



PATHFINDER

FY 23

Media Collection

The Catalyst-Pathfinder program creates collaborative engagements toward problem-solving and technical solutions between leading academic researchers, government subject matter experts, and Soldiers from active and reserve Army divisions.

In FY23, the program and its accomplishments garnered national media coverage in notable publications. This document highlights that coverage.



In 2023, the Department of Defense released the National Defense Science and Technology Strategy (NDSTS), focusing on three lines of effort:

- 1 Create and field capabilities at speed and scale foster a more vibrant defense innovation ecosystem, accelerating the transition of new technology into the field and communicating effectively inside and outside the Department.
- 2 Ensure the foundations for research and development continue and expand upon our efforts to recruit, retain, and cultivate talent, revitalize our physical infrastructure, upgrade our digital infrastructure, and nurture more vital collaboration.
- 3 Focus on the Joint Mission investing in information systems and establishing rigorous, threat-informed analysis processes to enable the DoD to make informed choices in its science and technology investments.

The Catalyst-Pathfinder program ensured these lines of effort were accomplished throughout FY23 via the following accomplishments covered in the media.

CREATE AND FIELD CAPABILITIES AT SPEED AND SCALE

Fall Issue of Solutions: Engineering the Future of Medicine

Vanderbilt University ■ Nov. 1, 2022

How Karl Zelik is using mechanical and biomedical engineering to prevent back pain and enhance endurance, most recently for soldiers.

Airborne Innovation Lab: Fort Bragg now has a new makerspace available to paratroopers to help provide them with the tools they need to succeed

Greater Fayetteville Business Journal ■ Nov. 11, 2022

The Lab is the product of more than a year's worth of effort and funding and is one of three Design, Innovation, Research, and Technology (DIRT) labs funded by Army Research Labs. The new makerspace features robotics equipment, 3D printers, a woodshop, textile station, sewing station and computer lab and is open to service members on Fort Bragg.



82nd Airborne Division's Airborne Innovation

Lab Soldier Systems ■ Nov. 21, 2022

The 82nd Airborne Division has established an Airborne Innovation Lab as a no-reservation-required makerspace to learn, research, innovate, build, and explore new ideas to solve tactical problems. However, the AIL also offers classes on how to use its various equipment.

Fort Stewart specialist creates an app to help combat mold in Army barracks

Savannah Now ■ Jan. 20, 2023

The Mold Conditions Awareness Tool integrates a series of sensors to track room temperature and humidity, according to a news release from Fort Stewart. The app was developed by U.S. Army Spc. Salem Ezz, who serves as the lead software engineer at the 3rd Infantry Division's Marne Innovation Center.

Soldiers at this base now have a 3D printing course

Army Times ■ Mar. 10, 2023

Soldiers at Fort Bragg, North Carolina now have a way to make their own parts or build solutions to engineering problems they face in their work.



Innovation We'll Defend: Senior Drill Sergeant Inspiring A New Generation of Army

DVIDS ■ Mar. 15, 2023



82nd Airborne Division saw what we were doing down at [Fort] Benning and wanted to learn firsthand how to **inspire that culture of innovation** in their own companies," Rance said. "It was an honor to see that our platoon-level workshops could **motivate a large organization like the 82nd into adopting new ways to train and fight.**

3rd Infantry Division Soldiers win Dragon's Lair 8

U.S. Army ■ Mar. 29, 2023

After careful deliberation, the judges selected the Mold Conditions Awareness Tool, or MCAT, that was presented by U.S. Army 1st Lt. Chris Aliperti and Pvt. Salem Ezz from the 3rd Infantry Division, as the top innovation of Dragon's Lair 8.

The Army's got a mold problem, these soldiers have an answer

Army Times ■ Apr. 4, 2023

This year's winner featured a Mold Conditions Awareness Tool, presented by Army 1st Lt. Chris Aliperti and Pvt. Salem Ezz with the 3rd Infantry Division. And that's good because a recent report found mold in more than 2,000 Army facilities after a service-wide inspection.

Did Army Soldiers invent a device to prevent mold in barracks?

Fayetteville Observer ■ Apr. 7, 2023

“We know that mold grows when it’s hot and humid, and it gets cleaned after the mold grows,” Aliperti said last week. “This tool gets ahead of the problem before the mold gets a chance to grow.”



Innovation Champion: 3rd Infantry Division Soldiers Named Winners of Dragon’s Lair 8

U.S. DoD ■ Apr. 10, 2023

The MCAT is a specialized 3D-printed device that uses sensors to detect temperature and humidity levels within barracks rooms to identify early signs of mold. The data is ingested in real-time to an application through WiFi that enhances military leaders and barracks managers’ visualization to assess the conditions and remediate through taking action.



Fort Stewart soldiers create device to address mold conditions

Military Families Magazine ■ Apr. 20, 2023

Mere months after several soldiers took to social media to reveal mold issues at Fort Stewart, Georgia, two members of the 3rd Infantry Division have created a tool to help address — and alleviate — the problem.

Marne Innovation Center Partners with the National Security Innovation Network

U.S Army ■ Jul. 18, 2023

College students will now be able to reach new innovative heights during the latest partnership to hit Fort Stewart’s Marne Innovation Center. The National Security Innovation Network now offers a 10-week summer internship for engineering students who apply for the X-Force Fellowship Program.



How innovation cells in Army combat units are harnessing soldiers’ ideas

Defense One ■ Aug. 17, 2023

Heads turned at Fort Irwin’s training ranges earlier this year when the 3rd Infantry Division arrived with quadcopters tethered to their Bradley Fighting Vehicles, providing extra eyes in the sky.

ENSURE FOUNDATION FOR RESEARCH AND DEVELOPMENT

Fort Bragg Airborne Division opens innovation lab

CBS 17 News ■ Oct. 6, 2022

“This first-of-its-kind facility will create an enduring culture of innovation here at Fort Bragg,” Lt. Col. Kyle Kirby said, the 82nd Airborne Division Innovation Chief. “By investing in a center solely dedicated to developing solutions to a myriad of problems, we are ensuring that our Paratroopers continue to lead from the front in a division known for solving the most complex problems.”

New Airborne Innovation Lab to tackle soldiers’ day-to-day problems

WUN 91.5 ■ Oct. 7, 2022

According to the 82nd’s lab website, soldiers have access to resources that include: laser cutting and woodshop tools, robotics kits, electronic workstations, and sewing machines, along with a “space for facilitating design thinking workshops and project collaboration.”



82nd Celebrates Grand Opening of Airborne Innovation Lab

U.S. Army ■ Oct. 17, 2022

Paratroopers, academic, and industrial partners all came together to celebrate the ceremonial ribbon cutting and AIL Open House, highlighting just some of the limitless capabilities of the AIL.



CMI2 announces two DIRT Days events in 2023 following successful inaugural field test

WV National Guard News ■ Nov. 29, 2022

In the wake of a highly successful inaugural DIRT Days event when Soldiers and Airmen from the West Virginia National Guard participated in the field testing of emerging military technologies, the Civil-Military Innovation Institute (CMI2) has announced two more such events scheduled for April and June 2023. The events will again be held at the CMI2 Adaptive Experimentation Facility in Fola, West Virginia.

101st Airborne troops train, test gear at sprawling Clay County maneuver area

Charleston Gazette-Mail ■ Apr. 22, 2023

As Spot, Boston Dynamics’ dog-like quadruped robot, nimbly paced its way across the rocky terrain fronting the Fola

Experimentation Facility's operations center, a large unmanned aerial vehicle silently hovered 100 feet overhead.

Fola: Military personnel, defense contractors, rave about Clay County training site

MetroNews ■ Apr. 23, 2023

While West Virginians were going about their regular business this week more than 300 of the top-trained soldiers in the U.S. Army were being put to the test on a mountaintop in Clay County.



Development Command (DEVCOM) and the 101st Airborne Division.

Robots in Yes, West Virginia – say what?

WV Economic Development Office Blog ■ Apr. 25, 2023

If you're a fan of action movies, you'd be pleased to know that some real-life military training exercises happened in West Virginia recently. The Civil-Military Innovation Institute (CMI2) hosted a military field training exercise and experimentation event, known as Driving Innovation in Realistic Training (DIRT) Days 23-001, in partnership with the United States Army Combat Capabilities Development Command (DEVCOM) and the 101st Airborne Division. It was held at CMI2's Adaptive Experimentation Facility in Fola, West Virginia, which is actually a repurposed coal mining facility.

CMI2 Says #YesWV

WV Economic Development Office Blog ■ Apr. 25, 2023

The Civil-Military Innovation Institute is investing in West Virginia in a big way by establishing a one-of-a-kind facility for advanced military training and technology experimentation in Clay County.

Talkline with Hoppy Kercheval

Apr. 24, 2023



CMI2 hosts second DIRT Days event

CMI2 ■ Apr. 24, 2023

FOLA, W.V. (APRIL 24, 2023) – Hundreds of the U.S. Army's top-trained Soldiers field-tested military technology in rural West Virginia during the second iteration of the Driving Innovation in Realistic Training (DIRT) Days event April 17-21, in Fola, West Virginia, presented by the Civil-Military Innovation Institute (CMI2), in partnership with the United States Army Combat Capabilities



How 101st Airborne soldiers are using EagleWerx makerspace to innovate

C4ISRnet ■ Apr. 25, 2023

EagleWerx makerspace to innovate Despite its characteristic arch, a 60mm mortar can be shot directly at someone. The issue, of course, is lining things up — and keeping one's appendages attached in the process.

Fort Stewart soldiers debut innovation center, discuss ongoing projects

Fox 28, Savannah ■ May 18, 2023

Soldiers at the 3rd Infantry Division are finding solutions to problems they face on and off the battlefield thanks to the new Marne Innovation Center on Fort Stewart.

The 82nd Airborne Division just announced its newest unit. Here's what it will do

Fayetteville Observer ■ Jun. 5, 2023

Paratroopers of the 82nd Airborne Division are innovators, the command team of the division said. To capitalize on that innovation, the division created a new company that was formally activated at the end of March, said Maj. Gen. Christopher LaNeve, commander of the 82nd Airborne Division.

Duke Engineering Hosts Defense Innovation Workshop

Duke University ■ Jul. 12, 2023

Duke faculty, the XVIII Airborne Corps and innovators from Fort Liberty met on



June 6 at a defense innovation workshop to collaborate on bottom-up solutions as a part of their Educational Partnership Agreement. Presenters from the XVIII Airborne Corps, Duke University and the Civil-Military Innovation Institute met for a day filled with discussing innovation strategy, funding, education, training and implementing solutions to problems common to soldiers.

863rd Military Police Co conclude annual training with DIRT Days

W.V. National Guard ■ Aug. 7, 2023

863rd Military Police Company, West Virginia Army National Guard, conducted annual training at Fola Experimentation Facility, West Virginia, in July. Their culminating exercise, July 20-21, 2023, was in conjunction with the third iteration of Civil-Military Innovation Institute's Driving Innovation in Realistic Training (DIRT) Days event.



University of Arkansas Joins U.S. Army Pathfinder Programs

University of Arkansas ■ Aug. 15, 2023

The University of Arkansas has become the latest university to join the Army Pathfinder Program, an initiative overseen by the U.S. Army Combat Capabilities Development Command (DEVCOM) Army Research Laboratory and executed by the Civil-Military Innovation Institute.

FOCUS ON JOINT MISSION

Airborne Innovation Lab Collaborates Across Formations

Army ■ Nov. 9, 2022

The newly minted 82nd Airborne Division's Airborne Innovation Lab is rapidly launching warfighter innovation into the next phase of global competition, strategic deterrence, and warfare with the prototyping of over 12 different Soldier-driven projects in its first 30 days.

Fort Bragg Visit Highlights Innovative Technologies and Partnerships with Key Industries in NC

Duke University ■ Nov. 18, 2022

On November 3rd, representatives from North Carolina's state and federal government, economic development, defense, and higher education community were invited to visit Fort Bragg to highlight Soldiers' need for innovative technologies to maintain combat readiness on the battle field.



Members of TN congressional delegation visit VU to discuss Fort Campbell partnerships, Latin America research, and veteran education

Vanderbilt University ■ Oct. 12, 2023

U.S. Sen. Marsha Blackburn (R-TN) and Congressman Mark Green (R-TN07) visited Vanderbilt University recently to learn more

about the Army Futures Command Pathfinder Program partnership with Fort Campbell, research and education related to Latin America, and university efforts to educate and employ veterans.



Chief of Staff of Army visits Fort Stewart's 3rd Infantry Division

WTOC 11 ■ Mar. 7, 2023

The Chief of Staff of the Army visited the installation, meeting soldiers face-to-face, and learned about the latest challenges and successes of the 3rd Infantry Division. General James McConville shaking hands with hundreds of 3rd ID members Tuesday thanking them for their hard work and touting their efforts overseas in Europe.

