ANNISTON ARMY DEPOT

TRACKS

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CLEANING THE ENGINES

Process readies tanks for painting

Safety office: Working to keep employees healthy

By ED WEDGE | Staff writer

Leading the charge, the safety office employs ergonomics to keep the workforce safe.

According to Katie Hawkins, safety specialist, here at Anniston Army Depot, we want you to be comfortable in your job and be able to return to work every day for years to come.

"We can easily replace a tank, but there is only one you, and you are irreplaceable," she said. "Ergonomics will help you with everyday repetitive tasks to keep you from getting hurt."

Ergonomics is a method of looking at ways to make a job less stressful on the body, she explained. Everything from wearing the proper shoes, anti-fatigue matts, braces, supports and various other devices help alleviate stress and pain.

Repeated physical stress and small damage to soft tissue over time can cause or aggravate work-related muscular stress disorders, such as tendinitis, bursitis, and carpal tunnel syndrome.

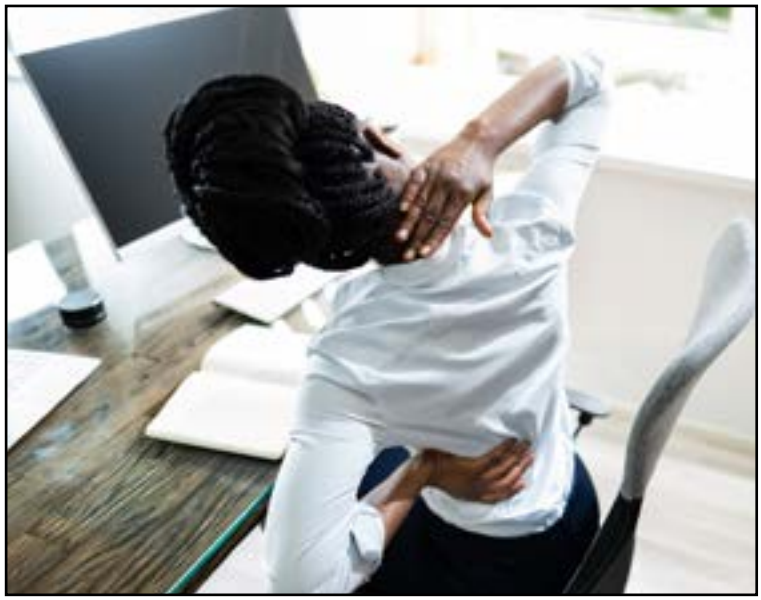
"The expense associated with a poorly designed workplace is considerable," Hawkins added. "Beyond the physical pain and suffering caused by a workplace injury, you also must consider the stress of worrying about medical treatment and your health."

The combined effect of several risk factors at a job site or workstation may increase injury, some of which include heavy lifting, poor back support, loud or constant noise, tight workstations, extreme temperatures, improper lighting, etc.

"Here at the depot, most workforce injuries result from heavy lifting, or straining to perform a task; and repetitive action or doing the same task over and over which stresses muscles and tendons," Hawkins said.

Maintain a neutral posture that aligns your spine and joints in a natural and comfortable position, she said. Neutral posture reduces pressure on your musculoskeletal system and supports the natural curves of your spine.

The safety specialist advises individuals to use the provided machines, tools, equipment, and workstation configuration to reduce



forceful exertion and repetitive motions, i.e., cranes, forklifts, carts, dollies, pallet jacks, etc.

She also recommends using the right tool for the job, placing parts and tools within reach and at waist height to avoid bending, and taking short breaks or, if possible, rotating jobs.

Other preventive measures include wearing personal protective equipment, i.e., safety shoes, goggles, hearing protection, using cushioned floor mats if standing for prolonged periods, exercising, and stretching regularly to prevent muscle and joint damage.

Individuals should report hazards through their chain of command and/or contact the Dear Clinic at (256) 235-7521 or the safety office at (256) 235-7541.

Depot celebrates, shines light on its volunteers

Volunteer Appreciation Week, celebrated 21 to 27 April, is observed annually to recognize the significant contributions made by volunteers who give their time and energy to provide quality programs and services to military families.

We salute the efforts of our volunteers to make a difference in the lives of everyone across our depot community.

TRACKS

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Test Track

Where rubber meets the road, tanks undergo final test

By ED WEDGE | Staff writer

The test track crew road tests the M1A1 Abrams tank, putting it through its paces in a simulated field conditions test.

The tank is run up hill and down, through mud and water, then around a flat track to determine its combat readiness.

Much like a race car qualifying at the Talladega Superspeedway, each tank must negotiate its final endurance test, completing five laps around the test track at 40-plus mph. This, to ensure that each vehicle is fully field worthy and ready for the battlefield before it's released to the customer.

"It's imperative that we hand off a quality product to the Army," said Mark Magouyrk, a heavy equipment mechanic. The depot provides quality and safety in its products through intense mechanical and electrical inspections.

"The most essential part of the road test is safety. It takes 80 hours of training to become qualified to drive a tank on the track, and every piece of safety equipment must be used, including a full-face motorcycle helmet," said Roy Wheeler, heavy equipment mechanic.

"Personal safety is a very high priority here," Magouyrk said. "We use all required personal protective equipment when working on the tank, including safety glasses and double hearing protection when running the engine."

"We run diagnostics on all the systems before any maintenance is done to ensure all repairs are accomplished," said Howard Reid, lead heavy equipment mechanic.

When the vehicle arrives at track, mechanics pull it into the garage and begin the inspection, checking for fuel and hydraulic line leaks. After disconnecting all the hydraulic lines, final drives, and the quick connects, the engine is ready to be pulled out.

As inspections continue, the team runs the engine on the test stand to a prescribed number of RPMs for a specified time to test the engine. While the engine is running, the mechanics perform a diagnostic "health check."

Once that diagnostic test has been completed, the team shuts down the engine and allows it to cool off, then accesses the tank's computer system to determine the useable number of hours remaining on the engine.

After the engine has passed inspection and been "ground hopped," they reinstall the engine pack into the tank.

The heavy equipment mechanics, Reid, Wheeler and Magouyrk, ready the tank hull to accept the engine by setting up the connections and ensuring the final drives are locked and prepared to receive the engine.

"After successful inspections, we move the tank from building 143 to the turret shop where the turret and the hull are matched, mated, and inspected," said Jason Noell, lead heavy equipment mechanic.

He added that after the turret is matched and bolted to the hull, all the hydraulic and electrical lines must be connected and tested.

"This lengthy process requires a great deal of diligence and attention to detail to include checking the ammo compartments, the main gun, and the turret itself and ensuring everything works properly from the global positioning system, or GPS, to the optics that do the targeting, ensuring the sights are all lined up and bore-sighted and everything works well together," he said.

The shop is more about inspection than installation.

"They ensure all components work correctly and there are no leaks in any systems," Noell said.

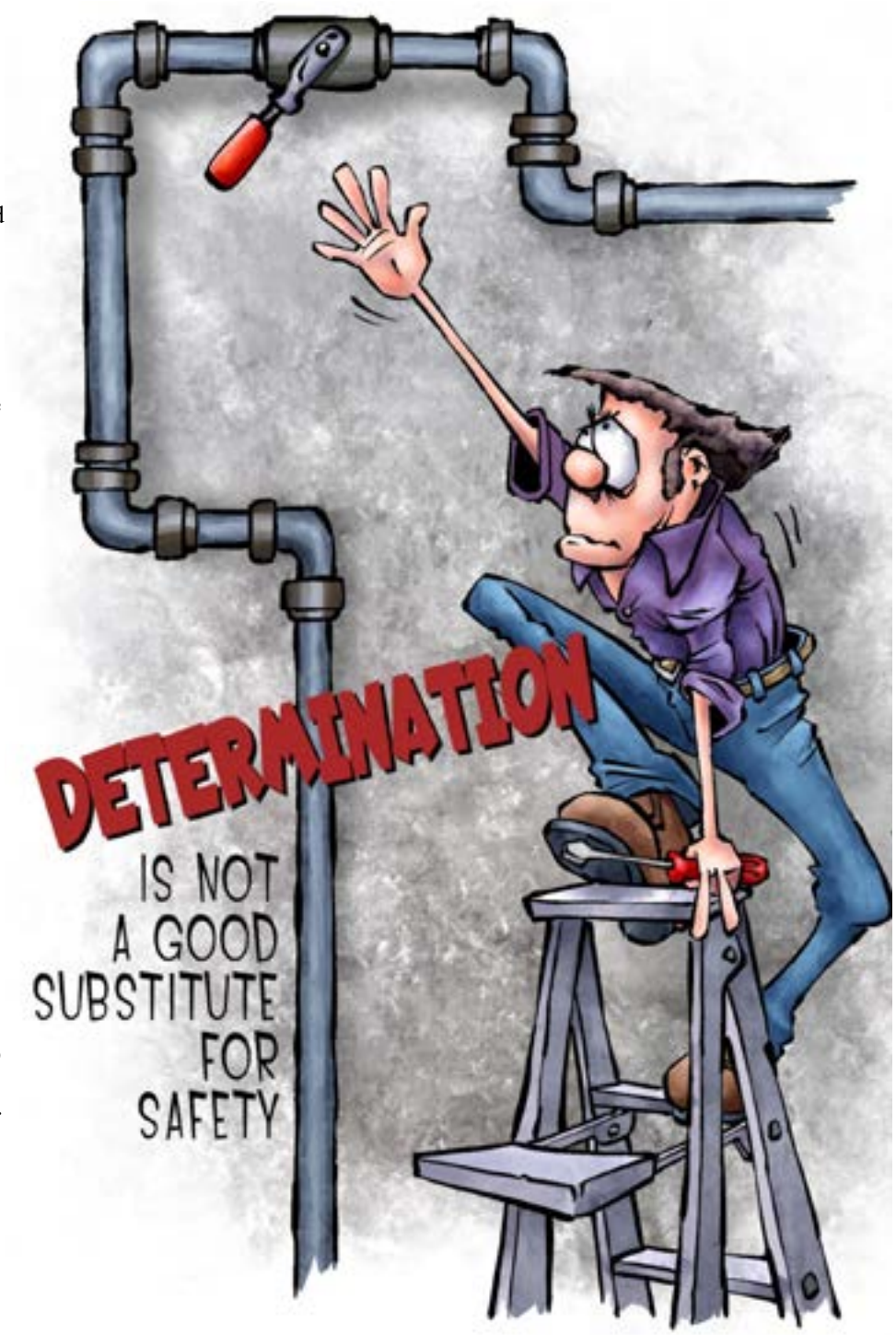
After each of the diagnostic tests and repairs have been completed, the tank is taken to the paint shop, where it will be painted camouflage or solid color design for the requested country purchasing these tanks.

U.S. Army Photo by Mark Cleghorn

To ensure its combat worthiness, the M1A1 Abrams tank is run through a series of tests, i.e., negotiating hills, mud, water and a flat track before its released to the customer.

Ladder Safety

By ED WEDGE | Staff writer



Ladders are an important piece of equipment for a large part of the workforce here at Anniston Army Depot.

It's important to ensure that all ladders are safe and compliant before each use. To ensure that employees have the proper means of accessing or working on any area above floor level, ladder inspections are required.

Ladder inspections help identify equipment that is unsafe or non-compliant. If either of these criteria are present, the ladder must be removed from service until it's repaired or replaced.

The Occupational Safety and Health Administration 29 Code of Federal Regulations 1910.23 – Ladders, identifies ladder regulatory compliance; and ANAD Regulation 385-9 - Ladder Safety Program identifies the responsibilities and requirements for ladders on the installation.

While using any ladder, always keep your body positioned inside the side rails of the ladder. Use the "belt buckle rule," keep your body and belt buckle or belly button in between the side rails. Never lean outside the side rails, lean backwards, or overreach for an object. Never stand on the top two steps of a stepladder. Never use the top three rungs of a portable ladder. Never use the cross bracing on the rear side of a ladder for climbing. Always face the ladder and maintain three points of contact while climbing or descending a ladder. Inspect the area a ladder will be placed prior to work to ensure that the area is clear and has a level and stable surface.

Ladders placed in locations such as doorways where they can be displaced by other activities or traffic must be guarded by a temporary barricade, such as a row of traffic cones or caution tape, to keep the activities or traffic away from the ladder.

Selecting the right ladder for each job is important. The ladder must meet regulatory requirements and those requirements must also align with the job task. The ladder needs to be marked and clearly visible to the user with a load rating, identifying the maximum weight it can handle.

Workers must consider their body weight in addition to any tools, equipment, and material they may be carrying to calculate the total weight to determine whether the maximum load rating for the ladder is sufficient and is of the appropriate length for the job task. If a worker is using the ladder for accessing an upper-level surface (roofs, balconies, platforms etc.) and they will be stepping off the ladder onto that upper level, the ladder length must extend three feet beyond the point of access.

Workers must also ensure that mobile ladder stands and platforms can support at least four times the maximum intended load. Additionally, wheels or casters under load can support the proportional share of four times the maximum intended load, plus their proportional share of the unit's weight. If the job task has you potentially working under electrical hazard conditions, the ladder must be manufactured with non-conductive (non-metal) side rails.

At the depot, ladders must be inspected prior to use with a formal inspection completed annually.

Each June, all portable ladders, stepladders, work platforms, scaffolds, step stools, mobile ladder stands, etc. must be inventoried using ANAD Form 385-16-E, inspected using ANAD Form 385-17-E, and these documents must be filed in the Go-To-Resource book for each cost center. Fixed ladders are inspected by a contracted service, but you must still visually inspect fixed ladders before each use.

Ladders must always be maintained in good condition. This may require properly storing the ladder when not in use.

Inspection criteria includes, but is not limited to, identifying any loose steps or rungs, loose screws, or bolts, cracked steps or rungs, damaged side rail bases that may cause the ladder to wobble or to be unsteady, broken hinges or spreaders, and corroded metal parts.

Ladder must be clearly labeled, identifying the maximum capacity and when the next periodic inspection is due. If any defects are found during the inspection, the ladder must be removed from service, reported to your supervisor, and tagged using the appropriate red tag to prevent others from using the ladder until it is repaired or replaced.

Please contact the Safety Office for more information at (256) 235-7541.

Tanks undergo series of cleaning, finishing, painting

By ED WEDGE | Staff writer

U.S. Army Photo by ED WEDGE

Donna Allen secures the safety harness and masks off the tank hull before she begins the painting process.

During the overhauling process at Anniston Army Depot, the tank navigates through the cleaning department several times.

At each turn, the tank undergoes a specific process, beginning with the addition of oil and grease to the surfaces, then cleaning and sandblasting.

The cleaning department is a phase of operations, which includes cleaning, finishing, and painting. All components are cleaned and stripped of grease and paint. Utilizing phosphates, zinc phosphates, chromium, and allodyne to prevent aluminum and other metals from corroding.

Before sandblasting and painting the tank, crews tape off anything that doesn't need to be sanded or painted. They sandblast using aluminum oxide, plastic beads, glass beads, and steel shots, depending upon the thickness of the part and the application.

Cleaning old paint and other substances off the tank is crucial to overhauling and inspection. It's easier for employees to locate defects and ensure the vehicle meets specifications if the metal is clean.

So, how does a 70-ton M1A1 Abrams tank hull get cleaned?

The tank cleaning process begins at the spinner hanger. These two giant buildings are equipped to hoist the hulls vertically and enclose them in huge blast cabinets. Once in the blast cabinet, the hull spins around under the pressure of multiple sandblast protective casings, spraying stainless steel beads, known as shot, at 12,000 revolutions per minute. This barrage effectively strips the hull down to the bare metal. This rotation process means that even highly complex work pieces with hard-to-reach surfaces are safely and accurately treated.

After the paint has been stripped, the crew sends the hull off to be welded and cleaned again before a finishing blast. Then, the paint shop masks off areas not being painted and applies a solid color or camo pattern depending on the customer's preference.

After this process, the hull can be presented to the inspection crew for the next overhaul phase.

Johnnie Whitehead

Directorate of Emergency Services gets new deputy director

By ED WEDGE | Staff writer

Anniston Army Depot is proud to announce the selection of Johnnie Whitehead as its new deputy director, directorate of emergency services.

A 7-year employee of the depot and a retired 32-year veteran of the military services, Whitehead culminated his Army career as an operations sergeant major.

When he joined the military, he was looking for a challenge and the Army "fit the bill."

Prior to his becoming deputy director, he was the anti-terrorism officer where he drew from his military experience, including theater security operations all over the world.

"I enjoy interacting with the different directorates and the employees at Anniston Army Depot," Whitehead said. "I ensure depot employees are provided a safe and secure work environment."

During his spare time, he enjoys archery and golf.

Johnnie Whitehead

Leadership process enables productivity

By ED WEDGE | Staff writer

Process-based leadership gives employees power like never before.

In keeping pace with the Army, Patricia Boothe, logistics management specialist, is actively promoting this process here at Anniston Army Depot.

Process-based leadership, or PBL is a way of managing by process rather than by personality, she said.

A supervisor shouldn't have to hover over your shoulder, micromanage or try to persuade you to get some work done, Boothe said. PBL provides all the information workers need to complete their tasks using tier boards or information centers.

According to Boothe, the tier boards were created to represent PBL visually and have been set up at work centers for the past four months.

The four different tiers include the shop floor (tier 1), branch chiefs and division chiefs (tier 2), directors and office chiefs (tier 3), and the command leadership (tier 4).

The boards are hubs where employees on the shop floor can communicate their ideas up to command level through a process of low touch, high function. These boards include pass-downs, rosters, and continuous improvement ideas. They capture quality, safety, delivery, and engagement.

"Before the organic industrial base leadership program, it took a lot of work for the people at the shop floor level to communicate with the command level and vice versa," Boothe said. "Now, it is so much easier. The process is accountability through communications, clarity, connectivity, and consistency."

The 6-minute huddle has been going on for years and has always been clear, connected, and consistent, she said. But now, through PBL, information and job status can be communicated up and down the command structure through the tier board process.

"We do not have to rely on a person," Boothe said. "We rely on a process."

U.S. Army Photo by ED WEDGE

Joseph Cash, division chief, reciprocating branch, updates the PBL tier board and readies to brief his team.

Alcohol Awareness Month

By MATHETTA L. HOWARD | ASAP Prevention Coordinator

April is Alcohol Awareness Month. The campaign is designed to bring awareness of alcohol misuse. It is a great opportunity to increase your knowledge about alcohol use, alcohol use disorder, associated risks and impacts on health and well-being.

According to the National Institute of Alcohol Abuse and Alcoholism, each year 140,000 people die from alcohol misuse, making it a leading cause of preventable deaths. Alcohol misuse can cause long-term problems that occur after only one drinking episode.

The Centers for Disease Control and Prevention reports that men are more likely than women to drink excessively, thus increasing their risk for alcohol-related hospitalizations, aggression, and certain cancers. Excessive alcohol use affects women differently than men due to their biological differences that allow women to absorb more alcohol and take longer to metabolize it. The risk of alcohol-related liver diseases is higher for women than men, and even low levels of alcohol consumption are associated with breast cancer. Alcohol is a contributing factor in sexual violence for both men and women.

Underage drinking also increases risk for youth. In the 2021 Youth Risk Behavior Survey, 23% of high school students reported drinking alcohol, and almost 20% reported driving after drinking or riding with a driver who had been drinking alcohol. Youth who use alcohol are more likely to experience problems at school, social problems, high-risk sexual activity, and disruption to normal growth and development.

There is always a level of risk associated with alcohol use, but risk can be mitigated by understanding how biology and choices interact to create risk and learning about factors that influence choices.

To learn more, contact your local Army Substance Abuse Program staff at (520) 669-6801.

Child Development Center - A hunting we will go!

By ED WEDGE | Staff writer








U.S. Army Photos by ED WEDGE

Thursday, March 28 – The Child Development Center held its annual egg hunt for Amber Howell's preschool and Sara Beddingfield's toddler classes. "Everyone had a great time," said Beddingfield.




Employee Spotlight

U.S. Army Photo by ED WEDGE

LYNN MITCHELL - INDUSTRIAL HYGIENE SPECIALIST

By ED WEDGE | Staff writer

Lynn Mitchell, an industrial hygiene specialist, has been an employee with Anniston Army Depot for five years.

Her goals for the year are to "investigate and impact others, helping them stay safe and healthy, establish a fully staffed shop and a balanced workload."

An avid runner, she says her "hero is a friend that runs ultra-marathons; she perseveres."

"I'm also very active. I run, do cardio, and weight training," Mitchell says. "My dream vacation would be to hike with my family at Mt. Zion National Park."

During her spare time, she enjoys attending her children's various school and sporting events since they are very active.

Mitchell spends the remainder of the time relaxing with friends and family, exercising, or reading.

Her favorite Bible verse that gets her through each day is: "*Trust in the Lord with all thine heart; and lean not unto thine own understanding." Proverbs 3:5.*