

2026

FEDERAL R&D IN PICTURES



Federal Laboratory Consortium
for Technology Transfer



2026 PLANNER AT A GLANCE



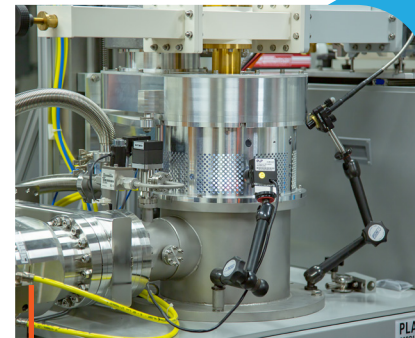
DECEMBER 2025



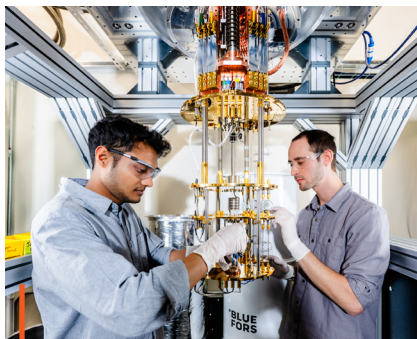
JANUARY 2026



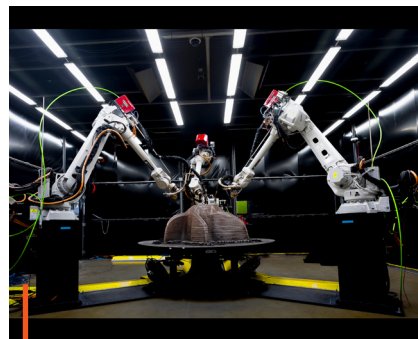
FEBRUARY



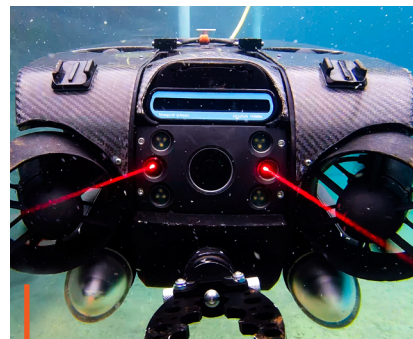
MARCH



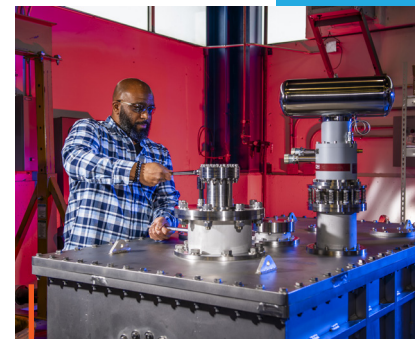
APRIL



MAY



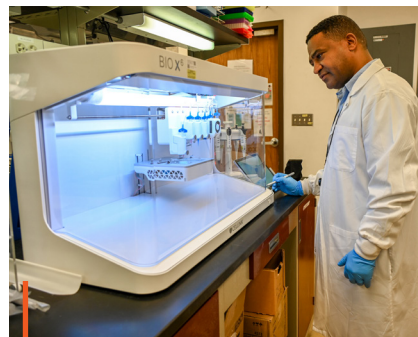
JUNE



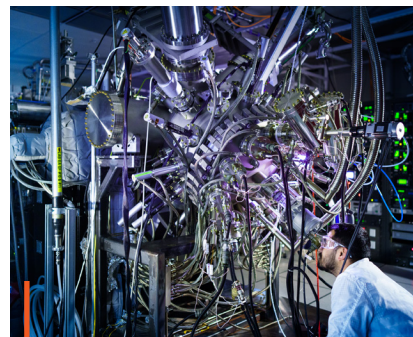
JULY



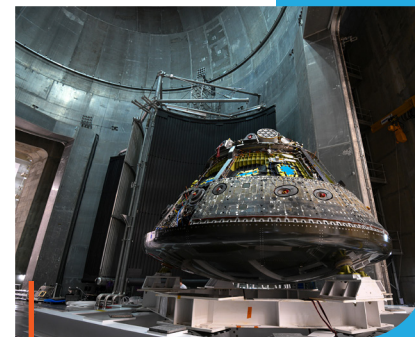
AUGUST



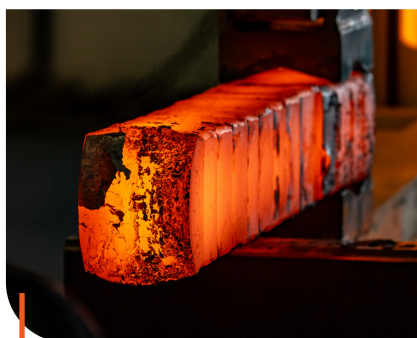
SEPTEMBER



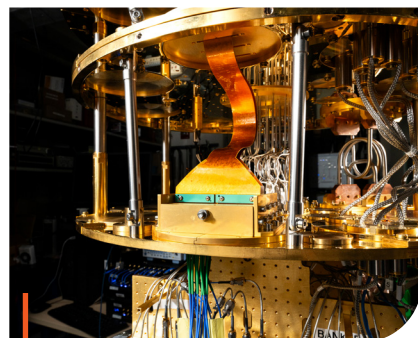
OCTOBER



NOVEMBER



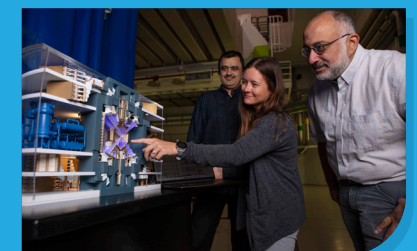
DECEMBER 2026



JANUARY 2027

LAB TECH EXTRAS

There were too many stunning photos to fit into just 14 months. Check out the Lab Tech Extras section following January 2027 for bonus photos of more innovative federal technologies.



....and more!

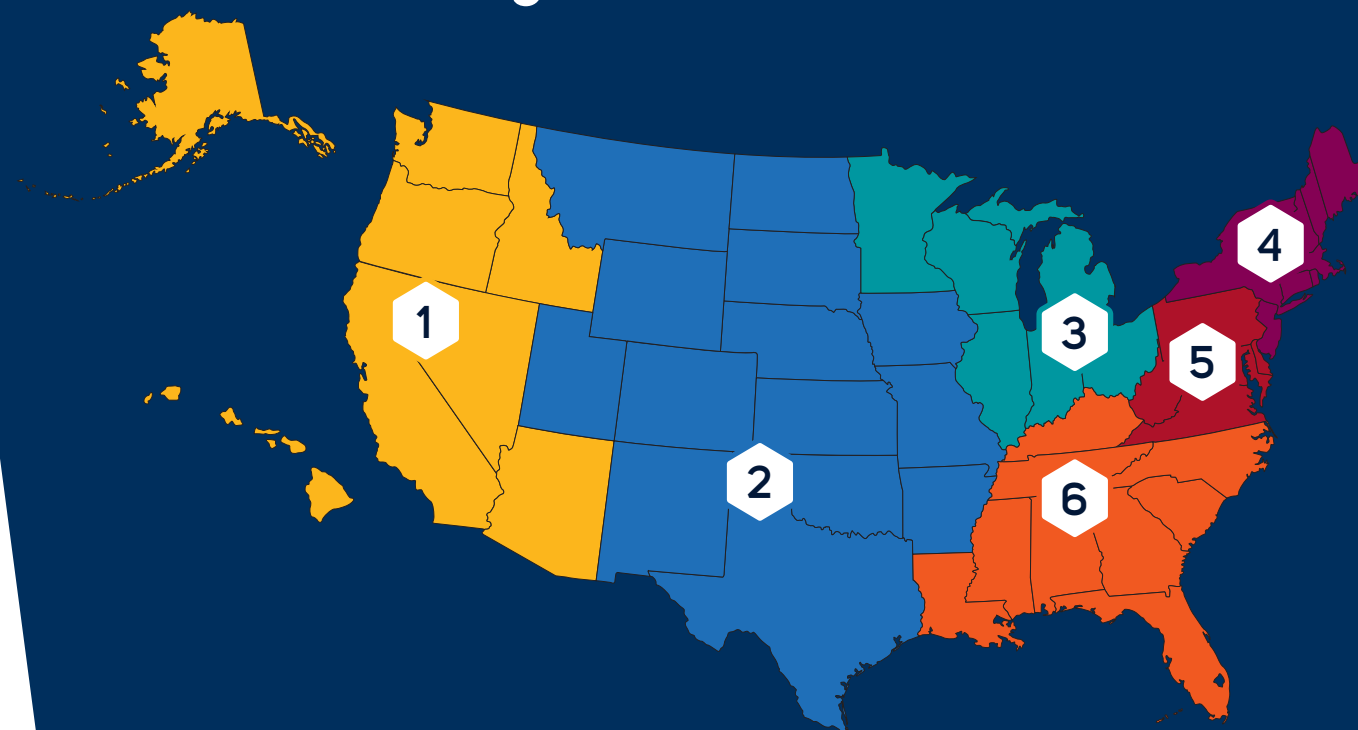
LEARN MORE about the featured labs and technologies in the Laboratory Directory on the last page.

ABOUT THE FLC

The Federal Laboratory Consortium for Technology Transfer (FLC) is a nationwide network of over 300 federal laboratories and research centers dedicated to accelerating federal technologies into the marketplace. American taxpayers' investment in research and development (R&D) at our national laboratories spurs scientific and technological breakthroughs that return dividends for our economy. New industries, businesses, and jobs are created when technology transfer (T2) brings these innovations to the marketplace.

The FLC's mission is to support federal laboratories in maximizing the impact of T2 for the benefit of the United States. The FLC provides educational resources, training, tools, and services that help federal labs create partnerships, navigate the commercialization process, and succeed in the market. As a connection point for the T2 community, the FLC plays a central role in supporting T2 professionals and their ability to partner effectively with the private sector. The FLC serves as a gateway for industry, government, and academia to access R&D to drive economic growth, strengthen national defense, and meet critical needs.

FLC Regions



1

Far West

Regional Coordinator:
Kimberly Minafra
National Aeronautics and Space Administration
Ames Research Center

2

Mid-Century

Regional Coordinator:
Nick Velasquez
National Nuclear Security Administration
Sandia National Laboratories

3

Midwest

Regional Coordinator:
Meghan Sheehan
Environmental Protection Agency

4

Northeast

Regional Coordinator:
David Zimmerman
Princeton Plasma Physics Laboratory

5

Mid-Atlantic

Regional Coordinator:
Amanda Corbel
Frederick National Laboratory for Cancer Research

6

Southeast

Regional Coordinator:
Sharon Soucek
National Institute of Environmental
Health Sciences



@federallabs

Photo credit:
© Dr. Laura Hasburgh
(Main and supporting images)



Cutting-Edge Non-Standard Fire Science Research to Evaluate Wood Products

Understanding the char rate of building materials is essential for structural designers to estimate how much load-carrying capacity wooden beams and columns lose during a fire. This technology enabled Forest Products Laboratory researchers — for the first time ever — to evaluate the thermal profile and develop a char-rate model of glulam (glued laminated timber) exposed to a three-hour standard fire. The study results impacted the adoption of exposed glulam columns and the structural calculations for the world's tallest wood building, Ascent Milwaukee.

DECEMBER 2025



@federallabs

U.S. Department of Agriculture Forest Products Laboratory

The Forest Products Laboratory is a national research laboratory operating under the U.S. Department of Agriculture Forest Service. The lab is responsible for scientific research on wood and developing innovative wood products.

The Forest Products Laboratory collaborates in partnership with academia, industry, and governmental agencies. As a world-class research laboratory, the Forest Products Laboratory has contributed to developing innovative ways to use the nation's forest resources since 1910.



SUN	MON	TUE	WED	THU	FRI	SAT
30	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31	1	2	3

Start of Hanukkah

Anniversary of Bayh-Dole Act

Christmas

Start of Kwanzaa

New Year's Eve

NOTES



VA



U.S. Department of Veterans Affairs
Veterans Health Administration
Minneapolis VA Health Care System



RECOVER
Rehabilitation & Engineering Center for Optimizing
Veteran Engagement & Reintegration

Adaptive Rowing Seat

At the Rehabilitation & Engineering Center for Optimizing Veteran Engagement & Reintegration (RECOVER) in Minneapolis, John Looft and a team of clinicians, researchers, engineers, and adaptive rowing coaches have developed a seating system to make rowing more accessible. The seat strategically supports the user while allowing a dynamic rowing movement so that more individuals can experience the many physical, mental, and social benefits of the sport. Partnering with the Advanced Platform Technology Center in Cleveland, the research team will continue to refine and test this system with veterans while working with industry partners Concept2 and USRowing.

JANUARY 2026



@federallabs

Department of Veterans Affairs Rehabilitation & Engineering Center for Optimizing Veteran Engagement & Reintegration

The Rehabilitation & Engineering Center for Optimizing Veteran Engagement & Reintegration (RECOVER) is a Department of Veterans Affairs (VA) Rehabilitation Research Development and Translation Center at the Minneapolis VA Health Care System. The mission of RECOVER is to maximize veteran participation in important lifelong roles and activities through development, evaluation, and clinical translation of practical rehabilitation interventions and technologies. In this mission, RECOVER is also strongly supported by the VA's Technology Transfer Program.



SUN	MON	TUE	WED	THU	FRI	SAT
28	29	30	31	1	2	3
				New Year's Day		
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
	Martin Luther King, Jr. Day					
25	26	27	28	29	30	31

NOTES



Reducing Warfighters' Exposure to Extreme Environments with Autonomous Vehicles

In a joint field event in Norway, researchers from the U.S. Army Engineer Research and Development Center's Cold Regions Research and Engineering Laboratory leveraged an industry partnership with Milrem Robotics to test the autonomous capabilities of the TheMIS unmanned ground vehicle (UGV). Designed to provide operational support in challenging arctic conditions, the modular UGV was directed by researchers to move through deep snow, ice, and freezing rain while transporting heavy loads, relaying data, and performing casualty evacuation tasks. These trials generate critical data to refine automation strategies, reduce risk to warfighters, and strengthen mission readiness in austere environments.

Photo credit: © U.S. Army Engineer Research and Development Center

FEBRUARY



@federallabs

Department of Defense,
U.S. Army Engineer Research
and Development Center
Cold Regions Research
and Engineering
Laboratory

The U.S. Army Engineer Research and Development Center's Cold Regions Research and Engineering Laboratory (CRREL) has supported the U.S. Army Corps of Engineers, Army, Department of Defense, and national missions for over 60 years. Through applied research, field testing, and modeling, CRREL addresses infrastructure, mobility, and environmental challenges, collaborating with military agencies, academia, and global partners to deliver innovative solutions in cold regions worldwide.



SUN	MON	TUE	WED	THU	FRI	SAT
1	2 Groundhog Day	3	4	5	6	7
8	9	10	11	12	13	14 Valentine's Day
15	16 Presidents' Day	17 Lunar New Year Start of Ramadan	18	19	20	21
22	23	24	25	26	27	28
1	2	3	4	5	6	7

NOTES

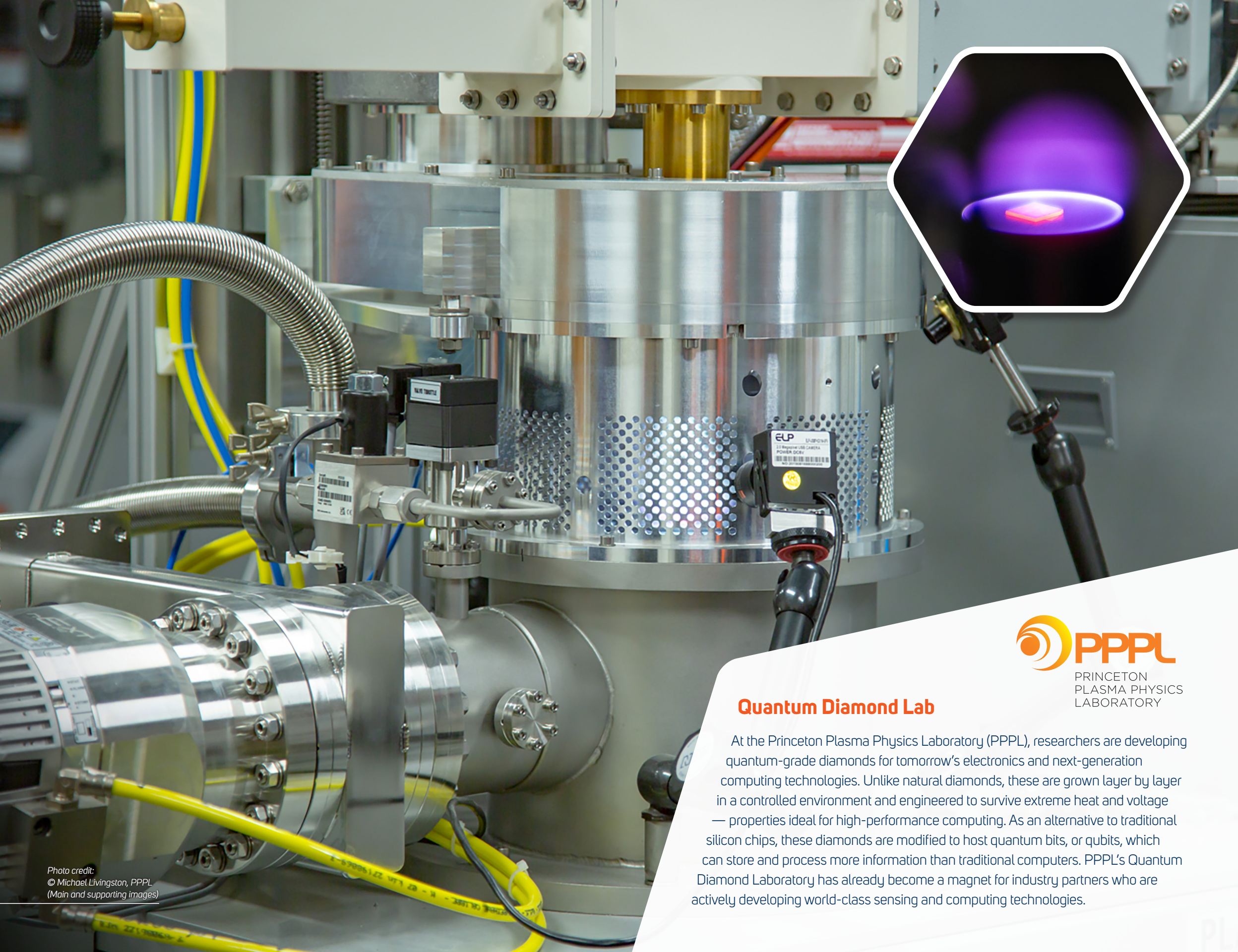


Photo credit:
© Michael Livingston, PPPL
(Main and supporting images)



Quantum Diamond Lab

At the Princeton Plasma Physics Laboratory (PPPL), researchers are developing quantum-grade diamonds for tomorrow's electronics and next-generation computing technologies. Unlike natural diamonds, these are grown layer by layer in a controlled environment and engineered to survive extreme heat and voltage — properties ideal for high-performance computing. As an alternative to traditional silicon chips, these diamonds are modified to host quantum bits, or qubits, which can store and process more information than traditional computers. PPPL's Quantum Diamond Laboratory has already become a magnet for industry partners who are actively developing world-class sensing and computing technologies.

MARCH



@federallabs

Department of Energy Princeton Plasma Physics Laboratory

The Department of Energy's Princeton Plasma Physics Laboratory is tackling some of the world's toughest science and technology challenges using plasma, the fourth state of matter. The lab conducts essential research across a full range of plasma applications, whether it's developing fusion as a clean, safe, and virtually limitless power source or creating the next generation of materials for microelectronics and quantum sensors and devices.



SUN	MON	TUE	WED	THU	FRI	SAT
1	2	3	4	5	6	7
8	9	10	11	12	13	14
Start of Daylight Saving Time						
15	16	17	18	19	20	21
		St. Patrick's Day		Eid al-Fitr		
22	23	24	25	26	27	28
29	30	31	1	2	3	4

NOTES



Quantum

At the Quantum Foundry at the Department of Energy's Argonne National Laboratory, scientists characterize materials developed for qubits and quantum devices. The dilution refrigerator pictured here enables them to test quantum-materials performance at supercold temperatures. By developing materials for applications in computing, communication, and sensing, the Argonne Quantum Foundry contributes to U.S. leadership in the quantum technology supply chain.

APRIL



@federallabs

Department of Energy
Argonne National
Laboratory

The Department of Energy's Argonne National Laboratory is a multidisciplinary research center where leading scientists and engineers work together to answer the biggest questions facing humanity — from how to obtain reliable and affordable energy to how to protect ourselves from emerging threats. Argonne works in concert with universities, industry, and other national laboratories on questions and experiments too large for any one institution to do by itself.



SUN	MON	TUE	WED	THU	FRI	SAT
29	30	31	1	2	3	4
			Start of Passover			
5	6	7	8	9	10	11
Easter Sunday						
12	13	14	15	16	17	18
			Tax Day			
19	20	21	22	23	24	25
			Earth Day			
26	27	28	29	30	1	2
World IP Day						

NOTES



Forging the Future: ORNL Revolutionizes Energy Component Manufacturing

A 3D-printed mold for a hydropower impeller is printed using Oak Ridge National Laboratory's MedUSA wire-arc additive manufacturing system. Using a process called powder metallurgy hot isostatic pressing (PM-HIP), the hollow mold is filled with metal powder and sealed. Heated in a pressurized furnace, the powder consolidates into shape via solid-state bonding. The mold is then removed through acid leaching or machining. PM-HIP is an alternative to casting and forging and offers a new approach for large-scale energy components.

Photo credit:
© Carlos Jones,
Oak Ridge National Laboratory

MAY



@federallabs

Department of Energy
Oak Ridge National
Laboratory

Oak Ridge National Laboratory, operated by UT-Battelle on behalf of the Department of Energy, delivers scientific discoveries and technical breakthroughs needed to realize solutions in energy and national security and provide economic benefit to the nation. It conducts research that translates science into solutions for the world's biggest problems. This translational research and development approach spans fundamental science to demonstration and deployment, leveraging signature strengths in materials, neutrons, nuclear, and computing sciences.



SUN	MON	TUE	WED	THU	FRI	SAT
26	27	28	29	30	1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
Mother's Day	FLC 2026 National Meeting					Armed Forces Day
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31	Memorial Day					

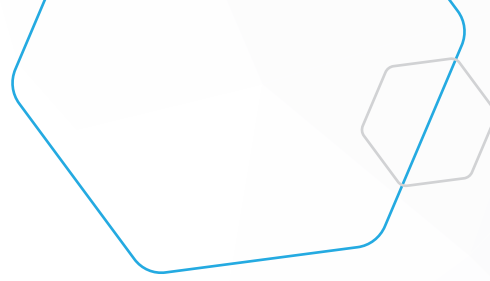
NOTES



Safer Underwater Inspections Possible with Remotely Operated Vehicles

Essential inspections of underwater infrastructure can endanger divers and require costly operational shutdowns (dewatering). To enhance safety and reduce expenses, U.S. Army Engineer Research and Development Center's (ERDC) Environmental Laboratory researchers are using remotely operated vehicles (ROVs) to inspect submerged structures where diver access is risky or impractical. In collaboration with U.S. Army Corps of Engineers' districts, ERDC has deployed ROVs at critical sites (including the Chicago Electric Dispersal Barrier and the New Orleans Inner Harbor Navigation Canal) with potential for broader adoption in the private sector. These inspections deliver precise, cost-effective data while maintaining operational continuity.

JUNE



@federallabs

Department of Defense,
U.S. Army Engineer Research
and Development Center
**Environmental
Laboratory**

The U.S. Army Engineer Research and Development Center's Environmental Laboratory (EL), a leader in ecosystem science and environmental resiliency research, has supported the U.S. Army Corps of Engineers, Army, Department of Defense, and national environmental missions for nearly 45 years. The lab's work ranges from sensor development to habitat restoration. EL collaborates with federal and state agencies, academia, and the private sector to address complex environmental sustainability issues.



SUN	MON	TUE	WED	THU	FRI	SAT
31	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
Flag Day					Juneteenth	
21	22	23	24	25	26	27
Father's Day						
28	29	30	1	2	3	4

NOTES



Conduction-Cooled Superconducting Radiofrequency (SRF) Cryomodule

A collaboration between Fermilab and RadiaBeam Technologies, supported by a Department of Energy SBIR grant, resulted in a conduction-cooled superconducting radiofrequency (SRF) cryomodule. Unlike conventional SRF systems that rely on complex liquid helium infrastructure, this design employs modern cryocoolers, enabling compact, efficient, and scalable accelerators. Eliminating liquid cryogens lowers operational complexity and cost, making high-power SRF systems more accessible to small businesses. Potential applications include medical device sterilization, waste remediation, and PFAS treatment. This successful technology transfer from Fermilab to industry expands the commercial viability and market reach of SRF innovations in practical, real-world applications.

Photo credit: © Dan Svoboda, Fermilab

JULY



SUN	MON	TUE	WED	THU	FRI	SAT
28	29	30	1	2	3	4
						Independence Day
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	1

Department of Energy Fermi National Accelerator Laboratory

Fermi National Accelerator Laboratory, or Fermilab, is America's premier laboratory for particle physics and accelerator research. Its scientists and engineers are experts in accelerator technologies used for high-energy physics experiments. Through its Illinois Accelerator Research Center, Fermilab collaborates with industry to develop and commercialize advanced accelerator innovations with applications in medicine, materials science, environmental remediation, and beyond.



NOTES



Autonomous Launch and Recovery System

Utilizing a Cooperative Research and Development Agreement (CRADA), the Israeli company Sealartec installed, integrated, and operated an autonomous launch and recovery (ALR) system on the Combatant Craft Division's STILETTO demonstration platform at the Naval Surface Warfare Center, Carderock Division. The ALR technology provides a critical capability for both manned and unmanned operations, improving the ability to launch and recover vessels in high wind and waves. The system integrates automated boat capture for enhanced safety, a vertical motion control system to reduce boat slamming, and an advanced positioning data acquisition system for reliable operations. The STILETTO program and the CRADA framework enabled Sealartec's ALR system to transition quickly into a real-world maritime environment.



Photo credit: © Travis Troller
(Main and supporting images)

AUGUST



@federallabs

Department of Defense
Naval Surface
Warfare Center,
Carderock Division

The Carderock Division consists of approximately 4,000 scientists, engineers, and support personnel working in more than 40 disciplines ranging from fundamental science to applied/in-service engineering. These are the Navy's experts for maritime technology. The division houses world-class facilities and laboratories. Carderock's headquarters is in West Bethesda, Maryland. The division also conducts research and development at several remote sites across the country.



SUN	MON	TUE	WED	THU	FRI	SAT
26	27	28	29	30	31	1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31	International Dog Day				

Anniversary of
the CHIPS and
Science Act

NOTES



3D Bio-Printed Cell Models Are Improving Biomedical Research

Scientists from the U.S. Army Medical Research Institute of Infectious Diseases (USAMRIID) Therapeutic Discovery Branch successfully established 3D bio-printed human liver tissue infected with a green fluorescent protein (GFP) labeled, live-attenuated vaccine strain of Venezuelan Equine Encephalitis Virus (VEEV) TC-83. The model surpasses a 2D cell culture by providing a physiological 3D environment and, compared to animal models, it reduces costs, saves time, and recapitulates human genetics. Using bioprinting to create these models helps USAMRIID scientists to improve the evaluation of medical countermeasures against biodefense threats and improve accuracy in drug screening.

SEPTEMBER



@federallabs

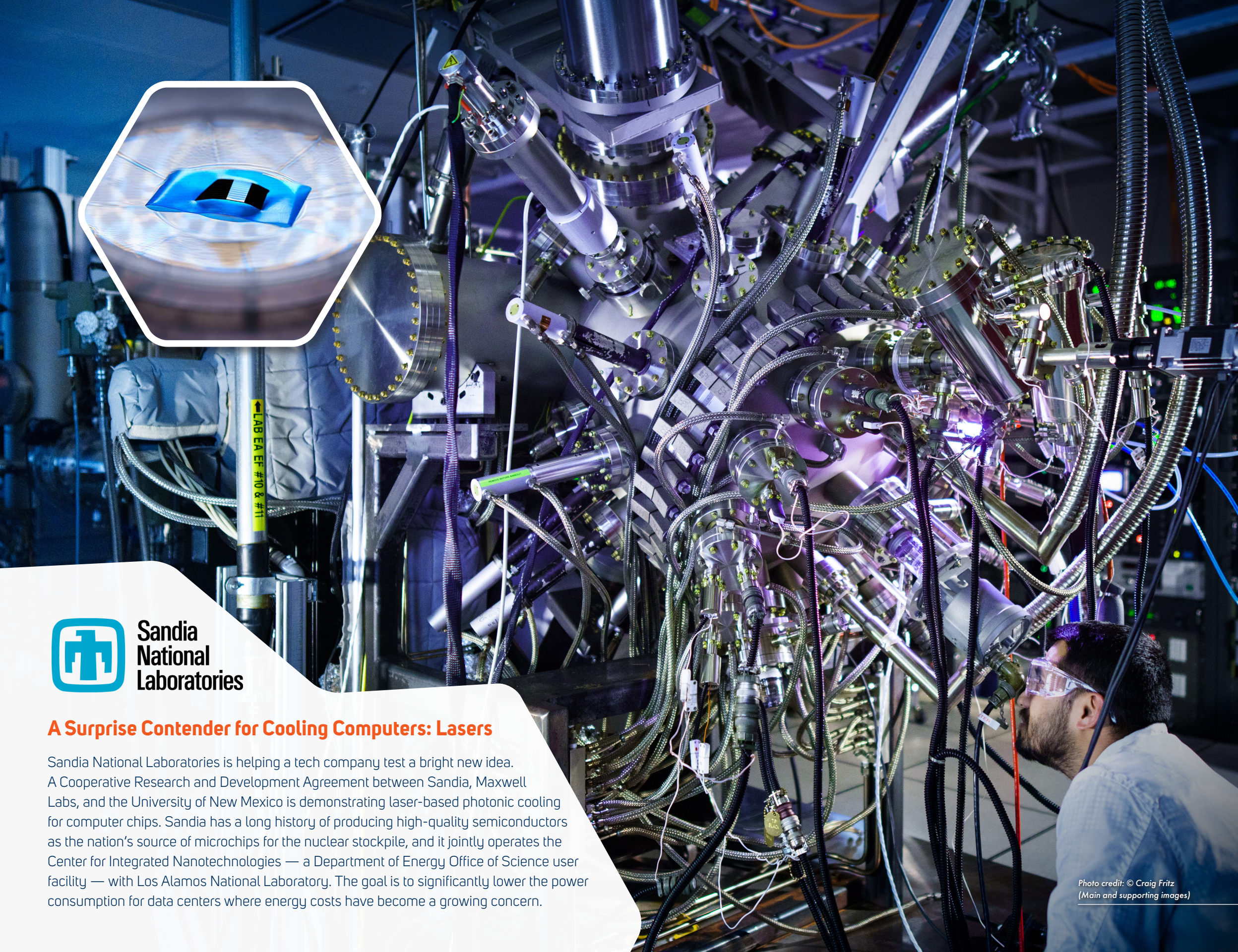
Department of Defense,
Defense Health Agency
**U.S. Army Medical
Research Institute of
Infectious Diseases**

Since 1969, the U.S. Army Medical Research Institute of Infectious Diseases has provided leading-edge medical capabilities to deter and defend against current and emerging biological threat agents. The institute is the only laboratory in the Department of Defense equipped to safely study highly hazardous pathogens requiring maximum containment at Biosafety Level 4. The institute's research leads to vaccines, drugs, diagnostics, and training programs and serves as an essential element in medical response to any future biological threats.



SUN	MON	TUE	WED	THU	FRI	SAT
30	31	1	2	3	4	5
6	7	8	9	10	11	12
	Labor Day				Patriot Day	
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	1	2	3

NOTES



**Sandia
National
Laboratories**

A Surprise Contender for Cooling Computers: Lasers

Sandia National Laboratories is helping a tech company test a bright new idea. A Cooperative Research and Development Agreement between Sandia, Maxwell Labs, and the University of New Mexico is demonstrating laser-based photonic cooling for computer chips. Sandia has a long history of producing high-quality semiconductors as the nation's source of microchips for the nuclear stockpile, and it jointly operates the Center for Integrated Nanotechnologies — a Department of Energy Office of Science user facility — with Los Alamos National Laboratory. The goal is to significantly lower the power consumption for data centers where energy costs have become a growing concern.

Photo credit: © Craig Fritz
(Main and supporting images)

OCTOBER



Department of Energy
Sandia National
Laboratories

Sandia National Laboratories is a multi-mission laboratory managed and operated by National Technology and Engineering Solutions of Sandia, LLC, a wholly owned subsidiary of Honeywell International Inc., for the Department of Energy's National Nuclear Security Administration. Major research and development responsibilities include nuclear deterrence, national security, defense nuclear nonproliferation, energy technologies, and advanced science and technology, with main facilities in Albuquerque, New Mexico, and Livermore, California.

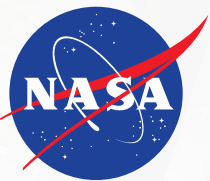


SUN	MON	TUE	WED	THU	FRI	SAT
27	28	29	30	1 Start of Federal Fiscal Year	2	3
4	5	6	7	8	9	10
11	12 Columbus Day Indigenous Peoples' Day	13	14	15	16	17
18	19	20 Anniversary of Federal Technology Transfer Act of 1986	21 Anniversary of Stevenson-Wydler Act	22	23	24
25	26	27	28	29	30	31 Halloween

NOTES

Orion CM (Crew Module) or Orion ETA (Environmental Test Article)

The Orion CM (Crew Module) or Orion ETA (Environmental Test Article) is passed through the vacuum chamber on its way to get ready for two critical tests in preparation for the Artemis II flight: a jettison test of the Docking Module and a jettison test of the Forward Bay Cover. The Artemis II test flight will be the first National Aeronautics and Space Administration (NASA) mission with crew under Artemis. Astronauts on their first flight aboard NASA's Orion spacecraft will confirm all the spacecraft's systems operate as designed with crew aboard in the actual environment of deep space.



NOVEMBER



@federallabs

National Aeronautics and
Space Administration
Glenn Research Center
**Space Environments
Complex**

The Space Environments Complex (SEC) houses the world's largest and most powerful space environment simulation facilities. The Space Simulation Vacuum Chamber is the world's largest space simulation vacuum and Electromagnetic Interference chamber, measuring 30.5 meters (100 feet) in diameter by 37.2 meters (122 feet) high. The SEC is located at NASA's Neil Armstrong Test Facility in Sandusky, Ohio.



SUN	MON	TUE	WED	THU	FRI	SAT
1	2	3	4	5	6	7
End of Daylight Saving Time		Election Day				
8	9	10	11	12	13	14
Start of Diwali			Veterans Day			
15	16	17	18	19	20	21
22	23	24	25	26	27	28
				Thanksgiving		
29	30	1	2	3	4	5

NOTES

Photo credit: © Jessica Habjan
(Main and supporting images)



Metals With the Right Mettle

The National Energy Technology Laboratory (NETL) specializes in the development of cost-effective, durable alloys that can perform in harsh environments — from very low temperatures for cryogenic liquid natural gas applications (minus 130 degrees Celsius) to very high temperatures (greater than 1200 degrees Celsius) for next-generation gas turbines. Researchers utilize NETL's Advanced Alloys Signature Center in Albany, Oregon, for prototyping alloy solutions using methods and at scales that readily translate to industrial practice and testing performance under simulated service conditions. By taking these steps, NETL accelerates innovation that enables affordable, reliable, and secure domestic energy.



DECEMBER 2026



SUN	MON	TUE	WED	THU	FRI	SAT
29	30	1	2	3	4	5
					Start of Hanukkah	
6	7	8	9	10	11	12
						Anniversary of Bayh-Dole Act
13	14	15	16	17	18	19
20	21	22	23	24	25	26
					Christmas	Start of Kwanzaa
27	28	29	30	31	1	2
				New Year's Eve		

Department of Energy National Energy Technology Laboratory

The National Energy Technology Laboratory (NETL) is a Department of Energy (DOE) national laboratory dedicated to advancing the nation's energy future by creating innovative solutions that strengthen the security, affordability, and reliability of energy systems and natural resources. With laboratories in Albany, Oregon; Morgantown, West Virginia; and Pittsburgh, Pennsylvania, NETL creates advanced energy technologies that support DOE's mission while fostering collaborations that will lead to a resilient and abundant energy future for the nation.



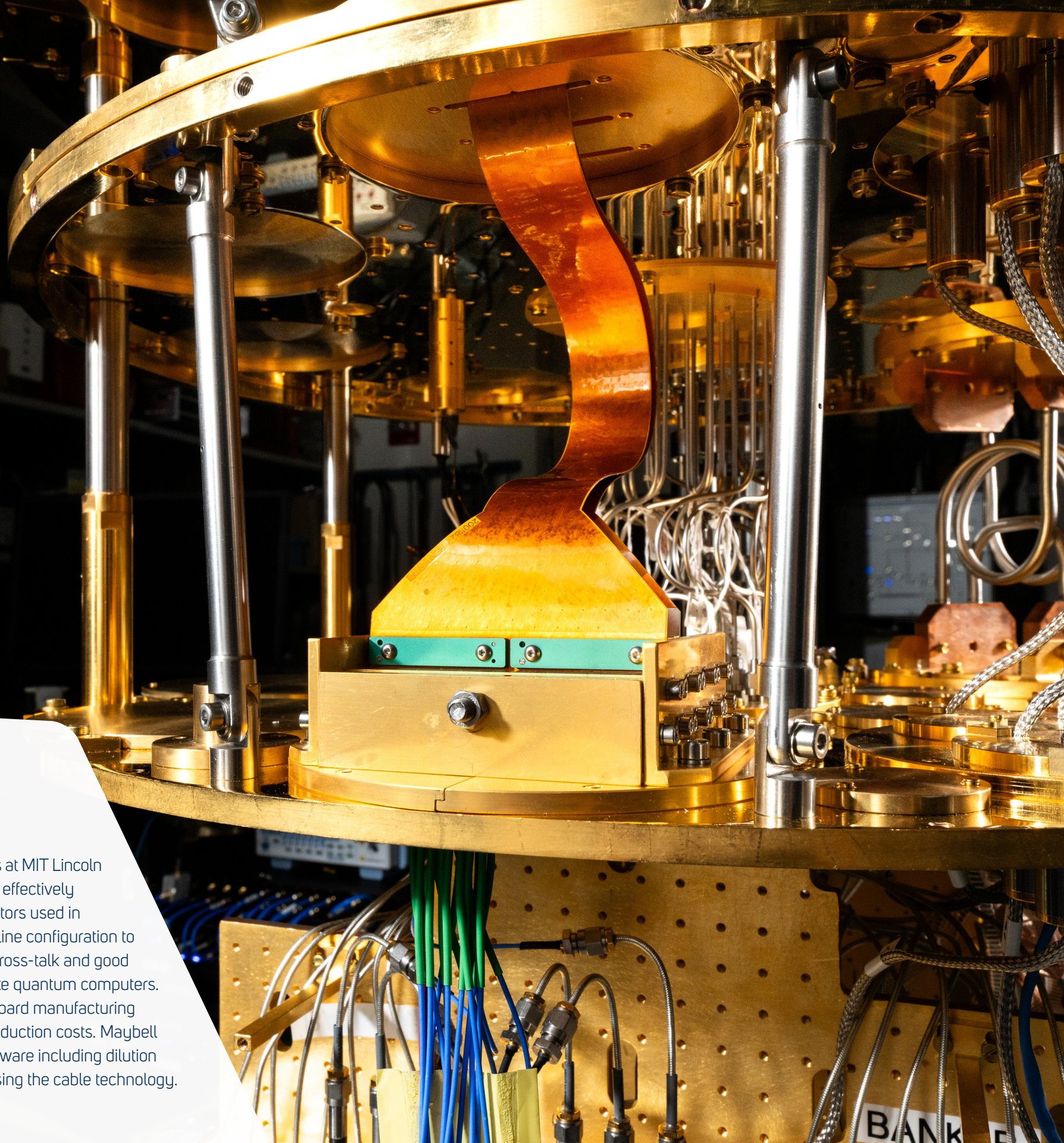
NOTES

Photo credit: ©Nicole Fandel,
MIT Lincoln Laboratory



Flexible Cryogenic Cables

Low-frequency flexible cables created by researchers at MIT Lincoln Laboratory provide reliable control lines that operate effectively in extremely cold environments like dilution refrigerators used in quantum research. The cables, developed in a strip-line configuration to enable delivery of high-frequency signals with low cross-talk and good impedance control, are ideal for complex systems like quantum computers. The cables are compatible with commercial circuit board manufacturing processes and offer high scalability with lowered production costs. Maybell Quantum, a company specializing in cryogenic hardware including dilution refrigerators for quantum systems, is currently licensing the cable technology.



JANUARY 2027



@federallabs

Department of Defense MIT Lincoln Laboratory

MIT Lincoln Laboratory is a federally funded research and development center operated by the Massachusetts Institute of Technology (MIT) for the Department of Defense. Located in Lexington, Massachusetts, the laboratory develops advanced technologies to address national security challenges, with expertise spanning areas such as radar, cybersecurity, space systems, artificial intelligence, communications, and sensing.



SUN	MON	TUE	WED	THU	FRI	SAT
27	28	29	30	31	1 New Year's Day	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18 Martin Luther King, Jr. Day	19	20	21	22	23
24 /	25	26	27	28	29	30
31						

NOTES

LAB TECH EXTRAS



Photo credit: © Tim Ford

Plasma-Research-ReACT-Lab

In this photo taken in the National Energy Technology Laboratory's (NETL) Morgantown, West Virginia, Reaction Analysis and Chemical Transformation (ReACT) facility, microwave-induced plasma forms from hydrogen in argon gas. NETL is actively researching microwave-induced plasma for various energy and chemical applications. This includes using microwave plasma to enhance reactions in chemical synthesis, improve hydrogen generation from plastics, and potentially create sustainable fuels. NETL's work also involves studying the fundamental interactions between microwave fields and materials to optimize these processes.



Photo credit: © David Woodfin and Allen Hopkins (LANL); Inset: © NASA

Improving Space Traffic Management

Increasing satellite numbers and orbital debris cause collisions and threaten low Earth orbit for commercial and national security use. Los Alamos National Laboratory developed the Spacecraft Speedometer to improve space traffic management. Patent-pending technology provides critical satellite speed data when GPS or ground station tracking fails during severe space weather. The instrument has demonstrated accurate speed measurements and space weather observations on the International Space Station. Compact size, weight, and power requirements allow deployment on spacecraft supporting a variety of missions, including interplanetary. The United States Air Force Academy has implemented it for the Department of Defense Space Test Program.



Assessment of Cybersecure, NDAA-Compliant Drones for First Responder Applications

The National Urban Security Technology Laboratory (NUSTL) conducted a series of assessments of cybersecure, National Defense Authorization Act (NDAA)-compliant drones, evaluating whether they can perform critical functions required for public safety operations. In this photo, a law enforcement officer from the New York City Police Department flies a drone in the Hudson Yards development of midtown Manhattan, one of the most complex urban environments in the country. To gauge whether these drones would meet their mission needs, NUSTL designed test activities for first responder pilots to perform. Assessment results will be shared with the larger responder community, helping them make data-informed purchasing and deployment decisions.



Photo credit: © National Urban Security Technology Laboratory (NUSTL)



Photo credit: © AFRL
Information Directorate



AFRL
AIR FORCE RESEARCH LABORATORY

Quantum Information Science

A full-scale quantum computing dilution refrigerator is suspended in the Colonel Timothy J. Lawrence Quantum Lab at the Innovare Advancement Center. This meticulously engineered system uses layered thermal shielding, precision cabling, and cryogenic infrastructure to cool quantum devices to millikelvin temperatures. The setup enables fundamental research in superconducting qubits and quantum coherence, advancing the Air Force Research Laboratory's work in secure quantum communication and computational power.



Photo credit: © Liam McMahon, Art-Z Graphics
(Main and supporting images)



Safer, Eco-Friendly Fire Protection for Airplane Cargo Bays

Federal Aviation Administration (FAA) researchers are working with industry partners to test new fire-extinguishing agents for airplane cargo bays. These chemicals are alternatives to Halon, which is being phased out globally due to its harmful effects on the ozone layer — the part of Earth's atmosphere that protects us from the sun's ultraviolet rays. FAA scientists are identifying safer options through simulated cargo fire tests at the agency's William J. Hughes Technical Center for Advanced Aerospace in Atlantic City, New Jersey. Their work enhances fire safety for airlines and passengers while supporting a cleaner, safer future for commercial aviation.

Fusion

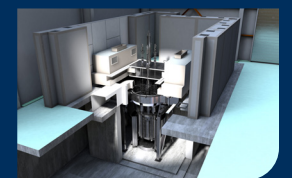
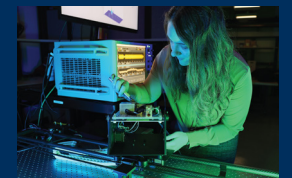
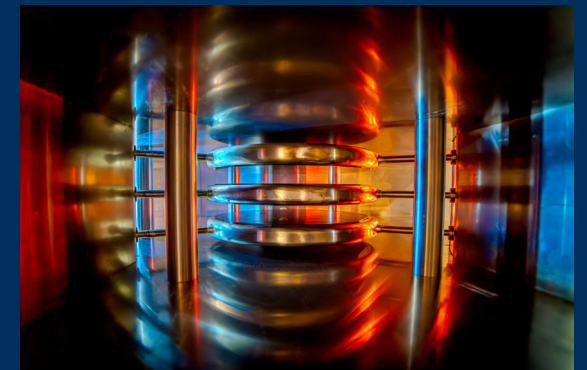
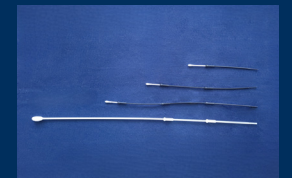
Repeated achievement of fusion ignition at Lawrence Livermore National Laboratory's (LLNL) National Ignition Facility has established the fundamental scientific feasibility of laser-driven inertial confinement fusion as a path toward fusion energy. To move from successful fusion ignition in lab experiments to commercial power plants, significant engineering and technical advances are needed. LLNL experts are working to help establish the technology basis for a viable development path toward laser-powered inertial fusion energy, which has led to Cooperative Research and Development Agreements with various startups, including Longview Fusion.



Photo credit: © Jason Laurea

 **Lawrence Livermore
National Laboratory**

*Your participation helps the
T2 community thrive!*



LABORATORY DIRECTORY



December '25

U.S. Department of Agriculture
Forest Products Laboratory



January '26

Department of Veterans Affairs
Rehabilitation & Engineering Center for Optimizing
Veteran Engagement & Reintegration



February

Department of Defense
U.S. Army Engineer Research and Development Center
Cold Regions Research and Engineering Laboratory



March

Department of Energy
Princeton Plasma Physics Laboratory
Quantum Diamond Lab



April

Department of Energy
Argonne National Laboratory
Quantum Foundries



May

Department of Energy
Oak Ridge National Laboratory



June

Department of Defense
U.S. Army Engineer Research and Development Center
Environmental Laboratory



July

Department of Energy
Fermi National Accelerator Laboratory



August

Department of Defense
Naval Surface Warfare Center, Carderock Division



September

Department of Defense
Defense Health Agency
U.S. Army Medical Research Institute of
Infectious Diseases



October

Department of Energy
Sandia National Laboratories



November

National Aeronautics and Space Administration
Glenn Research Center
Space Environments Complex



December '26

Department of Energy
National Energy Technology Laboratory



January '27

Department of Defense
MIT Lincoln Laboratory

Lab Tech Extras



Department of Energy
National Energy
Technology Laboratory



Department of Homeland Security
National Urban Security
Technology Laboratory



Department of Energy
Los Alamos National Laboratory



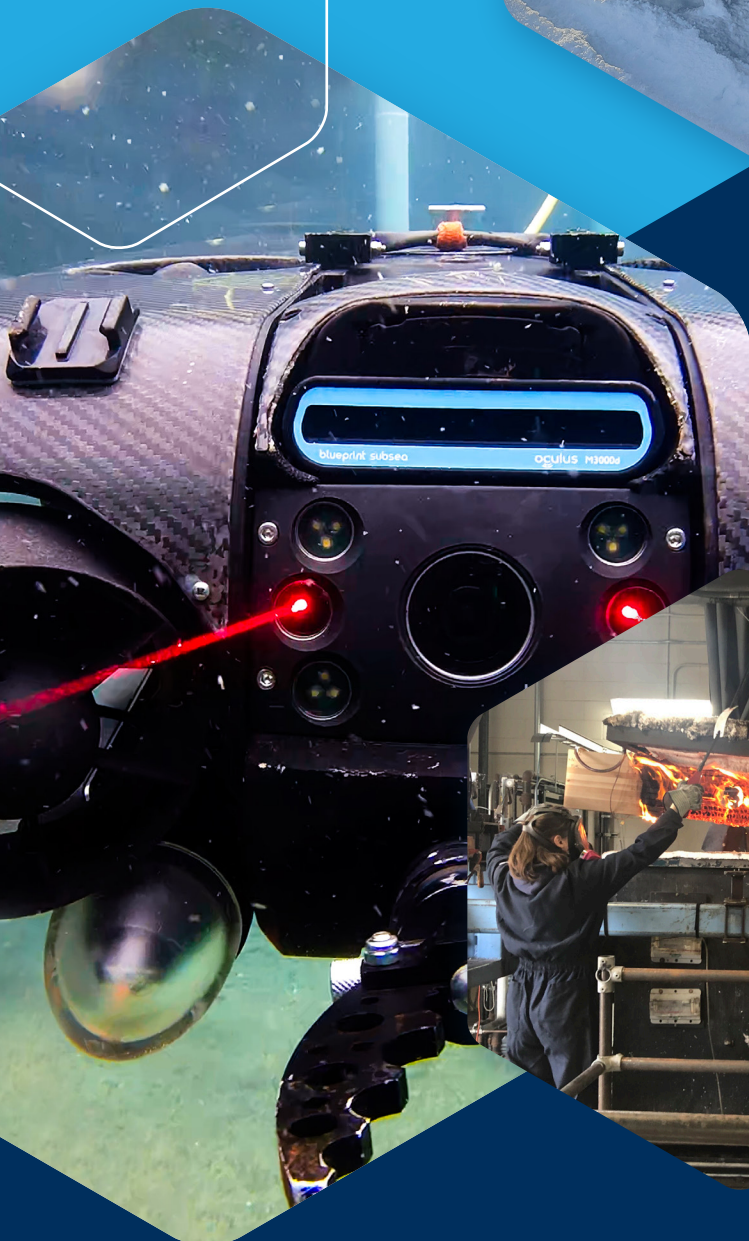
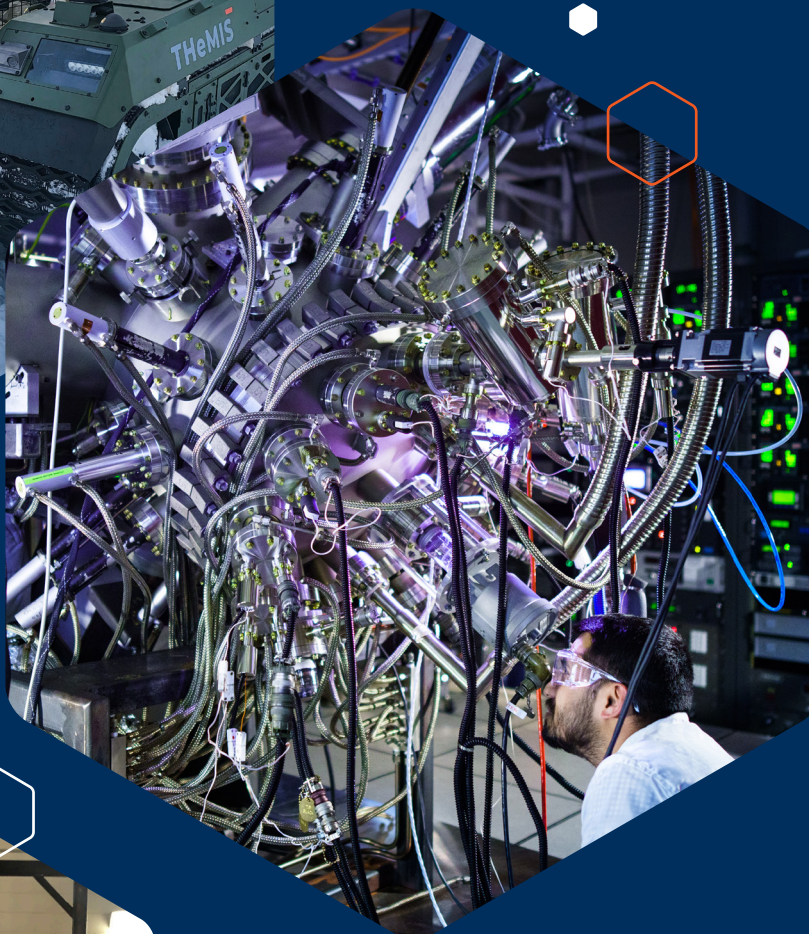
Department of Defense
Air Force Research Laboratory
Information Directorate



Department of Energy
Lawrence Livermore
National Laboratory



Department of Transportation
Federal Aviation Administration



Federal Laboratory Consortium
for Technology Transfer



@federallabs FEDERALLABS.ORG

Judges

Anne Kozak
Annie Bullock Yoder
Benjamin Recchie
Bhoomija Hariprasad
Brandy Wade
Charlotte Eng
Conrad Hollomon
Cynthia Burham
David Zimmerman
Grace Yeh
Hollie Lockhart

Janet Mercer-Smith
Jasmine Kalsi
Jordan Mizerak
Kimberly Minafra
Kristine Moes
Lydia Hierl
Michael Pollack
Richard Vermillion
Sarah Hibbs-Shipp
Steve Ferguson
Suzanne Frisbie