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Shrinking stockpile

Missile stocks depleted during tension with Iran **Page 2**



Army soldiers check and service a Terminal High Altitude Area Defense missile system in Texas last year.

JOSEFINA GARCIA/U.S. Army

COVER STORY

US used 14% of THAADs during Iran crisis

Report says it could take 3 to 8 years to replenish stocks of air defense missiles

By LARA KORTE
Stars and Stripes

It could take three to eight years for the U.S. to replenish its stockpile of high-altitude missile interceptors after the military launched nearly 14% of its arsenal during its June conflict with Iran, according to a new report.

The analysis, conducted by researchers at the Jewish Institute for National Security of America, found that interceptors fired by the United States' Terminal High Altitude Area Defense systems accounted for nearly half of all interceptors used to protect Israel from Iran's medium-range ballistic missiles during the 12-day bombardment.

While the THAADs — along with Israel's Arrow-2 and Arrow-3 interceptors — successfully destroyed 201 of Iran's 574 missiles, the rapid depletion raises concerns about capabilities in future conflicts, said Ari Cicurel, author of the report.

"It sent a clear signal to Iran, to Russia, to China, that we're willing to use our military assets in defense of our closest partner in the Middle East and to help it defend itself and defeat attacks," said Cicurel, who is JINSA's associate director of foreign policy. "But it also means that we need to rapidly replenish our stockpiles, and not just go back to baseline levels."

President Donald Trump has repeatedly expressed a desire to avoid more long, drawn-out conflicts in the Middle East.

But decisions to target Iranian nuclear facilities in June and Houthi rebels in Yemen earlier this year have raised concerns among defense analysts about readiness in other parts of the world, particularly the Asia-Pacific region.

The U.S. fired 92 THAAD interceptors during the conflict, Cicurel's research shows, cutting into its total estimated supply of about 632.

THAAD interceptors are produced by Lockheed Martin and cost about



A Terminal High Altitude Area Defense system stands ready to launch missiles.

\$12.7 million apiece, according to recent budget estimates from the Missile Defense Agency.

The U.S. acquired 11 interceptors in 2024 and is scheduled to receive 12 more by the end of the year. Between 25 and 37 additional interceptors are expected by the end of fiscal year 2026, but replenishing the stockpile could still take three to eight years, according to JINSA.

Other experts say the recent use of THAAD interceptors in Israel could

prompt Congress to spend additional funds to supplement the shortfall.

The report also found that the U.S. used roughly 30 Patriot interceptors defending Iran's attacks against Al Udeid Air Base in Qatar. While Patriot missiles are cheaper and faster to produce, they don't offer the same theater-level defense that THAADs do, Cicurel said.

Adding to Pentagon concerns, Iran's hit rate appeared to increase during periods when THAADs were the pri-



Missile Defense Agency

A THAAD launcher fires an interceptor missile during a flight test.

mary means of deterrence, the report said, suggesting potential system limitations during sustained attacks.

Video of the interceptions analyzed by JINSA suggests that during periods in which THAADs represented more than 60% of interceptors used, Iran increased its hit rate by 1% to 4%.

"As interception systems are pushed to their limits, even minor inefficiencies or delays can have significant consequences," the report said.

Still, Cicurel noted that the defense was still highly successful. Of the roughly 258 attempts to intercept Iran's missiles, only about 10% failed, with 57 striking populated areas. A majority of Iran's 316 fired missiles were allowed to strike unpopulated areas, according to JINSA's analysis.

The THAAD production rate means the U.S. may have to choose between shoring up its own arsenal and fulfilling foreign deliveries, Cicurel said. Those include a \$15 billion deal with Saudi Arabia to send over seven THAAD batteries and 360 interceptors.

Qatar also recently signed a \$42 billion defense deal with the U.S. that includes THAAD systems.

Lockheed Martin last month reported an 11% increase in sales during the second quarter in the division that produces THAAD and Patriot missiles. The Wall Street Journal recently reported. The defense contractor added that it expects backlogged weapons order to reach record territory this year, the Journal said.

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MILITARY

Army aims to swat down drone swarms

New \$43M contract builds on vision for microwave weapons to thwart attacks

By JOHN VANDIVER
Stars and Stripes

A recently awarded Army contract aims to provide more weapons that use high-powered microwaves to help soldiers take down drone swarms in one swoop.

Los Angeles-based technology company Epirus will develop a microwave platform that is expected to more than double the range and power of a similar system currently being experimented with, the company said in a statement last month.

Microwave technology that the company pioneered can deliver a pulse to zap a drone's electronics in midair. The new \$43.5 million deal with the Army is directed toward work on a second generation of the company's microwave platform.

"Drones are everywhere," Epirus CEO Andy Lowery said in the July 17 statement. "We've seen drone incursions over U.S. bases, incursions over our southern border. And swarm attacks are defining overseas conflicts."

The first microwave platform produced by the company has been "put through the wringer" and emerged from testing with favorable outcomes, Lowery added.

In May, the Army conducted a live-fire test of the Epirus system during an exercise in the Philippines.

"We were able to demonstrate that we can successfully defeat drone swarms in a tropical environment," Capt. Bray McCollum said in an Army statement at the time.

The Navy and Marine Corps also are carrying out similar tests.

There has been growing buzz in the military about the potential for microwave technology to deal with the drone threat. While such aircraft are easily and cheaply mass-produced, taking them down can be expensive.

U.S. service members have an array of tools to deal with drones, including electronic jamming technology and



BRANDON RICKERT/U.S. Army

U.S. soldiers test microwave counter-drone devices on April 30, during an exercise at Naval Station Leovigildo Gantioqui, Philippines. The system's creator, Epirus, signed a \$43.5 million deal with the Army to develop a second-generation version expected to more than double the range, according to a July statement.

"We've seen drone incursions over U.S. bases, incursions over our southern border. And swarm attacks are defining overseas conflicts."

Andy Lowery
Epirus CEO

expensive precision munitions fired directly at targets.

The advantage of Epirus' approach, the company says, is that it costs pennies per drone kill. Also, a soldier can use the system to take down an entire swarm at once rather than target drones individually.

It's unclear when the technology could be fully integrated into the military's counter-drone arsenal. However, despite its promise, it's still unlikely

to be a cure-all, according to analysts.

During the Russia-Ukraine war, drone use has been constantly evolving as both sides learn and adopt countermeasures. For example, as jamming capabilities developed, tethered drones invulnerable to electronic attack were deployed as a workaround.

Microwave pulses could also be effective against tethered drones, since the pulse waves target the onboard electronics regardless of how the drone

is controlled.

But just as free-flying drones also have become increasingly hardened against electronic jamming, adversaries would be expected to develop countermeasures to deal with the microwave threat, such as hardening internal electronics.

High-powered microwaves are "not a silver bullet," Neil Hart, a military analyst with the Australian Strategic Policy Institute, wrote in May.

"(Microwave anti-drone weaponry) must be integrated into a layered approach that combines kinetic, electronic warfare and directed energy systems to maximize the adaptability of defenses against evolving threats."

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MILITARY

Cavazos officially reverts to Fort Hood

Army post renamed to honor WWI officer

By ROSE L. THAYER

Stars and Stripes

FORT HOOD, Texas — The Army post in Killeen reverted to the name Fort Hood in a brief ceremony on July 28, ending a two-year stint as Fort Cavazos.

Col. Mark McClellan and Command Sgt. Maj. Loyd Rhoades, the commander and senior noncommissioned officer of the base's garrison command, carefully rolled up a flag bearing the name Cavazos and covered it in a long, slender bag. Then, the team unfurled the familiar flag of Fort Hood, which took its place alongside the American flag in a color guard formation outside of III Corps Headquarters.

Mitzi Huffman, a former Air Force captain, sat in the front row of the ceremony, occasionally wiping a tear from her face as the base was officially redesignated to honor her father, Col. Robert B. Hood, a veteran of World War I and recipient of the Distinguished Service Cross.

"In many ways, Col. Hood represents the ideal citizen soldier, a man who rose to the occasion when his nation needed him most and continued to give back long after the fighting had ceased," Lt. Gen. Kevin Admiral, commander of III Corps and Fort Hood, said in a brief speech to mark the occasion. "In recognition of his service, Col. Hood's name will live on as generations of soldiers who've served and will serve here learn about his career and the impact he had on our Army."

The three-star general stood at a podium alongside a large, framed portrait of Hood, who died at age 73 in 1964, three years after his retirement from the Army.

Huffman, who did not speak at the ceremony, said in a statement released by Fort Hood that much of her father's life was in selfless service to his country and his family.

"I tell you true, my dad would say the name on that gate does not ever define what that fort's legacy is," she said. "That fort is the backbone of the Army, and the Army code is instilled in every soldier that passes through that gate."



PHOTOS BY ROSE L. THAYER/Stars and Stripes

A portrait of Col. Robert B. Hood is displayed during a July 28 ceremony to rename an Army base in Killeen, Texas, in his honor. Before being renamed Fort Cavazos, the post had been named Fort Hood after a Confederate officer.

The July 28 ceremony returned the name Hood to the base after President Donald Trump announced last month that all nine Army bases renamed to remove homage to Confederate-linked generals would return. However, federal law now bars the use of those Confederate names, so each of the bases has returned to their original name but to honor a different person.

When established in 1942, then-Camp Hood was named to honor John Bell Hood, who led a Texas unit against Union forces in the Civil War. Today, the 280,000-acre post is home to roughly 38,000 service members.

A ceremony in the very same location two years ago removed that name and the base came to honor Gen. Richard Cavazos, a Texan, former III Corps commander and Medal of Honor recipient. For the two years it bore his name, it was the only Army base named for a Hispanic American.

Officials at the Texas post began using Fort Hood again immediately after Trump made the announcement, and many signs online and throughout



Lt. Gen. Kevin Admiral, commander of III Corps and Fort Hood, shakes hands with Mitzi Huffman following a ceremony July 28 to mark the renaming of the Texas Army base to honor Huffman's father, Col. Robert B. Hood.

the base have already been updated.

Admiral used his remarks to describe Hood's rise from Wellington, Kan., to become a decorated Army officer. Hood commissioned into the Army in August 1917, less than a year before III Corps was established, and soon became one of the first to serve in what is known as the "Phantom

Corps."

He deployed to France with Echo Battery of the 12th Field Artillery Regiment of the 2nd Infantry Division, and on Sept. 12, 1918, then-Capt. Hood directed his battery while under enemy fire at Thiaucourt, France, displaying exceptional leadership and bravery on the battlefield.

After losing his initial gun crews to German artillery and machine-gun fire, Hood reorganized his unit and restored its combat capability, which earned him the nation's second-highest military honor, the Distinguished Service Cross.

"Col. Robert B. Hood's life reminds us that while not every hero becomes a household name, their legacy can be immortalized through the values they lived and the lives that they touched," Admiral said. "As we reflect on his contributions, we honor a leader who exemplified the very best of American military tradition."

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MILITARY

Vets struggle to get discharge upgrades

Review boards were told to give liberal consideration to victims of sex assault, PTSD

By LARA KORTE
Stars and Stripes

The military services are inconsistently weighing discharge upgrade appeals from veterans whose experience with mental health issues or sexual assault may have contributed to their exit from the military, a new report has found.

Pentagon directives issued in 2014 and 2017 instructed review boards to give liberal consideration to applicants who were sexual assault victims or who have conditions such as post-traumatic stress disorder.

But that guidance isn't being followed regularly within the services, the Government Accountability Office said in the report on changes since the directives.

The boards decide whether to apply such consideration to discharge appeals on a case-by-case basis, according to the GAO. Between 2018 and March 2024, they did so for more than half of all applications, or about 21,000 cases.

In those cases where sexual assault or mental health conditions were considered, the majority had their requests for upgrades either denied or approved only to a lesser degree than the veteran was seeking, according to the report.

The Air Force Discharge Review Board had the lowest rate of full approval, at 8%. It was followed by the Air Force Board for Correction of Military Records at 10%; the Board for Correction of Naval Records at 13%; the Army Board for Correction of Military Records at 26%; the Naval Discharge Review Board at 27%; and the Army Discharge Review Board at 29%.

"While the adjudication process may appear relatively straightforward, officials from each board told us that every case is unique and that case reviews can be lengthy and complex," the GAO wrote in its report.

In 2017, an expansion of the Pentagon directive provided guidance on how to apply the standards more fairly and consistently.

Review boards were instructed to consider whether veterans had a condition or experience that may excuse or mitigate the discharge, whether the condition occurred during military service, and whether it excuses or outweighs the discharge.

In addition to the uneven handling, the boards also inconsistently explained how they applied the guidance in their decisions, and the Pentagon failed to post nearly half of its case decisions to its online database as is



ROBERT H. REID/Stars and Stripes

Military discharge review boards are not consistently following a directive concerning appeals from veterans who experienced such things as post-traumatic stress disorder or sexual assault.

generally required, the GAO report said.

Veterans who separated from the military under other than honorable conditions can't access certain benefits and may have trouble getting jobs.

A dishonorable discharge or dismissal is reserved for those convicted of felonies or military offenses requiring severe punishment.

But service members can also be discharged for behavior that constitutes a significant departure from what is

considered acceptable conduct or for bad conduct that doesn't meet the threshold for severe punishment.

The liberal consideration for discharge reviews stemmed from a lawsuit filed in 2014 by Vietnam veterans and three veterans organizations.

The complaint against the Army, Navy and Air Force said that because PTSD was not recognized as a serious condition at the time of the separations, veterans received other-than-honorable discharges.

Following the lawsuit, then-Defense Secretary Chuck Hagel directed review boards to give liberal consideration to discharge upgrade applications from veterans who documented one or more PTSD symptoms or conditions.

The subsequent expansion of that directive included considerations for applicants who had experienced sexual assault or harassment.

Among the nine recommendations in the report is one that the Defense Department examine how its guidance is applied. Others call on the agency to require the boards to share estimates about time frames and improve access to its online reading room.

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Navy seeks ideas to kickstart sea drone production

By JOHN VANDIVER
Stars and Stripes

The U.S. Navy said recently that it wants new ideas from industry on how it can ramp up production of unmanned attack vessels, marking the latest push by the service to incorporate more sea drones into the fleet.

The Navy issued a solicitation for companies to submit proposals for an array of modular sea drones that leverage cutting-edge technology and can counter evolving threats.

Proposed solutions will be "swiftly" prototyped, the Navy said. The aim is for the sea drones to "seamlessly maneuver with other Navy surface vessels or operate independently."

The Navy is seeking three unmanned systems with varying capabilities,

payloads and ranges, but did not specify a timeline for deployment.

Drone warfare has featured prominently in the Russia-Ukraine war, which the Pentagon has studied closely for lessons from the ongoing conflict.

While most of the fighting has involved ground forces and their deployment of drones to take out opposing troop formations and combat vehicles, Ukraine also has used unmanned systems at sea.

At the start of the full-scale war in 2022, Ukraine possessed only a small navy. But the country's creative use of sea drones enabled Kyiv to destroy numerous Russian warships and force the Kremlin to pull back its naval position in the Black Sea.

The approach has highlighted the



TYLER FRASER/U.S. Navy

The Navy sea drone Nomad transits the Pacific Ocean to participate in the Rim of the Pacific exercise in 2022.

risks unmanned systems pose to larger navies. But it also has put a spotlight on how such systems could help the U.S. Navy better counter China's fast-growing fleet in the Asia-Pacific region.

"There is a mismatch between the

U.S. Navy force structure and the requirements posed by (China's) posturing," stated a July 17 report by the Rand Corp., which asserted that the Navy lacks sufficient ships to meet its global security commitments.

To address its unmanned vessel needs, the Navy should use the domestic industrial base "to the extent that it can," but also consider tapping into the ship-construction capability of countries such as South Korea, Japan and Germany.

"If the U.S. industrial base does not support the requirement, there are options with its partners and allies," the report said.

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MILITARY

Study: US falling behind Russia, China on AI

Troops need backup on the information battlefield, Rand finds

By JOHN VANDIVER
Stars and Stripes

U.S. troops need more artificial intelligence support to challenge Russia and China on the information battlefield, where those two adversaries have American forces outgunned, according to a new Pentagon-commissioned report.

Machine learning tools can give a boost to military teams carrying out influence operations, in which American foes are now engaged “at a scale that (the Defense Department) cannot match,” the Rand Corp. report released July 22 said.

The United States risks falling farther behind if it doesn’t adopt AI technology in large volumes, the study said.

“Adversaries are rapidly adopting and applying generative AI capabilities for many functions, including influence,” Rand said.

The Pentagon should prioritize AI investments for information operations and seek out related AI training opportunities for troops involved in the mission, the report contends.

Across the military, commands are experimenting with AI in search of an edge in making faster decisions. The technology is expected to transform



DEMETRIUS MUNNERLYN/U.S. Marine Corps

Army Sgt. Lisa Swan, left, and Marine Corps Sgt. Joseph Szombathelyi drop leaflets from a KC-130 Super Hercules over Afghanistan during the war.

everything from how high-level headquarters command forces to how infantrymen on the front lines make decisions on the fly.

For years, the U.S. military has been involved in influence operations around the world. Such missions can take many forms, ranging from dropping leaflets to alert a local population in a war zone, to identifying false narratives pushed by adversaries or seeking to undermine popular support for an enemy force.

Given how fast information moves, the Pentagon needs to be able to detect adversaries’ action “in the media ecosystem” and move quickly to discredit them before their preferred

narratives take hold, Rand said.

“DoD experts framed this challenge with the example of the prevalence of false civilian death tolls reported by Hamas that persist despite authoritative sources having refuted them,” the report authors said.

Generative AI can “balance the battlefield” by allowing fewer U.S. personnel to produce more content faster, the report states.

Army special operations teams are experimenting with such tools. For example, a system known as Ghost Machine has already been developed. Among other capabilities, it can clone voices to convey desired messages, Rand said.

“A team may want to mimic an enemy commander as part of an effort to get them to surrender,” the report gave as an example.

AI tools that enable quick production of graphics, videos and other material with individually tailored messages could help troops hit their target audiences with greater precision, Rand said.

In one scenario, researchers tested how a planning team could refine messages to resonate with individual terrorists as part of a deradicalization effort.

In a battlefield scenario, AI also would enable military psyop teams embedded with conventional forces to disseminate messages faster, Rand said.

Still, the U.S. should be cautious about overdoing it. Adopting the preferred tactic of the Russians and Chinese of “flooding the zone” with their propaganda carries risks, the report noted.

“They are going high volume low effort; we are throwing a specific dart,” one influence operator told Rand.

The adversaries’ approach is arguably less effective because the volume of content can dampen the credibility of the message. American operators will need to find the sweet spot to win on the information battlefield, the report said.

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Army’s 250th anniversary celebration in DC cost \$30M

By MATTHEW ADAMS
Stars and Stripes

WASHINGTON — The Army’s parade and festival in June to celebrate the 250th anniversary of the service in the nation’s capital cost \$30 million, a spokesman said last month.

“We conducted the parade for a very specific reason because we saw it as our opportunity to introduce or to continue introducing America’s Army to the American people. We wanted Americans to feel connected to their Army,” service spokesman Steve Warren told reporters at the Pentagon.

For the parade, the Army had about

6,700 troops from every service division, 150 vehicles and more than 50 aircraft. The cost for the parade and other events was estimated to be between \$25 and \$45 million, including an estimated \$16 million to repair streets and other damage to the city following the event, NBC News reported at the time.

The Army took preparations to protect roads, including placing steel plates on the parade route where tanks would have to turn sharply and fitting vehicles with new track pads.

The parade caused minimal damage to streets in Washington, Warren said. The service spent \$3 million on steel plates.

The plates had to be secured with six-inch spikes into the asphalt that left holes in the ground that the Army refilled.

The only additional damage Warren said was a curb that was crushed by a tank near the staging area where vehicles were kept. He did not have a cost for the curb.

“The only check that I’m aware of that we had to write was to repair that curb,” he added.

The Army’s anniversary celebration June 14 was the same day as President Donald Trump’s 79th birthday. Estimates showed about 198,000 people passed through metal detectors to attend the

events, according to Secret Service data. But because there were separate checkpoints for the festival and the parade, it is not clear if people who attended both were counted twice. Leading up to the event, the Army estimated 200,000 would attend.

Though the service does not know how many people decided to join the Army because of the celebration, the service has seen an increase in website traffic and social media performance since the parade, Warren said.

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MILITARY

Bill aims to boost research on low-level blasts

Issues resulting from firing weapons would be closely tracked

By LINDA F. HERSEY
Stars and Stripes

WASHINGTON — Brain injuries and mental health problems diagnosed in veterans exposed to repeated low-level blasts from firing their own weapons would be closely tracked and studied under legislation sponsored by Sen. Jerry Moran, R-Kan., who is chairman of the Senate Veterans' Affairs Committee.

The Precision Brain Health Research Act aims to expand knowledge on potential links between frequent low-level blasts and the risks of mental health problems, cognitive delays and suicide among veterans, according to the legislation. It would authorize studies on treatments within the Department of Veterans Affairs that are yielding positive outcomes.



Ryan Larkin

Low-level blasts are generated from firing heavy weapons systems and detonating explosives in combat and training, according to the Defense Department. But the military's understanding about the full impact on service members and veterans is still "emerging" as research is conducted, the Defense Department said.

The bill's supporters contend the legislation is necessary because most studies have focused on high-impact blasts, such as explosions from roadside bombs. But there is far less information about potential health risks of low-level blasts from repeatedly firing weapons or working in areas where there is indirect weapons fire, according to lawmakers.

"We have a duty to expand our understanding of the impact these blasts have on mental health, and to protect the long-term health and well-being of our military community," said Sen. Angus King, I-Maine, a member of the Senate Veterans' Affairs Committee and co-sponsor of the bill.

The legislation would direct the



MATTHEW CONNOR/U.S. Army

Soldiers with the 10th Mountain Division fire a M198 Howitzers for the National Salute during the Mountain Fest 2025 in June. Firing of many weapons generates low-level blasts that can cause problems later.

Defense Department and the VA to share data on low-level blast exposures to further research and improve treatment.

But it is common for service members who have had low-level blast exposures not to have an immediate diagnosable injury, according to the Defense Department. Health problems may develop over time.

That was the case for Ryan Larkin, who served as a Navy SEAL from 2006 to 2016.

"My son was not the same guy when he came home from the military," said Frank Larkin, of Maryland, whose 29-year-old son died by suicide in 2017. "The bottom line is that the military has not put a priority on looking into this. I am driven to get some results on behalf of the men and women who've served this nation and now are being left behind."

Ryan underwent conventional brain scans after he began to experience mental health problems, Frank Larkin said. There were no signs of traumatic brain injury.

But a post-mortem study of Ryan Larkin's brain tissue showed extensive microscopic scarring. Doctors connected his undiagnosed brain injury to

"overpressure exposure to explosives and weapons systems."

Frank Larkin had donated his son's brain for medical research at Uniformed Services University, which conducts studies on brain injuries on military personnel. The university has a tissue repository where more than 500 brains have been studied for blast exposures.

Blast overpressure refers to the rapid increase in atmospheric pressure caused by the shock wave from an explosion or weapon discharge, according to the Defense Department.

Ryan Larkin had served as a special warfare operator first class with deployments to Iraq, Lebanon and Afghanistan. He then worked for two years as an "urban combat trainer" at several military training sites in California prior to his discharge.

He had used multiple weapons systems that included shoulder-fired rockets and concussion grenades, Frank Larkin said. Concussion grenades are non-lethal and produce a loud bang.

But Ryan increasingly became withdrawn and "devoid of emotion," Frank Larkin said. He struggled to carry out his duties and was reassigned to a desk job in logistics in 2015. He left the

military a year later.

"Ryan said there is something wrong with my head, but no one is listening to me," Frank Larkin said. "His doctors tried over 40 different prescriptions. But they could never settle on what was going on with him."

Low-level blasts do not necessarily cause a concussion or TBI that can be diagnosed by MRIs and other brain scans, according to the Defense Department. But the damage can lead to lasting cognitive problems, such as losses in focus, memory and critical thinking skills.

Frank Larkin said he saw those symptoms in his son and did not connect them to a possible brain injury from low-level blasts.

"It was not at the front of anyone's assessments" in the military or the VA, he said.

"When weapons are fired, invisible blast waves move through the brains of anyone nearby, which can cause inflammation and damage brain cells and blood vessels. Repeated exposure to blast waves — even smaller ones — can cause brain changes, including structural differences and degeneration," according to the American Brain Foundation.

The Defense Department has identified military occupations and weapons that bring a higher risk of brain injury from low-level blasts. They include jobs in armor, artillery, weapons training, explosive ordinance disposal and gunnery. The use of shoulder-mounted weapons, .50-caliber weapons and breaching charges also were identified.

But a 2024 study by Rand, a non-profit research organization, identified a knowledge gap about the effects from exposure to low-level blasts in the military. The study recommended the use of surveillance tools, such as blast gauges, to monitor and collect data on service members' exposure in training and combat.

"This legislation will help us start to better understand why and how blast exposures are impacting service members and veterans and make certain VA is able to quickly incorporate these findings into clinical care for our veterans to receive a diagnosis and a treatment plan," Moran said.

MILITARY

Navy seeks bids for sub base upgrades

Pier extension, electrical work will help West Coast base handle future fleet

BY GARY WARNER
Stars and Stripes

The Navy plans to spend up to \$250 million to extend and modernize a pier at Naval Base Kitsap-Bangor, Wash., to serve new ballistic missile and attack submarines coming into the fleet in the next decade.

The base, which is west of Seattle across Puget Sound, is homeport to the Navy's largest number of ballistic missile submarines, with eight of the boats based there. It is also homeport to two guided-missile submarines and two attack submarines.

A "request for information" posted on the Navy's procurement website is the first step in gauging interest from contractors to bid on the project eventually.

The work will enable the base to homeport more of the new Columbia-class ballistic missile submarines and Virginia-class attack submarines that the Navy has said will join the fleet in the next decade.

The Navy wants to extend a pier more than 500 feet and add structures, a crane, a tractor-trailer truck lane, improved lighting, higher voltage electrical transmission lines, reinforced

pier supports and fuel pods, according to the posted solicitation.

Once companies are identified, the Navy will produce detailed plans, ask for formal bids, and begin work when a contractor is chosen.

The Bangor submarine base is part of the larger Naval Base Kitsap complex, with more than 70 tenant commands.

The project is the second major renovation announced at the sprawling 12,000-acre base that is home to more than 15,000 active-duty personnel, 20,000 civilian workers, and 18,000 dependents and retirees.

The Navy has already started work on a \$145 million modernization of piers and electrical systems at Naval Base Kitsap-Bremerton to prepare it to homeport the USS John F. Kennedy, the second Ford-class aircraft carrier being built in Newport News, Va.

The carrier uses up to three times the electrical power when in port than the older Nimitz-class carriers.

Naval Base Kitsap-Bremerton is now homeport to two Nimitz-class carriers — the USS Nimitz and USS Ronald Reagan.

Mark Cancian, a retired Marine



RYAN RILEY/U.S. Navy

USS Maine, an Ohio-class nuclear ballistic missile submarine, transits Puget Sound near Seattle in March.

colonel who is a senior adviser with the Center for Strategic and International Studies think tank in Washington, D.C., said Navy ports have to prepare for a much larger fleet of submarines and ships in the decades ahead than they are handling today.

"We've bottomed out on our submarine inventory," he said. "We can't build them fast enough to replace the ones being decommissioned."

Cancian said the Navy needs to use the time to modernize its bases for when the delivery of new submarines catches up with the long-delayed ships.

"It is going to eventually turn around and the facilities to accommodate new and more complex submarines are going to be busy after 2040 or so," he said. "With the policy emphasis on the Indo-Pacific, there's a strong indicator of where a lot of the new submarines are going to go."

The Navy has been decommissioning Cold War-era Los Angeles-class nuclear attack submarines that have reached their 30-year expected lifespan. Of the 60 built between 1975 and 1995, only 20 remain in service. They are being replaced by Virginia-class nuclear attack submarines, with 24 built since 2003.

The Navy also has three Seawolf-class nuclear attack submarines from a short-lived program at the end of the 1990s.

Rear Adm. Todd Weeks, the Navy's

lead officer for submarine development, told Congress in April that the USS District of Columbia, the first of the new Columbia-class of ballistic missile submarines, is 18 months behind schedule, with a delivery date in 2029.

Weeks said the next ships in the class — to be named USS Wisconsin and USS Groton — will be delivered in 2032 and 2034, respectively.

"We are taking action right now to accelerate and recover as much schedule as we possibly can," Weeks told lawmakers.

The Navy now has 14 Ohio-class ballistic missile submarines, each capable of firing 24 Trident II D5 missiles with up to eight individually targeted nuclear warheads on each missile.

It has also converted four older Ohio-class submarines to launch guided Tomahawk cruise missiles instead of ballistic missiles. A three-year overhaul of the Navy's oldest submarine, the USS Ohio, delivered to the Navy in 1981, was recently completed at the Puget Sound Naval Shipyard at Naval Base Kitsap.

The Ohio-class submarines are the seaborne leg of the U.S. nuclear weapons triad, which includes land-based intercontinental ballistic missiles and Air Force manned bombers.

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