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E-BOOK:

From Ukraine to the Pacific: The Army Takes Stock

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Note from the Editor



In most predictions, a conflict in the Indo-Pacific will be one waged primarily with ships and planes. So what is the role of conventional ground forces in such a fight?

That's one of the many questions behind the annual Association of the U.S. Army's LANPAC Symposium and Exposition in Honolulu, Hawaii. During this year's event, army leaders from around the Pacific gathered to discuss their role in a potential Indo-Pacific war — and to see what lessons from the Ukrainian conflict could be applied to the region.

Of course, this is an ongoing discussion, one that will continue to evolve going forward, so make sure to check back with [BreakingDefense.com](https://www.breakingdefense.com) regularly for our coverage of both land forces and the Indo-Pacific region.

Thanks for reading,

Aaron Mehta
Editor in Chief, Breaking Defense



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Write algorithms, wage EW, share data: Lessons from Ukraine war

“The loss rate for Ukrainian UAVs at the moment is about 10,000 UAVs a month,” Jack Watling, a senior research fellow at the Royal United Services Institute, said. “That’s the level of equipment that both sides are going through.”



Members of Ukraine’s Territorial Defense Forces pose for photos during their military training on February 27, 2023 near Chernobyl, Ukraine. Russia’s large-scale assault on Ukraine has entered its second year, with the fiercest fighting concentrated in the country’s east and south. (Photo by Roman Pilipey/Getty Images)

By COLIN CLARK - May 30, 2023

LANPAC — The importance of a military’s ability to write algorithms at the edge of battle and then use them effectively, combined with a willingness to change doctrine and tactics to anticipate and destroy enemy forces, may be the biggest lessons of the [Ukraine war](#), a key leader of the US Army’s XVIII Airborne Corps said last week.

The formidable forces of Russia were expected to sweep across Ukraine in a few short weeks. While Ukrainian forces wobbled in the first days of war they [quickly began to adapt](#) and use new tactics, techniques and procedures, getting inside the unchanging Russian decision-making process, TJ Holland, Command Sgt. Major of the XVIII Airborne Corps noted at the recent LANPAC conference in Honolulu.

He compared the situation to the start of World War II, where many experts thought France possessed one of the world’s best armies, a force that could stand up to German aggression. But Germany mounted a relatively small number of FM radios on its land vehicles and changed the speed of decision making, allowing the Nazis to overcome French forces in a remarkable six weeks.

“Ukraine’s using data right now as effectively and efficiently as the Germans used FM radio,” Holland said. “And they’re able to mass effects at the most decisive point in time to achieve their operational advantage, because they’re making decisions faster than the Russians can, because the Russians — guess what, like the French — they’re stuck in their way of war. And that’s a really great thing.”

Key to moving men and materiel — massing effects — is the ability to gather and use data. Ukraine, with its innovative use of the commercial [Starlink satellite system](#), coordination with the United States and other NATO allies, is proving to be an innovative user in that regard.

“I can touch any army that’s holding that key piece of terrain from anywhere in the world,” the command sergeant major said. “I can influence them with data, right? I don’t have to be in the same hemisphere.”

Much of that is due to algorithms written by US and allied troops, Holland said. One was written for a commander who wanted to understand counter-battery fire between Russia and Ukraine. “That same algorithm showed us actually, we know the Russian way of war. So now we know if they’re posturing for a counter offensive, or they’re pausing and reinforcing. Or what they’re about to do next, another operation based off counter battery fires,” he said. “And we’ve learned through that and we’ve iterated and we’ve been able to write more code and more algorithms that can only happen when we have, you know, we have great young men and women that wear this uniform that are on the edge and do those great things.”

That kind of data is absolutely vital to resupply for crucial items. Knowing how much ammunition you’ve used, where you can get more and how quickly you can move it. Knowing the best ways to move troops in and out of the front lines as they grow weary. Knowing how many drones you’ve used and where and when you can get more has been especially important for the Ukrainians, who depend on them for reconnaissance and counter-reconnaissance.

“The loss rate for [Ukrainian UAVs](#) at the moment is about 10,000 UAVs a month,” Jack Watling, a senior research fellow at the Royal United Services Institute, said at LANPAC. (RUSI is an independent British think tank.)

Watling had only left Ukraine 10 days before the conference. “That’s the level of equipment that both sides are going through. And so when you’re in that environment, that frenetic activity at the front, your people get tired. You know, you have to rotate them out of the line. But every time you rotate them back and you push more people forward, you expose them to fire because they’re now out of the protections provided by their defensive positions.”

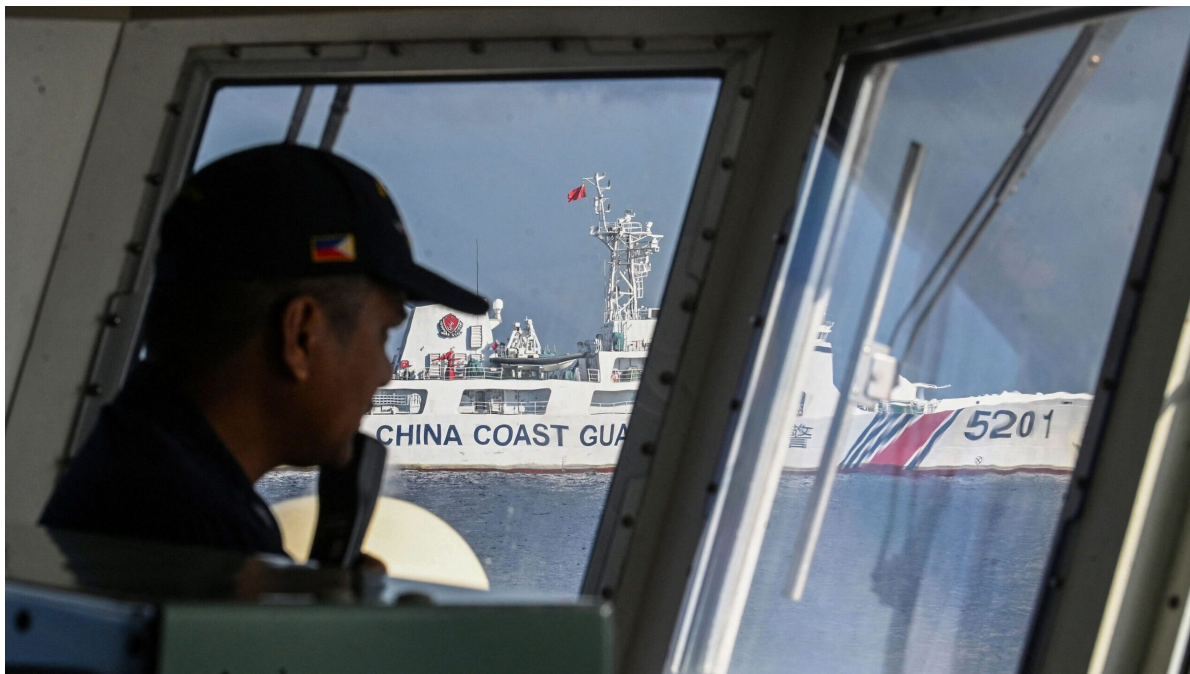
Managing all that requires masses of data that must be shared quickly and effectively. The problem isn’t new — consider the vast logistics of World War I when men and mountains of supplies were moved across Europe by trains. But the speed of data introduces new challenges and opportunities, as the Ukrainians have shown.

Key to making that possible through the stress of combat is managing the Electro-Magnetic Spectrum (EMS). This isn’t necessarily about some frequencies being jammed in particular areas, Watling said.

“Where you have real massive friction is the uncertainty that is generated by a catch-all and continuous [disruption in the EMS](#), because then I don’t know whether my orders go through. I don’t know what the latency is going to be between me launching a UAV and the off-boarding of the data from it. Therefore, it’s very difficult to plan, synchronize, coordinate,” he said.

Philippine army head sees China threat 'every day in South China Sea'

"Whenever we fly in our own territorial waters, we are challenged by the Chinese, challenged because they say we are in their territory, when in fact it is our territory," Lt. Gen. Romeo Browner, commanding general of the Philippine Army said.



This photo taken on April 23, 2023 shows a member of the Philippine coast guard vessel BRP Malabrigo manning his post while being shadowed by a Chinese coast guard ship at Second Thomas Shoal in the Spratly Islands in the disputed South China Sea. (Photo by TED ALJIBE/AFP via Getty Images)

By COLIN CLARK - May 19, 2023

LANPAC 2023 — While China was not officially a topic during the three-day conference in Honolulu on “emerging changes to warfare,” the people’s republic cast a very long shadow.

“The Philippines is facing the threat every day in South China Sea. The threat is real for us, because every day our fishermen are pushed away from our Exclusive Economic Zone,” Lt. Gen. Romeo Browner, commanding general of the Philippine Army, told several hundred attendees. “Whenever we fly in our own territorial waters, we are challenged by the Chinese, challenged because [they say we are in their territory](#), when in fact it is our territory.”

A key asset for the relatively small, if all too experienced, Philippine military in such cases to respond is the ability to use multilateral exercises for strategic messaging. The first two audiences for such displays are the Philippines’ own troops and then the broader community, whose support they need.

“The third audience,” Browner said, “would be, of course, the enemy. We are giving them the impression that we are united together as nations and, if push comes to shove, then we are ready. We are ready to fight them together.”

That idea, messaging to adversaries that any fight would include a wide range of allies and partners, has been a theme for [US officials of late](#), both from a strategic and tactical perspective. On the tactical side, Breaking Defense asked the head of [Army Futures Command](#), Gen James Raimey, what two systems were most needed to improve Indo-Pacific deterrence.

“Since you asked me, the command and control system, right? We need to get going faster. Interoperability is great, but we need to be integrated. We need to be able to move information so we can take full advantage of the coalition partners and the joint force. And we’ll figure that out,” he said, emphasizing that his response was his opinion and not official Army position. “We are getting better at that but we couldn’t do it right now. But the unrealized potential of algorithmic warfare and leveraging technology at the speed of combat is probably the clear number one, and number two would be a tie between protection and sustainment.”

The protection element is not, Raimey said, “all about kinetics. It’s about deception. It’s about small groups who have the advantage of land-based fires, as it’s easier to move and hide than it is in other domains.”

The sustainment and logistics issues were a regular topic of conversation throughout LANPAC, which seems natural given the vast distances of the Indo-Pacific.

The US Army’s aviation side just wrapped up an exercise explicitly designed to test data sharing with allies on the future battlefield. And during the next Talisman Saber exercise — the largest ever, held on its tenth anniversary — a key part of the exercise will be a new “joint logistics command,” Gen. Charles Flynn, head of US Army Pacific, said Tuesday. He said it will be the first one deployed and it will be used to test “new and innovative ways to sustain the joint force across the vast distances of the Pacific.”

The exercise, to be held in July and August, will boast almost double the number of troops involved in 2021, with approximately 30,000 military personnel. Fiji, Indonesia, Japan, South Korea, New Zealand, Papua New Guinea, Tonga, France, United Kingdom, Canada and Germany and, of course, the United States, will take part. The Philippines, Singapore and Thailand plan to attend as observers.

'Hard truth': Aussie army 'consuming readiness' in face of inflation, new strategic environment

"We've seen an increased demand for budget as costs rise due to inflation and consistent challenges to our workforce, including recruiting and retention. And there have been increased demands on our vehicles and our equipment," Lt. Gen. Simon Stuart, head of the Royal Australian Army, said.



An Australian Army soldier helps people evacuate onto a Blackhawk helicopter during Operation Bushfire Assist 19-20. Credit: ADF Cpl. Nicole Dorrett

By COLIN CLARK - May 18, 2023

LANPAC 2023 — Australia's army, facing a rapidly changing strategic landscape, is grappling with readiness woes as it struggles to maintain troop levels, replace and maintain aging weaponry, while deploying up to 20 percent of troops for operations like combatting bushfires and coping with [grey zone](#) conflict.

"The hard truth for us is that we are consuming readiness faster than we can build it," Lt. Gen. Simon Stuart, head of the Australian Army told several hundred attendees of the tenth LANPAC conference here in Honolulu. Meanwhile, the [diggers](#) were training, taking part in large-scale exercises with allies and partners.

"So our force did this all while transforming our army to be better connected, protected, lethal and enabled, making a greater contribution at the operational and strategic levels through new and enhanced capabilities. All of this time, resources — money, people and machines were under increasing pressure. We've seen an increased demand for budget as costs rise due to inflation and consistent challenges to our workforce, including recruiting and retention. And there have been increased demands on our vehicles and our equipment," Stuart said.

But Stuart said he took US President Theodore Roosevelt's purported maxim that "you do what you can with what you've got, where you are." (The Roosevelt Center [says Teddy credited a friend with the quote](#), though he used it.) "We must consider President Roosevelt's Maxim through the lens of a strong and abiding partnerships with allies and regional partners... Because in an era of great power competition, having more friends, is frankly, a much better situation than having less."

He told the audience that “that is really the standard that we work to every day.”

There is help to be had from technology. “Our formations are becoming increasingly specialized, and we will increase the use of emerging technology, robotics and autonomous systems, the application of AI and machine learning, quantum technology in human performance optimization throughout and across every aspect of our force,” the commander said.

Like the [Pentagon](#), he said the Aussie military is diving headlong into autonomous technology.

“Some examples include the application of autonomy. We’ve conducted live force experimentation with one of our mechanized infantry units, testing and evaluating a combat team through combat vehicles as part of the battle group. We worked with industry and academia to develop the algorithms and sensors to effect an autonomous drive system. It’s easy on civilian roads and a little more difficult among the clutter of our operating environment,” Stuart said.

The army has also been experimenting with electric propulsion technology, which is helping to improve sustainability in the field.

In the face of extremely low unemployment in Australia, made more challenging by three years without immigration, retaining soldiers may be the general’s greatest readiness challenge. “In short, we need to stop the hemorrhage of people,” he said, responding to a question from the audience. With top-paying companies competing for the same people, he said the army needs to offer the unique sense of purpose that comes from serving one’s country.

Downing of Russian missiles shows 'profound effect' of Ukrainians training on US systems: General



"I think about the value of training forces that never previously had a capability like that and then we provide that capability to them. And they're able to conduct an intercept in that way," Gen. Charles Flynn said. "To me that's that's the bigger issue."



US Patriot missile defense batteries newly installed at the Rzeszow airport located near the Poland-Ukraine border in Rzeszow, Poland on March 09, 2022. (Photo by Agnieszka Majchrowicz/Anadolu Agency via Getty Images)

By COLIN CLARK - May 17, 2023

LANPAC 2023 — Ukraine's destruction Tuesday of [six of Russia's vaunted Kinzhal missiles](#) is most impressive not for the proof that the American-made Patriot anti-missile system's technology works, but for the fact that US-trained Ukrainian troops brought down the missiles, the head of US Army Pacific told reporters here.

"We have advanced that [Patriot] capability in ways that are profound," Gen. Charles Flynn told Breaking Defense when asked about the shootdowns. "And so, that system, which was provided to the Ukrainian forces, and then a group of Ukrainian soldiers were trained on that system. I guess I take the question in a bit of a different way and say I think about the value of training forces that never previously had a capability like that and then we provide that capability to them. And they're able to conduct an intercept in that way. To me that's that's the bigger issue."

Flynn said the training of the Ukrainian troops on Patriots "has a profound effect on the applications of those weapons systems and, maybe more importantly, how you defend and what you're defending."

Flynn, who trains and equips all Army forces across the vast Indo-Pacific theater, often points to the importance of America's allies and partners in the region and cites them as America's "asymmetric advantage" in the regional competition against China. He's clearly making the wider point that the US could similarly train troops in this region to provide greater protection against weapons such as China's DF-21 and DF-26 missiles.

China claimed recently to have involved its Rocket Force in month-long exercises by the Shandong carrier group near Guam, [the South China Morning Post reported](#). The newspaper quoted analysts saying this indicated China was demonstrating it could target Guam, site of important US military bases.

For his part, Russian President Vladimir Putin had claimed the Kinzhal was the world’s most advanced hypersonic missile and would be virtually untouchable.

But Ukrainian officials said Tuesday they intercepted all six Kinzhals fired by the Russians, while the Russian Defense Ministry said that “a high-precision strike by the Kinzhal hypersonic missile system in the city of Kyiv hit a US-made Patriot anti-aircraft missile system.” (CNN [reported](#) today the damage to the Patriot system was “minimal” and that the system is still operational. On Wednesday the White House said it could not confirm reports about the damage.)

Jack Watling, an expert from the Royal United Services Institute (RUSI) here at the tenth LANPAC conference, noted that the Patriot has been “upgraded persistently since it was first introduced, and it’s had a lot of practice against Houthi ballistic missiles in the last few years,” referring to the Yemeni militant group.

Watling also said that the Kinzhal doesn’t qualify as an advanced hypersonic weapon, so that while the Russian missile is extremely fast and gives Ukrainian defenders “little time within which to respond,” they behave in ways the Patriot and its operators are familiar with.

The Kinzhal “certainly has a very different trajectory to a normal ballistic missile, and therefore it’s a challenge,” Watling told Breaking Defense after appearing on a panel about Ukraine war lessons learned. “So training providers of Ukrainians to operate that system proficiently was critical. Having said that, Ukrainian air defenders are pretty experienced people. They have operated in a high threat environment for quite a long time.”

Ukraine has one American-donated Patriot system and one given by Germany and the Netherlands.

New Taiwan military aid package coming in 'near term', SecDef confirms

"We won't hesitate to come forward and ask for what we need to make sure that we maintain our stocks," Defense Secretary Lloyd Austin told senators today.



Honor guards prepare to raise the Taiwan flag in the Chiang Kai-shek Memorial Hall square. (Ulet Ifansasti/Getty Images)

By ASHLEY ROQUE - May 16, 2023

WASHINGTON — The Biden Administration will soon send [Taiwan](#) military weapons and equipment from its stockpiles but will require Congress to free up dollars to backfill that delivery, [Defense Secretary Lloyd Austin](#) said today.

When Congress approved the fiscal 2023 National Defense Authorization Act, it included a provision enabling the administration to send \$1 billion military in aid to Taiwan via the Presidential Drawdown Authority — the measure used to expedite weapon deliveries to Ukraine — which takes weapons from existing Pentagon stocks and ships them overseas. When asked about [reports](#) that the Pentagon is finally ready to use this power with a \$500 million PDA package, Austin confirmed to senators that it is in the works.

"You are correct: We are working on an initiative, and we hope to have an action forthcoming here in the near term," he told members of the Senate Appropriations Committee.

Austin did not provide lawmakers with a timeline for that plan or detail what it will include, but noted that the Pentagon will need Congress to approve new spending to refill stockpiles with new equipment, a move that could be done via a supplemental spending bill.

"We will absolutely need to have the appropriations to replace those things which we provide," the retired four-star Army general added. "We won't hesitate to come forward and ask for what we need to make sure that we maintain our stocks."

With the rise of China as the primary military threat to America, the US has been looking for ways to boost Taiwan's defenses, in part [to deter](#) Beijing's military from invading the island. As part of that effort, the US State Department in recent years approved the sale of Stinger anti-aircraft missiles, M1 Abrams main battle tanks, amphibious assault vehicles (AAVs), F-16 fighter aircraft and munitions, Volcano minelayers and more. Such capabilities could potentially be pulled from US stockpiles and fast tracked to Taiwan now.

Secretary of State Antony Blinken and Commerce Secretary Gina Raimondo joined Austin at today's hearing to field questions about Washington's relationship with Beijing and challenges facing the US in the Indo-Pacific region. The hearing comes just weeks before the committee is poised to begin marking up FY24 spending bills, to include the [DoD's request](#) for \$842 billion in discretionary funds. That portion of the request contains \$9.1 billion for the [Pacific Deterrence Initiative](#) to help Washington prepare for a military conflict with China with funding for items like air basing, a new missile warning and tracking architecture, defense of the US territory of Guam and Hawaii, and multinational training and experiments.

Although senators did not wade into many of these plans, both [Republicans and Democrats](#) said they are concerned Pentagon planning for next year will be hindered if House lawmakers opt to cut defense spending, or lawmakers fail to approve a bill and the DoD must operate on a longer-term [continuing resolution](#). (A CR would require the DoD to adhere to FY23 spending plans).

"No amount of money can make up for lost time and ... the PRC is not waiting," Austin told senators. "Our budget reflects our strategy: We went to great pains to make sure that we linked our budget request to the strategy and so without a budget, it's difficult to execute the strategy as designed.

He reaffirmed that without the FY24 budget passed, the DoD cannot move forward with new procurement programs and shipbuilding could incur a \$9.7 billion "impact."