worked with helicopter passenger transport company Blade Air Mobility and a helicopter operated by Helicopters Inc. to transport passengers from Vertiport Chicago to two heliports northwest and southwest of Chicago.

"We're super excited to add a credible helicopter operator to our portfolio of customers," said Megha Bhatia, chief commercial officer of Eve, at the Revolution Aero conference here.

Eve says its backlog of eVTOL orders is nearing 3,000, valued at \$14.5 billion. It has 30 customers in 12 countries.

"We are taking an approach that is holistic. It's not just about delivering eVTOLs," Bhatia. "We are looking at a whole suite of solutions required to

support the operations. We've found so far that customers find it quite attractive."

The company has an eVTOL services backlog valued at \$1.6 billion, she adds. Eve also has signed up 14 customers for Vector, its urban air traffic management software.

**"We are taking an approach that is holistic. It's not just about delivering eVTOLs. We are looking at a whole suite of solutions required to support the operations. We've found so far that customers find it quite attractive."**

— MEGHA BHATIA, CHIEF COMMERCIAL OFFICER OF EVE



## REGULATORY

## FAA Approves Joby's eVTOL Training Academy

GRAHAM WARWICK, [graham.warwick@aviationweek.com](mailto:graham.warwick@aviationweek.com)

**Joby Aviation has ticked two more boxes on its journey toward launching commercial electric air taxi service in the U.S.**

The startup has received an FAA Part 141 certificate for its pilot training school, and the voluntary safety management system (SMS) for its air operations under Part 135 has been accepted by the FAA.

Joby received its Part 135 air operator certificate in May 2022 and has been operating a fixed-wing Cirrus SR22 on internal shuttle flights to exercise its operating procedures and systems while it works toward FAA type certification of the S4 electric vertical-takeoff-and-landing (eVTOL) air taxi, expected in 2026.

The Part 141 certificate allows the Joby Aviation Academy to deliver streamlined pilot training, enabling the startup to begin developing a pipeline of qualified pilots in advance of commercial operations. Approval is a step toward establishing a Part 142 training center for Joby and external customer pilots.

"We're pleased to be ticking two more items off our operations checklist as we continue to lead the industry toward commercialization of electric air taxis," says Bonny Simi, Joby's president of operations.

Under the FAA's Special Federal Aviation Regulation (SFAR) for powered-lift aircraft, finalized in October, eVTOL developers are allowed to begin training an initial cadre of pilots ahead of aircraft certification.

During type certification, instructor pilots at the OEM will develop the training curriculum. The instructors will then

administer the curriculum to the manufacturer's test pilots.

Once the test pilots meet the hourly requirements of the SFAR, the instructors will provide the same training program to the FAA's Flight Standardization Board pilots. The FAA pilots will then be able to administer the practical test for the powered-lift ratings to the OEM's test and instructor pilots.

Equipped with a training program and the initial commercially certified powered-lift pilots, the OEM can then begin training the first group of Part 135 operator, 141 training school or 142 training program pilots to that same curriculum, starting the pipeline of pilots required for commercial operations.

FAA acceptance of the air operations voluntary SMS under Part 5 is another key step on Joby's operations checklist. Such systems represent a formal, top-down, organization-wide approach to managing safety and ensuring the effectiveness of risk controls.

"We are also building a strong safety foundation for our planned operations with the FAA acceptance of our [SMS] governing air operations under our Part 135 operation, Joby Elevate," Simi says. The air operations SMS is part of Joby's enterprise SMS now being developed, which will cover the aircraft, manufacturing, operations, maintenance and flight training.

Along with the the recent regulatory approvals, Joby also announced it has completed a training program with the U.S. Air Force covering maintenance of the S4. As part of that effort, several Air Force service members, including a flight test pilot and aircraft maintainers, were trained over a four-week period on the specifics of inspecting and maintaining the S4. The program covered classroom instruction as well as hands-on inspections and pre-flight checks using Joby's production prototype aircraft.

## BUSINESS

## China's Aviage Establishes Subsidiary For AAM Avionics

GRAHAM WARWICK, [graham.warwick@aviationweek.com](mailto:graham.warwick@aviationweek.com)

**Aviage Systems, the Chinese joint venture between Avic and GE Aerospace that supplies avionics for the Comac C919 airliner, has formed a subsidiary to develop systems for advanced air mobility aircraft.**

Aviage Aircraft (Chengdu) Technology will be responsible for the development of avionics and flight controls for electric vertical-takeoff-and-landing aircraft (eVTOL) under the AvioNova brand. Chengdu is also the headquarters of Aerofugia, the subsidiary of Chinese automaker Geely developing the AE200 eVTOL and strategic customer of Aviage.

A 50:50 joint venture between Avic and GE, Aviage develops modular and certifiable integrated avionics and flight controls and supplies five subsystems for the C919 airliner. The company says it has cooperation agreements with a number of Chinese eVTOL manufacturers and suppliers.

In addition to Aerofugia, these include Yifei Aviation Technology, which is developing the ES100 eVTOL uncrewed cargo aircraft, eVTOL startups Dream Sky Technology and Raneg Aviation, as well as software suppliers Zhefei Aviation and Wind River China.

In November, Aviage supplied "red label" flight control computers to Range Aviation, also known as Shanghai Lanyia Aviation Technology, for use in flight testing of its LE200 eVTOL. Range rolled out the full-scale engineering prototype of the LE200 on Nov. 29.



TECHNOLOGY

## Switzerland's Smartflyer Rolls Out Electric Four-Seater

GRAHAM WARWICK, graham.warwick@aviationweek.com

Switzerland's Smartflyer rolled out its SFX1 prototype electric aircraft at Grenchen Airport on Nov. 6.

The aircraft is optimized around pure electric propulsion but is designed to accommodate a hybrid-electric range extender or a hydrogen fuel cell power system.

Smartflyer is looking for investors that can provide funding to take the prototype into flight in 2025. "Certification is being considered with an industrial partner so that the Smartflyer SF1 can go into commercial use in 2030," the company says.

The SF1 is an all-composite, four-seat aircraft with a take-off weight of 1,400 kg (3,090 lb.). The 160-kW electric motor

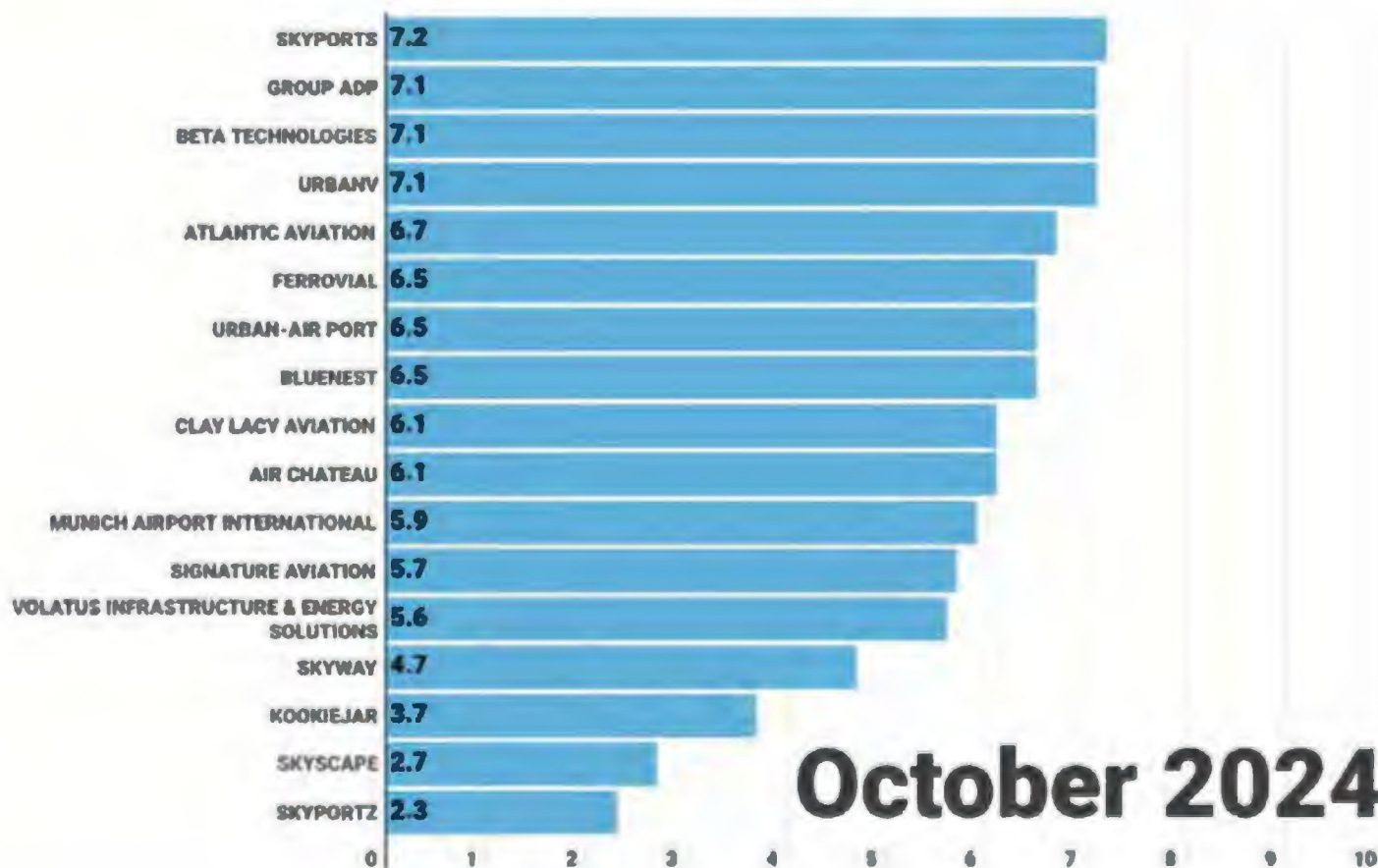
and propeller are located on the vertical stabilizer, where thrust is most effective, Smartflyer says. Batteries are housed in the wing, where they provide weight-reducing bending relief.

There is space in the nose for additional batteries, a small combustion engine that acts as a range extender and charges the batteries in flight, or a hydrogen fuel cell. Cruise speed is 120 kt. (138 mph) and flight endurance on batteries is 2 1/2 hr. Hybrid-electric propulsion extends the endurance to 4 hr. and range to 800 km (500 mi.).

Emissions and operating costs are halved compared with a conventionally powered four-seater, Smartflyer says. The SFX1 is planned to fly in 2025 and will be operated purely electrically in the area around Grenchen Airport, "massively" reducing noise emissions, the company says.

### Industry Data

## AAM Infrastructure Reality Index, Oct. 2024



October 2024

CREDIT: SMG CONSULTING

## BUSINESS

## ARC Aerosystems Seeks Buyer For C600 Heavy-Lift Drone

BEN GOLDSTEIN, [ben.goldstein@aviationweek.com](mailto:ben.goldstein@aviationweek.com)

**UK startup ARC Aerosystems has put its C600 heavy-lift hybrid-electric vertical-takeoff-and-landing (VTOL) cargo drone program up for sale, part of an effort to concentrate on development and certification of its planned line of passenger-carrying VTOL gyroplanes.**

The C600 program has been in development since 2017, having undergone seven design generations with multiple prototypes performing full transition from hover to cruise in flight testing. The company has spent around £10 million (\$12.7 million) on R&D so far, according to founder and CEO Seyed Mohseni. Taking the program to market from its current state would take around two years and an additional £6 million, he estimates.

The C600 is a heavy-lift cargo drone with a 150-kg (330-lb.) payload and range of 400 km (250 mi.). It features an 8-m swept wing with four pairs of coaxial propellers mounted on underwing booms for lift, as well as a tractor propeller for cruise. The aircraft is designed to perform both vertical-jump and conventional takeoffs. Electric power is used during takeoffs, while a thermal engine is used for cruise.

The C600 design has been frozen, and with a modest investment, a potential buyer could bring the aircraft to market without a type certification under the European Union Aviation Safety Agency's risk-based Specific Assurance and Integrity Level ruleset for uncrewed aircraft. The company says the program is at Technology Readiness Level 7 and Manufacturing Readiness Level 4.

Mohseni says an independent London-based consultant analyzed the C600 program and valued it at £20 million, although he said the company would be "happy to negotiate" on price. A final sale would include four prototypes, associated equipment, IP, patents, technical documents, test results, facilities and potentially its core team of 10 engineers.

ARC has formed a German subsidiary, Landon Aeronautics, as a vehicle to transfer IP to a new buyer.

The decision to spin off and sell the C600 program comes as ARC pivots to focus on development of its Pegasus III hybrid VTOL compound gyroplane. The aircraft could be brought to market for around £20 million, Mohseni estimates, adding he is hopeful proceeds from the C600 program sale potentially will finance most, if not all, of the remaining development costs.

"Because we are a small company, we can't continue to pursue two different programs, each one of which requires a lot of focus and attention," Mohseni tells Aviation Week. "Primarily, this is a restructuring and refocusing of our strategy on the gyroplane. The C600 program is doing well, we've received grants and support from the UK government, and we've [worked] extensively with full-scale prototypes. It's a good value for a buyer."

In 2023, ARC acquired the design rights and FAA type certificate for the Canadian-developed Avian Aircraft 2/180 gyroplane from Pegasus Rotorcraft in the U.S. The gyroplane first flew in 1960 and was certified under Part 27 in 1968. Avian went into receivership in 1970 and the certification rights and a surviving aircraft were acquired by Pegasus in 2020.

As a certified platform, ARC does not need a type certificate, but it is pursuing a series of supplemental type certificates related to modifications to the gyroplane. For example, the company plans to swap out the single Lycoming piston engine for twin engines—either a pair of pistons, or a piston paired with an electric motor or turbine engine. Additionally, the mechanical clutch system is being modified to enable an electric-jump takeoff. Third, the fuselage will change from aluminum to composites. A fourth modification will see one seat added to the two-seater.

The Pegasus III has a design range of 610 kph and cruise speed of 160 kph. The aircraft is being targeted at a variety of uses ranging from air ambulance to law enforcement, infrastructure inspection and air taxi.

Mohseni says there are several advantages to pursuing the gyrocopter design. These include the ability to autorotate and safely land without power. The design also can boast great efficiency, with disc loading that is four times less than Joby's S4. Additionally, pursuing the type-certified platform means the company does not have to complete a costly certification program like it would for a clean-sheet design.

The company has been ground testing the base prototype of the Pegasus, and Mohseni says it hopes to fly the aircraft "within the next couple of quarters," keeping it on track for planned entry-into-service in 2027.

"Our strategy is to use an existing certified platform and modernize it and increase its capability using off-the-shelf components that are already certified," he says.

In the longer term, ARC hopes to leverage its work on the Pegasus III to develop a family of intercity hybrid VTOL passenger aircraft. These include the two-passenger Linx P3 and nine-passenger Linx P9.



## AAM Briefs

### CUSTOMER

Spanish eVTOL startup **Crisalion Mobility** has signed a pre-sale agreement with Florida-based **UrbanLink Air Mobility** for 20 Integrity air taxis. UrbanLink aims to be the first independent operator of all-electric aircraft in the U.S. and has pre-orders for Lilium Jets and Eviation Alice electric regional airliners.

### ELECTRIC

**Wright Electric** has completed assembly of its 2.5-megawatt (3,350-shp) WM2500 electric engine, targeting simulated altitude tested in **NASA's Electric Aircraft Testbed** facility in 2025. Designed for propeller and ducted-fan propulsion, the WM2500 is sized to power aircraft with 100+ seats.

### AIRSPACE

**Thales** has partnered with Norwegian air navigation service provider and airport operator **Avinor** to implement the country's nationwide uncrewed traffic management system. The TopSky system will use technology from Dubai-based **AstraUTM**, acquired by Thales in March.

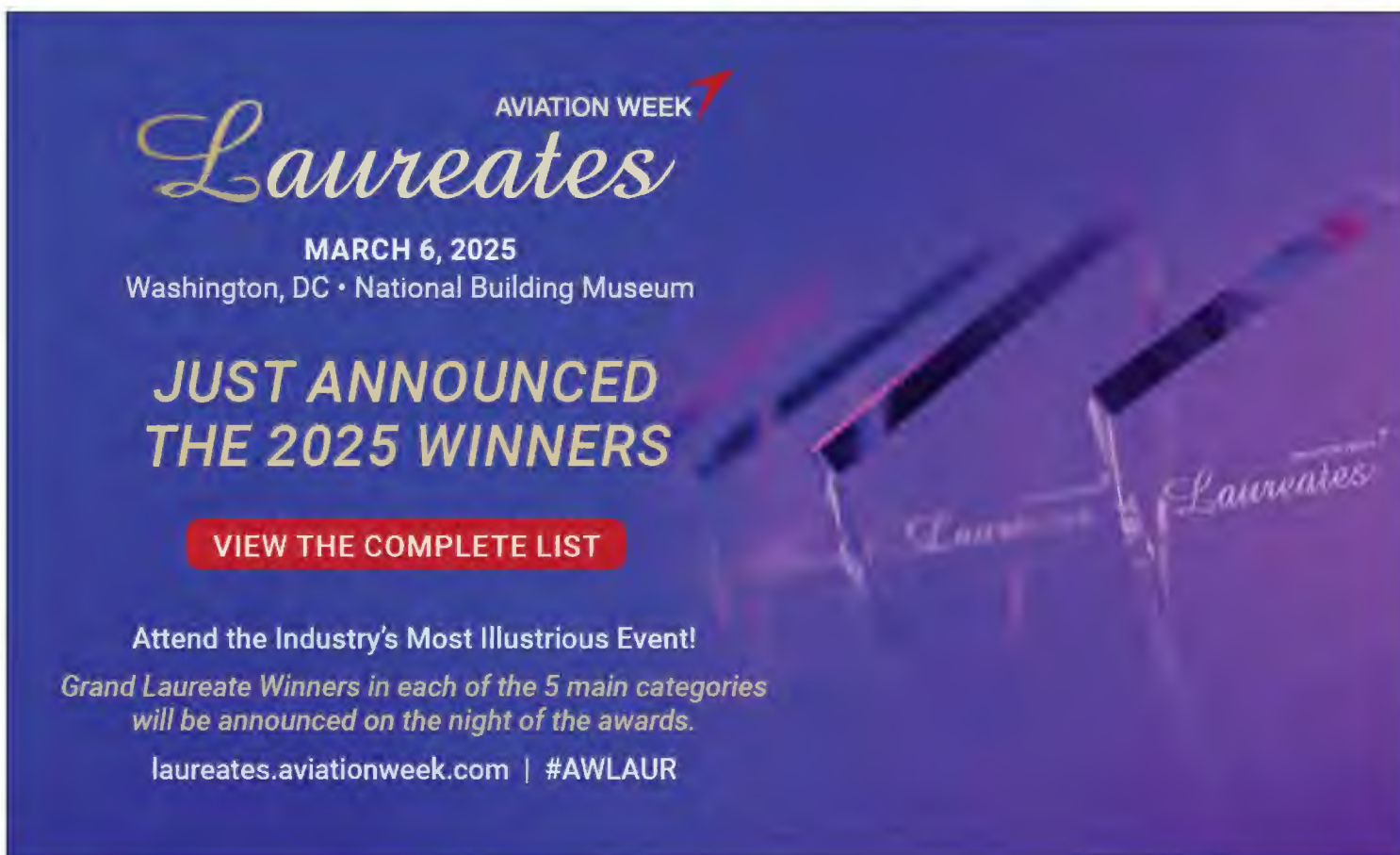
### SUPPLIERS

**Honeywell** has entered into a collaboration agreement with actuation specialist **Regal Rexnord** to integrate electromechanical components, systems and software for AAM aircraft. The scope could range from component manufacturing to assembly and test of Honeywell's flight control actuation systems.

### VERTIPORT

Vertiport developer **Bluenest by Globalvia** and Portuguese helicopter operator **Helibravo Aviation** plan to demonstrate AAM operations with drones and helicopters at the **Alges Heliport** in Lisbon in May 2025. Project partners include drone delivery operator **Speedbird Aero** and **Eve Air Mobility**.

Spanish startup **Crisalion Mobility** has selected **IFS Cloud** enterprise software platform to provide a comprehensive digital thread through design, manufacturing and maintenance of its planned passenger and cargo eVTOL aircraft.



AVIATION WEEK<sup>7</sup>  
*Laureates*  
MARCH 6, 2025  
Washington, DC • National Building Museum

**JUST ANNOUNCED  
THE 2025 WINNERS**

**VIEW THE COMPLETE LIST**

Attend the Industry's Most Illustrious Event!  
*Grand Laureate Winners in each of the 5 main categories  
will be announced on the night of the awards.*

laureates.aviationweek.com | #AWLAUR

**From:** [White House Press Office](#)  
**To:** [Warner, Cheryl {she, her} \(HQ-NA020\)](#)  
**Subject:** [EXTERNAL] [BULK] Press Briefing by Press Secretary Karine Jean-Pierre and Chair of the Council of Economic Advisers Jared Bernstein, December 10, 2024  
**Date:** Wednesday, December 11, 2024 3:31:03 PM

---

The White House Logo



**FOR IMMEDIATE RELEASE**

December 11, 2024

PRESS BRIEFING BY  
PRESS SECRETARY KARINE JEAN-PIERRE  
AND CHAIR OF THE COUNCIL OF ECONOMIC ADVISERS JARED BERNSTEIN

James S. Brady Press Briefing Room

(December 10, 2024)

2:31 P.M. EST

MS. JEAN-PIERRE: All right. Good afternoon, everybody.

Q Good afternoon.

MS. JEAN-PIERRE: Foggy day. Foggy day.

So, this afternoon, President Biden delivered a major address on his economic legacy. After decades of trickle-down econ- -- economics, President Biden has written a new playbook that's growing the economy from the middle out and the bottom up. His administration has delivered the strongest recovery in the world

and laid a strong foundation for years to come by investing in America, empowering workers and unions, lowering costs, and supporting small businesses.

Over the last four years, we have made remarkable progress, and the results speak for themselves: over 60 million jobs created, the lowest average unemployment rate of any administration in 50 years, inflation down faster than almost any other advanced economy, and incomes up almost \$4,000. The list goes on.

As you heard the president say, we face an inflection point. Do we continue to grow the economy from the middle out and bottom up, or do we backslide to trickle-down economics?

With that, I will turn it over to Jared Bernstein, chair of the Council of Economic Advisers, to further discuss the economic progress that we have made.

Jared.

CHAIR BERNSTEIN: Thank you. Great to be here with you again. I want to thank my team, as always, for helping me to prepare to speak to you today.

The president, as you just heard, gave a legacy -- legacy speech today wherein he spoke about the strong economy that his administration is leaving to the incoming team and how we got here, given what we faced when we took office.

He then lays out a set -- a set of -- he laid out a set of benchmarks, which I will go through with you in a minute, against which the incoming administration's economic stewardship should be judged.

The speech makes clear that while the pandemic was the acute source of economic stress four years ago, the damage done by decades of Republican fealty to trickle-down economic policy was a long-term underlying source of economic pain for millions of Americans -- Americans.

The speech goes through the policy implications of that agenda -- offshoring jobs with no concern for workers and their communities, anti-unionism, and disinvesting in American infrastructure workers' industries -- and contrasts that with the Biden-Harris agenda of middle-out, bottom-up growth, which implies a very different agenda: investing in workers in key industries of future growth and productivity, union power, full employment, labor markets, fair taxation, and taking on corporations and lobbies like Big Pharma on behalf of the American middle class.

The timing is not accidental. As Karine said, a quote from the speech, "With the outcome of this election, we face an inflection point. Do we continue to grow from middle out and bottom up by investing in all of America and in all of Americans, supporting



unions and working families, or do we backslide to an economic theory that benefited those at the top while working people in the middle class struggled for a fair share of the growth?"

The president, as his speech -- at the end of his speech, the president ticked through a set of benchmarks, indicators by which the -- the conditions of the current economy that the incoming team has inherited can be assessed and judged.

Sixteen million jobs with the manufacturing and a construction boom. In four years, we'll know if the -- that job growth and booms will continue or not.

Historic lows in unemployment. Record new businesses. Significantly closing the racial wealth gap. More people covered by health insurance than at any time in history. Our tax code is fairer. We've gone after concentrated corporate power, and in four years we'll know if this power goes back to big corporations or not.

Let me end my introductory comments today with a little bit of a reflection on the economics, speaking as the chair of the CEA, of the economic theory behind what the president talked about in his speech today. I should say the economic theory and the economic outcome. This is far from just a theoretical or an academic exercise.

The president talked about achieving a soft landing, and this is the idea of considerably lower inflation without giving up much on the economy's demand side -- that is, lower inflation without higher employment. As you know, many economists told us we couldn't get there. We'd have to have a recession to have as much disinflation as we've seen.

In fact, that did not occur, and one of the reasons it didn't is because the job market. You know, I heard the president mention full employment a couple times in his speech today. The job market has stayed uniquely strong for uniquely long, and that's given workers bargaining clout along with his union agenda.

And so, as prices have come down -- as inflation, I should say -- as inflation has come down and wages have gone up, we've had real wage gains now for about a year and a half on a -- on a yearly basis. Last seen: 1.5 percent real year-over-year. That's -- that's real -- that's a considerable pace of real wage gains.

This helps support strong consumer spending, and that's been a core factor keeping this economy moving forward a -- above trend growth rates and leading to a situation that you heard the president talk about today, where the U.S. economy really is the envy of the world. And I say that as someone who recently came back from Europe, where I was frequently accosted by people who wanted to just talk about how we've achieved the innovation, the

productivity, the persistent full employment that -- that we have.

That's the consumer side of the story -- the consumer spending side of the story. It's 70 percent of our nominal GDP, so it's extremely important to keep the economy moving forward.

But I often think of consumption as today's story and investment as tomorrow's story. I think what the president talked about today that was so important and so compelling -- especially given the fact that many of these benefits are going to unfold 2, 4, 5, 10 years from now, if the incoming folks nurture the seeds we've planted versus take them out -- this investment agenda i- -- has the potential and is already transforming economic growth, production, innovation, building up new domestic sectors in this economy in the area of clean energy, battery production, chips. And -- and that kind of investment agenda, that speaks to future growth rates. That speaks to future opportunities. That speaks to future productivity growth.

Now, we've already -- as the president said in his speech today, there's been a trillion dollars of private investment that has flooded into those sectors -- into clean energy, into semiconductors, into providing infrastructure for this country. All of that, again, is a complement to the consumer spending side of the agenda, the soft-landing agenda that sets us up for a future based on the kinds of investments the president talked about today.

With that, I'll turn to your questions.

MS. JEAN-PIERRE: Go ahead, Josh.

Q Good to see you, Jared. Thanks for doing this and subjecting yourself to all of us. (Laughter.)

One of the benchmarks that President Biden didn't mention in his speech was the U.S. budget deficit, which is closing out the fiscal year last year, like, above 6 percent of GDP. How sustainable is that as an inheritance of the incoming administration?

CHAIR BERNSTEIN: The president spoke about this a bit in the speech in the context of doubling on the TCJA tax cuts, of course, most of which expire at the end of next year. And he talked about over fi- -- I think he mentioned 5 trillion in deficit-financed tax cuts if Republicans fail to offset that.

I think that stands in stark contrast to the budgets that -- that we've passed that have three -- the most recent one with \$3 trillion of deficit reduction.

So, the first point is that if you look at the fiscal outlook that we've tried to craft in our budgets -- now, obviously, we were -- were not able to get those through Congress, but we certainly -- that's what we've been fighting for -- they're characterized by

significant deficit reduction and a great deal more fairness in the tax code, which is something he talked about today.

So, I think he correctly took a stance that the extension -- the full extension of the -- of the Trump tax cuts would be both significantly damaging our fiscal outlook and, even worse, creating more unfairness in the tax code and increasing after-tax inequality.

In terms of whether 6 percent deficits are sustainable, I think that when we -- what -- what you really want to see, it's very hard -- I think it's hard and probably not that advisable to say, "This number is okay and that number isn't. Once you get to this level of debt to GDP, you're in trouble. Once you go over it" -- you know, the -- the markets don't really work that way.

Given the extent of the debt that we face so far, we still have very successful auctions to -- you know, to -- to explain, you know, what I'm talking about.

But I do think that what you want to see is, when you get to a full-employment economy with above-trend growth, you'd like to see that number coming down. So, I think it's much more of a delta story. You'd like to see that number coming down, and one of the reasons you don't is because decades of trickle-down economics and Republican tax cuts have broken, have severed the linkage between strong economic growth and revenue flows to the Treasury. We tried to correct that in our budgets, but the politics have blocked us from getting it there.

Q But basically, you believe the current situation is not sustainable based off your budget proposals?

CHAIR BERNSTEIN: I think that when you get to an economy -- I think that when you're an economy like ours -- no, I wouldn't say it that way. I would say, when you're an economy like ours, with all the kinds of indicators the president discussed today -- full employment, above-trend GDP growth, historically low unemployment -- yes, your budget deficit should be going down because the revenues that come into -- the revenues that come into your coffers are outpacing your -- your outlays.

And that's the budgets that we've written. That's something we've tried to embed in our budgets, and, you know, we haven't been able to get them passed.

What's worrisome -- and the president talked about this today -- is that the incoming administration is making sounds of going in the other direction, which I would consider fiscally reckless.

MS. JEAN-PIERRE: Go ahead, Andrea.

Q Jared, it's been a -- a little while since I've seen you, so I

want to ask you a question about the speech and -- and the context for it. I mean, so many voters cited inflation and just their pessimism about the economy in their -- in exit interviews as -- as we were watching the election.

So, what is the -- what is the purpose of sort of going out and saying, "Well, we did all this right"? Against that backdrop, it's kind of like water under the bridge, right? You know, sort of, your account of the economic progress is against the backdrop of people having said, "No, that's not what we want to do."

CHAIR BERNSTEIN: Well, as I tried to express in my topper here, in my introductory remarks, the purpose was really twofold. One was to lay out a set of benchmarks. I mean, I think the president quoted Reagan in the speech, saying, "Sometimes facts can be stubborn things," but they are facts.

So, lay out a set of facts that are unequivocally correct about above-trend growth trending at 3 percent on real GDP, lowest average unemployment in 50 years, 16 million jobs, and so on -- real gains in average income of \$4,000 since we got here. Lay down a set of facts, benchma- -- 20 million new businesses -- small businesses created. Lay down a set of benchmarks against which the progress of the incoming administration should be judged.

I mean, this is -- the -- the incoming team, in no small part, ran hard against this economy. And so, it's entirely possible that, in some short amount of time, that they start making very different sounds about how -- how they own these great results. And we wanted to be sure that we set down the benchmarks that the Biden economic agenda delivered.

Secondly, how did we get there? So, those are the benchmarks, but how did we get there. We certainly didn't get there with trickle-down economics. We got there with the new playbook that Karine and I referenced, and that's a playbook that invests in American workers. It invests in American bargaining power. It believes in union strength. It believes in fair competition. It believes in fair taxation and a more reasonable fiscal outlook. It believes in pushing back on concentrated corporate power.

All of those parts of the Biden economic agenda got us to where we are in terms of the positive indicators that we had in this -- that I -- we outlined today.

Now, at the same time, nobody is denying the inflation that you -- you asked about, and, in fact, the president hit that head on in two ways.

One, first, he talked about our efforts to get inflation down. So, remember, in mid-June, you saw inflation peak, and after that, it turned around and came down pretty quickly to now it's within target -- it's -- it's close to the Federal Reserve's target rate, and that's why you see them cutting rates.

And so, how did we get there? Well, we did a great deal of work on trying to unsnarl supply chains; the president talked about his release of oil from the strategic reserves; and, of course, a full set of cost-cutting measures going after junk fees, health care, and so on.

The incoming administration has talked about repealing measures that would directly raise costs, not to mention adding a set of sweeping tariffs that would act like a national sales tax, pushing the wrong way on inflation.

So, it seems to us entirely important to reference all of those developments in this -- in this case.

Q Can I just follow up? So, you know, given that there's this lag in the economy -- like something happens, and then there's a lag when you see the effect -- you know, how long will it be before, say, Trump's tariffs sort of make themselves felt? Because, you know, I think your -- you know, the White House itself looked at the possibility of repealing or removing the U.S.-China tariffs to sort of address inflation and realized there would be only a very modest impact, so --

CHAIR BERNSTEIN: Okay. So, first of all --

Q Like, what -- what's your prediction --

CHAIR BERNSTEIN: Sure. I can give you some economics on that --

Q -- for the lag? Yeah.

CHAIR BERNSTEIN: -- the lag structure.

First of all, it's really important in this conversation dis- -- to distinguish between targeted tariffs that are designed to protect American industry and American taxpayers' investment against unfair overcapacity trade practices of the type that China has engaged in with sweeping tariffs of multi-digit percent tariffs on everything coming in from Europe and China. Totally different worlds.

The first protects produ- -- protects American producers. The second hurts American consumers.

How quickly does that happen? Quite quickly.

So, let's talk about how a tariff works. And, again, I think we've gotten some misguided explanations in this regard from the other side. The other country doesn't -- the -- the exporting country doesn't pay the tariff. Technically, the tariff is paid by the importing company. It's paid upon customs receipt by the importer. Now, that business then typically pushes that tax or tariff forward to their consumers.



And that's why studies have shown that fairly quickly -- I don't want to cite a number, but I think it's months ra- -- versus -- I don't want to cite a time period, but I think it's more months than -- than quarters. So, pretty quickly, I think, we've seen in the past.

Oh, you know what's a good example is the washing machine tariffs. That -- they hit very quickly. I think it was a matter of weeks or months before we saw the price effects on washing machines and on dryers -- American dryers, even though they weren't tariffed. So, the price effects worked pretty quickly.

MS. JEAN-PIERRE: Go ahead, M.J.

Q Thank you. Thanks, Chair.

CHAIR BERNSTEIN: Hi, M.J.

Q Hi. Nice to see you.

You know, over the last year or so, I think we've all seen you field a lot of questions about this disconnect between what you describe as a strong economy versus the people's generally pessimistic economic outlook. I just wondered -- and it's related to the last question -- what would you say is the reason that there wasn't enough of an improvement in people's economic outlook by Election Day? I assume you've had some time to reflect on the results of the election.

CHAIR BERNSTEIN: It seems clear, if you look not just at our election but at elections and approval ratings across the globe, that not just inflation -- because by the time the e- -- election came along, inflation was back down within distance of 2 percent, so it was back down close to the Fed's target -- so, not inflation, but the price level, the cumulative impact of inflation -- so the fact that people could still remember what things used to cost, that was a force that really whacked incumbents in every elect- -- I think, virtually every election we've seen across the globe. So, that was a very powerful force.

Now, look, from our perspective, we needed to do two things. We needed to get inflation down, because you'll never get -- people will never be able to acclimate to the higher price level unless inflation comes back down to around 2 percent. And that was behind our work on unsnarling supply chains, which became very important in this space. One of the graphics that, you know, I -- I like to tout from our CEA team is, if you look at supply chain measures of stress, which go way up and way down, pandemic and post-pandemic, and you plot them against commodities, goods inflation, they -- they track each other very closely with a bit of a lag.

And so, getting inflation back down to target was very much an important part of agenda. But that just means prices are rising

more slowly. It doesn't mean they're falling. And, in fact, to have a broad decline in the price level, you would need a deep recession that nobody wants.

So, what you need to happen is for incomes to catch up.

Now, that -- those dynamics were happening. They were occurring. And I've spoken about this from the podium before. I theorized, you know, probably a couple of years ago -- and one of my colleagues and I are trying to write an academic paper about this -- I theorized a couple of years ago that if inflation came down and people had enough time to acclimate to the new price level -- an acclimation that would be very much aided and, in fact, was essentially -- it had -- had to be aided by rising real wages or incomes -- eventually they'd start to get -- you know, to get acclimated and to feel better.

And, you know, pa- -- one -- one tr- -- you know, sort of, ape- -- what's the word I want? Sort of a trivial example of that is, you know, when I started driving, gas was 60 cents a gallon, but I don't walk around annoyed that gas isn't 60 cents a gallon because, while prices have gone up, incomes have gone up more.

That's where we are. Inflation is back down. Prices -- the price level remains too high from the perspective of consumers and voters, and that's partly -- you know, a big part of the answer to your question.

I sense you want to say something else.

Q Well, just this -- this long memory that people have on --

CHAIR BERNSTEIN: Yeah.

Q -- price levels. I mean, do you feel like you, the president's economic team, the president himself, could have done anything differently over the last few years to better address that, better, you know, sort of meet people where they are? I mean, you've known that that is where people's heads --

CHAIR BERNSTEIN: Yeah.

Q -- have been at for a while.

CHAIR BERNSTEIN: You know, the question of "could you have done something different and better," I always feel like, "Sure." You know, you could always im- -- nobody's perfect, and you can always improve on what you did.

But on the issues I'm talking to you about, we were one of the first folks to be -- to be talking about this, to be understanding the difference between inflation and price levels from people's perspective.

I mean, I don't know if you remember, but I brought this to our senior staff one day. You know, I brought this -- well, I think it might have been the only time I did this -- I brought a handout to our senior staff and said, "Let me talk to you about the difference between inflation and the price level and how people feel about that." And, you know, economics doesn't think that much about the price level. It thinks a lot about inflation. And, you know, not at all a critique of the mandate of the Fed, that -- that's the cr-- congressional mandate and the one they follow, but it's full employment and stable inflation.

So -- and you'll hear Chair Powell talk about that -- that, "I recognize the price level is a stress to people, but my job is to get inflation down."

So, it's something we've been on for a long time, and it's behind the cost-cutting work that we tried to do here. We cut costs in health care. The president talked ~~today~~ [today] about junk fees. You saw the energy results from the SPR release and so on.

We tried to get a lot more competition going in the grocery sector, where there's definitely not enough competition, leading to pretty high markups and profit levels that we've talked about and used the bully pulpit to convey our -- our concern about, but, you know, we live in a capitalist economy, and so prices are generally determined -- determined by private markets.

But where we could -- and health care is a great example, because the government is in 9 percent of the health care market. So, health care is about 18 percent of GDP; about half of that is the government. So, there's an area where we could and did make a huge difference: insulin; capping prescription drugs, which kicks in, by the way, in a couple of weeks -- the \$2,000 cap on prescription drugs. We're very proud of that agenda.

You know, could we have done more or talked about it differently? You know, I -- I think we did what we could.

MS. JEAN-PIERRE: Go ahead, Annie.

Q Hey, Jared.

CHAIR BERNSTEIN: Hey.

Q Good to see you.

One of the things the president mentioned today at Brookings was some -- he -- he had a note of regret about not signing the COVID checks the way that Donald Trump did. And I just was wondering if that's something you ever talked about or if, you know, following up on M.J.'s question about what could have been done differently, was that a debate that happened at all? Would you have recommended anything to the president in that regard?

CHAIR BERNSTEIN: It's not something I recall talking or debating about.

I mean, I will say two things about that. One is -- just to bring it back to the economic space in which I'm -- I'm more comfortable -- certainly, those checks were instrumental in what I described earlier, which was getting businesses and consumers to the other side of the crisis.

You know, we gave people more buying power than they had at a time -- and there's been a lot of second-guessing on this, so I'd love to set the record kind of straight -- in 20- -- in January of 2021, it was peak COVID deaths. Okay? The unemployment was stuck at 6.7 percent. And I just looked back the other day; the last jobs report when we came in was a negative. It had been revised -- it's been revised differently. I think it's actually been revised to be a bigger negative, but it was a negative. In other words, we'd lost, I think, 140,000 jobs, according to the print that was in December of '20.

So, this was a very challenging economy. You know, people who say, "It was fine, and you shouldn't have done anything," are forgetting. You know, that's -- that's amnesia.

So -- so, we're very proud of the fact that this income got into people's hands quickly. Who was asking about the lag a second ago? Boy, there's a really tight lag there. You know, this -- this money got out quickly. It got into the economy quickly, and it very quickly set up an economic expansion that is today the envy of the world. The president isn't hyperbolic when he says that, and I say that having recently come back from Europe. Is the en- - - that set up that full employment expansion that we've enjoyed since then.

And two -- so, I said there'd be two points. Two, he was kidding.

Q Oh, wait, he was kidding about signing the checks?

CHAIR BERNSTEIN: He was -- he was kidding.

Q Oh.

MS. JEAN-PIERRE: Go ahead, Danny.

Q Thanks. Thanks, Jared. I just wondered if you have had the chance yet to speak to your successor in the Trump administration, and if you've got any advice for him.

CHAIR BERNSTEIN: I have not. I don't know who will be sitting in my chair yet, so I haven't spoken to that person.

And then, advice?

Q Yeah.

CHAIR BERNSTEIN: That's a good question -- one I haven't thought of. I would say, read the president's speech today. (Laughs.) Really, I'm not -- I'm not being facetious.

The president's speech today is the best advice I could give to any member of the incoming economic team, because what it says is we have planted some very important seeds in growing domestic industry, which I think both the outgoing and the incoming administration share the strong desire to see American industry stand up independently, more resilient supply chains.

Yes, we still believe in very robust trade flows. So, obviously, part of my advice would be not to do sweeping tariffs. Certainly, small tariffs -- you know, targeted tariffs that protect against unfair dumping, sure. But I would be -- it would be to nurture -- you know, I mean, I guess this -- this may not be the most mellifluous advice that they want to hear, but nurture the seeds that we've planted.

This is not a blue-state thing or a red-state thing. And, in fact, the president was very clear on this today, most of the investments under the IRA, under CHIPS, even under Infrastructure, are going to red states, not blue states. Most of them are going to people with relatively lower incomes or lower levels of education, so very much a working-class issue.

So, nurture the seeds. Don't stomp on them.

MS. JEAN-PIERRE: Go ahead.

Q Is there anything that you have seen or heard from the incoming administration's economic plans that you like or that could be in line with what you have done here?

CHAIR BERNSTEIN: You know, I've heard, certainly, commentary about getting on a more fiscally sustainable path. So, I'm thinking about Josh's question a moment ago.

What I can't put together is how you get there from here -- well, not from here -- how you get there from what I -- I believe to be their fiscal agenda.

And, in fact, there have been many scorekeepers across town who have been scoring the cost of not just extending fully the TCJA tax cuts but going further -- tax cuts for overtime, tax cuts for Social Security, tax cuts for tips. And so, if you -- if you tout that all up, by one study, there was an upper bound of north of \$10 trillion in terms of adding to the deficit and the debt.

So, I like some of the sound I'm hearing about getting on a more sustainable fiscal path, but then I'm hearing a po- -- a policy agenda that goes the wrong way on that.



Q Just to follow up, you said that most of these projects are in red states. Certainly, the -- your administration didn't get a whole lot of political benefit from that. But I'm wondering, why is that? Is it because it's easier, there's less red tape, there's less regulations in red states, you can get projects up and going faster than in blue states?

CHAIR BERNSTEIN: No, it's -- it's not so much that. It's more that -- that these projects were targeted to communities that had been historically left behind. This president believes -- and I think he probably shares this belief with, you know, the incoming president to some extent -- this president believes that while there are absolutely positive attributes to globalization, the idea that globalization didn't leave behind American communities and didn't hurt anybody and uplifted everybody is clearly wrong and -- and even bereft. I mean, to blithely say, you know, "Here's another trade deal; everybody is going to love it and be fine," is just denying the impact of the China shock and the hollowing out that happened to the very communities we're talking about.

So, these plans were designed in part to disproportionately send their investments to communities that had been hollowed out and left behind: energy communities, communities where factories -- where anchor factories were lost. And that's behind where those investments have flowed.

Q But a lot of battleground states are -- were deindustrialized and left behind.

CHAIR BERNSTEIN: Well, it -- that --

Q I mean, you could of put projects anywhere.

CHAIR BERNSTEIN: -- no -- so, go to --

Q Why red states, is what I'm asking.

CHAIR BERNSTEIN: No, no. Go to Investment.gov --

Q Well, yeah.

CHAIR BERNSTEIN: -- and you'll see that there are lots of projects there too. So, it's not that -- it's not that 90 percent were in red and 10 were in blue. It -- I don't know what the division is, but I think it's probably fairly close. It's that a lot more -- you know, when the president talked about this today, he framed it as, like, "This may not" -- you know, "Some may look at this and say this is not my greatest political move." You know, that's not where he's coming from. When he said, "I'm president for all Americans," he meant it, and he over delivered.

MS. JEAN-PIERRE: Go ahead.

Q Yeah. Hi, Jared. Thanks for doing this. I have a question sort of about legacy. Biden billed this -- billed the speech this m- -- this afternoon as about an economic playbook, something that is successful and should be replicated, but it didn't have a lot of electoral success and it didn't -- you know, in the minds of voters, as other folks have said, they don't see it as a -- a success for them. I -- I just wonder, what gives you or what gives the president confidence that this -- this should be or would be --

CHAIR BERNSTEIN: So, here you have to --

Q -- replicated in the future?

CHAIR BERNSTEIN: That's a totally fair question. Here you really have to get under the hood, and I've done this. If you ask people what they think about paying \$35 for insulin versus \$400 a month, it's not going to surprise you that that polls somewhere between 80 and 150 percent. I'm making the second number up, but it polls north of 80 percent.

If you ask people how they feel about an infrastructure project that restored a bridge in their area, again, your -- you get poll num- -- you'll get approval numbers in -- in the high 70s and high 80s.

If you ask people -- and now I'm talking about Democrats and Republicans -- how you feel about this new computer fab that's going -- a micro- -- a microprocessor chip fab that's going up in your town, in your area, that's going to provide, you know, thousands of jobs building these fabs, which are three foot- -- football fields long, and lots of jobs staffing them, jobs that the president today said can pay up to, you know, \$100,000 for a non-college-educated person, not only are they going to say, "Yes, we like that," but a number of Republicans -- I think a double-digit number of Republicans -- have sent notes to the incoming administration saying, "Don't repeal that stuff."

So, part one, get under the hood and look at how people feel about many of the actions that the president talked about today.

Part two, which -- you know, I'm not denying the premise of your question at all -- it gets back to inflation. And I probably haven't said enough about that today. I talked to M.J. and others about the difference between the price level and how if you remember what things cost, that really sticks in the craw of many in the electorate, not just here but globally. But re- -- this -- this inflation was a global inflation, so let's not forget that. In fact, cumulatively -- we have good scatter plots on this in our forthcoming Economic Report of the President -- this in- -- this inflation cumulatively was about the same in the U.S. as it was in Europe and G7 countries.

Where we stand out from the pack is not in cumulative inflation;

it's in growth. It's in productivity. It's in innovation. It's in job creation. And so, that's -- you know, that's -- that's an important part of the puzzle too.

MS. JEAN-PIERRE: All right, we got to start to wrapping it up.

Go ahead, Peter.

Q Thank you for being here, Jared. I just want to ask you -- a lot of this has been sort of reactive to the new administration that's coming in. The president-elect posted, in the course of last hour as we've been gathering, that any company or person investing a billion dollars or more into the country will receive fully expedited approvals and permits, including environmental approvals.

Is there any consequence to something like that? Maybe this is a question that's more about the environment more broadly, but economically, is there any reason why there's -- this should be something that's reconsidered against tough scrutiny?

CHAIR BERNSTEIN: I would hesitate to respond to a tweet from the incoming president, just because I'd like to know more about what he's talking about and whether that's something they're actually planning or something --

Q To be fair, that's all we know about what he's talking about.

CHAIR BERNSTEIN: Right.

Q Yeah, that's fair.

CHAIR BERNSTEIN: So -- so, I probably wouldn't say much about that.

I will say the following that speaks to that a little bit. I keep flacking our forthcoming book. So, in -- (laughter) -- in the Economic Report of the President, out in a few weeks, one of the chapters in that -- one of -- and it -- it's not like we make any money; it's just point and click. So, it's a -- you know, this is just the intellectual sharing. (Laughter.)

We've had tremendous foreign direct investment. And, yes, we've definitely tried to make -- you know, clean the brush out so -- there's -- I'm cer- -- to -- to help diminish the burm- -- burden from permitting and things like that. And there's more to do in that space, and I think there are members of Congress -- I -- I -- that -- that is, I believe, a bipartisan issue that we -- we could be working on. So, if the Trump team is serious about trying to clear some of that brush, sure.

But one thing I often hear too -- one thing I hear too often from -- from him and them is without regard for any impacts of some of the -- some of the guardrails that are there for a reason. So,

that's why you shouldn't really just respond to a tweet. You need to look at what's the impact of taking down guardrails that are embedded in that -- in that tweet, but not -- not realized -- not recognized. But without -- you know, even with the current situation being as it is, we've had tremendous inflows of foreign direct investment.

I mean, TSMC, as you well know, I suspect, is building plants and already testing chips -- and, I think, quite successfully -- in their -- in their fabrication plants in -- in Arizona, I believe.

And, of course, across the country, we've seen these investments play out.

And when I think about the pictures in this chapter, the -- you know, the -- the foreign direct investment charts like -- they spike up like that. We've certainly seen historical investments in manufacturing facilities in this country.

We recently hit a hi- -- a peak in its contr- -- in the contribution of manufacturing facilities in this country, its contribution to GDP was recently the highest it's been since the early 1980s. So, that's not just domestic investment, that's global investment. We're very proud of it.

MS. JEAN-PIERRE: Okay. All right. Go ahead, Jared. Last question.

Q Thank you. So, the -- the -- I guess, more broadly, the audience for the address today, was it, like, you said, just for the American people to -- to know sort of what you were and then kind of how to judge the next four years, or is this kind of a call to action for members of Congress, for Democrats to think before maybe they go along with some of these policies legislatively?

CHAIR BERNSTEIN: I mean, I think that in some ways, sure, the latter of what you said, in the sense that the president was very clearly outlining two very alternative economic playbooks, and he was very critical of the former -- the trickle-down model -- and -- and, you know, very much underscoring the progress that we've made with the invest in America, invest in workers, worker -- invest in unions, invest in tax fairness, invest in domestic industries in this country.

That's the agenda, you know, that he obviously argued today is far superior to growing the economy in a lasting way to trickle-down tax cuts for rich people, which, as I said earlier, simply worsen the fiscal outlook and enrich their beneficiaries.

What I would say in terms of, you know, a me- -- I don't know that there was some sort of, you know -- no hidden message to politicians in there, but I've tried to say today, one, I think, useful way of looking at what he talked about today is this investment agenda. You know, strong consumer spending at 70

percent of our economy, that's important. But investment, you know, is another 10, 15 percent, and that's important too.

Consumer spending helped us get to where we are, helped us -- strong consumers on the backs of a strong labor market, easing inflation, strong real wage and income gains, that's helped get us to where we are. And, in fact, a healthy American consumer off the backs of a strong full-employment job market will always propel this economy forward because consumer spending is 70 percent of our GDP. In Europe, it's 55 percent. In China, it's 40 percent. So, that's a natural place for us to have gone.

But for investing in the future, you got to plant seeds. So, the message to anyone -- D, R, whomever -- from the speech today is nurture those seeds. Take those seeds that we've planted -- and, by the way, these are not sprouts in the ground. I mean, these are seeds that have a hundred -- that have a trillion dollars of private capital backing them. So, they're sprouting.

I think I better put this tortured metaphor aside pretty soon. (Laughter.) But, you know, th- -- those sprouts need to be nurtured. And I don't care if you have a D or an R next to your name, you need to roll up your sleeves and start nurturing.

MS. JEAN-PIERRE: (Laughs.) Nurturing.

All right. Thank you so much, Chair. Appreciate it.

CHAIR BERNSTEIN: Thank you.

MS. JEAN-PIERRE: We will be nurturing --

CHAIR BERNSTEIN: I'll bet you will.

MS. JEAN-PIERRE: -- those seeds. (Laughter.)

All good?

CHAIR BERNSTEIN: Yeah, it's good.

MS. JEAN-PIERRE: All right. Thank you so much, Jared. Appreciate it.

Q We'll take signed copies of the book. (Laughter.)

MS. JEAN-PIERRE: That's right.

All right. Just have two more things to share with all of you at the top, and then we'll get -- we'll continue.

So, today, following the G7's June agreement and the president's October commitment, the United States has disbursed \$20 billion to a New World Bank fund that will provide economic support for



Ukraine. The U.S. and G7 loans will be paid back by the interest earned from Russia's immobilized sovereign assets, increasingly putting the cost of the war on Russia, not on U.S. taxpayers.

After Russia's brutal invasion of Ukraine, the G7 made a commitment that Russian sovereign assets in our jurisdictions will remain immobilized until Russia ends its aggression and pays for the damages it has caused Ukraine. The United States and G7 are now making good on that commitment.

Together, we will leverage income earned from frozen Russian sovereign assets to provide a total of \$50 billion of extraordinary revenue acceleration, ERA, loans to Ukraine. This will lend vital support to the people of Ukraine as they defend their country, and it also makes clear aggressors and tyrants will be responsible for the damage they cause.

And finally, tomorrow, the president and the first lady will host the first-ever White House Conference on Women's Research -- Health Research. The conference will bring together business -- business, philanthropic leaders, academic researchers, advocates, investors, and administration officials to discuss the president and first lady's historic leadership to advance women's health research.

President Biden and First Lady Jill Biden created the White House Initiative on Women's Health Research to fundamentally change how our nation approaches and funds women's health research. The reality is, despite making up more than half the population, women have historically been understudied and underrepresented in health research.

To help close these gaps, President Biden called on Congress to make a transformative investment of \$12 billion in new funding for women's health research in his 2024 State of the Union. He also signed an executive order to advance women's health research and innovative, directing the most comprehensive set of executive actions ever taken to expand and improve women -- research on women's health.

Since its launch in November of 2023, we're proud that the initiative has galvanized nearly \$1 billion in funding to close gaps in research. And tomorrow, you will hear directly from the president, you will hear directly from the first lady, who are going to discuss this progress and the work that still remains.

And stay tuned for more.

With that, Josh, as always, it's good to see you.

Q Good to see you.

Given the killing of the UnitedHealthcare executive, what would you say to Americans who might sympathize with Luigi Mangione's

purported manifesto indicating that insurance companies ultimately care more about their profits than the health of their customers?

MS. JEAN-PIERRE: So, let me just s- --

Q Is that -- is that --

MS. JEAN-PIERRE: I'm sorry.

Q -- premise, like --

MS. JEAN-PIERRE: Yeah.

Q Do you -- is that premise accurate in any way?

MS. JEAN-PIERRE: So, let me just say at the top -- offer up, certainly, our condolences to the victims and his loved ones. We are certainly tracking the latest regarding this deadly shooting.

As you all know, local enforcement is leading the investigation, and the FBI certainly is supporting. So, we will know more as they complete their work, and we're going to give them the space to do just that.

And we are grateful to law enforcement for apprehending the suspect, and we stand ready to provide further support if needed.

And so, while we're certainly not going to comment on the investigation, we condemn -- we condemn violence in the strongest term.

And so, I'm just going to be really careful here and not comment on this case, as we do normally. It's not -- it's our usual step forward, as -- as we talk about these types of situations.

Obviously, this is horrific. Violence to combat any sort of com- - corporate greed is unacceptable. And so, that is as far as I'm going to go.

I'm going to let the investigation move forward, and I'm not going to speak to any manifestos or anything that has --

Q But --

MS. JEAN-PIERRE: -- is coming out to this.

Q Let me follow.

MS. JEAN-PIERRE: Sure.

Q This administration has made price gouging a priority. It's talked about junk fees. The president just outlined part of this in his economic speech.

Are Americans treated fairly by their insurance companies?

MS. JEAN-PIERRE: Look, I think what -- I want to be careful, because this is indeed connected to this case, connected to this ongoing investigation. I do want to be mindful in how -- what I say from here, and I'm going to let this open investigation continue and let -- let the law enforcement do their job. I think it's important that we give them the space to do that, and I don't want to speak to what has been said by this particular individual.

Obviously, we are going to continue to condemn any form of violence. That is unacceptable.

And so, that is as far as I can go from here, given that this is an ongoing investigation, and speaking to it would not be the right thing to do right now from this podium.

Go ahead, Karen.

Q Okay. A couple questions about drones. There have been repeated drone sightings in the Northeast, especially in New Jersey. These are not small drones; some of them are pretty large. They're flying at low altitudes. They're flying in flocks. Has the president been briefed on this situation?

MS. JEAN-PIERRE: So, we are certainly aware. The president is aware. So, we're closely tracking the activity and coordinating closely with relevant agency, including DHS and FBI, to continue the -- to investigate these incidents.

Don't have anything beyond that to share. Obviously, this is something that DHS and FBI are tracking very, very closely, and so I would have to refer you to -- to them directly.

But aware, keeping an eye out, and looking into the incidents that you just mentioned.

Q Right. A couple still, though, but --

MS. JEAN-PIERRE: Yeah, yeah.

Q -- has the -- has the federal government ruled out that these are controlled by foreign entities?

MS. JEAN-PIERRE: Yeah.

Q And do you know if they're conducting surveillance over these areas?

MS. JEAN-PIERRE: So, I cannot make any pr- -- any kind of predictions or -- or comments about that specifically from here. This is something that DHS is looking at and FBI, so I would have to refer you to them.

I don't have anything beyond that we're tracking this very closely. Obviously, we're all aware of the incidents that have been reported. I -- I'm not going to go into what they could be or could not be from here. That is something that obviously is being looked at -- those -- those respective agencies that I just mentioned.

Q When was the president briefed on this?

MS. JEAN-PIERRE: I don't have a timeline, but he certainly have -- has been made aware of this in his -- in his update.

Q Okay. And the New Jersey governor said, you know, it's frustrating that there aren't answers about where these are coming from, that people are very concerned about this. What's the White House message to the people up there who are frustrated that there isn't any information right now?

MS. JEAN-PIERRE: Yeah. And -- and, obviously, we hear them and we understand that. We are closely tracking this. We are monitoring the incidents that have been put forward and -- and certainly made public.

And we have two respect- -- two agencies that I've already mentioned that are looking into this, working closely with folks on the ground, trying to get to the bottom of it.

I don't have anything more to share beyond that.

Go ahead, Andrea. I was trying to see who else I can call --

Q (Laughs.)

MS. JEAN-PIERRE: -- because I know I called on you already.

Q So, I just want to follow up on your comment -- or your -- your --

MS. JEAN-PIERRE: Yeah.

Q -- desire to not comment, necessarily, on the UnitedHealthcare thing. But you did use the words "corporate greed." So, just to -

MS. JEAN-PIERRE: You mean, just in general in this administration? Or -- or --

Q Well, I mean, in terms of -- in ter- -- you -- you talked about the horrific response. I'll just read it back.

MS. JEAN-PIERRE: Yeah.

Q "Obviously, this is a horrific response."

MS. JEAN-PIERRE: Oh, you mean in my answer.

Q You know, your -- "This is horrific. Violence to combat any sort of corporate greed is unacceptable."

MS. JEAN-PIERRE: Yeah.

Q So, I mean, are you saying that you buy the argument that this violence was specifically targeted --

MS. JEAN-PIERRE: I --

Q -- at some sort of corporate greed by UnitedHealthcare?

MS. JEAN-PIERRE: What I'm saying is that anything -- right? -- any type of violence on whatever it is -- right? -- whether it's political violence or -- or any kind of violence, we are going to -- we're going to continue to say it is unacceptable and we're going to condemn any form of violence.

And that's what -- I was bringing it more so in a broader spectrum of -- of what we have been pretty consistent in saying at this podium, in this administration -- certainly this president as well.

Any form of violence -- any form of violence, whether -- what it is, we are going to certainly condemn it.

Q And then just to switch gears. The president today, during his remarks at Brookings, talked about leaving office but not going away and continuing to work on polarization and division issues. Do you have anything to share with us in terms of the president's plans? He's cut short his, you know, sort of -- you know, what will he be doing over the holidays? Can you just sort of give us a little readout on -- on what he's planning and whether, you know, there -- there would be a foundation or -- or how he envisions working on polarization?

MS. JEAN-PIERRE: So, you're talking what his --

Q Post. Post.

MS. JEAN-PIERRE: -- what his world will look like post his presidency? Look, I'm going to let the president speak to that. Obviously, he gave you a little bit of a window of his thinking of what he sees his world post-January 20th. I don't want to get ahead of him.

This is someone, if you think about it -- right? -- in -- in -- more broadly, he has had a 52-year career in public service. So, he is a public servant to his core and always believes in doing everything that he can to make Americans' lives better. And you saw him do that in the last almost four years. And he's going to continue, certainly, doing that in the next 41 days -- the last 41



days of his administration.

And so, that is inherently who he is. He talks about continuing to do the work that he truly believes in.

Obviously, he talked about polarization. This is something that he's talked about for some time. And this is also a president -- whether he was president, vice president, or senator -- and you know this, if -- if you followed his career very closely -- he has -- he has found ways to reach across the aisles to get things done on behalf of the American people. And so, I'm sure that is something that he wants to continue to -- to speak to.

But I -- I don't have anything to share. I'm going to let him certainly lay that out when he feels is the right time to do so.

Q And just, really quickly, I know that Kirby spoke with us earlier, but the -- the question that I have is on Syria and the -- it looks like the government there now is sort of -- or the ch- -- direction seems to be to embrace an open market economy. Can you say anything more about further contacts that you've had with -- with the opposition forces there in Syria and what your -- your, sort of, understanding is about the direction that that government will take?

MS. JEAN-PIERRE: So, look, what I will say is -- and what you've heard from many of my NSC colleagues over the past couple days, and certainly from the president on Sunday when he spoke to the developments in Syria on -- on Sunday, when he gave -- gave remarks in the Roosevelt Room -- so, what we can say and what I can say is that we are in contact with all the Syrian groups, including through -- with inter- -- intermed- -- including intermediaries, as we work to do whatever we can to support the Syrian people through a transition. And so, that's what I can speak to.

You heard the president say that various leaders of the rebel -- rebel grou- -- groups, including HTS, are saying what we view to be the right things publicly, obviously. But what is important is what they're saying closely matches their -- what they're saying -- their actions closely match their words, and that's what needs to be seen.

But I'm not going to go beyond that at this time. But certainly, we are in touch with Syrian groups.

Go ahead, M.J.

Q Thanks, Karine. Just quickly following up on the -- the murder of Brian Thompson. Can you give us any sense of how the president himself has been processing those headlines? I think even just setting aside the debate that it has prompted about the health care industry, I think just the image itself has been so shocking to a lot of people.

MS. JEAN-PIERRE: Yeah. And -- and I'm going to be honest, I haven't had a -- a deep-dive conversation with this -- the president about this. Obviously, I know that he has been updated. Certainly, have -- have talked to him about what -- what has been reported, and he's been updated by senior members -- other senior members of his team. So, haven't gone into the images or anything like that specifically.

But what I can say and what we've been really consistent -- and I just mentioned this to one of your colleagues -- is denouncing violence and how horrific this -- obviously, this incident is. And it is important to certainly continue to -- to say it's unacceptable, continue to say that we condemn it.

And we are trying to be really mindful because this is an ongoing legal matter. And so, what we say at this podium, as you know, goes far and wide and -- and has impact. So, we're trying to su- - be super, super careful from here.

But the thing that I can say is condemn the violence that we have - - that we saw certainly last couple of da- -- the -- couple days ago on this -- on this issue.

Q And just separately, can you confirm that the president still opposes the death penalty?

MS. JEAN-PIERRE: N- -- he -- his view has not changed on that.

Q Okay. Given that his view on that hasn't changed, can you talk to us a little bit about -- I know you're not wanting to, you know, share anything that you're not prepared to share yet, but given that that has been his stance, is he currently considering the possibility of the commutation of inmates that are currently on death row?

MS. JEAN-PIERRE: Again, I'm not going to go ahead of the president's thinking. Certainly, we will have more to announce on pardons and commutations, as I've said many times before, but there's a process. He's reviewing it. He's thinking through it. I'm just not going to get into any specifics from here at this time.

When he's ready to make announcements, we'll certainly, obviously, share that with all of you.

Go ahead.

Q Quickly, you mentioned the president can speak for himself on a lot of these issues. Will he give a year-end press conference?

MS. JEAN-PIERRE: I don't have anything to share. Obviously, the president is going to -- wants to continue to engage with all of you. I don't have anything to share on -- on that.

Q The former defense min- -- Israeli defense minister was here today. Any updates on where the hostage negotiations stand?

MS. JEAN-PIERRE: I don't have anything to update you on that. As you know -- and we've been pretty consistent about this and -- and pretty forthright on saying how we're -- certainly continue to be committed and working 24/7 to get the hostages home. This is a priority for this president, and he wants to do everything and continue to do everything that we can to do that.

National Security Advisor Jake Sullivan is going to be traveling to Israel this week to meet with Israeli officials as part of our close consultations on a range of important issues, including our efforts to reach a hostage release and ceasefire deal in Gaza, and so -- and the latest development in Syria and -- and for discussions about Lebanon and Iran.

So, that is happening. Jake will be going to the region. And, as you probably already know, he's going to be meeting with the hostage -- the hostage -- the families of hostages in Gaza. And so, they're going to be meeting this afternoon, if they haven't already. And this is something that -- as you know, he has spoken to this before. Jake Sullivan regularly meets with the families of these hostages, and he has done that multiple time throughout this past -- past year. And so, that is -- that is something that he's -- he will be -- he's been doing -- he's going to be doing today.

And so, we have been really clear. This president has been really focused on his commitment on bringing Americans who have been wrongfully detained, held hostage. I think we have brought home over 75 Americans who are unjustly detained around the world. And so, that commitment continues.

And so, that is certainly what we're going to work on 24/7 from here.

Q And -- and to that note, the president said that he believes that Austin Tice, the American journalist held in Syria, is alive. What exactly is that based off of? And has there been any movement in terms of securing his release?

MS. JEAN-PIERRE: So, let me just say at the top that that is a priority. You heard that from the president when he took, I think -- he made a statement and certainly took a question about this on Sunday. Finding Austin Tice is a ti- -- top priority of this administration.

The FBI and State Department have offered up to \$11 million in reward to -- to anyone who can provide information.

We do not know where he is located. We do not know. But we continue to hope that he is alive. And I think that's what you hear from this -- this president: that he is hopeful that he is

still alive.

And we're talking through, certainly, this with the Turks and others to find him and to bring him home, and that is our commitment from this president.

I will say, more broadly, to answer the question, there is no indication that he's not alive, but there's also no indication about his location or his condition.

So, again, we are hopeful. We are hopeful that he is, and we're going to continue to do the work to bring him home.

Q Sorry, just to follow up.

MS. JEAN-PIERRE: Yeah.

Q So, when the president says he believes he is alive, are you saying he's really saying that he's hopeful he's alive?

MS. JEAN-PIERRE: Well, there's no indication he's not alive. There isn't. But at the same time, we do not know his location and we do not know his condition. That is just the -- sadly, the realities that we're in.

You heard what I just laid out about what the FBI and the State Department have done: offered up \$11 million in r- -- awar- -- rewards to anyone who can provide more information. I think that shows our commitment to bringing him home, and that's what you're going to continue to see from this president.

Again, I -- I talked about how he has -- in his administration, has brought home more than 75 Americans who have been wrongfully detained. And so, I think you can see this president and hear this president's commitment to doing that, getting Austin Tice home to his family.

Go ahead, Peter.

Q Can you detail how recently -- or when most recently President Biden himse- -- himself spoke to the Tice family, what the engagements with the family look right now, and then, what, with some specificity, is being done to try to secure more information? Is there a hostage recovery effort that's taking place that is physically in Damascus on the ground? There are American troops there. What more can you tell us about that outfit?

MS. JEAN-PIERRE: So, I don't -- I would have to check in. I don't have a -- any update on -- on a conversation that -- when is the last time the conversation -- the president had a conversation --

Q None -- none since the fall of Assad, that you know of?

MS. JEAN-PIERRE: I just -- I -- I don't -- I just want to be super mindful.

Q Got it. Got it.

MS. JEAN-PIERRE: I just haven't had that conversation, so I don't have anything to share with you on the last time the president has spoken with Austin's family.

As you know, Jake Sullivan, the national security advisor, spoke to his family just last week. So, that has occurred. There has been engagement and -- and -- from us with the family. So, just want to make that clear.

Look, I -- I just laid out how the FBI and the State Department has offered up \$11 million in -- in rewards -- right? -- to try and get more information.

We do not know his location and we do not know his condition. And so, we are trying to do everything that we can to get that information.

We are committed to bringing him home. And so, that is what you heard from the president, certainly, on Sunday when he was asked directly this question -- or asked a question arou- --about Austin. And so, that is -- continues to be our commitment.

So, we are certainly working through the Turks and others to find -- to find him and bring him home.

So, that is the actions that we have been taking. And so, I don't have anything else to share beyond that.

Q If you have anything more to share, I trust you'll tell us.

MS. JEAN-PIERRE: Yes.

Q Let me ask you, if I can -- following up on a question that was asked to Jared that -- that raised this thought for me: Have you had any conversations with your successor --

MS. JEAN-PIERRE: Yeah.

Q -- to the podium, Karoline Leavitt? And, specifically, what advice would you give to her when she takes the podium?

MS. JEAN-PIERRE: Yeah, I was asked a questions like -- a question like this when her announcement was made. And certainly, I wish her all the luck. And this is a great job. I love this job. It has been an honor and a privilege to serve as the White House press secretary to this president -- to President Biden, to this administration. And -- and I hope she enjoys it, and I hope -- you know, again, I -- I just wish her well.



This has been an experience that I will always remember -- (laughs) -- a lifetime -- one of -- one of those experiences that will live with you forever. And -- and, you know, I know people say how tough this job is and how unre- -- unrelenting it could be, but I enjoy it. I've enjoyed this opportunity. I've enjoyed speaking on behalf of the president of the United States. That is a big deal. That is an important job.

I have not spoken to her, but certainly wish her well.

Q Obviously, you wish her well. So, those are good wishes.

MS. JEAN-PIERRE: Yeah.

Q But in terms of advice, what is your advice?

MS. JEAN-PIERRE: Well, look -- look, one of the things that we have -- I hope you all agree -- in this administration, is we have brought back the norms of how to engage with the press, having these press briefings, doing these back-and-forths, and trying to do that in the most respectful way that we can. And I think it's important. It's important.

We did that not because of all of you here -- obviously, we respect the work that you do, but also what -- what -- the job that you do and what it means to the American people.

Q So, to be clear, would you urge the new White House to have a daily press briefing?

MS. JEAN-PIERRE: I -- I am not going to --

Q That seems easy.

MS. JEAN-PIERRE: No, no, no. No, no. No, no. I -- I think they have to decide for themselves how they want to move forward with a Trump administration. That is for them to decide.

What I can say is bringing back the norms, I thought -- I think -- we believe, not even "I" think -- the president believed was incredibly important to do. Having this back-and-forth with all of you, we believe was important to do on behalf of the American people.

Being able to have the freedom of the press -- right? -- and respecting the freedom of the press is, indeed, very much a part of our democracy. The -- we call you all the "fourth of state," right? That is incredibly important to have -- to have that be part of this administration. The job that you do, reporting on what we're doing, even when we disagree with all of you -- not all of you; with some of you. (Laughter.)

I won't say "with all of you" -- a blanket "all of you."  
(Laughter.)

But even when we disagree, just generally -- right? -- even when we disagree, we believe it's important to have that back-and-forth, and it's healthy, it is part of our democracy, and we want to continue to respect -- certainly continue to respect that.

I'm not -- it is up to them. I'm not sitting behind the -- the Resolute Desk, and that is for that person to decide -- the next person to decide how they're going to move forward.

Q Thank you.

MS. JEAN-PIERRE: Yep.

Go ahead.

Q Yeah, two quick ones. One on the U.S. Steel matter. Is the -- can you give us an update on the timeline? And is the president committed to making a decision one way or the other before he leaves office, or is it --

MS. JEAN-PIERRE: Yeah.

Q -- a possibility he'll let --

MS. JEAN-PIERRE: I -- I --

Q -- his successor make that decision?

MS. JEAN-PIERRE: I don't have any update for you on that. I don't have an update.

Q Next one. Same question: TikTok.

MS. JEAN-PIERRE: What about TikTok? (Laughter.)

Q Is the president -- is the president --

MS. JEAN-PIERRE: I was -- I was --

Q -- committed to making a determination --

MS. JEAN-PIERRE: Do I like TikTok? What -- (laughs).

Q -- on TikTok --

MS. JEAN-PIERRE: Yeah.

Q -- before he leaves office, or is that something he might leave to his successor?

MS. JEAN-PIERRE: So, look -- so, I'm going to refer you to the Department of Justice, who has put out a statement on this, and the

court's finding that, and I quote, the government "has offered pers- -- persuasive evidence demonstrating that the act is narrowly tailored to protect national security" and -- another quote here -- "to counter a well-substa- -- substantiated national security threat."

I'll just reiterate: The administration and a strong par- -- bipartisan majority of Congress that passed this law have been clear that we want to -- we want to see is a divestment, not a ban. We've been very clear about that. You've heard us talk about that from here ad nauseam, I'm sure, for all of you.

So, this is not about banning the app. This is about preventing the PRC from being able to exploit data gathered on many Americans. So, this is about protecting our privacy and -- American privacy. And so, that's what we've been very clear about that.

Outside of that, I would have to refer you to the Department of Justice.

Q This is a presidential determination under the law that --

MS. JEAN-PIERRE: I would -- I would refer you to the Department of Justice since there was just a -- a decision made about this, so I'm going to refer you to this on that.

Go ahead. I --

Q Thank you. Two questions. One on Brazil. One on Haiti.

Haiti --

MS. JEAN-PIERRE: Yeah.

Q Haiti -- do you have a reaction to the massacre that --

MS. JEAN-PIERRE: Yeah.

Q -- recently happened? One hundred and eighty people were killed.

MS. JEAN-PIERRE: So, we are horrified -- horrified by the reporting that nearly 200 people in Haiti were needlessly mass- -- massacred, as you just stated, by self-serving criminal gang members. And so, we strongly, strongly condemn this vicious and -- and criminal act. And we call upon all of the international community to immediately stand with the people of Haiti and provide assistance to the Kenyan-led multinational security support mission.

But it is incredibly sad to us, what we -- been reported, and it's horrific. And, I mean, these are people who were needlessly massacred, again, by self-serving criminal gang members. And it is

-- it is certainly disheartening to hear.

Q And in Brazil, the president -- President Biden met with President Lula of Brazil last month. Today, President Lula was -- he was undergoing surgery. Has the president been following this?

MS. JEAN-PIERRE: So, he is aware, and -- and, you're right, the president was in Brazil recently. He -- he enjoyed President Lula's warm -- warm welcome to Brazil just a couple of weeks ago, just last month. And so, we are pleased to hear that his operation this morning went well. And certainly, we wish him a speedy recovery. And as you just asked me, the president is aware and is tracking.

Okay. Go ahead.

Q Thanks, Karine. One of the first things that the president did when he took office was rescind former President Trump's order creating a Schedule F that would have allowed thousands upon thousands of civil servants to be fired if they were determined to be in a -- in a policy-making position. And the administration has finalized regulations that would make doing that harder for a future president, but the president never got behind any of the bipartisan bills that would have prohibited future presidents from reclassifying civil servants, employees to make them more easily fireable. Does he regret not doing that, considering that President-elect Trump has indicated he wants to immediately bring back Schedule F and begin firing lots of civil servants?

MS. JEAN-PIERRE: So, what I will say is -- and you stated this in your question to me, and I think the president has led by example. You said what he was -- what he did the first couple of days, couple of weeks, even months when he stepped into this office, into this administration, and trying to protect, certainly, and turning back some of the policies -- policies that were put forward. And the reason he did that is because this is a president who believes that public servants deserve -- they deserve to be treated with dignity and respect because they are working on behalf of -- of their fellow Americans.

And so, he took those actions because he believed that. And he took that -- those actions because he was able to lead by example in this office.

And so, I'm not going to get into what the next administration is going to do or not do, but what I can say is -- really, very much into how you led into your question to me, is that he respects public servants, and he certainly has led by example from here.

Q But the president, he had a democratic trifecta when he came into office, and yet he did not put any of his political capital into getting Congress to include, in any of the must-pass bills, legislation that would have prohibited future presidents from doing what Donald Trump has -- has vowed to do.

MS. JEAN-PIERRE: Yeah.

Q And the regulations that the administration has finalized can be undone. They can be unwound. And all of what happened -- of what the administration did can be for naught.

Why did the president not, if he -- if he respects and -- respects civil servants so much, did he not put any political capital into safeguarding --

MS. JEAN-PIERRE: Yeah.

Q -- their status in legislation?

MS. JEAN-PIERRE: So, first, Andrew, I'm not going to litigate each policy, each legislation. I'm just not going to do that from here. And so, that is something that I'm not going to get into.

What I will say is the president took action. You said it in your question. He took action to undo some of the policies that were put forward by the last administration that harmed these public servants that were working very hard to the work -- to do the work on behalf of the American people. And he did lead by example. He did. He took steps, and -- and he did that because he believes in respecting and showing some dignity to those workers.

And he undid a lot of the harm that was caused -- policies, obviously, to these public servants. And I think that is showing leadership. That is showing how you can take action to do the right thing.

And so, I would -- so, I would obviously take a little offense to your question, but I'm not going to litigate each legislation. You said it yourself in asking me this question -- original question. The president did take action. He did lead by example, and I think that's important here.

I'm going to take one last question. Go ahead.

Q Thanks, Karine. Just quickly. Has the president been briefed on the fires out in California? Is the White House in touch with officials?

MS. JEAN-PIERRE: He -- he certainly has been kept up to date to the fires in Malibu, California, more specifically. So, we are certainly praying for communities out west that have been, in fact, impacted by the wildfires. And administration officials, as we normally are, are in close touch with local and state officials on the ground. Their counterparts and FEMA has issued a -- a Fire Management Assistant Grant to help reimburse California for firefight- -- -fighting cost.



And so, we are obviously always grateful to the brave firefighters who go out there and put their lives on the line to protect people and save lives. And so, we stand ready -- as we normally do, stand ready to pr- -- to provide any further support. And so, we certainly, as we do at all times when we see this type of extreme weather that's created, this type of havoc that communities on the ground, folks on the ground, need to certainly pay close attention to what's being said to them. Evacuate, if needed. And we want them to be ~~stafe~~ [safe] and to stay safe.

All right. Thanks, everybody. I'll see you (inaudible).

Q Thanks, Karine.

MS. JEAN-PIERRE: Thanks, everybody.

3:42 P.M. EST

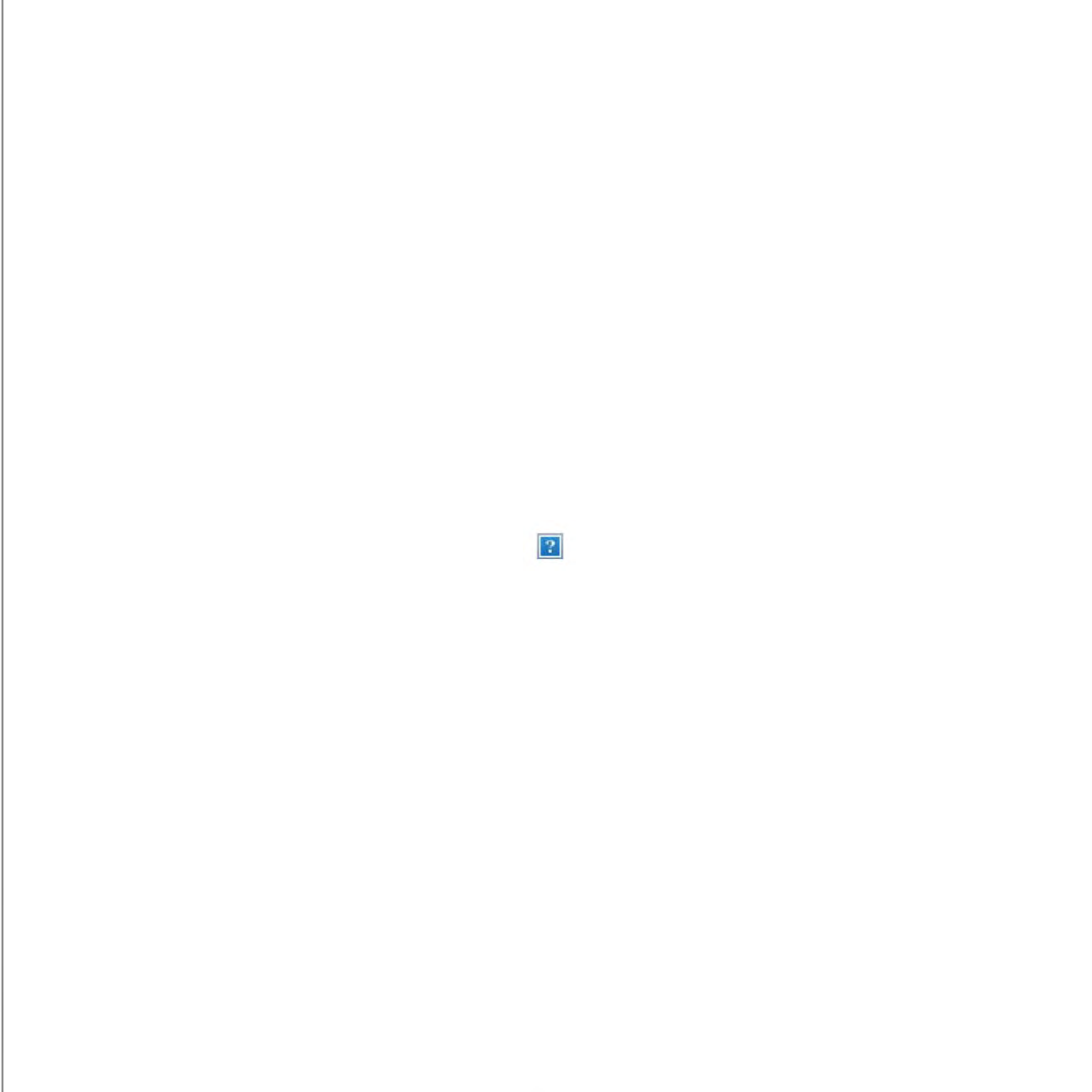
[Privacy Policy](#) | [Unsubscribe](#)

White House Press Office · 1600 Pennsylvania Ave NW · Washington, DC 20500-0003 · USA · 202-456-

1111

**From:** [SpaceNews FIRST UP](#)  
**To:** [Warner Cheryl \(she/her\) \(HQ-NA020\)](#)  
**Subject:** [EXTERNAL] [BULK] Isaacman on U.S. space future: 'We can't be second'  
**Date:** Thursday, December 12, 2024 7:41:16 AM

**CAUTION:** This email originated from outside of NASA. Please take care when clicking links or opening attachments. Use the "Report Message" button to report suspicious messages to the NASA SOC.



[View in Browser](#)

A SpaceNews daily newsletter

12/12/2024



## Top Stories

[Australian company Fleet Space Technologies has raised \\$100 million to advance satellite-based mineral exploration technologies on the Earth and moon.](#) Teachers' Venture Growth, part of the Ontario

Teachers' Pension Plan, led the nine-year-old company's Series D funding round announced Wednesday, valuing the company at \$525 million. The proceeds will help the company miniaturize mineral prospecting ground sensors that use its satellites to send seismic data to customers. Fleet says more than 50 exploration companies have used its ExoSphere service on projects across five continents. The company has also developed a version of the technology for use on the moon, with a sensor going on Firefly Aerospace's second Blue Ghost lunar lander mission in 2026. [SpaceNews]

**[President-elect Trump's choice to be NASA administrator said the U.S. "can't be second" in space.](#)**

Speaking at the Spacepower Conference Wednesday, Jared Isaacman did not comment directly on Trump's intent to nominate him to be NASA administrator, focusing instead on broader issues of American competitiveness in space. Isaacman was emphatic about the transformative potential of space entrepreneurship, stating that he believes we are entering "an era of great experimentation" with promising economic horizons, and urged companies to take risks in developing solutions ahead of government demand. He acknowledged that his Polaris program of private astronaut missions is "a little bit of a question mark" now. [SpaceNews]

**[The head of a U.S. Space Force unit in Europe says the military is now sharing intelligence more rapidly.](#)**

Brig. Gen. Jacob Middleton, commander of U.S. Space Forces Europe and Space Forces Africa, said in an interview at the Spacepower Conference that it is now delivering critical data to users within just 90 minutes. However, he added that adversaries are trying to disrupt that flow of information through cyberattacks. He said the military should tap commercial capabilities from private industry and specify what should be handled by government-specific requirements, while also striking a balance between public and classified operations. [SpaceNews]

**[Space industry executives are calling for greater integration of commercial capabilities into military systems.](#)**

Such integration, executives said at the Spacepower Conference, allows for enhanced resilience and effectiveness of hybrid architectures of government and commercial systems. That improved integration could involve a unified forum to streamline efforts and establish standards that would enhance compatibility between commercial and military sectors. [SpaceNews]

**[Maxar announced a partnership with Satellogic to provide improved geospatial intelligence for national security agencies.](#)**

The agreement, announced Wednesday, allows Maxar to task, collect and distribute imagery from Satellogic's constellation of more than 20 satellites. That constellation can provide more frequent updates than Maxar's smaller fleet, although Maxar satellites can provide imagery at higher resolutions. Maxar said it can leverage this capability to address government demands for comprehensive site and change monitoring, using its own satellites to take high-resolution followup images of areas of interest. [SpaceNews]

**[The Artemis Accords hit the milestone of 50 nations as signatories Wednesday.](#)**

In separate events at NASA Headquarters, Panama and Austria signed the Accords, which outline principles for safe and sustainable space exploration. Seventeen countries have signed the Accords this year alone, which officials credit to shared interest in the Accords' principles and the ability of the Accords to provide a forum for discussion of those issues. NASA Administrator Bill Nelson suggested that several more countries will sign the Accords in the next few weeks. [SpaceNews]



## Other News

**[JPL has completed an investigation into the final flight of the Ingenuity Mars helicopter.](#)** Ingenuity,

designed for just five flights, made a hard landing on its 72nd flight in January, breaking its rotors. At a briefing Wednesday, project officials said the helicopter's navigation system was confused by the featureless terrain it was flying over, causing it to land with a high lateral velocity. While engineers originally thought that the rotors broke after making contact with the ground, they now believe that high loads from the hard landing snapped the rotors without hitting the ground. While Ingenuity can no longer fly, its other systems continue to operate, collecting data on conditions at its final landing site. [SpaceNews]

[\*\*A startup in Oman has joined China's International Lunar Research Station \(ILRS\) program.\*\*](#) Oman Lens signed a memorandum of understanding with China's Deep Space Exploration Laboratory last week regarding participation on ILRS. It's unclear what role Oman Lens, a company planning a satellite constellation, would play in ILRS. The signing came around the same time that Oman conducted a sounding rocket launch from the site of a future spaceport as the country seeks to expand its role in space. [SpaceNews]

[\*\*Spaceflight training company Orbite has raised \\$4 million.\*\*](#) The company, founded in 2019, offers astronaut orientation programs in France and Cape Canaveral, combining training with luxury vacations. The Series A funding will support its Experience Train Fly Program, where customers can learn what it's like to train for space or live in space. The company also plans to develop a Spaceflight Gateway campus in Florida. [SpaceNews]

[\*\*SpaceX has completed a secondary share sale that values the company at \\$350 billion.\*\*](#) The company and outside investors are buying back \$1.25 billion in shares from insiders at \$185 per share, confirming a share price recently reported. That share price gives SpaceX a valuation of \$350 billion, far higher than the \$210 billion just earlier this year. [CNBC]

[\*\*A Chinese national was arrested for flying a drone over Vandenberg Space Force Base.\*\*](#) Yinpiao Zhou, a Chinese citizen and U.S. permanent resident, was arrested just before boarding a flight back to China Monday. He flew a drone over the base hours after a SpaceX launch last month, taking footage of launch sites there. He allegedly modified the drone's software to enable it to go higher than designed and to go into no-fly zones. According to court documents Zhou admitted flying the drone over the base was "probably not a good idea." [Los Angeles Times]

[\*\*A documentary about Sally Ride will premiere next month at Sundance.\*\*](#) SALLY, from National Geographic and director Cristina Costantini, will profile Ride's life using archival footage and interviews with Ride's family and friends. The film has already won the Alfred P. Sloan Feature Film Prize, given to the film at the Sundance Film Festival with the most outstanding depiction of science and technology. [collectSPACE]



## Send Elon to Mars

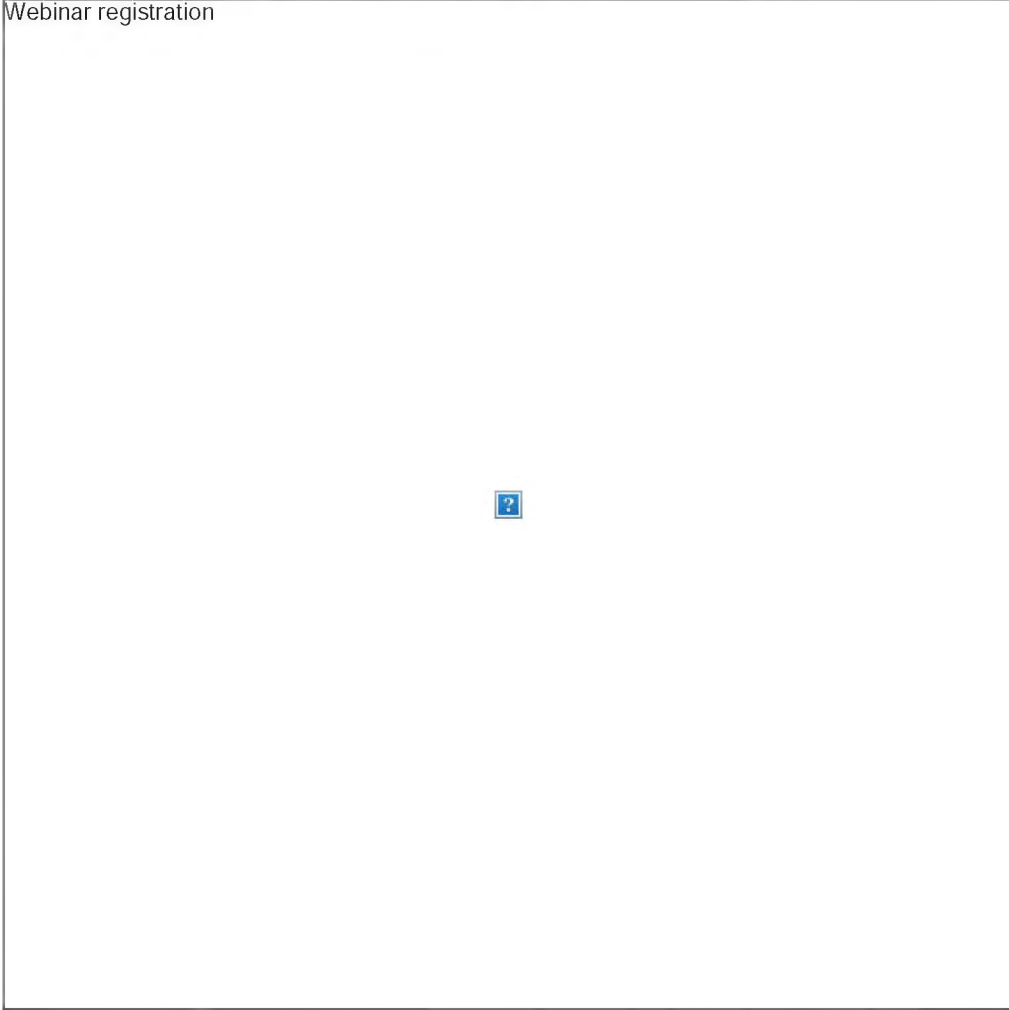
"Having taken observations over a whole solar cycle, we did some calculations to see what the impact is when we are planning to send humans there, when we send Elon in a couple of years."

– Don Hassler of the Southwest Research Institute, discussing studies of the radiation environment at Mars during a session of the AGU annual meeting Wednesday.

## What's New With SpaceNews?

**Don't forget to sign up** for our next webinar!

Webinar registration



**Join us** December 18 for a dynamic webinar that explores explores the critical intersection of commercial space innovation and defense sector transformation.



[Manage Preferences](#)

Sent to: cheryl.m.warner@nasa.gov

[Unsubscribe](#)

SpaceNews, 100 Fillmore Street, 5th Floor, Denver, CO 80206, United States

**From:** [White House Press Office](#)  
**To:** [Warner, Cheryl \(she, her\) \(HQ-NA020\)](#)  
**Subject:** [EXTERNAL] [BULK] Press Briefing by Press Secretary Karine Jean-Pierre and National Security Communications Adviser John Kirby, December 12, 2024  
**Date:** Thursday, December 12, 2024 4:38:02 PM

---

The White House Logo



**FOR IMMEDIATE RELEASE**

December 12, 2024

PRESS BRIEFING BY  
PRESS SECRETARY KARINE JEAN-PIERRE  
AND NATIONAL SECURITY COMMUNICATIONS ADVISER JOHN KIRBY

James S. Brady Press Briefing Room

1:44 P.M. EST

MS. JEAN-PIERRE: Hello. Hi, everybody.

Q Hi.

MS. JEAN-PIERRE: Happy Thursday. (Ms. Jean-Pierre adjusts the lectern.) Just mess- -- be messing with this lectern.

Okay. So, today, President Biden announced that he is granting clemency to approximately 1,500 Americans -- the largest act in a single day -- who have demonstrated remorse and rehabilitation as well as a strong commitment to making their communities safer.

The president is commuting the sentences of 1,500 individuals who were placed on home confinement during the COVID-19 pandemic and



who have successfully reintegrated into their families and communities.

He is also pardoning 39 individuals who were convicted of nonviolent crimes.

The Americans receiving relief today include a decorated military veteran, a nurse who has led response for a number of natural disasters, and an addiction counselor who volunteers his time to help young people. That's just to name a few.

Today's actions build on the president's record of criminal justice reform to help reunite families, strengthen communities, and reintegrate individuals back into society.

The president has issued more sentence commutations at this point in his presidency than any of his recent predecessors at the same point in their first terms. He is also the first president ever to issue categorical -- categorical pardons to individuals convicted of simple use and possession of marijuana and to former LGBTQI+ service members convicted because of their sexual orientation.

As the president has said before, America was founded on the premise of second chances. For far too long, our criminal justice system has closed doors of opportunity for too many people who should have the chance to once again participate in daily life and contribute to their communities.

And as the president said in his statement, he will take more steps in the weeks ahead. He and his team will continue reviewing clemency petitions to advance equal justice under the law, promote public safety, support rehab and reentry, and provide meaningful second chances.

And with that, I have my colleague here from the National Security Council, Admiral Kirby, to talk about foreign policy news of day.

MR. KIRBY: Thank you so much, Karine.

Afternoon, everybody.

Q Hello, sir.

Q Hello.

MR. KIRBY: Sorry?

Q We're just saying hi.

Q Hello, sir.

Q We're just saying hi.

MR. KIRBY: All right. (Laughs.) Look, as you all know, National

Security Advisor Jake Sullivan is in Israel today. He just wrapped up a full day of meetings, including one with Prime Minister Netanyahu.

Jake's meeting with the prime minister focused on the progress we've made in the region. That means ensuring the Lebanon ceasefire continues to hold, that we continue to engage with all Syrian groups to establish a transition toward an independent and sovereign Syria, and, most importantly, that we continue to make progress toward closing a hostage release and ceasefire deal in Gaza so that the hostages -- including Americans -- can be reunited with their families, so that civilians in Gaza can receive the humanitarian assistance that they desperately still need, and so that this war can come to an end.

Jake will now travel to Doha and to Cairo to continue these efforts.

His travel, of course, coincides with that of Secretary Blinken, who is traveling to Jordan and Turkey, making clear our commitment to a Syrian-led transition process so that the Syrian people and their aspirations can be realized.

The president is being regularly briefed on all these meetings and remains in close touch with his national security team as the situation in Syria continues to develop -- and it does continue to develop.

Tomorrow, he's going to speak virtually with his fellow G7 leaders. They will discuss a range of issues: our shared support to Ukraine, which comes, of course, after the United States disbursed \$20 billion to a new World Bank fund that will provide economic support for Ukraine as part of the \$50 billion G7 Extraordinary Revenue Acceleration loan effort.

And that, of course -- I think, as you all know -- leverages income earned from frozen Russian sovereign assets and increasingly puts the cost of war on Russia with no burden to the taxpayer here in the United States. We're going to continue to explore ways to make maximum use of those assets, by the way.

And I'd note that also today the president approved a new security assistance package for Ukraine that will provide them with additional air defense, artillery, drones, and armored vehicles.

It's the 72nd such drawdown package announced by the United States. And as the president made clear, we're going to continue to provide additional packages right up until the end of this administration.

I think G7 leaders can also be expected to discuss ongoing developments in the Middle East, of course -- how we're helping Israel defend itself against active threats and how we're all working towards that Syrian-led process we talked about.

Now, I'd also be remiss if I didn't just take a moment to highlight an important milestone in our efforts to keep faith with Afghan allies.

As of today, the State Department has issued 76,000 Special Immigrant Visas for Afghan partners and their families, surpassing the number of SIVs issued by all previous administrations combined since the program began back in 2009. They did this by surging staff, by leveraging new technology, by consolidating some cumbersome processing steps, and working hard to verify, in better ways, applicants' employment status.

And, of course, we've requested from Congress more visa numbers so that we can continue to do that.

Now, finally, I just want to add a few comments on the reports of drone activity here on the East Coast, particularly in and around New Jersey.

We have no evidence at this time that the reported drone sightings pose a national security or a public safety threat or have a foreign nexus.

The Department of Homeland Security and the FBI are investigating these sightings, and they're working closely with state and local law enforcement to provide resources, using numerous detection methods to better understand their origin.

Using very sophisticated electronic detection technologies provided by federal authorities, we have not been able to -- and neither have state or local law enforcement authorities -- corroborate any of the reported visual sightings.

To the contrary, upon review of available imagery, it appears that many of the reported sightings are actually manned aircraft that are being operated lawfully.

The United States Coast Guard is providing support to the State of New Jersey and has confirmed that there is no evidence of any foreign-based involvement from coastal vessels.

And, importantly, there are no reported or confirmed drone sightings in any restricted airspace.

Now, that said, we certainly take seriously the threat that can be posed by unmanned aircraft systems, which is why law enforcement and other agencies continue to support New Jersey and investigate the reports, even though they have uncovered no malicious activity or intent at this particular stage.

While there is no known malicious activity occurring, the reported sightings there do, however, highlight a gap in authorities. And so, we urge Congress to pass important legislation that will extend

and expand existing counter-drone authorities so that we are better prepared to identify and mitigate any potential threats to airports or other critical infrastructure and so that state and local authorities are provided all the tools that they need to respond to such threats as well.

Now, tomorrow, there's a little thing called the Army-Navy game.

We wish both sides a good game. (Laughter.) We thank them for their service now, of course, at these service academies and for their service in the future. We don't officially take sides here at the National Security Council, but "Go Navy, Beat Army."

(Laughter.)

MS. JEAN-PIERRE: Go ahead.

Q Thank you, Admiral. Good luck.

What is the White House reaction to President Xi being invited to President-elect Trump's inauguration next month?

MR. KIRBY: Well, that's going to be up to President-elect Trump to decide who's going to sit with him there at the inauguration and who's going to be there.

We've worked really hard on this most consequential of bilateral relationships. The president met with Xi Jinping a number of times, including recently and, as you know, at the -- at APEC.

And we -- we believe that as we get ready to turn over things to the Trump team that we're turning ov- -- turning over a U.S.-China relationship that is in better shape than the one we found it in.

That doesn't mean that we don't have disagreements. We do and we will, and I'm sure they will too. But we're working hard on this relationship, and we'll do that right to the end.

Q Did President Biden invite any foreign leaders to his inauguration in 2021?

MR. KIRBY: Oh, geez, I don't -- I don't know. I'd have to take that question. I don't know.

Q I think one -- one other question about Travis Timmerman. Was the U.S. aware that he was missing and being detained in Syria before this week?

MR. KIRBY: I am not aware of any indication that we had that this gentleman was in Syria. I would -- I want to remind that we are just getting word of this, and we're trying to confirm his identity at this point, so the State Department is working hard on that right now. I -- I am not aware that we had any prior indication that -- that he was -- was in Syria.

It's also a good reminder for everybody, if you're traveling overseas, to enroll in the State Department's STEP program so that,

you know, they have an idea of who you are and where you are. It's voluntary, of course, but we recommend that to everybody.

MS. JEAN-PIERRE: Go ahead.

Q Thank you. So, regarding Travis Timmerman, have there been any other -- I don't know, have there been any other Americans -- or people who have been saying that they're American uncovered in detention following what -- the events in Syria? And then, regarding Americans, do you have any updates on Austin Tice?

MR. KIRBY: On your first question: Not that I'm aware of.

On your second question: We don't have any additional context or information about Austin since the events of the weekend in Syria, but we are working very, very hard. And as we've said in the past, we -- we hope that developments in Syria could lead to some opportunities and some -- and some more information, but right now we don't have anything.

Q Are you concerned that there isn't more information around Tice -- there isn't more of an update, considering the fact that we're seeing these prisons -- sort of, people released? We're sort of -- would you have expected to have more news about Austin Tice at this point?

MR. KIRBY: We're concerned about Mr. Tice. We're concerned about finding out more about him -- where he is, his condition. We certainly, as the president said on Sunday, want to do everything we can to get him back with his family where he belongs.

Would we like to have had more information in the last 40, 48, 72 hours? You betcha.

And we're working hard. We're in touch with interlocutors and counterparts in and outside Syria to try to get as much information as we can, but I just don't -- I don't have anything additional to report to you today.

Q And just following up on the news that President-elect Trump's press secretary confirmed that she was invited -- you yourself have talked about wanting a competitive relationship that doesn't have conflict -- like you said, "a better relationship now than four years ago with China." So, what's your take? Was it a wise move?

MR. KIRBY: I'm not going to -- it's -- it's not my place from the podium here to -- to pass judgment on the invitations to the inauguration. That's really for the Trump transition team to -- to speak to.

Look, I would just again say this. It is, without doubt, the single most consequential bilateral relation that the United States has in the world, and it is a relationship that is both fraught with peril and with opportunity.

And when we get ready to turn over to the Trump team, we will -- we will make sure they are fully informed about everything President Biden has done -- and he has done a lot -- to get this relationship on a more stable footing.

And it'll be up to them to determine how and to what degree they want to carry that forward. And if -- if that means having a conversation with President Xi around the inauguration that President Trump wants to do, well, again, that's his prerogative.

MS. JEAN-PIERRE: Go ahead.

Q President-elect Trump --

MS. JEAN-PIERRE: Oh, sorry.

Q Karine?

Q Thanks. Sorry. President-elect Trump this morning also kind of dismissed a question about protecting Taiwan. Could you talk at all about conversations that the current Biden administration might be having with Taiwan in this moment, if there's more security concern with those friends and partners than with an incoming Trump administration?

MR. KIRBY: I think Taiwanese leaders know very well where President Biden stands on our continued support to Taiwan's self-defense. I think that they also clearly understand that we don't want to see any cross-strait tensions resolved through violence or force and that -- that we're committed to our obligations under the Taiwan Relations Act.

So, I'm not aware of any additional specific conversations that have happened in recent days, but I think it's pretty apparent to everybody, including the PRC and President Xi, where we stand on the issue of Taiwan's self-defense.

MS. JEAN-PIERRE: Go ahead, Danny.

Q Thanks, Karine. Thanks, Admiral. What's your response to President-elect Trump saying in his TIME Magazine interview that it was a "foolish decision" by the Biden administration to let Ukraine fire long-range missiles into Ukraine?

MR. KIRBY: Hey, look, I'm not going to get into a back-and-forth with the president-elect and what he's saying in the media space.

All I can do is -- is reiterate what President Biden's policy and guidance has been, and that is to do everything we can, including today with this package that we're announcing, to make sure Ukraine can continue to defend itself so that if and when this comes to some sort of negotiation, that President Zelenskyy is in the best



possible position that has the most leverage possible, that he has the most success on the battlefield that he can -- that he can take into that negotiation.

That has included additional policy guidance that President Biden issued not long ago to allow for some long-range missile systems to be used to help Ukraine defend itself across that border, and that policy still stands.

Q Very briefly, will you be extending any congratulations to President-elect Trump on his second Time of the -- Time Person of the Year award? (Laughter.)

MR. KIRBY: I actually didn't know that -- that that had happened. I -- I don't have any -- I don't have anything more to say on that.

MS. JEAN-PIERRE: Go ahead, Nadia.

Q Thank you, Karine. I want to go back to Austin Tice. Can you give us some information about the U.S. presence on the ground?

Who is there to secure his release? Because it seems to me like it's battle between journalists who are trying to reach to any American prisoners there and this -- what happened this morning.

MR. KIRBY: Now let's not get ahead of where we are right now. Two things. One, U.S. military presence in Syria is predominantly in the east and it's designed solely to help us with the counter-ISIS missions. And we're working with the Syrian Democratic Forces to that end. That's why they're there, and that's the only reason that they're there.

We don't have enough information right now about Mr. Tice and his whereabouts and his condition to develop any kind of policy options in terms of getting him home. So, we -- let's just not get ahead of where we are right now.

Right now, we're really trying -- and we hope that developments in Syria will give us the opportunity to glean more information.

Q So, you -- sorry, I just to follow on this. So, you're saying that there's no FBI agents, there is nobody from the hostage departments that the U.S. was dealing who on the ground now in Syria? Because I'm aware of the Hostage Aid -- that's an organization that trying to find all hostages all over, American hostages. They are on the ground. And there are journalists, including my station, who's -- who actually the first station to reach Mr. Timmerman this morning.

MR. KIRBY: The work that we're doing, the presence that we have in Syria is -- is largely around counterterrorism missions.

Again, I don't have policy options to speak to right now about finding and retrieving Mr. Tice. We just don't have enough

information at this point.

Q Okay. One more on Gaza, please. You have called on the Israelis many times from this podium to make sure they avoid civilian casualties and aid workers who have been working in Gaza.

In the last week, every single day there's at least 50 civilians are being killed, including entire families and 34 aid workers.

So, has your message gone on deaf ears, or are you following up with what's happening there? How civilians are being killed every single day, and we don't hear much about them?

MR. KIRBY: We talk to the Israelis almost every day about -- about their operations and about how we want to see them be more careful and minimize civilian casualties.

And, my goodness, Jake Sullivan, our national security advisor, is in Israel today, and this very much was a part of the discussions he had with -- not -- with the Israeli national security team as well as the prime minister. He brought it up today. Secretary Blinken is in the region. I have no doubt that he'll be bringing it up as well.

MS. JEAN-PIERRE: Go ahead, Patsy.

Q Thanks you, Karine. John, two questions. One on Afghanistan -- if you have any thoughts on the death of the Taliban minister Khalil Rahman Haqqani in a suicide bombing claimed by a regional Islamic State affiliate.

MR. KIRBY: I think that -- look, we're just getting information about this. I think it's a little too soon for me to -- to make a comment. The only thing I would say is that we recognize -- and we said so at the time -- that there was still an ISIS threat inside Afghanistan. And clearly, they have set their sights on the Taliban. But I don't really have anything more say on that.

Q Is there anything in terms of U.S. over-horizon capability? Can you comment on that, in terms of, you know, how -- how this kind of suicide bomb -- bombing --

MR. KIRBY: We maintain and have improved, since our withdrawal from Afghanistan, the ability to conduct over-the-horizon counterterrorism operations anywhere in the world -- anywhere in the world -- and we've proven our ability to do that, including in places like Afghanistan since we left.

Q And one quick one on Venezuela, if you don't mind, John. So, Argentina is accusing Venezuela of continually harassing members of the opposition that's sheltering in their diplomatic compound in Caracas. Do you have any comments on that?

MR. KIRBY: Let me get back to you on that one.

MS. JEAN-PIERRE: Go ahead.

Q Yeah. John, thanks so much. On Syria again. What is the United States doing to ensure that there are no clashes between that Turkey-backed SNA and the U.S.-allied Kurdish militia there?

MR. KIRBY: Yeah.

Q And then I've got one more.

MR. KIRBY: One of the things we want to make sure is that the Syrian Democratic Forces stay partnered with us on counter-ISIS missions. And we have seen in the past where -- where certain parts of the SDF, if they pursue -- perceived other -- other threats and challenges, they've -- in the past, they've kind of moved off that mission, and we don't want to see that happen.

So, we're in very close touch with our SDF partners to -- to try to maintain that focus on counter-ISIS missions, and we are just as importantly in touch with our Turkish counterparts, including Secretary Blinken, to -- to make sure that we understand what they're trying to do and that we both take steps that -- that help preserve the effectiveness of the counter-ISIS mission and that it's not diminished in any way.

Q Okay. I mean, the relationship with the Turks hasn't been the best. So, how do you hope to ensure that this, you know, message gets through and is respected?

MR. KIRBY: By being there and talking to them, which is what we're doing today.

Q Okay. And then just one more on -- on Syria -- or, rather, on Austin Tice. There have been reports -- scattered reports that he could be in Iran. Can you say anything to that?

MR. KIRBY: I can't. As I said -- and it's an honest answer -- we just don't have enough context right now to make a judgment about his whereabouts or his condition, and that's why we're working so hard. And we are, as we speak -- you and me today -- we are asking those questions. And we hope that what happened in Syria over the weekend may give us an opportunity to learn more.

Q Are you directly in touch with the Iranians about this at all?

MR. KIRBY: We have been in touch -- I'll just say this. As you would expect -- or at least I hope you would expect us to be -- we have been in touch with interlocutors and groups and leaders all over the region. And we have various ways of being in touch, some is indirect -- some is indirect.

But I -- I think it's safe for you to assume that, given the events over the weekend, we're -- we're -- it's a full-court press to see what we can do to find out more about Austin Tice, and that

includes having a whole heck of a lot of conversations with a lot of different folks.

Q Okay. And then just one more, quickly, on Gaza. So, Jake said he thinks the ceasefire deal may be near. We've obviously heard that before.

MR. KIRBY: And Jake said we've heard that before -- (laughter) -- and we -- and we haven't al- -- always been able to get it across the finish line. We're being pragmatic about this.

Q I know. But, I mean, what -- what -- you know, how are the circumstances different now? What dynamics could be different that would actually make a deal happen?

MR. KIRBY: That's a great question. I think if -- if you're Hamas right now, which is still fairly a -- a rudderless organization, and you look at the world today, you know, the options aren't good. Your -- your military capabilities have been all but decimated. Your main leader is gone. The leader of your -- your buddy, Hezbollah, he's gone -- Nasrallah is gone. He- -- Hezbollah is now in a ceasefire arrangement, which is still holding, with Israel. And Iran is not coming to the rescue. There is no cavalry for the Hamas right now -- for Hamas right now.

So, this is the time, and I think that's what Jake was alluding to. The -- there has been an awful lot of pressure put on anybody who is supporting Hamas. And now, given where they are and how weakened they are, this is the moment to make this deal.

And that's why, I think, Jake believes that we're -- that we're getting close. I mean, this is a great opportunity right now to do it.

MS. JEAN-PIERRE: Go ahead.

Q Thank you, Karine. Just to follow on Gaza. In those comments in Jerusalem earlier today, Jake Sullivan said that the posture of both Prime Minister Netanyahu to do a deal and the posture of Hamas at the negotiating table in the wake of the ceasefire between Israel and Lebanon had changed favorably toward a deal. I'm just wondering if you could elaborate a little bit more on that dynamic and what he's referencing there.

MR. KIRBY: Well, it's kind of my -- my answer to Andrea. I mean, i- -- the -- the situation for Hamas has radically changed, particularly because of what's happened.

And I would add -- one thing I didn't add was events in Syria, because now Assad is gone. And who was Assad's main backer? Iran.

Iran was not only unwilling but unable to come to Assad's rescue. It's just more proof -- or should be more proof -- to Hamas

leaders that there is, as I said, no cavalry coming to the rescue.

So, th- -- they're -- they're at a moment of weakness and desperation. This is the time to make this deal and move forward on it.

Now, whether they'll do it or not, as Jake said, you know, we can't be certain, but we believe there's an opportunity here -- a moment -- and that's why Jake's in the region.

Q On Syria, the U.S. has stated that one of its primary goals is to make sure that ISIS does not reconstitute there. In the days since the Assad regime has fallen, have you seen any information or any intelligence about cells or larger groups that are trying to exploit this opening?

MR. KIRBY: Yeah, I'm not going to get into too much on the intel side.

I'll just tell you that we're watching this real closely, and that is a risk. That is a worry -- that ISIS -- I mean, this is a group that -- that loves ungoverned space. And you can expect -- we have to expect that they're going to look at what's happening here with the fall of Assad and now Russia -- or Iran not coming to the rescue; Russia now also not coming to rescue. Russia is worried about their own presence in Syria and how that's going to look.

You can expect -- you would expect that a group like ISIS would try to exploit that.

So, we're watching it closely.

I don't have any, again, additional intelligence indicators to speak to -- to today, but it is something we're laser-focused on.

Q And then just broadly, on foreign policy. There's only one president at a time, but we've seen the president-elect wade into his preference for what the U.S. does or doesn't do in Syria, the U.S. approach to Ukraine, to the Middle East. And now the transition is also, as you guys have said, working hand in glove as you push for a ceasefire in the region there. He's also inviting world leaders to inauguration.

Is this having an impact on your foreign policy?

MR. KIRBY: No. No.

But I want to go back to your first question, though. The oth- -- the other thing I want to stress on this ISIS thing is that that is why -- and the president said this Sunday -- the -- the concerns about ISIS is exactly why that mission in Syria, the mil- -- the U.S. military mission and the partnership with the SDF is so important and why we want to see it continue.

MS. JEAN-PIERRE: Lalit.

Q Thank you. Two questions. One on Bangladesh, then on India.

On Bangladesh. Over the past few weeks, several Hindu American groups across the country have been holding protest march -- one outside the White House over the weekend. They're protesting against the continued killings of Hindus and the temples in Bangladesh after the fall of Sheikh Hasina's government. Is the president aware about it? Did he raise this issue when he met his friend and the interim government chief Muhammad Yunus on the sidelines of the U.N.?

MR. KIRBY: We're watching this very, very, very closely, and the president is following events closely as well.

The security situation in Bangladesh has been difficult following the ouster of the former prime minister, and we've been working closely with the interim government to enhance the capability of their law enforcement and security services to deal with the challenge.

We've been very clear in our engagement with all Bangladeshi leaders that protection of religious and ethnic minorities is absolutely critical, and the leaders of the interim government have repeatedly committed to providing security to all Bangladeshis, regardless of religion or ethnicity.

We hol- -- we want to hold them to that.

Q And on India. As the president concludes his four-year term, what do you think of the key achievements of India-U.S.'s (inaudible)?

MR. KIRBY: The president is very proud of the way in which our bilateral relationship with India has transformed during his administration. I mean, we've elevated the Quad now -- the Indo-Pacific Quad. I don't know how many meetings he's had now inside the Quad and bilaterally with the -- the prime minister.

There's an awful lot in our relationship that has improved: military-to-military communication and -- and defense security partnerships there in India and in the Indo-Pacific writ large, people-to-people ties, economic ties. I mean, there's been an awful lot.

Q Quick follow-up on -- on India. You mentioned about Quad. What are the president's expectations on the coming administration on Quad and other American --

MR. KIRBY: That's going to be up to the incoming administration.

Q -- U2I2 --



MR. KIRBY: That's -- it's going to be up to them to determine how they leverage the Indo-Pacific Quad. We can only speak to the ways President Biden has.

Q Do you expect there to be the bilateral -- sorry, bipartisan support to India's relationship?

MR. KIRBY: Do I expect --

Q India's relationship has -- has been a bipartisan support -- right? -- for the -- both the sides have supported it.

MR. KIRBY: I don't see anything in the future which would indicate a change in that. There has been strong bipartisan support for growing this bilateral relationship, and I'm -- I'm -- I would expect that that will continue.

MS. JEAN-PIERRE: Go ahead.

Q Hey, John.

MR. KIRBY: Oh, sorry.

Q Yeah. President-elect Trump last night named a new director for the Voice of America: Kari Lake. Do you think that the president has the authority to name a new director of that news group?

MR. KIRBY: I understand that there's -- I -- I actually don't -- you know what, I -- I'm going to -- look, I'm -- I think I should take the question, because I don't understand enough about the process there to really weigh in on that. So, why don't we take that question?

Q Could you just react generally to the fact that, you know, this is a nonpartisan agency, and Kari Lake is someone who just ran a Senate campaign? Just any reaction to the fact that she --

MR. KIRBY: I -- I'm just not going to get into casting judgments on the names that the president-elect is putting forward for various jobs. That is for him and his team to speak to.

The -- but what I can tell you: President Biden and this entire administration -- and that includes me, personally -- have great respect for Voice of America and the work that they do here and around the world. We value and we respect that they have an editorial independence, which I think is absolutely vital for them to be able to do their job credibly.

If you're going to have the name "Voice of America" on your bumper sticker, then, you know, you can expect that certain people around the world may look askance at that. But the fact that they are editorially independent and do good, solid reporting on their own,

I think, says -- speaks volumes about how valuable they are to making sure that the proper news and context and information gets to audiences around the world.

MS. JEAN-PIERRE: Go ahead.

MR. KIRBY: I'm very proud of them.

Q Hi. Thanks, Karine. Thanks, John. At the top of your remarks, you talked about the administration's commitment to an independent and sovereign Syria. And, of course, Israel has sent its forces into the buffer zone adjacent to the Golan Heights and apparently beyond it. The presence of foreign troops would seem inconsistent with an independent and sovereign Syria. So, will the administration pressure its ally to withdraw those troops?

MR. KIRBY: We are in discussions with the Israelis, as you might expect us to be, about their operations there inside that buffer zone and staying in close touch, as Jake did today, with better understanding what their goals and objectives are.

I would tell you -- or I would point you to what they have said, which is this is a temporary measure to deal with exigent circumstances and what -- what we -- and we recognize what they recognize, that there are some legitimate threats that they're trying to --

Q Have they given any indication what they mean by "temporary," given that they've been, you know, in occupation of the Golan Heights --

MR. KIRBY: I think I'd point you to --

Q -- since 1967?

MR. KIRBY: -- the Israelis to speak to their military operations.

MS. JEAN-PIERRE: Go ahead, Jacqui.

Q Thanks, Karine. John, on the drones, does the U.S. government have any of its own imagery or video of these systems?

MR. KIRBY: I'm not aware that we have U.S.-government-produced imagery ourselves. But as I said in my opening statement, we have certainly done federal analysis of the existing imagery.

Q Like from people's cell phones that we're seeing? Basically, with what you're looking at, how can you credibly tell people that there is no public safety threat, there's no national security threat, that there's no reason to believe that a foreign government is involved?

MR. KIRBY: Because the analysis thus far, in an investigation that is ongoing, has not revealed any national security or malicious

intent or criminal activity.

But, Jacqui, I would remind you, we're at the beginning here, not the end. There's a lot more work to be done, and we're working closely with the state and local authorities to gain more information.

Q It's taking them a while.

MR. KIRBY: I -- I would argue that it's -- we're -- we're moving pretty well here with a sense of energy to try to figure out what we can do to learn more about this. We're at -- we're still in the middle of an ongoing investigation, and I'm up here explaining to you and to let you know what we know so far, what we believe so far.

If information comes to light that changes that characterization, then, my goodness, you know, we'll be the first ones to let you know. But right now, there's just no indication that this is some sort of foreign malign activity or, in fact, even criminal.

Q Well, what I don't understand is -- you know, this has been happening since late November. I don't know that the law enforcement officials or residents in New York and New Jersey, or even the Democratic senators who wrote to Director Wray, Mayorkas, and the FAA administrator today would think that this has been handled with a sense of urgency.

But, you know, that being said, has --

MR. KIRBY: I --

Q -- has the president or the secretary of Defense issued any guidance to NORTHCOM or military installations to act on these systems if they are deemed to be a threat in any way? And what's the benchmark for that determination?

MR. KIRBY: So, two thoughts. First of all, you -- you're right, late November. It is now -- what? -- the 12th of December. So, I think it shows that we're moving on with this and we're going to stay on it. So, this -- don't -- I want to disabuse you of any notion that we're not taking this seriously, because we are.

I can also tell you that if the president, as commander-in-chief, believed -- based on the information that he'd been given -- that there was a national security threat at play here or even a public safety threat at play here, he would issue the appropriate directives to -- to not only law enforcement but perhaps even the military if that was needed.

I want to go back to something I said at the top: There has been no evidence of any of this activity in or near restricted spaces.

Q That's not what the senators said in the letter. They said,

in fact, that they've been observed maneuvering near critical infrastructure, sensitive locations, including reservoirs and military installations, and cited a concern from law enforcement about public safety threats because a medevac helicopter was prevented from transporting a seriously injured patient for care because of the presence of these drones.

MR. KIRBY: I stand by my opening statement.

Q Can you make that make more sense? Because I think people in New York and New Jersey see drones the size of an SUV over their house every night and think that that doesn't make any sense.

MR. KIRBY: Certainly I understand why people would be looking at this and being concerned about it. I -- we're concerned about it too, which is why we have the Department of Homeland Security and the FBI, my goodness, looking at this, and we're taking it seriously.

And we -- we understand that people are concerned. We understand that they got questions. We got questions too, and we're working hard to get the answers to that.

What I can tell you, as we sit here today, you know, at 2:16 in the afternoon on the 12th is we haven't seen any indication thus far that there's a public safety risk, and we haven't seen --

Q But does anyone in the government know what they are?

MR. KIRBY: We are still investigating this. I can't tell --

Q So, no.

MR. KIRBY: -- you definitively -- I cannot characterize for you definitively what these sightings are. I can just go back to what I said at the opening: We've looked at the imagery. We can't corroborate some of the reported sightings through our own expert analysis using sophisticated detection techniques. But that doesn't mean that, you know, we're putting our pen down here this afternoon and calling it a day. We're going to keep at this.

Q What are you doing though?

MR. KIRBY: We -- we are continuing to investigate it, as I said in my opening statement. Two federal agencies, as well as United States Coast Guard, and state and local law enforcement officials, which we are staying in close touch with.

MS. JEAN-PIERRE: Go ahead.

Q Picking up on drones. Has it reached a level or is there a level determined by which the president or the administration, more directly, would prohibit any use of the airspace -- since it is

regulated -- for drones for a period of time to try to figure out who they are and to remove this anxiety that people in the northeast are feeling?

MR. KIRBY: I don't know that we're at a stage right now where we -- where we're considering that sort of a policy option, but I can tell you that we're going to keep an open mind here. And I think we're going to -- whatever policy options we determine are appropriate will be informed by the investigation.

And thus far in this early stage of the investigation, there's just no national security threat that we see and no public safety risk.

So, again, you -- you want to be careful that you don't -- that you -- you don't jump to conclusions and you don't jump to policy options that may not be appropriate at this particular stage. But we'll -- we'll obviously see where it goes and we'll be informed by investigators.

Q One other topic. With Jake in Israel and issues related to Ukraine and Russia, the Middle East, and so forth, with 40 days to go, do you feel that the Biden foreign policy team is in a -- cooperate with a very vocal president-elect who is talking about these issues to -- to achieve the aims that you have? Or do you view it as this is really your negotiation to have, whether it's in Israel, whether it's with Ukraine? Is it coordination, competition? How would you describe --

MR. KIRBY: I would say consultation. We are keeping the incoming Trump team fully aware and read in of not only what we're doing but what we're thinking about doing so that -- that they -- there's nothing they should see in the public domain -- nothing I'm saying here, nothing Jake said in Israel -- that would surprise them, that we're keeping them fully informed.

Q And has the president or members of this administration asked the president-elect to pull back from public statements or phone calls or anything that might impinge on what you're trying to do?

MR. KIRBY: Not that I'm aware of.

MS. JEAN-PIERRE: Go ahead. Final question. Go ahead.

Q What do you make of reports that were out today that Austin Tice was seen alive at a prison in Damascus in 2022?

MR. KIRBY: I think I've answered this before. I just don't have -- I -- I've seen that press reporting. I -- I don't have any information to verify that reporting, and I certainly don't have anything today that gives us a sense of his whereabouts right now.

Q I'm asking, though, because the Israelis bombed that facility over the weekend. And so, I'm wondering if there are any

conversations with the Israelis about, you know, maybe avoiding targets where Austin Tice or other prisoners might be held?

MR. KIRBY: We're -- we're -- as I said earlier, it's a full-court press to get more information about Austin, and we are actively in touch with interlocutors and counterparts throughout the region, and that includes Israel.

MS. JEAN-PIERRE: All right. Thank you so much.

MR. KIRBY: Thank you, Karine.

Q Thank you, John.

Q Thanks, John.

MS. JEAN-PIERRE: Before we continue, I was asked by one of my colleagues to -- to flag Rodney's sweater. (Laughter.) The amazing Christmas gear you got going on, sir, and the tie and all of it. It looks good.

Q Thank you. Thank you so much.

MS. JEAN-PIERRE: And I hear that you -- this is a normal thing during the season.

Q Yeah.

MS. JEAN-PIERRE: Okay. All right. (Laughter.)

That's why he's -- this is why he's behind the camera. (Laughs.)  
He's like -- he's like --

Q Aw --

MS. JEAN-PIERRE: No, I meant that nicely!

Q No, no. She's right. (Laughter.)

MS. JEAN-PIERRE: I meant that really nicely. He's like, "Please don't talk to me." (Laughs.) That's what I meant. I meant "Don't talk to me."

Q (Inaudible.) (Laughter.)

MS. JEAN-PIERRE: I appreciate you, Rodney. Thank you for what you do.

Q Thank you.

MS. JEAN-PIERRE: Okay. With that -- jeez. Tough crowd.

Colleen.



Q Thank you. So, let's see. On the pardons.

MS. JEAN-PIERRE: Yes.

Q I wondered if -- you know, there's been a couple categorical pardons -- or categorical, I guess, grants of clemency by the president. So, I wondered if we could expect more of those sort of categorical pardons, in particular related to the death penalty, which, you know, the president had said during the campaign trail in 2020 he wanted to get rid of. And, you know, I know it's paused, but it isn't gone. And there's, I think, 40 people on federal death row. The president-elect, you know, has made no secret of his -- his desire to continue the death penalty.

So, you know, wondering about that and any other possible categorical ones.

Sorry to interrupt you.

MS. JEAN-PIERRE: Yeah. So, I will say that during the president's remaining weeks -- and he said this in his statement overnight, and I said it at the top as well -- that we're going to continue to -- he's going to continue to talk to his team to review any steps that he's going to be taking.

He wants to take additional steps, obvi- -- obviously, to -- to provide meaningful second chances. This is what this is all about when you look at the -- what -- the actions that the president not just took today but over, certainly, the last four years.

And so, they're going to continue to review clemency petitions, he and his team, in normal course. And certainly, further -- they want to further the criminal justice reforms in a manner that advances equity and justice; promotes public safety; supports rehab and re-entry, which is all the things that I said at the top; and provides, again, meaningful second chances.

So, when we have more to share, we certainly will update all of you. But I think if you look at what the president has done over the past four years, as I just -- just laid out, granting -- in addition to what he talked -- what we announced today -- granting 21 pardons, 122 commutations, he has certainly done more in -- than his last four predecessors at this point in their first term.

And so, the president takes this very, very seriously and is going to review all options and, especially, as you stated, clemency petitions as we, you know, close out these final -- final few weeks.

Q On pardons still.

MS. JEAN-PIERRE: Sure.

Q We had a poll yesterday that just about 2 in 10 Americans approved of President Biden's decision to pardon his son. In particular, they were troubled by the fact that he'd gone back on his word. So, I wondered what the president's message is to those Americans.

MS. JEAN-PIERRE: I mean, I'd just go back to his statement that he put out 12 days ago, I think, now -- that Sunday. And I think that last paragraph where he talks really, truly directly to the American people about this decision that he's made, obviously, as president, as a father.

But I would say more broadly, you know, legal experts -- you've heard me say this -- you've heard from legal experts, specifically an analyst, former U.S. a- -- U.S. attorneys from across the country, who have said -- and they have all agreed no one would be criminally prosecuted with felony offenses with these facts -- the underlying facts that we have -- certainly, have gone back and forth on.

And I have quoted many times, and I'll do this again, the former attorney general, Eric Holder, who said, "No U.S. attorney would have charged this case given the underlying facts. Had his name been Joe Smith, the resolution would have been fundamentally and, more fairly, a declination. Pardon warranted."

And so, I think the actions that the president took today, the actions that he's taken over the last four years when it comes to clemency, I think, shows the president's commitment when it comes to reforming -- trying to reform the criminal justice system and his -- obviously, his commitment to that but, also, giving people a second chance.

And so, you know, I think that -- as it relates to the American people, I think that -- I understand that you had this poll, and I get that, but I hope that they will understand the decision that he made and -- and, you know -- and what he's going to continue to do in these closing weeks as president.

Q Do you think he should apologize based on what the polling found?

MS. JEAN-PIERRE: What I think is -- I think the president hopes that the American people hear him out. Again, going to that last part of his statement -- and I feel that I should continue to reiterate that the American f- -- American people out there should take a look at the president's own words, his statement, how much he wrestled with that decision, and how circumstances did indeed change for him and his view.

And I quoted many times what Congressman Clyburn said when he spoke to the president two weeks prior -- how the president was indeed reticent in making this decision.

And when he saw that Republicans weren't going to let up, when he s- -- you know, we talked about the recently announced Trump appointees for law enforcement who have said themselves that they were going to seek retribution, and there was no reason to not take them by their word. The sentencing was coming up.

All of these pieces certainly led to circumstancing -- circumstances changing, and so he made a very difficult decision.

And I just hope that in time -- in due time, the American people will -- will see why he made this decision to move forward.

In the meantime, I think this announcement -- the statement from the president, this announcement today that we're making: 15- -- nearly 1,500 people getting this -- their commutation -- I think it's important. I think it's important about second chances, giving people second chances.

And -- and so, that's what the president certainly is going to continue to focus on.

Go ahead.

Q Thanks. Different than commuting a sentence, though, or pardoning someone who has been convicted of a crime, there was conversation at one point about the idea of preemptive pardons for somebody who hasn't been convicted yet but who might be a target of the incoming Trump administration. Is that still on the table?

MS. JEAN-PIERRE: I'm not going to get ahead of the president. As I said, we'll have more -- the president will have more to announce over the upcoming -- upcoming weeks as we are -- close out our time here.

I'm not going to get into the president's thinking. He's going to have conversations with his team. He's going to review clemency petitions. He's going to review options on the table.

And so, I'm -- that's where I'm going to leave it.

And I think, you know, 1,500 individuals, as you all know, who are -- who were placed on home confinement during the COVID-19 pandemic and who have successfully reintegrated into their families and communities -- and also pardoning 39 individuals --is -- is a big deal.

I think it's important to those individuals and their families and their communities. As I've said, they've rein- -- -integrated into -- into those really important pieces of their lives, and I think that's really important -- and just building on what the president has done over the past four years.

And I think that's -- I think those -- today, I think it's a good day for many of those folks who deserve that second chance and who have proven -- proven to -- to be able to take that on.

Q Absolutely.

MS. JEAN-PIERRE: Yeah.

Q Some of the names that have been floated around preemptive pardons, though -- since it would just be such an unusual, extraordinary step -- we've talked about -- in the news, we've seen Liz Cheney, Dr. Fauci, Mark Milley --

MS. JEAN-PIERRE: You're talking about the preemptive pardoning?

Q Right. I understand you don't want to get ahead of the president's thinking, but are any of those names wrong? Still -- can you tell --

MS. JEAN-PIERRE: I'm just --

Q I mean, do you want to tell us anything about --

MS. JEAN-PIERRE: I -- it would be a bad move on my -- on my -- on my behalf if I preempted the president or previewed anything that the president was thinking about, considering. And so, this is a -- this is something that he's going to talk with his team about. And -- and I just don't have anything beyond that for you.

Again, I think today is a very important day, as we talk about the criminal justice system, as we talk about giving people who have shown that they can reintegrate into their community, back into their families, a second chance. I think that's a big deal, and I think that shows the president's commitment to this.

And, you know, the president talks a lot about what this country has to offer and possibilities, and you see that in every -- every action that the president certainly has taken when it comes to this issue and so many other policies that he's put forward.

Go ahead.

Q So, Karine --

MS. JEAN-PIERRE: Yeah.

Q -- I keep asking you this question. I'm going to ask it one more time.

MS. JEAN-PIERRE: Yeah.

Q You have been working on an Islamophobia -- or an -- a strategy to counter Islamophobia that would partner with the strategy that you've already released to countering antisemitism. We've been waiting for it for a long time.

Do you have any further updates on when that could be released? Do you anticipate it coming before the end of the year?

MS. JEAN-PIERRE: I would say: Stay tuned. This is obviously something that we're very committed to when it comes to protecting communities across this country.

You saw that in our antisemitism strategy, and obviously we've been talking about this Islamophobia strategy as well -- or talking about coming up with a way forward in protecting communities.

Certainly, that's the President's commitment.

I don't have anything to share right now at this moment, at the -- at this podium, behind this lectern. But I would say: Stay tuned.

Q Given -- given the former president's ban on entry from -- for people from Muslim-majority countries -- also known as the Muslim ban -- at the beginning of his term --

MS. JEAN-PIERRE: Which -- which we -- you know, which we repealed and dealt with that very early on.

Q No, I understand.

MS. JEAN-PIERRE: Yeah.

Q But there were -- you know, there were many, many people on no-fly lists. And there still are some people on no-fly lists.

You know, do you -- is there any preemptive action that the administration can take to guard against that kind of, you know, mass move again this time?

MS. JEAN-PIERRE: Well, you know where the president stands on this in this administration.

I don't have any policy announcement to share with you at this time. And so, I'll just leave it there.

Q All right. And then, just on the pardons and clemency acts. You know, numerous groups have sort of asked the administration to go even further, to be even more bold in terms of saying that there's something like 9,000 additional -- additional petitioners, some of whom are chronically ill, some who are aging, some have very young children.

Can you -- I know that you are still reviewing these things, but can you say something about the scale? I mean, is this the sort of the -- you know, is this the big move that we're going to see and then we'll see sort of individual pardons coming forward? Or will there -- you know, do you anticipate that there could be another larger-scale move?

MS. JEAN-PIERRE: I'm not going to get into the strategy. I'm not

going to get into numbers. I'm not going to get into what the president is currently thinking through. Not something that I'm going to do from here.

But I don't want people to forget -- and I said this at the top, and I just want to reiterate -- we're talking about Americans who -- receiving relief who are decorated military veterans, a nurse who has led response for a number of natural disasters, and an addiction counselor who volunteers his time to help young people. And that's just naming a few.

And so, that is important to note, because these are the folks that we're talking about, who are, again, reintegrating back into their communities in a way that's effective, in a way that's incredibly important, giving them second chances.

And let's not forget all of the other ways that the president has been able to give second chances to Americans over the past almost four years when he has made these types of important decisions. So, I'm not going to preview. I'm not going to get ahead of this president. It would not be wise for me to do so, because he has to make those final -- that final decisions, and he has to review what's in front of him with his team.

Q And I just want to -- one more real quick.

MS. JEAN-PIERRE: Sure. Sure.

Q There's anniversary coming up on Saturday for the Sandy Hook shooting, and I know that this is something that's very near and dear to the president.

MS. JEAN-PIERRE: Yeah, obviously. Yeah.

Q Is he planning any kind of action or -- or statement?

MS. JEAN-PIERRE: So, don't have anything for you. As you know, we think -- during his presidency and, I think, over the past couple of years, even before his presidency, he's spoken to this day -- this tragic, tragic day.

And you're right, this is -- when it comes to Sandy Hook and any devastating, horrific events like we saw on that day and -- you know, the president has always speak -- spoken out to it. This is a president that understands loss, understands what that means to a family, understands what that means to a community. And Sandy Hook was one of those moments that tore us apart.

If -- I think if you think about that moment and, I think, if you are just a human and you remember that day, it is a heartbreaking, heartbreaking moment. And obviously our hearts go out to the families and certainly their loved ones who are still dealing with -- every year, dealing -- dealing with a difficult moment, a difficult anniversary. And so, I know the president thinks about



them almost every day.

And I don't have anything to -- to read out to you on how we're going to be acknowledging that day, but I'm sure you'll be continuing to hear from this president.

Go ahead.

Q Thank you. You talk about the clemency actions as historic -- the "big deal," as you called them earlier -- and a real relief that is being brought to human individuals by the actions the president has taken. So, in terms of sequencing, how did he come to the decision to pardon his son before these individuals?

MS. JEAN-PIERRE: So, I think we've gone back and forth on -- on how he made that decision. The president obviously -- as I -- as I said, the president put a statement out 12 days ago, made that decision over that weekend.

It was a decision that he wrestled with. I think we've talked about the -- the politics around this, the decision that he made.

He put out a pretty comprehensive statement. I've mentioned Congressman Clyburn's -- his own words, saying that the president, even two weeks before he had made that decision, was reticent in doing so. And he wrestled this, and I -- as I have said many times: For him, there were consequences that changed his decision.

I just laid that out moments ago.

Q But this action pending --

MS. JEAN-PIERRE: Yeah. Yeah.

Q -- for thousands of individuals --

MS. JEAN-PIERRE: Yeah.

Q -- why not bring the relief to them before --

MS. JEAN-PIERRE: Well, I mean --

Q -- announcing the pardon on his son?

MS. JEAN-PIERRE: -- and I was about to get to your question. This is -- what you see today, that was far from this being his first -- right? -- I think we can't forget that -- his first pardon or act of clemency.

He has issued more -- more -- we cannot forget this -- more sentence commutations at this point in his presidency than any other recent predecessors at this -- at the same point of their first term. And so -- and I talked about what he was able to do in April when he issued historic categorical pardons as well to address marijuana possession convictions and military convictions

in the LGBTQ+ community. These are actions that this president has taken.

And, again, today is historic, but he has been taking these types of actions for some time now. This is far from the first pardon that the president has taken.

We've gone back and forth. I've laid out what the president is thinking. He has talked about it directly in a statement in his own voice to all of you about 12 days ago.

And so, I don't have anything beyond that, but we can't look at today as being only the first action that he's taken. He's taken many actions to try and deal with giving an opportunity to people who have shown that they deserve a second chance, giving them an opportunity to have that second chance.

Q Anita Dunn, who was for a very long time the senior-most communications aide here at the White House, has been very critical of the president's decision to pardon his son. She called it extraordinarily bad timing. She said it was clear that the White House was "not part of this process." And she called the president's rationale "an attack on the judicial system."

She goes, "The argument is one that I think many observers are concerned about. A president who ran to restore the rule of law, who has upheld the rule of law, who has really defended the rule of law kind of saying, 'Well, maybe not right now.'"

How would you respond to that?

MS. JEAN-PIERRE: I will respond in this way. She also agreed that Hunter Biden, and I quote, "absolutely" deserved a pardon. Those -- "deserved a pardon" is her own words. So, she supported that action and --

Look, I don't want to take away the record that the president has made on providing the most individual commutations in a single -- in a single day, and I think that matters. And he'll certainly have more news to share in this -- in this area -- in the clemency space, obviously, in the near future. And we'll have more to share and certainly more to speak to.

Q Was she right that the White House was boxed out of the process --

MS. JEAN-PIERRE: I -- I --

Q -- in reaching that decision?

MS. JEAN-PIERRE: What I can say is that I would obviously continue to refer you to the president's statement 12 days ago. He laid out his thought process, I think, in a very comprehensive way. We've go- -- we've gone back and forth here about how the circum-

circumstances had changed, but I -- let's not forget that she also said that Hunter Biden "absolutely" deserved a pardon, and I think that matters as well.

Q Thank you.

MS. JEAN-PIERRE: Go ahead.

Q Thanks, Karine. What was President Biden's reaction to FBI director Christopher Wray's decision to step down?

MS. JEAN-PIERRE: What I will say is that the president ap- -- certainly appreciates the service of Christopher Wray, the FBI director, and -- and all that he has done to -- in his role. I don't have anything more to say beyond that. Certainly, he wishes the FBI director well.

Q Was the president disappointed that Wray is not going to be serving his full --

MS. JEAN-PIERRE: I don't have any --

Q -- 10-year term?

MS. JEAN-PIERRE: I don't have anything else to share besides the service that the FBI director has been able to provide, and he respects his service. And I don't -- don't have anything beyond that.

Q Has President Biden spoken to FBI Director Wray since the director made that announcement, or was the White House given a heads-up about the decision?

MS. JEAN-PIERRE: I would say that I don't have anything to share of a conversation between the FBI director and the president since this decision was -- was made, but the president is grateful -- is grateful for the director's service to our country. And I just don't have anything else beyond that to share.

Go ahead, Kelly O.

Q Can you -- given the breadth of the pardons, can you describe a little bit about the president's process? Did he read into the individual cases? Did he accept a list from those who were working on this on his behalf? How much did he personally dive into particular stories? And did he decline on any of the ones brought to him for this time? Or was it sort of a big package presented to the president?

MS. JEAN-PIERRE: So, I'm not going to go into step by step of this process.

What I can say is this is a president who certainly takes this very seriously, understands the importance of when an individual is able

to show that they can reconnect with their community, reconnect with their family, be -- be part of a community in a way that I just laid out -- when you think about military veteran, when you think about a nurse that's been very helpful in disaster response -- he takes that all into account. He wants to make sure that -- that there are specific criterias that are made, if you will.

In this case, y- -- the Bureau of Prisons, obviously, was very involved in the -- in wh- -- in looking at -- when I say "very involved," when they made the decision on -- on the home confinement of these folks. And so, obviously, that is a big part of it too.

And, look, they've all des- -- demonstrated good behavior, have shown that incarceration and at-home confinement has been successful in their rehabilitation. And those are all important criterias to look at.

But this is something, obviously, his team reviews. It's presented to the president. He makes this decision on how to move forward.

I'm not going to get into the nitty-gritty, but these are important facts that I just laid out to, certainly, look at when you think about getting -- again, getting back into the community and showing -- showing that, you know, it is -- it is meaningful to get that second chance because what these individuals have been able to do.

Go ahead, Annie.

Q Thanks, Karine. On the pardons today, can you say whether the president has signed all the paperwork and it's completely finalized with his signature on it?

MS. JEAN-PIERRE: Yeah. Well, my assumption is that we -- this is ready to go, since we made the announcement and that we've announced it, obviously, overnight. And so, this is ready to go, and we're moving forward. We wouldn't have made this announcement if we weren't. And so, that's what I could speak to.

This is something that the president has decided on, and we're taking, certainly, the steps to make this happen.

Q (Inaudible) be able to say sort of precisely when he signed it? Or maybe (inaudible.)

MS. JEAN-PIERRE: I -- I don't have specifics on signature -- when -- when it was signed, how the process even works.

I know that we just made announcement, obviously, overnight on -- on this, really -- you know, this granted clemency of nearly 1,500 people. I think that's a big deal. Thirty-nine individuals are -- were, certainly, pardoned, were -- who were convicted of nonviolent crimes. And I think this is important to -- to just not forget.

But I don't have the specifics of the process or how it works.  
But, obviously, it's out there, and we're moving forward with it.

Q And then one other thing. You had been asked several times about whether Hunter Biden would receive a pardon and responded to that question.

MS. JEAN-PIERRE: Yeah.

Q In that vein, can you tell me whether the president is considering a pardon for his son [brother] James Biden?

MS. JEAN-PIERRE: Look, what I can speak to is the p- -- the president made that decision -- right? -- about Hunter Biden. He put it in -- in his own words. I don't have anything to share beyond that. What I can say is: Not that I'm aware of, but I just don't have anything else beyond that.

And the president, certainly, is going to -- as it -- more broadly speaking, as we move forward to the next couple of weeks, he obviously is going to review with his team about other clemency decisions, and they're taking additional steps. And so, that's what I can speak to at this time.

Go ahead, Zolan.

Q Thank you. During the past clemency actions you were talking about, it seemed like most of the time the recipients were nonviolent, you know, drug offenders -- low-level drug crimes. There were a couple recipients here, though -- I mean, a judge who participated in a scheme that sent juveniles to for-profit jails; Medicare fraud; you know, real estate fraud.

I guess what I'm wondering is, was the crime that was committed also part of the criteria here? Or was it the mere fact where, if you were somebody on home confinement -- despite the crime you committed, but just the fact that you were on home confinement -- you received a commutation?

MS. JEAN-PIERRE: So, they're two different things, right? There is the 1,500 folks who -- who were placed on home confinement during COVID --

Q The examples I listed are part of the 1,500.

MS. JEAN-PIERRE: Oh, th- -- okay.

Q Yeah.

MS. JEAN-PIERRE: I didn't know, because I -- because those are commutation, right? So, I didn't know. So --

Q S- -- those are commutations, right.

MS. JEAN-PIERRE: Okay. So, you were saying "pardoned," so I just wanted to make sure of that.

Q Yeah. To clarify --

MS. JEAN-PIERRE: Okay. Yes.

Q -- those examples I listed are --

MS. JEAN-PIERRE: Are the fif- --

Q -- part of the 1,500 that received commutations.

MS. JEAN-PIERRE: Okay. Okay. Because, as you know, there were 39 people who were -- who were pardoned. So, two different things, so I just want to make sure we were on the same page.

So, this is definitely related to the home confinement from COVID. Let's not forget, there was the CARE[S] Act of 2020, right? This is all connected, certainly, to that. And that's -- those are the individuals who were -- again, who had home confinement and they successfully reintegrated into their families, into their communities. And that's the group of people -- that category, if you will -- that we were looking at.

Q But -- but --

MS. JEAN-PIERRE: Yeah.

Q Like, if they -- just the fact that they were on home confinement, they received a commutation here?

MS. JEAN-PIERRE: No, no, no. Because --

Q Was there -- did you factor --

MS. JEAN-PIERRE: There was --

Q -- in any -- like, in the process, do you also factor in the individual cases and the individual crimes that were committed?

MS. JEAN-PIERRE: Well, I think what's important is that they were successfully able to reintegrate into their communities and back into their families, right? They showed that having a second chance is something that they should be given, right? And so, that is what's important.

That -- let's not forget that -- the successfully reintegrating. And I think that's a huge factor. That matters as well. The home confinement, obviously, those -- that's the category that they -- that they were in during that CARE[S] Act of 2020. They were -- they -- as you know, there was a decision because of COVID-19 pandemic to move forward, back in 2020, before the president was,



obviously, in office.

And these folks, this 1,500 that we're talking about -- the nearly 1,500, were able to successfully reintegrate. And I think that's a criteria that we can't forget. And that's a criteria that's incredibly important here as the president made his decision.

Q And to follow up on --

MS. JEAN-PIERRE: Yeah.

Q -- I think, Kelly's question. Just, I know you don't want to go step by step in the process --

MS. JEAN-PIERRE: Yeah.

Q -- but c- -- can we say accurately that the president reviewed, looked at any of these applications?

MS. JEAN-PIERRE: What I can say is this president made this decision. This is the president that made the decision to move forward on this.

Q What was his involvement, though? Did they present him the applications and he said yes, or --

MS. JEAN-PIERRE: I mean, obviously the president was presented from his team the -- th- -- granting the clemency -- right? -- of these approximately 1,500 Americans and also the 39 that he pardoned. He was presented that by his team, and he made the decision.

This is a -- this would not have happened -- we cannot forget: This would not have happened if the president didn't sign off on it, if the president didn't decide to move forward.

And we can't forget what the president has done. We're talking about the -- let's not forget the past. Yes, we're talking about today, but we can't forget the president has also done 122 commutations, 21 pardons before this. We can't forget that the president issued -- issued categorical pardons for LGBTQ+ service members convicted because of their sexual orientation or identity -- gender identity and individuals charged with simply possession of marijuana. This is -- and he just did that back in April.

So, the president has certainly taken action to show the importance of giving Americans second chances, and this is a continuation.

This is not just a one-day thing. This is a continuation of the person -- of the president taking clemency and giving people second chances very, very seriously and understanding how much that means to families and, certainly, communities.

Go ahead.

Q Yeah. Has the president called any of the people he granted pardons to? Do you have anything to read out on that front?

MS. JEAN-PIERRE: No. It's a good question. I don't have anything to read out on the president calling any -- any of the 15- nearly 1,500 people or 39 folks that he was able to -- to pardon today. I just don't have anything to share.

Q And is he planning a farewell address at some point? Is there something in the works? Do you know where it might be, when it might be?

MS. JEAN-PIERRE: So, I don't -- we'll certainly have more to share what the next -- the last couple of weeks, last couple of days of the president's administration will look like, if he's going to be giving any big speeches or giving any important remarks as he -- as he ends his presidency.

I don't have anything right now in this moment, but I would say stay tuned. We'll have a lot more to share as to what January post-holiday will look like.

Go ahead. I know -- go ahead. I know I was supposed to call on you and I didn't.

Q Thank you. Back to Austin Tice --

MS. JEAN-PIERRE: Okay.

Q -- with apologies.

MS. JEAN-PIERRE: No. No apologies. (Laughter.) That's an important -- no, no. It's important. No apologies.

Q So, I believe it was last Friday when the family of Austin Tice said that they had spoken to officials here at the White House.

MS. JEAN-PIERRE: Yeah. They met with National Security Advisor Jake Sullivan at the end of last week, yes.

Q And then they had a statement at the National Press Club, where they said that they had been told from a reliable source -- we assume Sullivan -- that -- that Austin was alive and that he was being treated well.

MS. JEAN-PIERRE: Yeah.

Q So, now we don't know any of that. So, what -- how did that -- where did they get that information?

MS. JEAN-PIERRE: So, look, I'm going to let the family speak for themselves. I can't e- -- can't even imagine what they're going through. I don't want to imagine what they're going through. I

know this has been a difficult time for them.

But what I can say is, when it comes to Austin Tice, this is a top priority for this president. He said that himself. And there is no indication that he is not alive, but there's also no indication about his location or condition.

And so, what our goal is is to bring him home. And so, we hope, certainly, that he is alive.

And -- and as we have stated many times before, we are talking through the -- through -- through this with the Turks, and we want to do everything that we can to bring him home. It is a top priority for this president and this administration, and that's how we're going to continue to move forward on this.

All right, everybody.

Q Will there be further --

MS. JEAN-PIERRE: Oh, go ahead.

Q Will there be further meetings between now and the end of this administration?

MS. JEAN-PIERRE: Well, as you know, this administration, including the national security advisor, Jake Sullivan, has met with many family members of -- of Americans who are wrongfully detained, held hostage. That is something -- and also the president has done this as well. The national security advisor, as I just mentioned, just met with Austin Tice's family just this past week -- this past week.

And so, we're c- -- we're going to continue to certainly stay engaged and in touch.

I don't have any meetings to preview for you at this time, but we've been pretty con- -- pretty consistent in staying in touch with these families.

Again, I -- our hearts go out to them. Our hearts go out to them as they are dealing with an incredibly, incredibly difficult time.

All right. Thanks, everybody.

Q Thank you.

P.M. EST

White House Press Office · 1600 Pennsylvania Ave NW · Washington, DC 20500-0003 · USA · 202-456-1111

**From:** [White House Press Office](#)  
**To:** [Warner, Cheryl {she, her} \(HQ-NA020\)](#)  
**Subject:** [EXTERNAL] [BULK] Background Press Call on the Ongoing Response to Reported Drone Sightings  
**Date:** Sunday, December 15, 2024 1:52:12 PM

---

The White House Logo



**FOR IMMEDIATE RELEASE**

December 15, 2024

NATIONAL SECURITY COUNCIL

BACKGROUND PRESS CALL

BY SENIOR ADMINISTRATION OFFICIALS  
ON THE ONGOING RESPONSE TO REPORTED DRONE SIGHTINGS

Via Teleconference

(December 14, 2024)

MODERATOR: (In progress) -- discuss the ongoing interagency response to the reported drone sightings.

Today, we have representatives from the FBI, from DHS, from FAA, who will open remarks and talk through their respective roles and authorities when it comes to these reported sightings.

Today's call will be on background, and it will be -- and speakers from each agency can be attributed as representatives from their respective agencies. For example, speakers from DHS can be attributed as a DHS official. Speaker from FBI can be attributed

as an FBI official, and so on, but not quoted by name.

Each representative will provide opening remarks at the top of the call, and then we will go ahead and take some questions.

So with that, I will turn it over to the FBI to kick us off.

FBI OFFICIAL: Thank you very much, and good afternoon, everyone.

On Monday, 18 November 2024, multiple suspicious activity reports were generated through the New Jersey Suspicious Activity Report System regarding unidentified and unknown subjects operating multiple unmanned aircraft, otherwise known as UAS, in the vicinity of critical infrastructure locations in the state of New Jersey.

On Wednesday, 20 November 2024, FBI Newark opened an investigation into the sightings.

On Tuesday, 3 December 2024, FBI Newark established the 800 and online tip lines at the request of our local law enforcement partners to help free up 911 call centers that were being inundated with calls about drones.

Since the UAS activities were first reported, FBI Newark has done extensive investigative work to determine if any threats or threat actors are behind them, or if they pose a threat to the public or national security. We have been engaged with over 50 local, state, and federal partners consistently, and have so far completed a number of investigative activities, including serving legal process to relevant companies surrounding key UAS events.

We have visual observation teams deployed at various locations throughout the state of New Jersey, to include our military installations, conducting video radar analysis, alongside with our partners, which have determined all large fixed-wing reported sightings have been manned aircraft.

We established a tip line, and in that tip line process, the process approximately 5,000 tips -- have received 5,000 tips through that national tip line. And of those 5,000, less than 100 leads have been generated and deemed worthy of further investigative activity.

We have conducted dozens of interviews, and collected and reviewed multiple videos, and that analysis of those videos is ongoing.

We have also conducted intelligence analysis in comparison to other activities. We are working actively with our law enforcement partners all over the country to bring equipment into our AOR to assist with tracking and identifying drone activity.

We have consulted with our counterparts in other regions that have experienced similar sightings. We established a tip line to collect additional information about these and other drone



sightings. We have and continue to actively investigate leads, searching out the most relevant information, doing interviews, and responding to reports of downed UAS.

The reported down UAS so far have been relevant -- have not been relevant to our investigation. We are consulting with experts in the field of unmanned aircraft. Most of the reports of UAS have originated from the ground, with very, very few reports of UAS activity from pilots of manned aircraft. And that was the origination of our investigation, opening of our investigation with New Jersey State Police (inaudible).

In overlaying the visual sightings reported to the FBI with approach patterns for Newark-Liberty, JFK, and LaGuardia airports, the density of reported sightings matches the approach patterns of these very busy airports, with flights coming in throughout the night. This modeling is indicative of manned aviation being quite often mistaken for unmanned aviation or UAS.

The combination of efforts so far as noted above, to include technical equipment, tip line information, and noted consults has found -- has not found any evidence to support large-scale UAS activities.

It is important to note, though, that they're without a doubt -- without a doubt have been UAS's flying over the state of New Jersey. With nearly a million registered UAS in the United States, there's no doubt many of them are owned and operated here within the state.

The national airspace is designed to be as minimally restrictive as possible. And all indications are these UAS operators are operating within the parameters established for their use in that airspace. This is not to say the FBI does not believe UAS's are used for criminal or other nefarious activity, and it is well known to us that criminals breaking the law do, in fact, use UAS to support their actions.

The FBI will continue to investigate all allegations of criminal activity involving UAS, and we'll continue to work with our partners to defend and disrupt criminal and national security threats. Thank you.

MODERATOR: Thank you so much. We will now go to [DHS official] with DHS.

DHS OFFICIAL: Yeah, thank you, Michael. On the DHS side of the house, we certainly understand why people are concerned. That's one of the reasons we're devoting significant resources to support New Jersey and our federal and state law enforcement partners who are actively investigating these reported sightings.

At the same time, it's important to understand that we don't have any current evidence that there's a threat to public safety.

The FBI, DHS, and our federal partners, in very close coordination with New Jersey State Police, continue to deploy personnel and technology to investigate the situation, to confirm whether the reported drone flights are actually drones or otherwise inaccurate sightings.

You've probably heard there hasn't been any electronic detections to confirm the visual reports, but one thing we do have, and I'll reiterate as our partners at FBI said, is the geospatial modeling, where we're overlaying the drone sightings and the manned aircraft tracks, and we're confident that many of the reported drone sightings are, in fact, manned aircraft being misidentified as drones.

Historically, we've experienced many cases of mistaken identity where reported drones are, in fact, manned aircraft or facilities.

Now, as the FBI said, that does not mean that we're dismissing all reports as noncredible, but it does help us understand that the amount of actual drone activity is likely less than what's being reported. In fact, we absolutely share New Jersey's concerns with the amount and type of activity being reported, which is why our HQ and component field offices continue to support New Jersey and investigate the reportings.

Some examples of our support include the U.S. Coast Guard and other partners determined that there is no evidence to date of any foreign-based involvement in sending drones ashore from marine vessels in the area. DHS also sent New Jersey State Police advanced camera and radar equipment directly out of our R&D pipeline.

This kit is drone-specific radar that also cues a highly capable EO/IR, or electro-optical infrared camera system. If the radar detects a drone, the camera will be able to identify and track it. This is extremely helpful for drones without a standard radio frequency signal. The imagery can also help determine the type of drone and whether there is a payload, for example.

So far, the equipment has not detected anything unusual. We are aware that additional equipment is being provided by our partners as well.

Lastly, CISA and the U.S. Coast Guard also continue to monitor and evaluate security for critical infrastructure like power plants, and may adjust our positions as necessary. At this time, however, no threat has been identified.

And while there is no known malicious activity in New Jersey -- occurring in New Jersey right now, the reported sightings there do highlight a gap in our current authorities, and so we would also urge Congress to pass our important counter-UAS legislation that

will extend and expand our existing counter-drone authorities so we're better equipped to identify and mitigate any potential threats at airports or other critical infrastructure, but also so state and local authorities are provided the tools that they need to respond to such threats as well.

We'll be happy to answer questions as we move forward. Thank you.

MODERATOR: Thank you. We will now go to [FAA official] with FAA.

FAA OFFICIAL: Yes, thank you. And good afternoon, everyone. As you've heard, there is a considerable interagency effort underway here. So, worth mentioning also that the FAA is a safety organization, and I wanted to mention that as this interagency effort is multifaceted, with different responsibilities of different agencies.

Also worth mentioning: It is not illegal to fly drones in U.S. airspace. Generally speaking, it is legal to fly a drone in most locations, both during the day and at night, as long as you remain below 400 feet and you keep those drones in sight at all times, avoiding other aircraft and not causing hazard to any people or property, and avoiding restricted airspace. Some local municipalities may also have additional requirements that are levied, that will change from municipality to municipality.

Flying for any other purposes, like videography or news gathering, require additional authorities. Safely integrating drones into the National Airspace System is a key priority for the agency and something we take very seriously.

The FAA received the first reports of drone activity near Morris County, New Jersey, on November 18. At the request of federal security partners, the FAA published two temporary flight restrictions -- I may refer to them as TFR, (inaudible) -- prohibiting drone flights over Picatinny Arsenal as well as Trump National Golf Club in Bedminster.

The Picatinny Arsenal temporary flight restriction was published on November 20, and that is a 2-nautical-mile, 2,000-foot restriction that currently expires on December the 26th but can be extended. We're also working on a permanent restriction over that location.

November 22nd, Bedminster Golf Course, temporary flight restriction went into effect with a 1-nautical-mile, 1,000-foot restriction that expires on December 20th. Also may be extended.

We continue to support our interagency partners regarding reported drone sightings, and we also continue to highlight our website as a resource for drone information, and continue to engage with industry and the user community to educate operators on the requirements of operating drones within the National Airspace System.

And we are also able to take any questions.

MODERATOR: Great. Thank you so much. We will now go into the Q&A portion. We also, for this, have representatives from the Department of Defense on the line to answer questions related to their equities.

And then, just as a reminder to everyone, the attribution for this call is on background and can be attributed as representatives of their agencies, but not by name. Thank you very much. We will now go to Q&A.

Our first question is going to go to Andrea Shalal. You should be able to unmute yourself.

Q Hi. Hey, thanks so much for doing this. I guess my question is: You know, Kirby answered these questions pretty, you know, comprehensively on Thursday. You know, first of all, why did you decide to have another press conference today, or another briefing or call?

And two, you know, I'm seeing reports that these sightings have now sort of spread. I mean, can one of you sort of say what you think is happening here, which is sort of like, you know, a sense of panic is setting in, that people are worried despite your assurances that these reports have been, you know, manned aircraft, general aviation aircraft?

And what -- sorry -- just, like, help us contextualize it, if you will. And then, you know, is it -- how long will this go on? How long will this investigation go on? Is there some sort of end time that you have envisioned? Thanks.

MODERATOR: FBI, would you want to come in on the question about the investigation?

FBI OFFICIAL: Yeah, I'll talk briefly about the nature of the investigation. I'll talk maybe, perhaps, about our authorities. We investigate the criminal misuse of drones, and so I think that's an important piece to highlight, particularly if they're smuggling -- if the drones are used to smuggle contraband into prisons or conducting some type of illegal surveillance, stalking, or some type of terrorist threat.

But there are -- you know, it's important to note that any investigation that we're conducting as a result of the use of UAS is limited in scope. There is legislation -- I echo the concerns of the partners at DHS -- there's legislation that's introduced in both houses, and that will expand our legal authorities as it relates to the counter use -- the counter-UAS tools and technology that we have in those efforts that will help us quickly identify or quickly mitigate some of the threats that would exist as a result of that utility of UAS.

Now, as it relates to how long this investigation will occur, I can't speak to how long. What I can say is that we are doing everything we can alongside our partners to understand what is happening and whether or not there is more nefarious activity that we need to explore.

I can't speak to any other press releases or press conferences.

Q Michael, can you just sort of say anything about whether the investigation has expanded to include sightings in Maryland? The former governor of Maryland posted a note yesterday on X, saying that he'd seen activity going on for something like 45 minutes, shared a video. Has your investigation expanded to include Maryland and other states, or is it still focused mostly on New Jersey?

FBI OFFICIAL: Yeah, you know -- this is FBI again here. You know, there's evidence to support that, you know, again, as relayed, a lot of sightings are manned aviation.

I think there's two parts to this. Is there are the initial sightings that took place here in New Jersey and perhaps in other locations throughout the country, and then now there is this expanded level of drone activity that may not have been coordinated as part of what occurred in the initial stages that we observed. So, in other words, the initial reports that we were getting, (inaudible) there's no confirmation that any of those relate to anything that's being observed throughout the country or at other locations.

MODERATOR: And I'll just add, Andrea, on your first point: You know, I think our goal in doing this is just to continue to provide the most accurate picture of how we see this and the ongoing work that's happening. You know, I think that given how much focus there has been here, we just wanted to provide another opportunity to hear from the experts who are working every day on this to get the latest -- to let you know the latest information. I

Q I mean, do you think people are panicking?

FBI OFFICIAL: Yeah, I think there is -- you know, look, if we are talking about the 5,000 leads that we received, again, less than 100 of those have been actionable to us.

I think there is -- I don't want to cause alarm and panic, but you can't ignore the sightings that have been there, and we are concerned about those just as much as anybody else is. I'm a resident here of New Jersey. I live here. My kids have those same types of questions. And we're doing our best to find the origin of that specific -- of those drone activities. But I think there has been a slight overreaction.

Q I'm sorry, it's hard to hear you. There has been a slight --

MODERATOR: Our next question is going to go to -- sorry, next question is going to go Pierre Thomas. You should be able to unmute yourself.

Q Can you guys hear me okay?

MODERATOR: Yes.

Q So, my question is this: Have there been confirmed drone sightings near sensitive or military installations? Have you confirmed any? And give us a sense of whether they were nefarious or -- I mean, I think based on what you said, no, but I just wanted to be specific in that question. Have there been any confirmed drone sightings near sensitive or military installations?

DOD OFFICIAL: Yeah, this is Joint Staff here. I can talk to the military bases. We have had confirmed sightings at Picatinny Arsenal and Naval Weapons Station Earle. They are -- you know, I refer to them as sightings. They're all visual, but they are by highly trained security personnel.

This is not a new issue for us. We've, you know, had to deal with drone incursions over our bases for quite a time now. It's something that we routinely respond to in each and every case when a reporting is cited. We have electronic means to detect and respond, and we train our security personnel to identify, categorize, and then employ their equipment to deny the drone use over our bases.

In some cases, it is at the low end a violation of the local, state force protection measures, which, you know, they are essentially all no-drone zones, so there's no unauthorized drone use over our facilities. In other cases, it is federally controlled airspace, and it is, in fact, a federal airspace violation.

So, there are different things that we can do, different authorities based on what type of violation it is.

But, yes, in December we have had sightings over Picatinny and Naval Weapons Station Earle.

Q As far as you can determine, did they have cameras or anything, or were they just people inadvertently in the wrong space?

DOD OFFICIAL: Yeah, to date, we have no intelligence or observations that would indicate that they were aligned with a foreign actor or that they had malicious intent. But I just got to simply tell you we don't know. We have not been able to locate or identify the operators or the points of origin. We have very limited authorities when it comes to moving off base. We have to coordinate with local and as well as federal law enforcement to try and locate these persons and where they're launching from, to

either cite them or execute law enforcement activities that we're restricted from doing off base.

So, we simply don't know. And I know there's been a lot of press reporting on this. We don't know. We're also significantly restricted, and rightfully so -- in fact, prohibited -- from intelligence, surveillance, and reconnaissance here in the homeland.

So we don't have the same capabilities and the same methods that we would employ in other locations outside of the homeland to determine points of origin and identify very quickly where these operators are located and then respond to that location. We just can't do that here in the homeland. We have to coordinate with law enforcement to try to do that, which we are doing, and we do that on a routine basis at nearly all of our locations. We have good relationships and excellent coordination, and we respond quickly to try to identify them.

But the main point is to deter the activity using some of our electronic means that can respond to most of these small commercial systems and deny them access to the airspace over our bases.

But we don't know what the activity is. We don't know if it malicious, if it is criminal, but I will tell you that it is irresponsible. And, you know, here on the military side, we are just as frustrated with the irresponsible nature of this activity.

MODERATOR: Thank you so much. We got to move to the next question. Sorry.

The next question is going to go to Eric Martin. You should be able to unmute yourself. Eric, you're still on mute if you're trying to speak.

Q Yes, can you hear me?

MODERATOR: Yeah.

Q Sorry about that. Thank you so much for doing this. Just to follow up on Andrea's question, you know, what has changed today, December 14th, from what you knew earlier in the week? I mean, can you just -- because it seems like a lot of what's being provided is review of things that have already been briefed upon.

I'm just wondering if you can -- you know, in terms of the nuance of what you know now that you didn't know two or three days ago, if you can just explain, kind of chronologically, what it is that you've learned from the investigation in the last day or two, or what events there is. Or has this just reconfirmed the initial findings that we were told about earlier this week?

SENIOR ADMINISTRATION OFFICIAL: I'll just jump in. I mean, I think, one, it's our responsibility to update the public on what



we're learning, and that's part of what we're doing. I think it's notable that -- I mean, I think the topline are the same, which is: At this point, we have not identified -- obviously, we are taking this incredibly seriously. At this point, we have not identified any basis for believing that there is -- that these drones -- that there's any criminal activity involved, that there's any national security threat, that there's any particular public safety threat, or that there's a malicious foreign actor involved in these drones.

That said, as you've heard from all of the experts on this call, all of the departments and agencies are taking this incredibly seriously and investigating every possible lead and working to try to understand what these sightings are.

I think you've also heard, consistent with what I believe was briefed to you earlier this week, that at least some portion of what has been reported to be drones have on further inquiry turned out to be manned aircraft that were lawfully in the airspace. And that is not uncommon for people to see things that appear to be drones that turn out not to be drones.

So I think, largely, the topline are the same, but I also think that it is our responsibility to make sure that the public has the latest information available.

MODERATOR: Thank you so much. I think we have time for maybe one more question, and we'll go to Celia Mendoza.

Q Yes. Thank you so much. I have a question in terms of what local authorities can do versus the federal authorities. We understand that the governor of New Jersey had sent a letter to the President asking for not only more resources, but capabilities to do more. Can you, kind of, give us an understanding of what are the limitations of local authorities when it comes to bringing down this type of objects, or what could be the expanded options that they might get if the President decides to?

SENIOR ADMINISTRATION OFFICIAL: I'll take a stab real quick, and then others should fill in.

The administration has been seeking, for several years now, additional authorities to expand the counter-UAS authorities, both of the federal government, which are themselves very limited, and also to give state and local authorities the authority to use certain C-UAS technologies with federal oversight.

That legislation has been pending. I think, again, emphasizing that while at this point we have no evidence to believe that these drones pose a national security or a public safety threat, or that they are the work of a malicious foreign actor, nonetheless, this incident and the concern about the drone sightings highlights the importance of expanding authorities so that state and locals can

have some of the authorities that you're referencing and that the federal government can also -- would also be able to take additional actions beyond what is currently authorized by the limited statutory grants.

MODERATOR: Thank you so much. And, unfortunately, that's all the time we have today. Thank you all for joining. Thank you to our speakers.

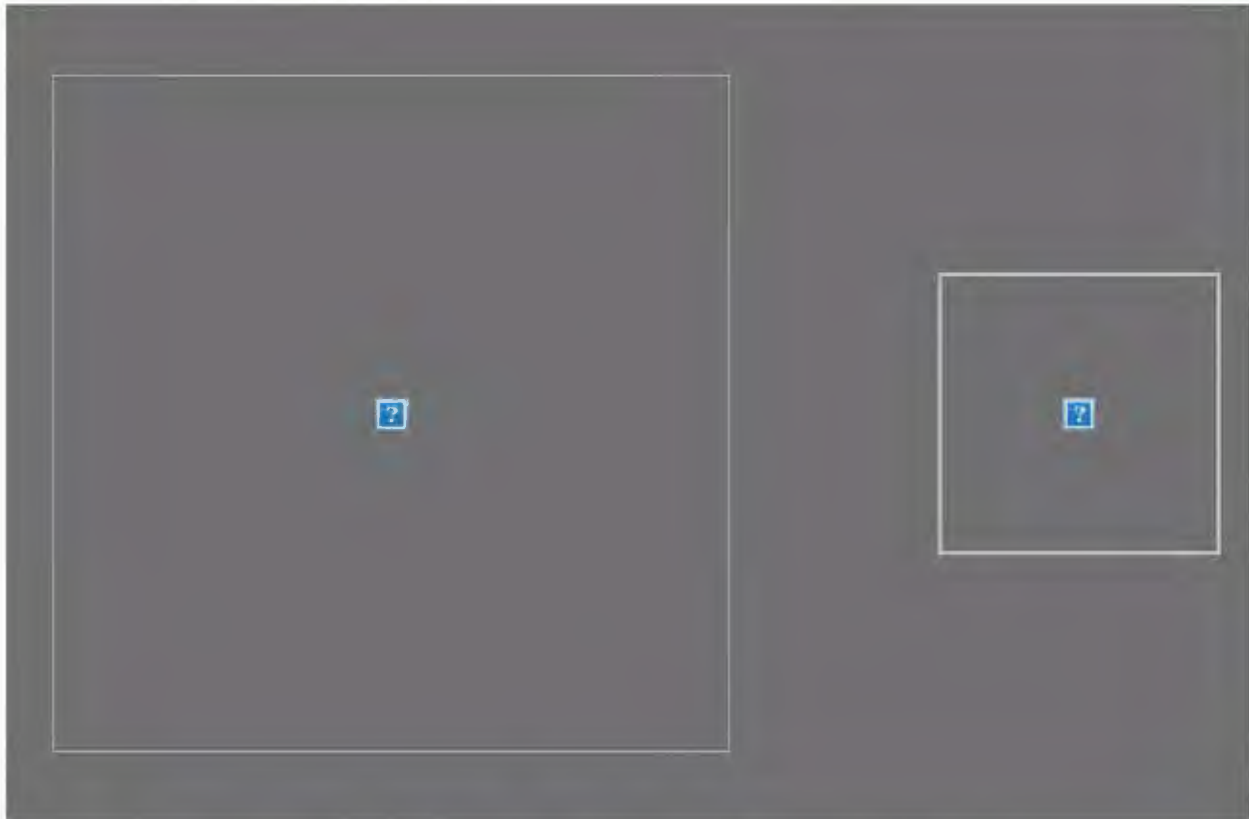
I know it's a Saturday afternoon, but we wanted to bring everyone together to share the latest information we had and an update. So, appreciate everyone joining, and thank you to all of our speakers here.

Any follow-up questions, feel free to reach out to myself at the NSC or our press distro on this. And thank you again, and have a great rest of your day.

**[Privacy Policy](#) | [Unsubscribe](#)**

**From:** [AW Intelligence](#)  
**To:** [Wamer, Cheryl \(she, her\) \(HQ-NA020\)](#)  
**Subject:** [EXTERNAL] Aerospace DAILY: Drone Furor; Watchkeeper Out; Afwerx Shifts - Dec. 18  
**Date:** Tuesday, December 17, 2024 10:54:14 PM  
**Attachments:** [asd 12 18 2024.pdf](#)

**CAUTION:** This email originated from outside of NASA. Please take care when clicking links or opening attachments. Use the "Report Message" button to report suspicious messages to the NASA SOC.



The Business Daily of the Global Aerospace and Defense Industry Since 1963

**December 18, 2024**

[DOWNLOAD PDF](#)

### [U.S. Tries To Calm Hysteria Over Drones; DOD Focuses On Protection](#)

The FBI has received more than 5,000 reported drone sightings over the past few weeks, with about 100 leads generated.

### [Winds Foil Second Stratolaunch Hypersonic Retest Attempt](#)

The planned test of the second Talon TA-2 flight was scrubbed because winds at the planned recovery site at Vandenberg Space Force Base were out of limits.

### [U.S. Space Force Launches Seventh GPS Sat. Last NRO Mission Of 2024](#)

The spacecraft was launched on a SpaceX Falcon 9 rocket at 7:52 p.m. EST from Space Launch Complex 40 at Cape Canaveral.

### [Firefly Lunar Lander Arrives At Kennedy Space Center](#)

Firefly Aerospace's Blue Ghost lander is due to launch mid-January onboard a SpaceX Falcon 9 rocket and attempt a soft landing on the Moon about 60 days later.

### [SpaceX Cargo Dragon Capsule Splashes Down Off Florida Coast](#)

The return ended a nearly eight-week roundtrip to the seven-person International Space Station.

### [Daily Briefs](#)

SKYALYNE lines up IT support for RCAF training... KULR announces flight of space battery prototype... DANISH MoD orders more eBee drones...

### [In Brief: Rolls-Royce F130 Passes B-52J Critical Design Review](#)

News in brief.

### [Watchkeeper UAS 'No Longer Fit' For Operations. UK Defense Officials Say](#)

The British Army decided to withdraw its Thales Watchkeeper uncrewed aircraft systems (UAS) because they are "no longer fit for operational purpose."

### [AFWERX Says Agility Prime eVTOLs Lack Range. Shifts To Hybrid](#)

AFWERX does not have any specific requirements, a program of record, or impending contracts for hybrid eVTOLs.

### [Europe Targets Risk Reduction Contracts For IRIS<sup>2</sup>](#)

European officials plan to move quickly to put on contract risk reduction efforts for the IRIS<sup>2</sup> satellite communications program to mature critical tech.

### [Eutelsat Awards Airbus 100-Satellite OneWeb Contract](#)

The European satellite operator on Dec. 17 said Airbus is due to start delivering the satellites in late 2026.

### [Europe Defense Sales Boost Prompts Embraer To Open Regional Office](#)

The company says the opening of the Embraer Defense Europe office demonstrates its

increased commitment to European defense and security activities.

#### [T-Mobile To Beta Test Starlink Cellular Service In Early 2025](#)

The cellular service provider has opened registration to potential beta testers on a first-come, first-served basis.

#### [KAI Opens Facility For AAM, Helicopter Tests](#)

KRW40 billion (\$27.8 million) was invested in the facility and the designing of the center in 2022.

#### [South Korea Approves F-15K Upgrade, Air-To-Air Missile Development](#)

South Korea's Defense Acquisition Program Administration has approved an F-15K upgrade plan in the midst of political turmoil.

[View full issue](#)

---

To make the most of your subscription, access Aerospace Daily & Defense Report online.

Simply visit [awin.aviationweek.com](http://awin.aviationweek.com) to login. Online, you can:

- Access essential news, data and intelligence throughout the business day
- Create alerts that enable you to keep up-to-date on the programs, organizations, etc. most important to you and your workflow
- Search through an Aerospace Daily & Defense Report archive that goes back over 15 years

If you would like to find out more about your online access, or have any other questions about your Aerospace Daily & Defense Report subscription, contact our customer support team at +1.561.279.4661 or email [tech\\_assistance@aviationweek.com](mailto:tech_assistance@aviationweek.com).





The Business Daily of the Global Aerospace and Defense Industry Since 1963

December 18, 2024

## Inside:

### PROGRAMS

Watchkeeper UAS 'No Longer Fit' For Operations, UK Defense Officials Say..... **PAGE 2**

AFWERX Says Agility Prime eVTOLs Lack Range, Shifts To Hybrid..... **PAGE 3**

Europe Targets Risk-Reduction Contracts For IRIS<sup>2</sup>..... **PAGE 7**

### OPERATIONS

Winds Foil Stratolaunch Hypersonic Retest Attempt..... **PAGE 4**

U.S. Space Force Launches Seventh GPS III Sat, Last NRO Mission Of 2024..... **PAGE 5**

Firefly Lunar Lander Arrives At Kennedy Space Center..... **PAGE 6**

### BUSINESS

Eutelsat Awards Airbus 100-Satellite OneWeb Contract..... **PAGE 4**

T-Mobile To Beta Test Starlink Cellular Service In Early 2025..... **PAGE 8**

### TECHNOLOGY

KAI Opens Facility For AAM, Helicopter Tests..... **PAGE 4**

### FUNDING & POLICY

S. Korea Approves F-15K Upgrade, Air-To-Air Missile Development..... **PAGE 7**

## B-52J Engines

Rolls-Royce announced Dec. 13 that its F130 engine has passed the critical design review for the U.S. Air Force's B-52J program. The milestone clears the company for final development, testing and production of the engine, with altitude testing set to begin in February 2025. The Air Force will replace the aging Pratt & Whitney TF33 engines on the bomber as part of a major modernization effort.

## Daily Briefs

**SKYALYNE** (military pilot/aircrew training) signed 25-year agreement with CGI for services incl. cybersecurity, cloud computing, infrastructure management supporting Royal Canadian Air Force training.

**LOCKHEED MARTIN** has \$33.8m U.S. Navy contract modification for four test controller processors and 10 infrared receivers for F/A-18 aircraft.

**EXOSTAR** (business collaboration software) acquired **ROBOT MORNING** and **COMPLYUP** to enhance product offerings with more robust supply and demand management plus integrated governance, risk, and compliance management functionality.

**KULR TECHNOLOGY GROUP** announced launch of the KULR ONE Space battery via launch integrator **EXOLAUNCH** on a **SPACEX** rideshare mission scheduled for 2026.

**AGEAGLE AERIAL SYSTEMS** announced order for an additional three eBee X drones from the Danish Ministry of Defense Acquisition and Logistics Organization.

### OPERATIONS

## U.S. Tries To Calm Hysteria Over Drones; DOD Focuses On Protection

BRIAN EVERSTINE, [brian.everstine@aviationweek.com](mailto:brian.everstine@aviationweek.com)

**The U.S. military has deployed additional uncrewed aircraft system (UAS) detection equipment to bases in the Northeast as several government agencies maintain that the recent rampant sightings of so-called drones do not pose any threat—and are mostly just normal air traffic.**

"Having closely examined the technical data and tips from concerned citizens, we assess that the sightings to date include a combination of lawful commercial drones, hobbyist drones, and law enforcement drones, as well as manned fixed-wing aircraft, helicopters, and stars mistakenly reported as drones," a joint statement from the Department of Homeland Security, FBI, FAA and the Pentagon says. "We have not identified anything anomalous and do not assess the activity to date to present a national security or public safety risk over the civilian airspace in New Jersey or other states in the Northeast."

The FBI has received more than 5,000 reported drone sightings over the past few weeks, with about 100 leads generated. The governmental response has included both advanced detection technology and visual observers, who have determined there were no anomalous activities.

"That said, we recognize the concern among many communities. We continue to sup-  
DRONES, P. 2

## PROGRAMS

## Watchkeeper UAS 'No Longer Fit' For Operations, UK Defense Officials Say

TONY OSBORNE, [tony.osborne@aviationweek.com](mailto:tony.osborne@aviationweek.com)

**LONDON—The British Army has decided to withdraw its Watchkeeper uncrewed aircraft systems (UAS) because they are “no longer fit for operational purpose,” senior defense officials say.**

The troubled Thales-made system only reached full operational capability in 2018 but will be withdrawn from use by the end of March 2025. It is one of several platforms that are being sunset early to save money ahead of the UK's upcoming Strategic Defense Review.

Lt. Gen. Robert Magowan, the deputy chief of defense staff for military capability at the UK Defense Ministry, told the UK Parliament's Defense Committee on Dec. 17 that lessons from Ukraine had determined that platforms like Watchkeeper are too vulnerable. Activity is underway to ensure that an alternative undisclosed capability would be acquired for the army in 2025, he said. Magowan added that Watchkeeper's early withdrawal saved “quite a long of money” in terms of defense expenditure.

As well as Watchkeeper, the Defense Ministry also decided to

retire the remaining Royal Air Force Airbus Puma helicopter fleet and 14 of what Magowan called the “oldest and most expensive” CH-47 Chinook transport helicopters, ahead of the introduction of a new fleet of MH-47G Chinooks from Boeing in 2027 through a capability sustainment program. These Chinooks are referred to as H-47(ER) by the Defense Ministry.

“We thought [retiring early Chinooks] was a prudent thing to do, and that we should be looking to the future in terms of those capabilities,” Magowan said. He added that commanders would be able to “manage” the operational risks associated with having fewer Chinooks available to them. Work is now underway to find a commercial gap-filler rotary-wing capability that will replace the Airbus Pumas in Brunei and Cyprus until their replacement in those two countries, in the form of the Airbus H145 Jupiter twin-engine light helicopters due for delivery in 2026/27.

Magowan said work was continuing on the New Medium Helicopter (NMH) program, noting that the remaining bidder, Leonardo Helicopters, has offered to build their proposed platform, the AW149, in the UK.

Other bidders in the program, including Airbus and Sikorsky, have dropped out, citing the lack of budget for the project.

## DRONES, from P. 1

port state and local authorities with advanced detection technology and support of law enforcement,” the statement says. “We urge Congress to enact counter-UAS legislation when it reconvenes that would extend and expand existing counter-drone authorities to identify and mitigate any threat that may emerge.”

### Public sightings

Amid the thousands of public sightings of what has largely been normal air traffic, there have been several UAS incursions over U.S. military bases and installations in recent months. This has prompted changes in operations, and brief stoppages of flight operations, at installations across the country and in Europe.

Pentagon spokesman Maj. Gen. Patrick Ryder told reporters Dec. 17 that the department has sent both active and passive sensing systems to locations including Picatinny Arsenal and Naval Weapons Station Earle in New Jersey. The Pentagon has also deployed systems to defeat drones, such as the Flex Force Dronebuster, which can sever the connection between a UAS and its operator.

The incursions into military base airspace is not new, government officials say, though it is receiving increased attention amid the rampant coverage of purported mystery drones.

“There are more than 1 million drones lawfully registered with the FAA in the United States and there are thousands of commercial, hobbyist and law enforcement drones lawfully in the sky on any given day,” the statement says. “With the technology landscape evolving, we expect that number to increase over time.”

### Real threats

The situation is showcasing the difficulties that the Pentagon has to defend its installations against real UAS incursions. Ryder, for example, highlighted the ability of bases abroad such as those in the Middle East to conduct intelligence, surveillance and reconnaissance (ISR) on its surroundings to better understand potential threats—something that is not possible at home.

Though there are multiple systems that can be used to shoot down low-level drones, there is also a danger to other air traffic in the area.

In October, Doug Bush, the U.S. Army's assistant secretary for acquisition, highlighted the need for a policy change as the Pentagon rolled out a new push for counter-UAS systems. The Pentagon needs to work with the FAA on how to use jamming and other electronic warfare capabilities in locations that are close to civilian airspace.

“We can do a lot overseas that you can't do here,” he says.



## PROGRAMS

## AFWERX Says Agility Prime eVTOLs Lack Range, Shifts To Hybrid

GARRETT REIM, [garrett.reim@aviationweek.com](mailto:garrett.reim@aviationweek.com)

**In a significant shift of its strategy, the U.S. Air Force's AFWERX Agility Prime program has acknowledged that the battery-powered electric-vertical-takeoff-and-landing (eVTOL) aircraft it has been funding and testing over the past four years lack the range necessary to be useful over the vast reaches of its operational theaters, such as across the Pacific Ocean.**

"We're always balancing priorities and budgeting, but certainly the future is going to be in hybrid systems," Prime Division Chief Lt. Col. Jonathan Gilbert told Aviation Week on Dec. 13. Hybrid eVTOL aircraft would give the Air Force the additional range and payload capacity needed for the service's logistics, he says.

AFWERX does not have any specific requirements, a program of record, or impending contracts for hybrid eVTOLs, Gilbert says. Instead, the Agility Prime accelerator program would look to piggyback on the existing hybridization efforts of commercial eVTOL developers, he says.

Developers of eVTOLs have typically designed their battery-powered aircraft with short range air taxi operations in mind. But at least two eVTOL developers, Beta Technologies and Archer Aviation, have said this month that they are developing hybrid aircraft for military missions.

Beta has two hybrid eVTOL aircraft in development, Kyle Clark, founder and chief executive of Beta Technologies, told Aviation Week on Dec. 16. The company has flown its ALIA A250 eVTOL with a reciprocating engine-powered range-extension kit installed in its cargo area multiple times since fall 2023.

The diesel-fueled generator was developed to validate hybridization engineering and design work for the ALIA. But Clark says the system could be sold in the future as a range-extender kit that would allow the battery-powered aircraft to ferry itself in conventional-take-off-and-landing (CTOL) mode—flying on its wing using its pusher propeller—more than 3,000 mi. The range extender is mounted to a cargo pallet and plugs into the aircraft's electrical power. A standard cargo door is swapped out for a door with an intake for aspiration and cooling, as well as an exhaust port.

The range extension kit could allow the U.S. military to self-deploy an eVTOL, says Clark, who notes the equipment also has a ground-based function. "That whole system comes out and becomes a generator on the ground to charge the aircraft."

Beta is also developing a turbogenerator version of its ALIA that would provide power through all modes of flight, including vertical takeoff and landing (VTOL). The company says it has

adapted a turbine typically used for low-altitude helicopters into a turbogenerator.

The startup has developed its own electromagnetic generators, controllers and has integrated the hybrid system into the nose of the ALIA. The company declines to say specifically where in the aircraft's nose the turbogenerator is located, but says the location was chosen for cooling and aspiration reasons. Exhaust comes out of the non-passenger and cargo side of the aircraft. Fuel is stored in the ALIA's wing.

The turbo-electric ALIA would have a 500-mi. range, including military reserves, when carrying 2,000 lb. of payload, Clark says. Beta is ground testing the aircraft ahead of a planned first flight.

Beta has "hybrid-related contracts with AFWERX and [U.S. Army Combat Capabilities Development Command] to support the development and testing of hybrid concepts," Clark says. The contracts are to deliver test data and report other information to the branches, he says.

Beta's disclosure comes after Archer Aviation and Anduril Industries said on Dec. 12 that they had signed a "strategic partnership" to develop "next-generation aircraft" for defense applications starting with joint development of a hybrid-eVTOL aircraft for a potential U.S. Department of Defense program. The hybrid-eVTOL aircraft would be developed using Archer Aviation's eVTOL expertise and existing commercial parts and supply chains, as well as Anduril's expertise in autonomy, artificial intelligence (AI), military missionization and systems integration, the partners said.

Archer's Midnight eVTOL air taxi, designed primarily to shuttle passengers from downtowns to airports, has a range of 100 mi. Performance and the configuration of Archer's hybrid eVTOL were not disclosed, and the company declined to elaborate beyond its initial announcement.

Archer's hybrid eVTOL development project will be run within the company's new Archer Defense program. "To support this initiative and for other general corporate purposes, Archer raised \$430 million in additional equity capital," Archer says.

Joseph Pantalone will lead the Archer Defense unit as head of advanced projects. Pantalone worked from 2020 to November as Sikorsky's director of special programs and operations analysis.

Joby Aviation, another prominent air taxi developer and participant in the Agility Prime program, did not respond to a request for an interview about its interest in hybrid eVTOLs, but said in a statement that it was "supportive of any efforts to decarbonize flight." The company also emphasized its participation in the Agility Prime program and noted it is developing hydrogen fuel

AFWERX, P. 8

## OPERATIONS

## Winds Foil Stratolaunch Hypersonic Retest Attempt

GUY NORRIS, [guy.norris@aviationweek.com](mailto:guy.norris@aviationweek.com)

**COLORADO SPRINGS—Stratolaunch is setting up for a third attempt at the first reusable test flight of the Talon A hypersonic testbed after aborting a second mission on Dec. 17.**

The planned test of the second Talon TA-2 flight was scrubbed because winds at the planned recovery site at Vandenberg Space Force Base, California, were out of limits.

The second attempt followed an initial launch effort on Dec. 13 that was abandoned due to low temperatures at the drop altitude.

The targeted flight is the first under Stratolaunch's five-flight block buy with the U.S. Navy Multi-Service Hypersonic Advanced

Capability Hypersonics Test Bed (MACH-TB) program. It marks the company's first attempt to fly the Talon-A at speeds of more than Mach 5. Conditions at Vandenberg are also critical as the mission will be Stratolaunch's first attempt to recover the vehicle with a runway landing.

The only previous powered flight of a Talon-A—vehicle TA-1—was conducted on March 9 and ended with a deliberate ditching in the ocean.

Like the Dec. 13 attempt, the latest flight saw the Roc carrier aircraft take off from Mojave Air & Space Port, California, and transit to the Point Mugu Range Complex off the California coast, adjacent to Vandenberg SFB. The Roc crew performed several racetrack circuits, accompanied by two chase aircraft—a Cessna 550 Citation II and an Eclipse 500—before returning to Mojave after 4 hr. 10 min.

## BUSINESS

## Eutelsat Awards Airbus 100-Satellite OneWeb Contract

ROBERT WALL, [robert.wall@aviationweek.com](mailto:robert.wall@aviationweek.com)

**Eutelsat is extending its relationship with Airbus for the OneWeb low-Earth-orbit satellite constellation under a new deal to deliver 100 satellites.**

The European satellite operator on Dec. 17 said Airbus is due to start delivering the satellites in late 2026. The satellites should be ready to assure continuous OneWeb coverage.

The spacecraft will feature technology enhancements that should also smooth the path for the European IRIS2 commercial satellite architecture, the company said. Eutelsat, along with SES and Hispasat, leads the SpaceRISE consortium that the Europe-

an Union this week put on contract to deploy the IRIS2 constellation through a roughly \$11 billion effort.

"We are relying on our long-standing partner, Airbus, to begin building the first batches of the Next Generation of our OneWeb LEO constellation, which will ensure we deliver continuity of service of the existing constellation with enhanced service features, as we move toward an architecture in line with the IRIS2 constellation in 2030," Eutelsat CEO Eva Bemeke said in a statement.

Airbus, which this year bought out Eutelsat's stake in the Airbus OneWeb Satellites joint venture that makes spacecraft in Merritt Island, Florida, said it would build these satellites in Toulouse, with production to start in 2026.

Eutelsat said the funding for the satellites is included in its capital expenditure forecast.

## TECHNOLOGY

## KAI Opens Facility For AAM, Helicopter Tests

CHEN CHUANREN, [chuanren.chen@informa.com](mailto:chuanren.chen@informa.com)

**Korea Aerospace Industries (KAI) has inaugurated its Rotorcraft Flight Center in Jinju city, dedicated to advanced testing of rotary-wing and future autonomous air mobility (AAM) vehicles away from crowded airspaces.**

Situated about 15 1/2 mi. northeast of KAI's headquarters and test site in Sacheon, the site spans 135,197 m<sup>2</sup>.

It houses a five-story building, a hangar and a 700-m runway, and can simultaneously operate up to five helicopters while

accommodating 120 personnel.

KAI invested KRW40 billion (\$27.8 million) in the facility and the designing of the center in 2022. Ground is set to be broken in 2023.

KAI says the facility aims to address the growing demand for advanced testing environments and that its existing Sacheon site is saturated by commercial and military activities. It said a separate site will improve efficiency and safety for rotary-wing models such as the Surion utility helicopter and Light Armed Helicopter. The site will also support the development of future technologies such as AAM, the High-Speed Medium Utility Helicopter and manned-unmanned teaming.

**Staff**

**EDITORIAL**

2121 K Street, NW, Suite 210, Washington, DC 20037  
 +1-202-517-1100 [awin.aviationweek.com](http://awin.aviationweek.com)

**EDITORIAL STAFF**

**Editor in Chief** Jefferson Morris  
**Assistant Editor** Andy Savoie  
**Copy Editor** Guy Ferneyhough  
**Editorial Director** Joseph C. Anselmo  
**Executive Editor, Defense & Space** Robert Wall  
**Military Reporters** Michael Bruno, Bill Carey, Brian Everstine, Guy Norris, Tony Osborne, Steve Trimble, Graham Warwick  
**Space Reporters** Mark Carreau, Irene Klotz, Vivienne Machi, Garrett Reim  
**Associate Producers** Heidi Carcella, Donna Thomas-High

**DATA & ANALYTICS**

**Senior Director, Forecasts & Aerospace Insights** Brian Kough  
**Senior Director, Data Operations and Solutions** Terra Deskins  
**Head, Defense Markets and Data** Craig Caffrey  
**Senior Military Program Analyst** Mathew Jouppi  
**Manager, Military Fleets** Samuel Archer  
**Senior Data Engineer** Nigel Howarth  
**Senior Defense Analysts** Sonny Butterworth, Haleigh Kling, Brandon Patrick, Anna Sliwon-Stewart  
**Defense Analyst** Edy McEvoy  
**Manager, Defense Market Intelligence** Rachel Hutchinson

**SUBSCRIBER SERVICES**

Customer Service, New/Renewal Sales  
 Aerospace Daily & Defense Report,  
 22701 W 68th, Ste 100, Shawnee, KS 66226-9806  
 Tel: +1-877-369-3706 (within the U.S.)  
 Tel: +1-913-850-6930 (outside the U.S.)  
 Fax: +1-800-455-3145  
 Email: [tech\\_assistance@aviationweek.com](mailto:tech_assistance@aviationweek.com)

**INTELLIGENCE AND DATA SERVICES**

**Senior VP, Intelligence, Data and Media** Anne McMahon  
 Tel. +1-646-469-1564, [anne.mcmahon@aviationweek.com](mailto:anne.mcmahon@aviationweek.com)  
**Senior Director, Intelligence and Data** Matt Holdreith  
 Tel. +1-917-703-0920, [matt.holdreith@aviationweek.com](mailto:matt.holdreith@aviationweek.com)

Discounted rates for multiple users and enterprise access available. Custom packages and additional services available including Intelligence/Research, Fleet Data, Forecasts.

**ADVERTISING & USER ENGAGEMENT**

**Marketing Director** Melissa Crum  
 Tel: +1-913-284-2951, [melissa.crum@aviationweek.com](mailto:melissa.crum@aviationweek.com)  
**Senior Director, NA Media** Rob Howlett

**REPRINTS**

Wright's Media  
 Tel: 1-877-652-5295 (within U.S.)  
 Tel: 1-281-419-5725 (outside U.S.)  
[informa@wrightsmedia.com](mailto:informa@wrightsmedia.com)

Published daily except Saturdays, Sundays and holidays by Aviation Week, 2121 K Street, NW, Suite 210, Washington, DC 20037. (ISSN No. 0193-4597). Gregory Hamilton President, Aviation Week.

COPYRIGHT © 2024 by Informa Markets, a trading division of Informa, PLC. All rights reserved. None of the content of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means (electronic, mechanical, photocopying, recording or otherwise) without the prior written permission of the publisher. Available in online and email editions.

Vol. 290 • No. 55



informa the world's leading



**OPERATIONS**

**U.S. Space Force Launches Seventh GPS III Sat, Last NRO Mission Of 2024**

VIVIENNE MACHI, [vivienne.machi@aviationweek.com](mailto:vivienne.machi@aviationweek.com)

**The U.S. Space Force launched the seventh GPS III spacecraft Dec. 16, accelerating the timeline to get its newest position, navigation and timing asset on orbit before year's end.**

The spacecraft was launched on a SpaceX Falcon 9 rocket at 7:52 p.m. EST from Space Launch Complex 40 at Cape Canaveral. The service called it a Rapid Response Trailblazer (RRT) launch in a Dec. 16 announcement, and said that planning began for the launch only five months ahead of time, rather than the typical 24 months.

The rapid turnaround was necessary as United Launch Alliance's (ULA) Vulcan Centaur rocket awaits certification from the Space Force to carry National Security Space Launch missions. ULA has completed the required two certification launches, but the Space Force has not finished evaluating the data needed to give its stamp of approval.

ULA was originally contracted to orbit the seventh, eighth and ninth GPS III spacecraft, while SpaceX would launch Space Vehicle 10. The RRT mission demonstrated "flexibility" to adjust the Space Force's manifest to minimize the impact of Vulcan's delays, Col. Jim Horne, senior materiel leader of launch execution for the Space Force's Assured Access to Space office, said in the press release. "It not only demonstrates the teams' ability to respond to emergent constellation needs, but is a testament to our flexibility and responsiveness to deliver capability as rapidly as space vehicle readiness allows," he said.

The Space Force call-up to launch for the seventh GPS III satellite was reduced to about three months. The spacecraft traveled for six days via ground transport from Lockheed Martin's Littleton, Colorado, facilities to the launch site at Cape Canaveral, as the standard military aircraft ride was engaged in hurricane tracking and relief efforts, Lockheed Martin said.

The spacecraft is now under operational control at Lockheed Martin's Denver launch and checkout operations center until its official acceptance into the current GPS constellation. That constellation now features 31 active satellites, to include the seven GPS III spacecraft in reserve status and three more vehicles completed and awaiting launch, the Space Force said. All the GPS III space vehicles are equipped with M-code, an advanced anti-jamming and anti-spoofing signal that increases secure access to military GPS signals for U.S. and allied forces.

The Space Force also launched a new mission for the National Reconnaissance Office (NRO) Dec. 17, its sixth mission to build out a proliferated satellite constellation in low Earth orbit.

NROL-149 was launched at 8:19 a.m. EST on a SpaceX Falcon 9 rocket from Space Launch Complex-4 East at Vandenberg Space Force Base, California. The mission was the eighth successful NRO launch of 2024 and the agency's last scheduled launch of the calendar year, an announcement said.

The NRO anticipated launching six missions in 2024 to support its new proliferated architecture. Now that those are completed, additional launches are expected to build out the constellation through 2028. The previous five launches occurred on Nov. 30, Oct. 24, Sept. 5, June 28, and May 22, all from Vandenberg.

Between June 2023 and December 2024, the NRO launched 10 missions and delivered more than 100 payloads on orbit, the agency said.





BUSINESS

## Europe Defense Sales Boost Prompts Embraer To Open Regional Office

TONY OSBORNE, [tony.osborne@aviationweek.com](mailto:tony.osborne@aviationweek.com)

**Hot on the heels of a spurt of defense sales in Europe, Brazil's Embraer has opened a new office in Lisbon, Portugal.**

The company says the opening of the Embraer Defense Europe office demonstrates its increased commitment to European defense and security activities.

The Brazilian OEM describes the opening as a "strategic mile-

stone" for its expansion into Europe.

"The subsidiary in Portugal is proof of Embraer's long-term vision for Europe," said Bosco da Costa Junior, Embraer Defense and Security's president and CEO.

Embraer has seen significant success in Europe over the last two years with C-390 airlifter orders from Austria, the Czech Republic, Hungary, the Netherlands and Portugal. The type has also been selected by Slovakia and Sweden, with the latter expected to contract for the aircraft shortly. Portugal has also become the first European customer for the A-29 Super Tucano.

OPERATIONS

## Firefly Lunar Lander Arrives At Kennedy Space Center

IRENE KLOTZ, [irene.klotz@aviationweek.com](mailto:irene.klotz@aviationweek.com)

**CAPE CANAVERAL—The third in a series of NASA-backed missions to send small commercial landers to the lunar surface arrived at Kennedy Space Center Dec. 16 for launch preparations.**

Firefly Aerospace's Blue Ghost lander is due to launch mid-January onboard a SpaceX Falcon 9 rocket and attempt a soft landing on the Moon about 60 days later.

The mission is poised to be the third under NASA's Commercial Lunar Payload Services (CLPS) program. Astrobot's Peregrine lander lifted off in January, but a propellant leak scotched a lunar landing attempt. Intuitive Machines' Odysseus' spacecraft followed in February and reached the lunar surface despite a problem with its laser rangefinders that caused the lander to descend too fast

and tip over at touchdown, hampering science operations.

Carrying 10 science instruments, Blue Ghost aims to land inside Mare Crisium, a large, dark basaltic plain in the northeast quadrant of the Moon's near side. Mare Crisium was created by early volcanic eruptions that flooded the area with basaltic lava more than 3 billion years ago.

The lander is designed to operate for one lunar day—the equivalent of 14 days on Earth. "We're going through a lot of mission rehearsals and simulations, as you'd expect. Our team just hones and refines their mission operations capabilities so that we can increase the probability of success of landing on the Moon," CEO Jason Kim told Aviation Week during an interview last month.

The 6.6-ft.-tall, 11.5-ft.-dia. Blue Ghost lander was taken to SpaceX's payload processing facility at the Cape. Prelaunch operations include final lander health checks, battery charging, fuel loading, integration and encapsulation.

OPERATIONS

## SpaceX Cargo Dragon Capsule Splashes Down Off Florida Coast

MARK CARREAU, [mark.carreau@gmail.com](mailto:mark.carreau@gmail.com)

**HOUSTON—SpaceX and NASA declared a successful splash-down and recovery of the company's 31st agency-contracted Dragon cargo mission capsule on Dec. 17 in the Gulf of Mexico off Panama City, Florida.**

The return ended a nearly eight-week roundtrip to the seven-person International Space Station (ISS). The parachute-assisted splashdown occurred at 1:39 p.m. EST following a 12-min. 9-sec. deorbit burn at 12:49 p.m. EST and deployment

of the capsule's four main parachutes. The Dragon was greeted by a SpaceX recovery vessel and its crew. Once lifted aboard, time-sensitive scientific research was to be removed for transport to NASA's Space Systems Processing Facility at Kennedy Space Center, Florida, for distribution to researchers.

The space freighter departed the ISS at 11:05 a.m. EST on Dec. 16. The Cargo Dragon's departure was initially planned for Dec. 5. But it was delayed five times by weather conditions at splash-down zones off the Florida peninsula's Atlantic Ocean and Gulf of Mexico coastlines. The first of SpaceX's ISS resupply missions was launched in October 2012 under an initial four-year, \$1.6 billion contract to include at least a dozen resupply missions.


AVIATION WEEK

**MILITARY AVIATION LOGISTICS AND MAINTENANCE SYMPOSIUM**

APRIL 8-10, 2025 • ATLANTA, GA • #MALMS

GET 30% OFF! Use Code: **AWIN30**  
Valid for all new registrations.

REGISTER TODAY





PROGRAMS

## Europe Targets Risk-Reduction Contracts For IRIS<sup>2</sup>

ROBERT WALL, robert.wall@aviationweek.com

**European officials plan to move quickly to put on contract risk-reduction efforts for the €10.6 billion (\$11.1 billion) IRIS<sup>2</sup> satellite communications program to mature critical technologies needed for the multi-orbit constellation.**

European Space Agency (ESA) officials acknowledge IRIS<sup>2</sup> is under an aggressive schedule with the goal of having the 292-satellite system featuring new technologies operational starting in 2030. To help maintain progress, ESA officials said they are trying to get off to “a very quick start” with some technology maturation development contracts likely to be signed this year and in January.

ESA has identified three low-technology readiness level (TRL) equipment items it wants to mature to avoid program disruptions: the onboard processor, onboard computer and digital beam-forming antenna.

“These are the critical paths,” an ESA official said.

Program officials have preselected the low-TRL items and industrial partners to work on them, including Thales Alenia Space and Airbus.

Thales Alenia Space is also the independent system architect. Officials are still discussing how to set up the management system involving the SpaceRISE industrial consortium, which also serves as the system prime contractor, and the European Commission and ESA to oversee the project.

To mitigate the risk of schedule slippage, program officials in June plan to conduct a technology maturity review in advance of the preliminary design review scheduled for around 12 months from now. At that point, ESA officials note, they may have to make decisions on whether the technologies are maturing fast enough or if a course correction is needed.

ESA is tracking at least 30 items of IRIS<sup>2</sup> equipment to assure progress is maintained.

Program officials also plan to run competitions early for other critical components, such as electric thrusters for the satellites or the optical links designed to connect all the spacecraft to ensure data is beamed down in sovereign European Union territory.

FUNDING & POLICY

## S. Korea Approves F-15K Upgrade, Air-To-Air Missile Development

KIM MINSEOK, kim.minseok@aviationweek.com

CHEN CHUANREN, chuanren.chen@informa.com

**SEOUL—South Korea’s Defense Acquisition Program Administration (DAPA) approved the F-15K upgrade plan at the 165th Defense Acquisition Program Promotion Committee amid political turmoil following a short-lived declaration of martial law by now-impeached President Yoon Suk-yeol.**

All 59 F-15Ks currently in service with the Republic of Korea Air Force will be upgraded at a cost of KRW4.56 trillion (\$3.17 billion). The total is around KRW1.1 trillion more than the KRW3.46 trillion initially budgeted by DAPA for the project in 2022.

Upgrades of the F-15Ks are planned over 13 years, through 2037.

According to DAPA, the price increase was driven by rising material and labor costs, due in particular to a shortage of work-

ers in the defense industry.

In addition, the procurement agency said Boeing initially proposed upgrading the F-15K by building a new forward fuselage for the aircraft with the novel equipment and swapping it with the existing body. Following an evaluation, the cost increase was deemed excessive. Instead, the upgrade will be performed by swapping out components.

The U.S. Defense Security Cooperation Agency in November approved the F-15K upgrade package with RTX’s APG-82(V)1 active, electronically scanned array radar and BAE Systems’ AN/ALQ-250 Eagle Passive Active Warning Survivability System. The Foreign Military Sale was priced at \$6.2 billion, although these values are usually a guideline for the maximum allowable cost for the project.


DAPA has also approved a 10-year domestic, short-range, air-to-air missile project running until 2035. The KRW661.6 billion program aims to bolster South Korean missile technology capabilities and produce a missile that can equip its KF-21 fighter with future exports in mind.

AVIATION WEEK  
**SupplyChain**  
CONFERENCE

March 12-13, 2025 • Dallas (Southlake), TX • #AWNSCC

ADAPTING TO THE  
SPEED OF CHANGE

REGISTER TODAY



## BUSINESS

## T-Mobile To Beta Test Starlink Cellular Service In Early 2025

GARRETT REIM, [garrett.reim@aviationweek.com](mailto:garrett.reim@aviationweek.com)

**T-Mobile plans to beta test SpaceX's Starlink satellite-based cellular service starting in early 2025.**

The cellular service provider has opened registration to potential beta testers on a first-come, first-served basis, it said Dec. 16. Participating in the beta testing program is free and priority is to be given to emergency first responders, T-Mobile says.

T-Mobile says SpaceX has more than 300 Starlink cellular satellites in orbit. SpaceX started launching the cellular variant of its Starlink communications satellite in January 2024.

The direct-to-mobile satellite service is aimed at eliminating dead zones beyond the coverage of terrestrial cellular towers, some 500,000 mi.<sup>2</sup> of land in the U.S.

"We throw down 248 beams per satellite. So, this is like 248 cellphone towers," says Benjamin Longmier, senior director of satellite engineering at SpaceX, in a promotional video for the launch of beta testing.

The satellite-based service will initially support texting. Data and internet-of-things service is planned for 2025, SpaceX's website says. The rocket and satellite manufacturer previously said satellite-based cellular voice service would come in 2025 as well, but has changed its schedule to "coming soon" on its website.

"With Starlink's direct-to-cell satellite constellation specifically designed for integration with the T-Mobile terrestrial network, the experience is expected to be much more user friendly than other satellite messaging services currently in market," T-Mobile says. "For example, users will not need to hold their phone up to search for a signal. Both inbound and outbound messages are sent and received just like any other message."

The reference to a user holding a phone aloft is an apparent dig at Apple's direct-to-cellular service, which launched through partner satellite operator Globalstar. It has offered emergency SOS messaging since 2022 but requires a user to point their phone to a satellite. In November, Apple unveiled plans to spend \$1.5 billion to finance a new cellular satellite constellation with Globalstar to expand service.

---

### AFWERX, from P. 3

cell technology as a means to extend eVTOL range. In July, Joby demonstrated a preproduction prototype version of its S4 flying 561 mi. using liquid hydrogen and a fuel cell.

Air Force generals have repeatedly stressed the logistical challenges of resupplying forces across the Pacific theater, noting the "tyranny of distance."

The service's leadership has also chosen a dispersion strategy, called Agile Combat Employment, to prevent its aircraft from being wiped out all out once while on the ground by missile attacks from China. But spreading aircraft across landing strips on islands across the Pacific Ocean makes the U.S. Air Force's logistics challenges more difficult.

AFWERX hopes that new smaller aircraft could help reduce the Air Force's reliance on its workhorse Lockheed Martin C-130 transport aircraft for delivering parts over "the last tactical mile," Gilbert says.

Toward that goal, ARWERX's Agility Prime program is funding a variety of Advanced Air Mobility projects, including test flying autonomous Cessna Caravan 208s, such as the systems developed by Joby Aviation's XWing, as well as Electra.Aero's hybrid-electric, short-take-off-and-landing (eSTOL) EL2 prototype aircraft.

"What we haven't done is a true analysis of alternatives and looked at, 'OK, well, do I care more about runway independence,

or do I care more about getting there faster, or do I care more about the range, or do I care more about the payload? I think that's some work that's going in right now to refine requirements for that Next Gen Air Lift concept," Gilbert says. "From an AFWERX perspective, VTOL right now is desired, but not required."

Fighter aircraft in need of replacement parts are likely to be found on an 8,000-ft. runway, he adds. A long airstrip should also accommodate a variety of conventional aircraft for resupplying parts.

"If that runway has been under attack and cratered out, then likely there's some room to land an aircraft still," Gilbert says. "If you look at an Electra [eSTOL aircraft] or a [Cessna Caravan] 208 or something like that, if I can do it in 1,500 to 2,000 ft. – land and take off – there's likely that room available on that runway."

Gilbert says the U.S. Air Force's ideal vehicle is a high-speed vertical takeoff-and-landing (HSVTOL) aircraft. DARPA is taking the lead on that aircraft type with its Speed and Runway Independent Technology (Sprint) project. That effort aims to demonstrate technology for an HSVTOL aircraft that is able to cruise at 400 kt. (460.3 mph). But with that aircraft still years in the future, AFWERX is weighing what it can do in the shorter term with hybrid eVTOLs, eSTOLs and autonomous fixed-wing aircraft, Gilbert says.



**From:** [White House Press Office](#)  
**To:** [Warner, Cheryl {she, her} \(HQ-NA020\)](#)  
**Subject:** [EXTERNAL] [BULK] On-the-Record Press Gaggle by White House National Security Communications Advisor John Kirby  
**Date:** Tuesday, December 17, 2024 10:09:24 AM

---

The White House Logo



**FOR IMMEDIATE RELEASE**

December 17, 2024

NATIONAL SECURITY COUNCIL

ON-THE-RECORD PRESS GAGGLE  
BY WHITE HOUSE NATIONAL SECURITY  
COMMUNICATIONS ADVISOR JOHN KIRBY

Via Teleconference

(December 16, 2024)

4:47 P.M. EST

MODERATOR: Hi, everyone. Thanks for joining our gaggle late in the day today. Kirby has some words here at the top, and then we'll get into as many questions as we can.

MR. KIRBY: Hey, everybody. Good afternoon. Sorry for the late afternoon gaggle. Obviously, lots going on here. So, again, thanks for joining late.

I do want to start by expressing our deep condolences to all the victims and the families, and certainly the community of Madison,



today. Just horrific news, and news that no family, no parent, no sibling, no son or daughter ever wants to hear. So, just terrible.

And we will continue to stay focused on the community there in Madison, and we'll obviously offer whatever help may be required or needed of local and state authorities.

I can tell you that the President has been briefed on the school shooting there and that senior White House officials are, as you would expect we would be, in touch with our local counterparts there in Madison to provide whatever support that they need.

Now, I want to address a couple of more things here before we take your questions, and first to the continued interest in drones.

And just at the outset, I think it's important to remember a bit of context here. There are more than 1 million drones that are lawfully registered with the Federal Aviation Administration here in the United States, and there are thousands of commercial, hobbyist, and law enforcement drones that are lawfully in the sky on any given day. That is the ecosystem that we are dealing with. And it is legal. It is proper. In fact, in many cases, these drones provide valuable services, both on the commercial side and on the law enforcement, public safety side.

And with the technology evolving as it is, we have every expectation that the number of drones in the skies over the United States is going to increase over time.

Now, with respect to what's going on in and around New Jersey, the FBI has received now tips of some 5,000 reported drone sightings in the last few weeks, about 100 of which they felt needed to be followed up on. So out of 5,000 tips, they did the analysis and determined that about 100 required following up on.

We also have federal government resources and personnel supporting state and local officials as they investigate these reports. We're obviously quickly working to help state and local authorities prioritize and follow up on the leads that are still being followed up on. As Secretary Mayorkas said, we have sent additional advanced detection technology to the region, and of course, we've sent some trained visual observers as well.

Having closely examined the data, having closely looked at the tips and collated them as best we can from concerned citizens, we assess that the sightings to date include a combination of lawful commercial drones, hobbyist drones, and law enforcement drones, as well as manned fixed-wing aircraft, helicopters, and even stars that were mistakenly reported as drones. We have not identified anything anomalous or any national security or public safety risk over the civilian airspace in New Jersey or other states in the Northeast.

The work continues. So that said, we obviously recognize the concern among many communities. We continue to support state and local authorities, as I said, with technology and law enforcement support. And we will continue to follow up, as appropriate, on the leads that are still active.

But I want to stress again: Our assessment at this stage is that the activity represents commercial, hobbyist, law enforcement drones, all operating legally and lawfully, and/or civilian aviation aircraft.

As we continue to work through the leads that are out there, we'll continue to share what we can. And I would add that this assessment that I just read out is coming from law enforcement officials.

I want to add that we urge Congress to enact counter-UAS -- unmanned aerial systems -- legislation that has been proposed and repeatedly requested by this administration that would extend and expand existing counter-drone authorities to help identify and counter any threat that does emerge. There are gaps and seams, for instance, between the various government agencies -- federal, local and state. And this counter-UAV, counter-drone legislation would help us close some of those gaps and seams. So we need Congress to act.

And so, when Congress reconvenes in January, we're going to be calling on them to put in place a bipartisan task force [commission] to examine congestion in the skies and to help set appropriate rules to address the public's concerns.

Now, additionally, there have been a limited number of visual sightings of drones over military facilities in New Jersey and elsewhere, much of which is, of course, restricted airspace. Such sightings near or over DOD installations are not new. And DOD takes unauthorized access over its airspace seriously, as you would expect them to do, and they coordinate closely with federal and law enforcement authorities as appropriate. And they are actively engaged with local commanders to ensure that there are appropriate detection and mitigation measures in place.

And lastly, if I could, turning to North Korea and Russia.

Throughout this conflict, we've seen North Korean support for Russia's illegal and unprovoked war, including the transfer of missiles, artillery ammunition. And, in October, of course, we announced that more than 1,000 North Korean troops were deployed to Russia on a purported training mission.

In reality, Russia, due to Ukraine's strong defense, and out of military desperation, sought additional support to facilitate and to perpetuate its war.

Over the past few days, we have seen these North Korean soldiers

move from the second lines on the battlefield to the front lines on the battlefield meant to be actively engaged in combat operations.

It's not surprising -- and of course, it's also not surprising that now North Korean soldiers are suffering losses on the battlefield in response to Russia's escalation, which, of course, the introduction of North Korean soldiers represents in terms of escalation.

The United States has announced new assistance, including the use of long-range capabilities to degrade North Korean and Russian forces before they attack. And we have continued to surge security assistance, announcing two drawdowns in just recent weeks, and one USAI package.

Today, the Biden-Harris administration is announcing new sanctions on nine DPRK -- North Korean -- individuals and seven entities, including banks and shipping companies, all of which is over, of course, Kim Jong Un's support for Russia's war in Ukraine, as well as the DPRK's continued ballistic missile testing.

These sanctions contribute toward broader efforts to degrade the DPRK's ability to continue generating revenue for its weapons of mass destruction program and for providing munitions and ballistic missiles to Russia for use against Ukraine.

We're going to continue to hold accountable all actors who facilitate financially and militarily Russia's illegal and brutal war in Ukraine. And it goes without saying, or at least I hope it goes without saying, that we stand by Ukraine and the Ukrainian people as they defend their freedom, their territorial integrity, their sovereignty, their citizens, their lives, and their livelihoods. That's been a consistent theme, it's been a consistent effort by this administration since Mr. Putin decided to cross the line in February of '22. And I can assure you, with every day that we have left in this administration, we're going to make good on that commitment.

With that, I can take your questions.

MODERATOR: Thank you. Our first question will go to Nandita with Reuters.

Q Hi. Can you hear me?

MODERATOR: Yep.

Q Thank you. I wanted to ask about President-elect Trump's comments on Ukraine today. He's obviously raised doubts about President Biden's strategy of sending long-range missiles to Ukraine. Today he said Ukraine has to agree to a deal. I'm curious what you think of Trump's comments and what they mean for President Zelenskyy and the future of Ukraine.

MR. KIRBY: I'm not going to engage in a public back-and-forth here, but I do want to make a couple of points.

There are things you've heard me say before, but, my goodness, if you need to hear, I'll say it again: Nothing about Ukraine without Ukraine. We're not going to have talks about them without them involved. We're not going to force their hand in terms of what their next steps might be.

President Zelenskyy was elected by the Ukrainian people to be their representative in the executive branch of their government, and he is. And he gets to decide if and when there's going to be a negotiation.

Now, we all believe there should be a negotiated end to this war.

That's probably the most likely and the best way it's going to end. We recognize that. But President Zelenskyy gets to determine under what terms, what conditions, when, and how he wants to engage in negotiations. And as we have made clear to him in the past, so I can today: When he makes that decision, as long as President Biden is Commander-in-Chief, he will find in this administration a supporter as he moves forward to negotiating. But he gets to determine that. And if he does do it, he gets to determine the conditions.

What we're going to -- the third thing I'll say is that between now and that day, whenever that day is, we're going to make sure that his army has what they need to continue to succeed on the battlefield and to push the Russians back and to make it harder on Mr. Putin to continue to fight this war.

I mean, even as we're talking here, it is true that the Russians have made some plodding progress in the east, and it is true that they are going after Ukrainian lines in and around Kursk, but they're doing it with North Korean soldiers, because that's how desperate he is. And the progress that they're making in the east, yes, not denying that they're making progress, but it's coming at a heavy cost for Russian soldiers as well.

One of the things that Mr. Putin has had to buy a lot of in terms - - and he's bought a lot of missiles, he's bought drones, he's bought artillery shells, and he's getting them from all kinds of different places. He's also had to buy a lot of body bags. And I think that shouldn't be forgotten. And that's it.

MODERATOR: Thank you. Our next question will go to Aamer with the AP.

Q Hey. Thank you, John. One question I had was: Did the administration consult with President-elect Trump's team before the decision to loosen restrictions on the use of American-provided ATACMS?

And then, just secondly, on your point about North Koreans now

being seen moving up to the front lines, is there anything specific triggering this? And is there an assessment of how many North Korean troops have been injured or lost thus far? Thank you.

MR. KIRBY: So, let me take your second one first. I don't know that we have an exact number, but we do believe that they have suffered some significant losses, killed and wounded, but it's difficult for me to put an actual number on it. I would say certainly in the realm of dozens, several dozens.

And we're just now starting to see this movement of them from the second line to the front line. So it's a fairly new development, Aamer, and we might be able to have a little bit more granularity as days go on, but I wouldn't have put it in this opening statement if we didn't assess that these were fairly significant losses.

Again, we just don't have a hard number on it, but just the figures that we are seeing and trying to triangulate tell us that, again, this has not been an insignificant set of losses for these guys.

And, look, we said it at the time: If they want to enter the fight, they do so at their own peril, and now they're learning what that means.

On your first question: Look, the conversations that we were having inside the administration about ATACMS started before the election.

All I can assure you is that in the conversations we've had with them since the election, and we've had it at various levels, we have articulated to them the logic behind it, the thinking behind it, why we were doing it, and to stress to them that this was in response, quite frankly, to the North Korean troops being put on the battlefield, which they did before the election.

Q John, just real briefly, is it incorrect when President-elect Trump said that he wasn't consulted?

MR. KIRBY: Again, Aamer, I'm not going to get into a back-and-forth with the President-elect or his team. I can only tell you the decision about ATACMS was made before the election, before we had a result, and it was made internal to this administration, as it should be. And it was made because of a decision by Putin to use North Korean troops, which was a decision he made before the election. So, all that happened pre-election.

Post-election, we have had the appropriate level of conversations with the incoming team about various national security issues, including the war in Ukraine, to explain what we're doing, what we're seeing, why we're doing it, you know, so that, as I said the other day -- I think I said this in the briefing room -- there should be no decision we are taking or that we have taken in recent weeks that should come as a surprise to them.

MODERATOR: Thank you. Our next question will go to Francesca with USA Today.

Q Thanks so much for doing this. I had a question about something else that the President-elect had said today. Kirby, he said that the U.S. military and both President Biden know where the drones are coming and going from. He indicated perhaps that you know more than you're letting on, and said that you should stop keeping people in suspense, that you should tell them what you know. Could you just respond to that and whether the administration does know more, whether the military and the White House do know more about where the drones are coming and going from?

MR. KIRBY: I've talked to you guys last week. We did a backgrounder over the weekend. And I'm talking to you all today. And today, as I think you hopefully picked up in my opening statement, we are now able to tell you what our assessment is to date, and our assessment is to date, as I indicated, what we believe these things are.

Now, again, that's the assessment to date. So I would say that we are making a very good-faith effort to be as open and direct with all of you and with the American people as we can. And that will continue. That will continue all throughout the coming days.

There's absolutely no effort to be anything other than as upfront as we can be.

Now, what we're not going to do is speculate, and we're not going to hypothesize. We're not going to provide content that we can't be sure is accurate.

So, you know, I recognize that some of the criticism over the last few days has been that we haven't said more of what we know. It's because we didn't have as much information as we do now after a few more days of extra resources, extra personnel, extra analysis.

And so, that's why I'm coming out here at 4:30 on a Monday to let you know what we've learned. And we're going to continue to do that, because we know there are, you know, ongoing concerns about this.

But I want to stress again: Please, if you do anything in your coverage, please make sure that you remind people that there are over a million legal drones in the country and that thousands of them are flying around on any given day, legally, lawfully, performing valuable services, including for the betterment of citizens on the ground. It's okay to fly drones. It's legal to do it, you know, if you're registered with the FAA, and our assessment is that the vast, vast majority are.

And the other thing I'd ask you to please keep front and center is that we're watching -- we're monitoring this in real time and analyzing it in dang near real time. And still today, on Monday, we have not seen anything that indicates a threat to national



security or a public safety risk. And obviously, if we did, we would, as appropriate, take the right action, do the right things, execute the right policies, and be as transparent with the American people about it as we could.

Q Kirby, if I just could really quickly, not to get into intelligence assessments, but is there anything that you're seeing in the intelligence that perhaps he was referring to that you're not able to tell us about right now?

MR. KIRBY: No. I mean, the short answer to that is no.

Look, you know that I'm always careful when I'm asked about intelligence assessments one way or another. But if there was something there that would indicate -- that would contradict my statement that there was no national security threat at play right now that we know of, or a public safety risk, obviously I wouldn't say it that way. You know, it's not like there's a bit of intel out there that I'm obfuscating or obscuring from you.

If we had information, intelligence or otherwise, that told us that there was a national security threat posed by this drone activity, I would say that. Maybe I wouldn't be able to tell you exactly what the threat is or who it's from or what the purpose is, but I would. And I can't -- I just can't say that to you honestly, because we haven't seen it.

MODERATOR: Thank you. Our next question will go to Kayla with CNN.

Q Thank you. And thank you, Admiral, for doing this.

First, I just wanted to see if you could elaborate at all on the nature of the discussions between the White House and Trump teams on Ukraine, in which the President-elect has said he wants to see a ceasefire on day one.

And second, I wanted to see if you could comment on the impeachment of President Yoon in South Korea, what it means for the alliance, and whether the U.S. believes, as some in the country do, that President Yoon should be charged with insurrection. Thanks.

MR. KIRBY: I will defer to the incoming team to speak to whatever policies that they want to pursue from a national security perspective. That's the appropriate thing. You know, they should speak to whatever decisions that they believe they're going to make or approaches that they want to take. I mean, that's not for me to comment on or to go into any depth on.

I would just tell you -- well, I don't want to just repeat what I said before. I'd point you back to my previous answer. Nothing about Ukraine without Ukraine. We want to put President Zelenskyy in the best possible position so that if and when he's ready to negotiate an end to this war, he can do it from a position of

strength, from a position of some leverage. And that's why we continue to flow so much security assistance to him in these closing weeks of the administration. And that's going to continue.

What the next team decides to do or how they want to handle that, that really would be for them to speak to. And I just don't think it's useful or productive for me to go beyond that.

Obviously, we continue to watch events in South Korea very, very closely. A significant ally. Remains a significant ally. An alliance that is incredibly healthy now after the result of these last four years of really working on our alliances and partnerships in the Pacific.

As you know, the President spoke with the acting president, Han Duck-soo, over the weekend -- I think it was on Saturday evening -- to congratulate him and also to reaffirm our commitment to the South Korean people, to the alliance.

I will not speak to internal domestic issues inside South Korea, your question about whether he should be charged with insurrection. Those kinds of things are for South Korean officials, South Korean legislators, the South Korean people to determine, not the United States. All I'll say is that, as the President said to Acting President Han Duck-soo, this is an important relationship for us, it's a terrific alliance. The United States is going to stay committed to it.

MODERATOR: Thank you. Our next question will go to Cheyenne with ABC.

Q Hi. Thank you for doing this. The President-elect also mentioned changing a trip to Bedminster. Do you have any reason to believe that Bedminster, New Jersey, has been at all at risk with any of these drone sightings?

And also, you've talked about the thousands of drones flying around legally on any given day. What's your explanation for why this became a concern just recently in New Jersey? Do you think it's just a chain reaction?

MR. KIRBY: I don't know the answer to that. I don't. But I can tell you we're working hard to triangulate all of these sightings. And as I said, of the 5,000 that the FBI took in, and the local law enforcement, there were about 100 that were deemed -- that required, I should say, to follow up on.

So, I don't know. I can't explain the number of sightings. Many of them are duplicative. In other words, you might get, like -- this is an example, not -- a hypothetical example -- but you might get 10 sightings of a single aircraft. So that counts as 10 sightings, but it may only be one aircraft. So, as this has become a story locally and certainly through the media, more and more

people are looking skyward, and more and more people are seeing things, and more and more people are calling them in and taking video of them. But in a lot of instances, it turns out to be the same thing seen by multiple people. But I just can't explain. I don't know.

But your question, I think, gets to why I made those comments at the beginning: to remind people of the sheer size and scope of unmanned aerial systems that are flying legally and lawfully every day over this country. And again, it's to our benefit, commercially and even from a public safety and law enforcement perspective. So, that there are lots of drones in the sky I think is without dispute, and that the vast, vast majority of them are doing good things for people on the ground also should not be in dispute.

As for the issue of Bedminster, it is already designated as restricted air space, so it is unlawful to fly in that space, with or without it being a manned aircraft, without the FAA's approval. So it's already restricted. I can't speak to the President-elect's travel or what he's decided to do or where he's decided to go, but I think it's important to remember that it is already restricted airspace.

MODERATOR: Thank you. Our next question will go to Nadia.

Q Thank you. I have a couple of questions. First, the mother of Austin Tice has sent a letter to Prime Minister Netanyahu, asking him to hold Israeli strikes outside of Damascus because she believes that Austin Tice might be held in a jail there. Do you think that Israeli strikes might affect his chances of being found alive? And I have another question.

MR. KIRBY: I really don't have anything for you on that one, Nadia. That's a -- you know, I think that's a question better put to the Tice family and to the IDF.

I would just tell you that we continue to work very, very hard to try to find out where Austin is, how Austin is, and stemming from that information, what we can do to try to get him home. And sadly, regrettably, I just don't have additional detail to provide for you on that today. We're still working this very, very hard.

Q Okay. Also, the President-elect Trump said today that Turkey holds all the keys to what's happening in Syria. In fact, he's insinuating that Turkey is a major player of what's taken on unfolding events in Syria, and he praised President Erdogan as a smart guy. What's your assessment of Turkey's role on what we have seen so far in the fall of the Bashar al-Assad regime?

MR. KIRBY: There's no question that the Turks are significant players here in whatever the outcome in Syria is going to be, as they have been over the course of the last 14 years. And that's

why Secretary Blinken went to Turkey last week. It's why we continue to have conversations with them at all different levels about what they're doing, what their concerns are.

As I have said in the past, they have legitimate concerns with a terrorist threat along that border with Syria. Turkish citizens have fallen victim to terrorist activities there. You can't very well blame the Turks for being concerned about that threat.

On the other hand, we have a relationship with the Syrian Democratic Forces to go after ISIS. We want to keep that focus of them and us, and so we have certainly talked about our concerns with respect to that mission set as it relates to Turkey's military operations on the other side of that border.

And if there's a need -- as there's a need to deconflict and to work through some of those overlapping concerns, well, we'll do that because Turkey is, as you rightly said, a NATO Ally.

So they have had, and legitimately so, have had a large interest in what's going on in Syria. We recognize that. We also recognize that sometimes their goals aren't exactly the same as ours, and so we talk to them about that, and we'll continue to do so.

MODERATOR: Thank you. Our next question will go to Alex with the Wall Street Journal.

Q Thanks so much. Real quickly -- Kirby, I noticed you said that this assessment is coming from law enforcement. Just checking if any intelligence agencies, or especially military intel, is part of what went into this assessment, knowing that some of the drones went over Langley and Wright-Patt.

And just trying to get a sense of, you know, how did the administration work to get this info. You mentioned, you know, you didn't have it before. Now you do. Sort of what went into this?

Is this like -- you know, were there a bunch of meetings? Did FBI send a bunch of folks out? Can you just give us some detail on how you've gotten to this point now in the assessment? Thanks.

MR. KIRBY: I kind of already did, Alex. I said we surged resources, detection capabilities. We surged personnel, including visual observers, from federal agencies, predominantly DHS. The military, the Defense Department has surged some additional detection capabilities, certainly with respect to Naval Weapons Station Earle and Picatinny Arsenal.

So, the assessment I was able to offer today was really the result of the collective action of all of these efforts, including continued work by local law enforcement and state officials.

The work continues. This is our assessment to date. We will continue to look at this as hard as we can. But it is really the result of an influx of resources and personnel applied to this

particular problem set.

I think the Pentagon already spoke to Wright-Patterson. There was no -- as I understand it, no disruption of operations. I think some of the original reporting out of there was lacking some context that I think the Pentagon added to and provided.

And, look, on intelligence, I would just say that this is a true interagency effort, and we're all working really hard to apply the right resources to the problem set and to be as open and transparent with people as we can be. And I think I best leave it at that.

Again, I want to foot-stomp what I said earlier. It's important for people to understand the ecosystem of drones over the skies of the United States. I mean, there's a lot of activity. And again, the vast, vast, vast majority of it is legal and lawful. And we believe -- again, to date, our assessment is that the sightings thus far have been of that ilk. But we'll continue to keep looking.

MODERATOR: Thank you. We have time for one more question, and we'll go to Robin Wright.

Q Thank you, John. Can I take you further afield to Syria and ask you: Has there been any more contact between the United States and HTS?

And secondly, can you give us a sense of what Iran is doing in Syria? The head of the IRGC said that there have been evacuations of 4,000 citizens from Iran. Do you have a sense of what Iran is doing in the aftermath of Assad's demise or what it's planning to do? Thank you.

MR. KIRBY: I can tell you, on HTS, as Secretary Blinken indicated, we have been in direct contact with HTS, as we have been with other groups. We also have indirect ways of communicating with all those groups as well, and we're pulling on all those levers to make sure that we can very closely monitor this transition to what we hope will be -- well, we hope it will be a peaceful transition, but to a stable, secure, sovereign Syria that meets the aspirations of its people.

But I don't have any additional or specifics about conversations with HTS, except to reiterate what Secretary Blinken said. We have been in touch with them and I suspect we will be going forward.

I also think, Robin, you shouldn't -- no one should expect that we're going to get into a detailed readout of every single conversation that we have with every rebel group or opposition leader as it unfolds. I wouldn't expect that you're going to see that.

And as for Iran, you know, I would be lying to you if I said we

had, you know, perfect visibility on everything that Iranian leaders are doing or deciding when it comes to Syria. I can go so far as to say we certainly have seen indications that the Iranians are pulling people and resources out of Syria. That is true. But at what scale and on what timeline, it's difficult for us to be very granular on that. We just don't have perfect visibility. But it's clear to us that they certainly weren't willing or able to come to Assad's rescue. And in the aftermath of his departure, it's clear to us that they are reevaluating, I think is the best way to put it, their presence in Syria and have already started to move some people and some resources out.

That's really as far as I can go.

MODERATOR: Thank you. And thank you, everyone, for joining us today. As always, if we weren't able to get to you, please reach out to the NSC press distro, and we'll get back to you as soon as we can. Thanks all.

5:24 P.M. EST

[Privacy Policy](#) | [Unsubscribe](#)