

NUCLEAR SECURITY & DETERRENCE / MONITOR



February 13-15, 2023 | Hyatt Regency Crystal City | Arlington, VA

Get insider insights from a vast network of key contacts in the nuclear deterrence industry.

Register by Oct. 29 and save \$300



COVID-19 CREATED MORE THAN A YEAR'S WORTH OF DELAYS FOR PIT PRODUCTION AT LOS ALAMOS, LAB SAID

- Pits feel the pinch in short-term federal budget bill for fiscal year 23
- DOE extends Fluor-led SRS prime; security provider deal next
- Livermore lab director Budil arrested for driving under the influence, speeding
- NNSA plans to finalize new cybersecurity directive in April, agency tells GAO
- Couple again pleas out in case of stolen nuclear sub secrets
- Round up: at the IAEA general conference; NNSA grant to Case Western; BWXT finance personnel; more
- Editorial: if Dr. Kimberly Budil deserves the NNSA's confidence, so do others

RADWASTE / MONITOR

Weekly news and intelligence on radioactive waste delivered directly to your inbox.

CLICK HERE FOR YOUR FREE 6 WEEK TRIAL



DEFENSE DAILY with EXCHANGEMONITOR PUBLICATIONS & FORUMS

presents

THE BUSINESS END

PODCAST: Boeing and Northrop Lock Horns over Ground-Based Strategic Deterrent.

LISTEN HERE

COVID-19 created more than a year's worth of delays for pit production at Los Alamos, lab said

Dan Leone

Due primarily to COVID-19, Los Alamos National Laboratory believed it could take a year longer than expected for the lab to casting 10 plutonium pits annually in New Mexico, according to an internal document.

A redacted copy of the Los Alamos-authored document, dated September 2021 and released by the National Nuclear Security Administration (NNSA) under the Freedom of Information Act, was viewed by the *Exchange Monitor*.

Since the publication of the September 2021 document, high-level NNSA officials have downplayed a legally binding deadline for the agency to produce at least 10 pits annually at Los Alamos by 2024 and instead emphasized that the agency believes it can still cast at least 30 pits a year at the lab by 2026, assuming round-the-clock operations.

In the 20 months spanning February 2020 to September 2021, which the lab called a “COVID-impacting period,” personnel working to convert Los Alamos’ PF-4 Plutonium Facility into a pit factory did only about seven months worth of “capital equipment installation” work, according to the document.

That put the 10-pits-a-year milestone behind by 14 to 15 months, Los Alamos wrote in the document. The lab also wanted that the delay “directly impacts” its ability to shift up to 30 pits annually by 2026.

An NNSA spokesperson at agency headquarters in Washington did not reply to a request for comment. A Los Alamos spokesperson did not reply to a request for comment.

The agency’s 2023 budget request, published in March, said the NNSA still planned to make 10 pits annually in 2024. In February, at the *Exchange Monitor*’s annual Nuclear Deterrence Summit, Charlie Verdon, then NNSA’s deputy administrator for defense programs, said the agency was “trying to find out ways to get more time to schedule implementation of equipment” at the Los Alamos National Laboratory,” and that “if we only make nine [pits] in [20]25, it shouldn’t be viewed as a failure.”

Current law requires the NNSA to make at least 10 pits a year by 2024, at least 20 a year by 2025 and at least 30 a year by 2026. Some time in the 2030s, according to NNSA’s current schedule, a second planned pit factory would come online at the Savannah River Site in Aiken, S.C., and produce at least 50 pits annually.

Initially, both plants would produce pits for W87-1 intercontinental ballistic missile warheads: newly manufactured copies of the W78 warhead. W87-1 would be used on the silo-based Sentinel missiles, built by Northrop Grumman, that the Air Force plans to put into service around 2030 to replace the current Boeing-made Minuteman III fleet.

Pits feel the pinch in short-term federal budget bill for fiscal year 23

Dan Leone

The House on Friday passed a stopgap budget that would hold the National Nuclear Security Administration to its fiscal year 2022 budget through Dec. 19 and allow work to continue on pit production plants, the B83 gravity bomb and a nuclear, sea-launched cruise-missile warhead.

The continuing resolution will put a crunch on the semiautonomous Department of Energy nuclear weapons agency’s plutonium pit program though, which now will get a drizzle of fiscal- year-2022-equivalent funding for two-and-a-half months instead of at least a 40% year-over-year raise.

The House of Representatives approved the band-aid budget bill 230-201 on Friday afternoon and sent it to President Joe Biden’s desk for his signature, averting a midnight government shutdown and effectively postponing the need for further debate about the federal budget until after the midterm elections; partisan control of the House and Senate is up for grabs.

Under the continuing resolution, which the Senate approved Thursday, the National Nuclear Security Administration (NNSA) would receive the annualized equivalent of \$26.65 billion it got in fiscal year 2022, plus an extra \$35 million “to respond to potential nuclear and radiological incidents in Ukraine, assist Ukrainian partners with security of nuclear and radiological materials, and prevent illicit smuggling of nuclear and radiological material,” according to [a bill summary](#).

The 2022 budget allowed NNSA to continue working on a sea-launched variant of the W80-4 cruise missile warhead and the B83 megaton-capable gravity bomb: programs that some fiscal year 2023 defense spending bills produced in Congress this year would kill, at the Joe Biden administration’s request. Lawmakers on the whole though remain split on the programs’ fate and in the past few years have generally allowed them to continue rather than obstruct omnibus spending bills.

Plutonium pits are the big loser under the continuing resolution, if only temporarily.

Plutonium modernization, the category that includes construction of planned pit plants at the Los Alamos National Laboratory and Savannah River Site in Aiken, S.C., will get the annualized equivalent of \$1.7 billion under the continuing resolution.

This summer, the full House approved the Joe Biden Administration's request to up that figure to \$2.4 billion, mostly due to the urgent needs at Los Alamos, which is supposed to be the first of the two planned plants to produce war-ready nuclear-weapon cores.

The Senate Appropriations Committee, in a bill released in July, proposed going even further and increasing the Plutonium Modernization budget to some \$2.9 billion, or about 70% more than the 2022 appropriation. Unlike the House and the Biden administration, the Senate wanted to pour billions more into construction of the pit factory planned for the Savannah River Site in Aiken, S.C.

Meanwhile, nuclear-weapon life extension and major alteration programs, NNSA's bread and butter, would feel few pinches under the continuing resolution. The House and the Senate committee each proposed meeting the White House's request of roughly \$2.87 billion for fiscal year 2023, which itself was only a marginal increase over the \$2.83 billion appropriated for fiscal 2022.

On top of that, the continuing resolution will provide funding for one life extension program that the NNSA finished last year, giving the agency a large enough pot of money to make any short-changed programs whole via a funds-reprogramming request to Congress.

The stopgap has the equivalent of \$207 million for the W76 life extension program that the NNSA has wrapped up, more than enough to bridge the roughly \$45-million gap between the 2023 request for the Stockpile Major Modernization budget and the 2022 appropriation.

Stockpile Major Modernization is where the NNSA book keeps nuclear-weapon refurbs including life extensions and major alterations.

The Senate passed the continuing resolution bill on a 72-25 vote Thursday, just days before members of the upper chamber were to return home to campaign ahead of November's midterm elections.

The 2023 fiscal year begins at 12:00 a.m. on Oct. 1.

DOE extends Fluor-led SRS prime; security provider deal next

Wayne Barber

As expected, the Department of Energy has signed a potential five-year, multibillion-dollar extension with the Fluor-led management and operations manager for the Savannah River Site in South Carolina, the company said late Thursday.

The extension could keep Savannah River Nuclear Solutions (SRNS) on as the prime contractor through September 2027 and be worth \$12 billion over five years, Fluor said in a Thursday [press release](#). The deal is a four-year extension with a DOE option for an additional year.

Fluor will book its four-year, \$4.5 billion portion in the third quarter, the company said in its release. Other members of the SRNS team are Newport News Nuclear and Honeywell International.

Prime contractor SRNS has overseen Savannah River since August 2008 under an agreement valued at \$17.8 billion. Earlier this year, DOE signaled its intention to keep SRNS on site manager for [up to an additional five years](#).

Work under the contract includes everything from managing non-liquid-waste environmental cleanup to nuclear weapons and nuclear non-proliferation missions for DOE's National Nuclear Security Administration. That agency also passes construction money for its proposed plutonium pit factory at Savannah River through the prime contract.

A DOE boss telegraphed the extension Monday while speaking to members of the site's federally chartered advisory board.

"A new contract should be signed sometime this week because Sept. 30 is approaching fast," said Jimmy "Mac" McMillian, DOE Savannah River assistant manager for infrastructure and environmental stewardship, told the Savannah River Site Citizens Advisory Board. Friday Sept. 30 marks the expiration of the prior extension with SRNS.

On the heels of that move, DOE also intends to extend the site's security contract with Centerra Group for up to two years, McMillian said.

Centerra's current contract, which began in October 2009 and is valued at more than \$1 billion, would expire Oct. 7 without an extension, according to an agency's [website](#). In a notice published in July, DOE said it [planned to extend](#) Centerra until Oct. 7, 2024.

The DOE initially [awarded](#) a 10-year, \$1-billion award to a joint venture led by Securitas CIS in February 2021. But following a pair of contract challenges filed by Centerra, DOE has said "[corrective action](#)," is being taken, and McMillian said that process is still ongoing.

In November 2021 the DOE [indefinitely suspended](#) a request for proposals for a new operations contract at Savannah River Site until the DOE Office of Environmental Management and the semi-autonomous National Nuclear Security Administration decide which entity will control the federal complex in the future. Environmental Management senior adviser William (Ike) White said last week to expect more details [within the next three months](#).

Livermore lab director Budil arrested for driving under the influence, speeding

Dan Leone

Kimberly Budil, director of the Lawrence Livermore National Laboratory, admitted last week to all hands at the California nuclear-weapons design lab that she had been arrested for driving under the influence and speeding.

Budil, the first woman to run Livermore, has been director of the younger of the two U.S. weapon-design labs for about a year-and-a-half. She [took over from William Goldstein on March 3, 2021](#).

"I am profoundly sorry for this terrible mistake," Budil wrote in a statement shared Tuesday with the *Exchange Monitor* through a Lawrence Livermore National Laboratory (LLNL) spokesperson. "It is the honor of my lifetime to serve as director of LLNL, and I am committed to working with the Laboratory community to repair their confidence in me."

"Dr. Kim Budil has been a strong leader at Lawrence Livermore National Laboratory and across the NNSA complex," an NNSA spokesperson at agency headquarters wrote in an email on Tuesday. "NNSA remains confident in Dr. Budil's ability to successfully lead the lab while the incident is reviewed through established security processes."

Livermore is managed by Lawrence Livermore National Security LLC, the senior partners in which are Bechtel National and the University of California.

Lawrence Livermore National Security's board of governors "has no further comment at this time," Brett Henrickson, director of national laboratory governance and chief of staff at the office of the president of the University of California, wrote in an email on Tuesday.

Budil, a PhD engineer who has spent a career in the nuclear weapons enterprise, returned to Livermore in 2019 as director of weapons complex and integration. Prior to that, she had worked for about five years as vice president for national laboratories in the University of California's office of the president.

Among other things, driving under the influence in California can result in the suspension of one's driver's license and criminal penalties including fines, according to the state's [Department of Motor Vehicles](#).

NNSA plans to finalize new cybersecurity directive in April, agency tells GAO

ExchangeMonitor

Organizations within the National Nuclear Security Administration bureaucracy are reviewing a draft cybersecurity directive the agency wrote after a third-party review, the weapons steward told the Government Accountability Office last week.

The semiautonomous Department of Energy weapons agency planned to issue a final supplemental directive, titled Baseline Cybersecurity Program, by April 30, according to the agency's response to recent Government Accountability Office (GAO) findings, published Thursday.

The National Nuclear Security Administration (NNSA) wrote a draft directive after the Institute for Defense Analysis reviewed the agency's compliance with federal cybersecurity requirements, according to the GAO report, "[Nuclear Weapons Cybersecurity: NNSA Should Fully Implement Foundational Cybersecurity Risk Management Practices.](#)"

In 2020, the NNSA's business operations database was breached by hackers who exploited a weakness in software provided by the company SolarWinds. The hack also hit other Department of Energy networks. News of the hack broke a few days before Congress passed the fiscal year 2020 National Defense Authorization Act, as part of which lawmakers ordered the GAO investigation that led to Thursday's report and recommendations.

Couple again pleas out in case of stolen nuclear sub secrets

ExchangeMonitor

The Maryland couple whose shoddy spycraft got them arrested for trying to sell nuclear submarine secrets to a foreign power again pleaded guilty for their alleged crimes on Tuesday, deciding not to face a jury after a federal judge threw out their first plea deal.

The *Washington Post* reported that both Jonathan Toebbe and his wife, Diana Toebbe, again pleaded guilty to a conspiracy to sell data about U.S. nuclear-powered attack submarines for \$5 million in crypto currency. Jonathan Toebbe once worked for the Navy.

The *New York Times* [reported in March](#) that the country Jonathan Toebbe solicited was Brazil.

As of Wednesday morning, the U.S. District Court for the Northern District of West Virginia Martinsburg had only published [Diana Toebbe's new plea deal](#) in its docket.

The new plea agreements, according to the *Post*, would land Jonathan Toebee and Diana Toebee longer prison terms than the old pleas rejected in August by Judge Gina Groh, a Barack Obama appointee. Groh [said then](#) that the three-year sentence worked out between Jonathan Toebee and the Department of Justice was too lenient.

Round up: at the IAEA general conference; NNSA grant to Case Western; BWXT finance personnel; more

ExchangeMonitor

Secretary of Energy Jennifer Granholm led a large Department of Energy delegation to the UN International Atomic Energy Agency's (IAEA) 66th general conference in Vienna, Austria this week. Senior officials from the DOE and its semiautonomous National Nuclear Security Administration (NNSA) [attended](#).

In a [speech during the plenary session](#), Granholm said the U.S. is "working closely with the IAEA to ensure that the AUKUS partnership among Australia, the United Kingdom, and the United States meets the highest nonproliferation standard." Announced in September 2021, AUKUS is an effort to transfer nuclear submarine-propulsion technology to Australia.

The National Nuclear Security Administration (NNSA) said this week it awarded \$14 million for materials research at Case Western Reserve University in Cleveland.

The total, which NNSA will award over five years, will help "establish and manage the Material Data Science for Stockpile Stewardship Center of Excellence," the agency wrote in a [press release](#).

BWX Technologies appointed Michael Fitzgerald as its vice president of finance, effective October 24 and as chief accounting officer, effective the day following the filing of the 10-Q filing for the quarter that ends September 30, according to a filing this week with the U.S. Securities and Exchange Commission.

Fitzgerald will replace Jason Kerr as vice president and chief accounting officer, whose last day in that role will be September 30, according to [the filing](#). Also effective on September 30, 2022, Kevin Gorman will become BWX

Technologies' corporate controller and interim chief accounting officer until the company files its next 10-Q.

Donald Ross, a Manhattan Project chemist who visited the Chernobyl nuclear power plant in Ukraine a few years after its disastrous core meltdown in 1986, died Sept. 4, according to an obituary posted online.

Ross retired from the Department of Energy in 1989 as chief of the agency's Occupational Safety Branch. He was born in 1923, according to [the obituary](#), which did not specify his birthday.

Editorial: if Dr. Kimberly Budil deserves the NNSA's confidence, so do others

ExchangeMonitor

Dr. Kimberly Budil broke the law and put herself and others in danger by driving under the influence and speeding, but she also did what a leader should do and admitted her mistake to all hands at the Lawrence Livermore National Laboratory.

Budil, who has been the director at the California lab for about a year-and-a-half, is the first woman to lead the younger of the two nuclear-weapon design laboratories and has given much of her career so far to the nuclear weapons enterprise.

Perhaps that is why the National Nuclear Security Administration (NNSA) quickly jumped to her defense this week, telling the *Exchange Monitor* that the agency was "confident" Budil could successfully lead the California lab while the government investigates the incident.

Budil has worked her whole life, made powerful friends, put down roots in the national security business and become valuable to industry. No one should say she didn't earn her shot at the top.

Yet we at the *Exchange Monitor* wonder who, if anyone, would defend people of lesser stature at Livermore if they made, as Budil called hers, such a "terrible mistake." What happens to fresh-faced holders of fresh Q clearances who stand to lose a future they mortgaged most of their past to chase because they picked the wrong night to give that rideshare a miss?

If the NNSA and the others stakeholders in Budil's career deem her still fit for the job after the promised security review, the director should have to demonstrate that she has learned from her mistake and that the incident has not left her vulnerable to coercion by anyone shameless enough to exploit it for either their own personal gain or the proliferation of U.S. nuclear secrets.

Given the battery of recurring evaluations, disclosures and investigations required to grant a security clearance in the first place, we at the *Monitor* trust that DOE and the NNSA will have no trouble defining the parameters, or assessing the fidelity, of a suitable demonstration.

We are not experts in the field, but it seems to us unlikely that a bad actor could blackmail Budil over her DUI, seeing that she readily and publicly gave away the damning secret.

Meanwhile, there is an opportunity here that is larger than one chapter of one person's career.

The NNSA has made much in recent years of the difficulties it faces hiring and clearing qualified stewards for the U.S. nuclear arsenal. It has also made much of inclusivity.

Perhaps by retaining and supporting Budil — if appropriate — and by demonstrating that such treatment isn't reserved for senior leadership, the agency could avoid a few hiring difficulties of its own creation and show that it is willing to include in its ranks a category of people that intersects with a great many other categories of people: those who have had a brush with the justice system.

We have all made bad mistakes. Before we judge someone else's, we should humble ourselves and remember what it's like when our best qualities and highest achievements are overshadowed by our lowest moments.

SUBSCRIPTIONS / ADVERTISE / JOBS / TWITTER 

© 2022 Access Intelligence, LLC. All rights reserved. Reproduction in whole or in part in any form or medium without expressed written permission of Access Intelligence, LLC is prohibited. ExchangeMonitor Publications & Forums is a registered trademark of Access Intelligence, LLC.

FOR YOUR EYES ONLY: Please do not forward this issue. It is against the law to copy, fax, or electronically transmit the newsletter without our permission.

By using our e-mail delivery service, you understand and agree that we may use tracking software to ensure accurate electronic delivery and copyright compliance. This software forwards to us certain technical data and newsletter usage information from any computer that opens this email. We do not share this information with anyone outside the company, nor do we use it for any commercial purpose.