March 2026

U.S. ARMY

MEDLOG MONTHLY

A NEWSLETTER PUBLISHED BY

U.S. ARMY MEDICAL LOGISTICS COMMAND

Army medical maintenance facilities modernize with AI, telemaintenance to support future fight

FORT DETRICK, Md. – U.S. Army Medical Logistics Command is embracing the use of artificial intelligence and advanced telemaintenance to ensure life-saving medical devices are ready for the next generation of warfare, where troops may be more isolated and support less accessible than ever before.

AMLC operates three Medical Maintenance Operations Divisions, or MMODs, where small teams of expert technicians are transforming sustainment-level maintenance operations to provide critical remote support to the warfighter.

The shift addresses the challenges of potential future conflicts in geographically vast areas, for example, such as in the U.S. Indo-Pacific Command area of operation.

"If we have a new one spring up, like in the Pacific, [we're] talking about lots of small island chains and isolated areas that are not easily accessible," said Ian McNesby, chief of operations at AMLC's MMOD in Tracy, California, or MMOD-CA. "A lot of these guys are going to be on their own or cut off from major resources ... unless we can provide remote support."

In that scenario, a unit-level medic

Sgt. Jason Paglia, a biomedical equipment specialist, inspects a medical device at U.S. Army Medical Logistics Command's Medical Maintenance Operations Division at Hill Air Force Base, Utah. (U.S. Army photo by C.J. Lovelace)

(Continued)

MEDLOG MONTHLY is an official publication of U.S. Army Medical Logistics Command. We welcome comments and content submissions from our readers. **Email:** usarmy.detrick.amlc.mbx.pca@army.mil
Visit our website: www.amlc.army.mil **Follow us on Facebook:** @ArmyMedlogCommand

(Continued)

U.S. Army Medical Logistics Command is embracing new technology, including artificial intelligence and advanced telemaintenance capabilities, to bring sustainment-level medical maintenance expertise directly to operational forces in the field. (U.S. Army graphic by C.J. Lovelace)

with a broken diagnostic machine can't wait days for a replacement part or a fly-in technician to address the issue. To bridge that distance, the MMODs are moving beyond traditional support methods.

"We've always done some form of telemaintenance, but in the past we didn't have visual capability," McNesby said.

Now, using platforms like Microsoft Teams, technicians can visually diagnose equipment issues and assist Soldiers downrange with repairs, a major leap from simply talking over the phone.

Leading this change is AMLC's Medical Maintenance Management Directorate, or M3D, which oversees the three MMODs in California, Pennsylvania and Utah. The directorate is carefully charting its course to align with the AMLC's higher headquarters, U.S. Army Communications-Electronics Command.

MMOD-CA Director Isaac Newman emphasized a strategic, forward-looking approach when it comes to AI.

"Modernizing sustainment is a key part of the Army's mission, and we are watching the development of CECOM's Artificial Intelligence-Assisted Maintenance (AIAM) platform with great interest," Newman said. "While it's not part of our daily workflow yet, we are actively exploring how we can best leverage it in the future."

The integration of AI is already showing promise. MMOD personnel are using it for administrative tasks but also considering ways to directly assist technicians.

"As the program matures, we see tremendous opportunity to contribute our specialized medical equipment data into the learning model," Newman added. "This will ensure the platform is finely tuned for the unique needs of Army Medicine, ultimately benefiting the Soldiers who rely on this equipment."

This technological leap is being driven by the teams at each MMOD, comprised of military, civilian and contract technicians, many of whom are prior military as well. Their deep, hands-on knowledge is M3D's greatest asset, McNesby said, but also its greatest challenge as some seasoned experts near retirement.

"It takes time to grow a subject-matter expert … you can't just grow that overnight," McNesby warned, highlighting the need to capture their institutional knowledge.

AMLC is supporting modernization efforts at all three MMODs, which also includes facilities at Tobyhanna Army Depot, Pennsylvania, and Hill Air Force Base, Utah.

Each facility supports a different geographical region, serving as

(Continued)

(Continued)

a center of technical excellence for different types of equipment. The MMODs are staffed by expert technicians who can service unit-level equipment shipped to their shops, as well as deploy to provide direct support to operational units or National Guard units in their respective regions.

MMOD-CA primarily supports medical imaging systems and specialized calibration equipment, while MMOD-UT specializes in pulmonary and oxygen-generation systems, and MMOD-PA focuses on clinical lab equipment.

In addition to technological advances, MMOD-PA recently completed a major renovation that doubled its warehouse space to 60,000 square feet and added a new training room dedicated to telemaintenance support.

"Our modernization efforts are in lockstep with CECOM's strategic vision," M3D Director Jorge Magana said. "This innovation isn't happening in a silo; it's a deliberate, directorate-wide effort across our MMODs. By empowering our teams to embrace technologies like AI and remote support, we are building a more resilient sustainment enterprise that directly contributes to CECOM's goals and delivers readiness for the entire Army."

A key part of this digital transformation is M3D's effort to digitize its equipment manuals and build out a searchable dashboard that will give maintainers instant access to everything from parts lists to data on average repair times.

Medical maintenance experts from U.S. Army Medical Logistics Command's Medical Maintenance Operations Division at Tobyhanna Army Depot, Pennsylvania, use videoconferencing capabilities to provide telemaintenance support remotely to an Army unit in the field. (Courtesy William Wall)

As the Army prepares for an uncertain future, the work being done to modernize medical maintenance operations is a critical part of ensuring overall medical readiness. By embracing new technology, AMLC's MMODs are working to guarantee that no matter how remote the battlefield, the American warfighter will have the support they need.

"We're all in and fully on board to make that leap," McNesby affirmed. "It's our main mission. We're here to support the warfighter above all else."

By C.J. Lovelace

RELATED LINKS:

www.amlc.army.mil/Medical-Maintenance

NEW URL

NEWS

USAMMA cuts ribbon on new medical maintenance facility at Tobyhanna Army Depot

www.army.mil/article/276097

Army employs telemaintenance for remote surgical equipment repair in Iraq

Maj. Gen. James D. Turinetti IV, commanding general of U.S. Army Communications-Electronics Command, observes a telemaintenance support mission while visiting U.S. Army Medical Logistics Command's Medical Maintenance Operations Division in Tracy, California, in January 2026. The mission focused on the repair of a complex C-arm medical imaging device in Iraq. (DoW photos by John O. Johnson)

TRACY, Calif. – U.S. Army Medical Logistics Command recently showcased its telemaintenance capabilities by remotely guiding the repair of a critical imaging device in Iraq, a vital medical device for troops supporting Operation Inherent Resolve.

The successful mission, led from AMLC's Medical Maintenance Operations Division in Tracy, California, or MMOD-CA, highlighted how remote support is becoming a go-to solution for complex sustainment – saving time, reducing costs and keeping personnel out of harm's way.

The device, a C-arm machine, provides real-time X-ray imaging essential for surgical procedures. When the detector on a unit in Iraq malfunctioned, rendering half the screen unreadable, it created a significant readiness issue.

From MMOD-CA, expert technicians Fernando Gonzalez-Rodriguez and Eduardo Barraza-Cardenas used video conferencing to guide the medical maintainers remotely, supporting the intricate repair and calibration procedure over two days in January.

"It was a good example of what we can accomplish using telemaintenance in lieu of sending people downrange," said Ian McNesby, MMOD-CA's chief of operations. "That was our first choice and usually best option, a faster way to get it done if you have a trained tech on the other end."

The alternative was far more complex. Sending a technician to Iraq would have involved recertification training and securing an Iraqi visa, a process that can take up to 60 days.

Instead, the team embraced a technological solution, coordinating shipment of the replacement part direct to the unit, then using a training C-arm, a camera on a tripod and Microsoft Teams to guide the Soldiers through the repair.

A key factor in the mission's success was recent training completed by a biomedical equipment specialist on the other end. McNesby said the Soldier had attended a course on the C-arm at the Tracy facility just a few

(Continued)

(Continued)

months prior to his deployment.

That familiarity proved crucial, especially when the team hit an unexpected snag. After the new detector was installed, the C-arm's memory still displayed an error from the previously failed calibration procedure.

"We walked them through how to reset it, and it cleared the problem," McNesby said, adding that the Soldiers were able to complete the final calibration on their own, restoring the C-arm to full functionality and improving the unit's medical readiness.

MMOD-CA Director Isaac Newman said the seamless repair was a testament to the direct link between remote support and strategic industry partnerships. He noted that the repair was "significantly aided by the fact that the biomedical equipment specialist on the ground had recently received manufacturer-level training" at MMOD-CA.

"This underscores our vision of establishing MMOD-CA as a premier training hub where warfighters and civilian subject-matter experts receive manufacturer-level training side-by-side," Newman said.

He added that this collaborative model is crucial for forging invaluable working relationships between warfighters and MMOD-CA's experienced technicians.

Wes Ladlee, chief of the Maintenance Support Office for AMLC's Medical Maintenance Management Directorate, emphasized the immense time and cost savings.

"It's all about solving problems in the shortest time possible to ensure readiness," said Ladlee, estimating a reduction of about two months compared to deploying a civilian technician.

For Newman, the success is a clear indicator of a broader strategy.

"By fostering both technical expertise and these vital professional bonds, we are enhancing the skills and confidence of our warfighters, ensuring that our forces remain ready and resilient for the future fight," he said, "and proving that there's no distance we can't cover to support the mission."

Operation Inherent Resolve is an established international coalition of forces in the fight against the Islamic State, created at the request of the Iraqi government. The coalition works in partnership with local forces to stabilize the region, providing air support, training and guidance to enable them to secure their own territory.

AMLC is a major subordinate command of the U.S. Army Communications-Electronics Command. AMLC delivers integrated medical logistics that enables Army and Joint Forces readiness from strategic support to the tactical edge.

By C.J. Lovelace

AMLC showcases medical readiness at DoW maintenance symposium

Maj. Gen. James D. Turinetti IV, left, commanding general, U.S. Army Communications-Electronics Command, and Command Sgt. Maj. Jay High, second from left, discuss medical maintenance operations with Staff Sgt. Charles Roberts and Sgt. Kimberli McDonald, of U.S. Army Medical Logistics Command AMLC's Medical Maintenance Operations Division at Hill Air Force Base, Utah, during the 2025 Department of War Maintenance and Logistics Exhibition at the Phoenix Conference Center on Jan. 21, 2026. (U.S. Army photos by Katie Ellis-Warfield)

PHOENIX – In the crucial moments between injury and treatment on the battlefield, the reliability of medical equipment is paramount.

At the 2026 Department of War Maintenance & Logistics Exhibition, U.S. Army Medical Logistics Command offered a compelling look into how it is ensuring every medical device is a lifeline Soldiers can count on.

This year's event, themed "Advancing Readiness to Exploit the Logistics Deterrent Effect," drew over 2,300 professionals from across the military, government and private sectors to the Phoenix Convention Center for the two-day event, held Jan. 21-23.

AMLC, a major subordinate command of U.S. Army Communications-Electronics Command and the Army's Class VIII medical materiel command, showcased its vital role in delivering integrated medical logistics – from stateside sustainment-level divisions to the front lines.

A mission of 'precision and safety'

At the forefront of AMLC's hands-on mission are the skilled technicians of its Medical Maintenance Operations Divisions, or MMODs.

Staff Sgt. Charles Roberts and Sgt. Kimberli McDonald, exhibitors at the event representing MMOD-UT out of Hill Air Force Base, Utah, explained the critical nature of their work.

"Precision and safety in medical device maintenance means that a device is calibrated to a specific standard because it will impact life-saving measures on the battlefield," McDonald said.

Added Roberts, "We develop the expertise in conducting sustainment-level repairs, ensuring every piece of equipment performs according to manufacturer specifications."

The commitment of AMLC's experienced military, civilian and contractor technicians form the bedrock of medical maintenance that supports readiness on the battlefield.

"The work we do is critical because others depend on that accuracy for everything from diagnosis to treatment," Roberts said.

(Continued)

(Continued)

Jorge Magana, center, director of U.S. Army Medical Logistics Command's Medical Maintenance Management Directorate, discusses current Army transformation efforts with Maj. Gen. James D. Turinetti IV, right, commanding general, U.S. Army Communications-Electronics Command, during the 2025 Department of War Maintenance and Logistics Exhibition at Phoenix Conference Center, Jan. 21, 2026. Also pictured is Sgt. Kimberli McDonald, from AMLC's Medical Maintenance Operations Division at Hill Air Force Base, Utah

Modernizing support for the future fight

AMLC is not just maintaining the current force; it is actively shaping the future of medical logistics. The command is leveraging cutting edge technology to anticipate the needs of the Army as it undergoes transformation efforts to become more agile and lethal.

Jorge Magana, director of AMLC's Medical Maintenance Management Directorate, emphasized that the command is aggressively integrating new technology to anticipate the Army's needs as part of the ongoing Medical Logistics in Campaigning, or MiC, efforts.

"AMLC is actively modernizing medical maintenance today by using AI to analyze historical equipment data, allowing us to move from a reactive to a predictive support model and anticipate maintenance requirements before they become a problem," he said.

This proactive posture is exemplified by the Forward Repair Activities–Medical, or FRA-M, program, designed to push expert maintenance closer to the units that need it.

"For my entire military career, effective support always seemed to be somewhere else, far from the point of need," Magana said. "The future of the FRA-M program is about fundamentally changing that reality. We are finally bringing medical maintenance capabilities directly to our Soldiers, closing a gap that has existed for decades."

A strengthened, unified partnership

This transformation is reinforced by a partnership with CECOM's Integrated Logistics Support Center. The recent integration of the medical logistics life cycle management into CECOM has streamlined processes and amplified the importance of the mission.

"Perhaps the most significant outcome of this integration is the powerful advocacy it creates," Magana said. "It's no longer just the medical community making the case for our needs. Now, we have a major command, CECOM, championing the importance of medical logistics and maintenance from within. That unified voice is a game-changer."

From the strategic vision to the expert technicians on the ground, AMLC is ready to meet the demands of a rapidly changing environment.

"We are harnessing technology to respond directly to the needs of the force," Magana said, "working at the maximum speed our resources allow and taking smart risks when necessary to get critical capabilities into the hands of our Soldiers."

By Katie Ellis-Warfield

CECOM Spotlight: MMOD-PA safety officer recognized in January

Michael McHugh, unit safety officer for U.S. Army Medical Logistics Command's Medical Maintenance Operations Division at Tobyhanna, Pennsylvania, earned praise in the CECOM Spotlight for the month of January.

Since October 2023, McHugh has led safety efforts at MMOD-PA – a Tobyhanna Army Depot Safety Star Point – while also serving in the Shipping/Receiving Branch.

"He consistently executes all USO responsibilities – including hazard analyses, safety inspections and coordinate with TYAD – with outstanding diligence and effectiveness," AMLC Safety Manager Wally Edwards wrote in his nomination of McHugh.

"In addition, he proactively enhanced team safety during winter weather events by monitoring conditions, addressing slip hazards and ensuring personnel had clear, safe access to the facility," Edwards wrote.

McHugh has been a member of the team at MMOD-PA for the past six years.

The CECOM Spotlight, a monthly recognition program through the CECOM G-1, provides a platform for team members to acknowledge the efforts and accomplishments of their colleagues.

SOCIAL MEDIA HIGHLIGHTS

AMLC's offsite PT session

Starting the day strong!

Soldiers from AMLC headquarters took their Feb. 13 PT session to a local Frederick gym to build readiness and team cohesion.

Physical fitness is a cornerstone of Army life, ensuring our team is always prepared to meet the demands of our critical medical logistics mission. Great work, everyone!

LANDS' END Outfitters

GET YOUR AMLC & GEMINI BRANDED GEAR AT:

This does not constitute an official endorsement by the U.S. government.

SOCIAL MEDIA HIGHLIGHTS

ROC drill at AMLC

Putting plans into practice!

AMLC headquarters staff conducted a ROC drill Feb. 9 at Fort Detrick, rehearsing how the command would respond to potential real-world scenarios.

A ROC – or Rehearsal of Concept – drill is a military planning method that visually walks through complex operations on a large map or model to identify flaws, test coordination, and improve understanding and staff synchronization before actual execution. It involves leaders physically moving markers to represent forces and actions.

These exercises are crucial for refining our strategies and ensuring seamless delivery of medical logistics to support our teammates and service members worldwide.

SOCIAL MEDIA HIGHLIGHTS

Valentine's Day potluck

Great food and even better company at our AMLC potluck!

Headquarters staff spread the love with a Valentine's Day-themed get-together over lunch on Feb. 12 at Fort Detrick.

It was a wonderful opportunity to reconnect with colleagues, celebrate the team's hard work, and build morale. And of course, everyone walked away with a FULL stomach and some sweet treats!

What do you do?

As AMLC's information security manager, I lead AMLC's CyberOps team. My current focus is aligning AMLC security with the Army's evolving Zero Trust standards. As our digital attack service increases, cybersecurity no longer serves supporting role but a mission essential function. I enjoy collaborating with cross-functional leaders to bridge policy gaps ensuring mission assurance and operational accountability.

What do you enjoy most about your job?

I enjoy most being an "architect of trust" and force multiplier for AMLC. When I see my work transform technical capabilities into strategic advantages that ensure our medical logistics infrastructure remains resilient, it's cool. I take pride in mitigating the unseen risks that threaten our human, physical and logical assets. Ensuring our warfighters stay in the fight because the digital ground they stand on has been secured by my work makes what I do relevant.

How long have you worked here?

I've been working inside the Defense Medical Logistics Center at Fort Detrick for a little over 18 years, including the past two here with AMLC.

MEDLOG all STARS

JOANNE WOODWARD STELLO

Information security/cyber operations lead, AMLC HQ

What's your favorite quote?

My favorite quote is: "You can tell a lot about a person by watching to see if they return the shopping cart."

As my work centers on human nature, I value the concept of framing a mundane chore as a litmus test for integrity. It poses a fundamental question: What do you do when no one is watching and there is nothing to gain?

What do you do outside of work?

I have five sons and six grandchildren, so most of my free time is spent on the sidelines of basketball, baseball, lacrosse and soccer games. When I'm not with my grandkids, I'm hanging out with my husband and dogs, Gracie and Mabel (5-year-old Pug/10-year-old Lab). I also enjoy researching family genealogy, bike riding, writing or resurrecting childhood hobbies (spinning, pottery and baking). Some days, I can just sit all day and binge watch Downton Abbey or Traitors.

If you have an All-Star in YOUR organization, please email us at usarmy.detrick.amlc.mbx.pca@army.mil!

What do you do?

As the management rep and quality assurance manager for the Medical Materiel Readiness Program at Sierra, my responsibilities include overseeing the QA program and the shop library, as well as serving as TMDE coordinator.

What do you do outside of work?

I enjoy 3D printing, laser engraving, camping, and I am an amateur radio operator.

How long have you worked here?

I started working at the Force Projection Directorate, starting under the U.S. Army Medical Materiel Agency, in 2010 at Hill Air Force Base as a contractor before moving to Sierra Army Depot in 2014 as the contract lead. I assumed the management representative position in 2019.

MEDLOG all STARS

MICHAEL DODGE

MMRP QA manager, Force Projection Directorate

What's your favorite quote?

"If you always do what you have always done, you will get what you always got."

What do you enjoy most about your job?

The day-to-day challenges in doing the right thing every time, assisting the younger techs to get the job done right.

If you have an All-Star in YOUR organization, please email us at usarmy.detrick.amlc.mbx.pca@army.mil!

What do you do?

I serve as a management analyst and a BEM (Back-to-Work Management) representative. My primary responsibilities involve advising on and managing personnel actions for our local national workforce, as well as recruitment actions for our Army Civilians and local nationals. Additionally, I guide employees through the reintegration process following medical leave and assist with implementing reasonable accommodations.

What do you enjoy most about your job?

The multicultural environment and the diverse nature of my tasks. I also find it very rewarding to provide hands-on support to both our leadership and our employees every day.

What's your favorite quote?

"The best way to cheer yourself is to try to cheer someone else up."
– Mark Twain

This quote perfectly reflects my personal philosophy. It aligns closely with why I find my work so rewarding – seeing the positive impact of successfully assisting someone brings me genuine joy. Encouragement, kindness and support go a long way for everyone.

MEDLOG all STARS

TERESA KEMMLEIN

Management analyst, S-1/HRD, USAMMC-E

What do you do outside of work?

I enjoy sports, dancing and reading. But my all-time favorite activity is spending time with my family.

How long have you worked here?

I have been working at USAMMC-E since October 2019.

If you have an All-Star in YOUR organization, please email us at usarmy.detrick.amlc.mbx.pca@army.mil!

What do you do?

In my role as resource manager, I am responsible for the total management of operating financials, budget and manpower for USAMMC-K. My primary goal is to integrate these resources to promote maximum efficiency and economy in support of our missions and programs. I also supervise a team of five personnel within my section.

What do you enjoy most about your job?

I find the most satisfaction in knowing that my work directly contributes to the success of USAMMC-K's critical missions. Effectively allocating our financial and personnel resources ensures that we can provide the best possible support and seeing that tangible results are very rewarding.

How long have you worked here?

I have been working at USAMMC-K since July 2023.

MEDLOG all STARS

GIA T. VU

Resource manager, USAMMC-K

What's your favorite quote?

"When everything seems to be going against you, remember that the airplane takes off against the wind, not with it."

– Henry Ford

This quote is my go-to for motivation during tough times. It's a reminder to keep myself pushing forward, especially when it is difficult, because that's often turns a moment of despair into a moment of potential.

What do you do outside of work?

My favorite thing to do outside of work is spend quality time with my daughters. Whether we're reading, playing outdoors or just talking about their day, that's the time I cherish the most. I also have a passion for cooking. I find it's a fantastic and creative way to unwind and bring everyone together.

If you have an All-Star in YOUR organization, please email us at usarmy.detrick.amlc.mbx.pca@army.mil!