

## E-BOOK: 2022: Year in Review 2023: Looking Ahead

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## **Editor's Letter**



It's hard to remember a year quite like 2022 in the defense world.

When I sat down to write the introduction to last year's version of this collection, I noted in passing the uncertainty about what Russia might do to Ukraine. At that time, the first US intelligence warnings were coming out that Russia was considering an invasion, but the conclusion inside the Beltway – and in many European capitals -- was that it was more posturing than real threat.

By late February, not only had it become clear the threat was as real as could be, the world was given a first-hand look at Russia's vaunted military falling apart at the seams, setting up a stalemate in Ukraine that would last 11 months and counting. In the process, the entire security framework of Europe changed, with NATO expansion on the table, a reassessment of the importance of armor in modern conflict, and fears of a full-on continental war.

Oh, also, there were major tension points in the Pacific, with China stepping up its aggressive stance and America's partners issuing new strategic guidance as a result. So much was happening that the Middle East – with a resurgent Taliban running Afghanistan and the Iranian threat driving previously impossible-to-imagine security agreements between Israel and other regional powers – was to many an afterthought.

All of which is to say, looking back and assessing the year that was is always going to be easier than trying to predict the future. That doesn't mean we haven't tried, as this collection of stories shows.

How well did we do in guessing what is to come? Keep us honest by checking back often at BreakingDefense.com over the coming year. We look forward to continuing to provide you with the best defense coverage throughout the year.

Thanks for reading,

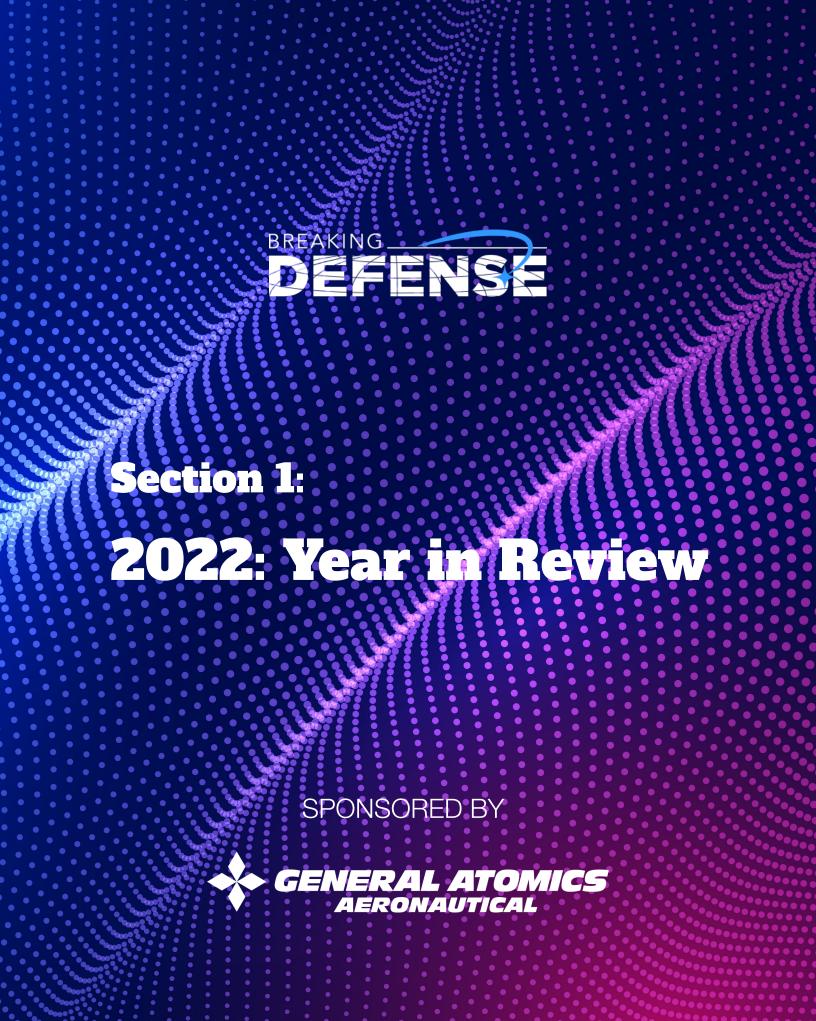
Aaron Mehta

Editor-in-Chief, Breaking Defense

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### The year the Marine Corps' Force Design 2030 came into its own: 2022 in Review

A new unit formation, a different way to operate and vocal congressional backers are all ways that Force Design 2030 took shape this year.



Marine Corps Commandant Gen. David Berger addresses the Marines and sailors of 23rd Marine Regiment at Fort Pickett, Virginia, on Jan. 27, 2022. (U.S. Marine Corps photo by Lance Cpl. David Intriago)

### By JUSTIN KATZ

on December 22, 2022 at 12:00 PM

WASHINGTON — Like most things in the Pentagon, the Marine Corps' Force Design 2030 has taken several budget cycles before visible changes emerged. But in this reporter's opinion, 2022 has been the year where Commandant Gen. David Berger's overarching redesign of how the service will fight started to come into its own.

At the top of the year, the service formally re-designated the 3rd Marine Regiment to the 3rd Marine Littoral Regiment, a new unit formation envisioned as an especially nimble part of Force Design. The 4th and 12th Marine Regiments are also scheduled for re-designation in future years, but the 3rd MLR, based in Hawaii, is the first of its kind. Gen. Eric Smith, the assistant commandant, told reporters in February the MLR required a year of "reorganizing" but is now structured into "smaller units that actually are capable of deploying tonight."

The MLR will be equipped with capabilities such as the Navy/Marine Expeditionary Ship Interdiction System, a ground-based, anti-ship missile system dubbed a key modernization priority for Force Design 2030 that spent 2022 being put through its paces out at Camp Pendleton in California.



### The year the Marine Corps' Force Design 2030 came into its own: 2022 in Review

The service is also starting to operate in the way Force Design 2030 envisions. At the tail end of 2021, Berger published "A Concept for Stand-in Forces," a doctrine that calls for Marines to operate in the smaller, agile forces epitomized by the 3rd MLR. Berger himself offered one example of this by highlighting 1,000 Marines who were in Norway when Russia's invasion of Ukraine began.

Within a few weeks, multiple Marine units, from F/A-18 squadrons to military intelligence, transitioned from experimentation to operations for US European Command collecting whatever information they could about the situation in Ukraine. But equally as important, their activities served as a visible force in NATO countries and, in Berger's eyes, a "stand-in force."

"From a very forward posture...inside the collection and weapons engagement zone, operating persistently all the time, not trying to hide. Show [them] that we're there," Berger said, referring to the information warfare elements of the concept. "In other words, knowing when they can see me and how do I operate? How do I use that from an information perspective effectively? How do I either confuse them? Or how do I convince them that what they're seeing is what they want to see, but it's not really accurate."

Lastly, 2022 has been a year where Force Design 2030 was tested in the court of public opinion. That fight happened in April when POLITICO reported that two dozen retired general officers, many of them Marines, were lobbying against the changes Berger proposed. Despite the effort reportedly having some seriously high-power names behind it — former commandants, a Navy secretary and at least one chairman of the Joint chiefs — lawmakers this year went out of their way to get behind Berger.

That support shouldn't be discounted. For any real change at the Pentagon to have staying power, it either needs to be noncontroversial or the majority of Congress needs to get behind it. Otherwise it's doomed to have a target on its back.

But Berger's time as commandant is coming to a close. Unless President Joe Biden taps him as the next chairman of the Joint Chiefs, he will most likely retire next summer when his four-year term leading the Marine Corps comes to an end.

While speaking at a Defense Writers Group event earlier this month, he was asked what he'll do to ensure Force Design 2030 stays with the Marine Corps after his exit. The commandant said the way to do that is to keep the service's relatively small group of 3- and 4-star generals all engaged in the process, as well as provide mechanisms for the next chief to make adjustments as they see fit.

"All 15 [senior Marine Corps generals] are part of the debate," he said. "How do you ensure it [stays] when you leave? Make sure first of all that it's right. But I would say ... actually more important than right is you build in the mechanisms, the confidence that there's a way to constantly test, evaluate, reassess, and make changes along the way."



### In Space, baby steps and a ponderous 'pivot': 2022 in Review

For the newest military arm, this year saw it plant the seeds for important changes in everything from strategy to acquisition.



Gen. Chance Saltzman (right) assumes command of the Space Force during a transition ceremony for the Chief of Space Operations at Joint Base Andrews, Md., Nov. 2, 2022. Gen. Chance Saltzman relieved Gen. John W. "Jay" Raymond (center) as the second CSO, the senior uniformed officer heading the Space Force. (US Air Force photo by Wayne A. Clark)

#### By THERESA HITCHENS on December 23, 2022 at 9:30 AM

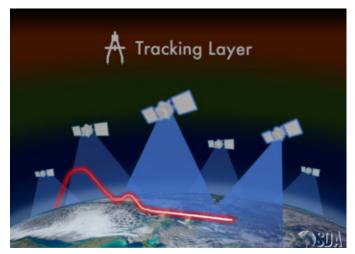
WASHINGTON — In early January during a virtual Mitchell Institute event, the Space Force's first chief of space operations promised that the coming year would see the service take real-world steps towards a new on-orbit posture that would be better shaped to withstand adversary attack.

"We have got to shift the space architecture, if you will, from a handful of exquisite capabilities that are very hard to defend to a more robust, more resilient architecture by design. That's what this force design work is doing," Gen. Jay Raymond said. "And so we will begin our pivot significantly to a resilient architecture this next year."

In March, Air Force Secretary Frank Kendall, who is the Defense Department civilian directly overseeing the Space Force as well as the Air Force, foot-stomped the need for a more survivable satellite architecture — making "defining a resilient and effective space order of battle" one of his seven "imperatives" for the future.



As 2022 wraps up, Raymond has retired and turned over the Space Force's reins to Gen. Chance Saltzman, but it is clear that the service is headed, albeit slowly and ponderously, into the "pivot" he promised. Space Force leaders have taken a number of baby steps this year towards dispersing satellites into multiple orbits, making it harder for an adversary to wipe them all out. The service also has made some progress towards figuring out how to better use commercial satellites to augment the military's own constellations.



SDA Tracking Layer optimized to keep tabs on low-flying, maneuvering hypersonic missiles. (SDA graphic)

That said, the long pole in the tent remains the thorny problem of reforming space acquisition. There have been some positive signals on that front, largely emanating from a number of organizational restructures — especially the appointment in May of Frank Calvelli to serve as the first-ever assistant secretary of the Air Force for space acquisition and integration, and the top space acquisition executive. On the other hand, we've yet to see a lot of fruit from those seeds of change.

### **Missile Warning: From Few To Many**

The Space Force put money down in 2022 towards revamping how it does missile warning/tracking by launching numerous smaller satellites into lower orbits rather than relying on a handful of very large birds in geosynchronous orbit some 36,000 kilometers above the Earth — the latter of which former Vice Chair of the Joint Chiefs of Staff Gen. John Hyten famously called "fat juicy targets."

In its fiscal 2023 budget request, the service asked for some \$828 million from FY23 through FY27 for a new program called "Resilient Missile Warning Missile Tracking – Medium Earth Orbit (MEO)," with the hopes of orbiting at least four satellites to provide an "initial warfighting capability" by 2028. This new effort, led by Space Systems Command (SSC), will be complementary to the Space Development Agency's program to put a constellation of some 100 Tracking Layer satellites in low Earth orbit (LEO) with a primary mission of better keeping tabs on low hypersonic missiles that present challenges for current infrared monitoring satellites.

And in September, SDA Director Derek Tournear confirmed that those two constellations would eventually replace the Defense Department's current Space Based Infrared System (SBIRS) satellites in GEO and their already planned successors, the Next Generation Overhead Persistent Infrared (Next-Gen OPIR) satellites budgeted at a whopping \$12 billion between FY23 and FY27.

"We'll do away with the GEOs, and the big, exquisite expensive satellites," Tournear said.

### 'Hybrid Architecture' Includes Commercial

"Hybrid architecture" is latest buzz word for the changing shape of the Space Force's satellite network structure, which will not only see satellites dispersed across various orbits but also involve greater reliance on commercial constellations. The Ukraine war in particular has pumped up interest within the national security community about the value of commercial satellite services, especially communications and remote sensing.

The Space Warfighting Analysis Center incorporated the hybrid concept into its space data transport force design. And DoD's Defense Innovation Unit (DIU), the Air Force Research Laboratory (AFRL) and SDA this year took the first tiny steps toward implementing that design.



Further, SSC in March announced the creation of the Commercial Services Office, designed to serve as a one-stop-shop for connecting commercial space operators — from communications to remote sensing to space monitoring firms — to potential government customers. The new office is looking both to widen DoD's use of commercial capabilities and to shift the way the Space Force contracts for them. The goal is to move toward a "managed service" model that mimics how most customers contract for telephone and internet connectivity. The Army, for example, has been working with the Space Force to pilot using the managed service concept to buy SATCOM.

### Acquisition, Acquisition, Acquisition

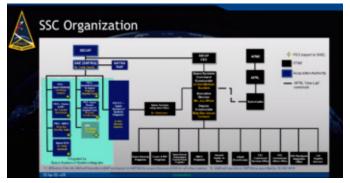
For Kendall, the need for speedier acquisition and fielding of new tech is all about keeping ahead of "China, China, China." But the ability to do that in the space domain requires big changes in the processes used by the Space Force to plan and buy capabilities.

Calvelli seems to be off to a fast start on attempting to do that. First, he gave SDA a soft landing in its new home within the Space Force, making no "dramatic organizational changes." More importantly, he also made it clear he intends to steer the bigger Space Force acquisition portfolio, worth some \$72 billion, managed by SSC in the direction of SDA's two-year, iterative development-to-launch model.

In November, Calvelli also put forward guidelines to his workforce in the form of nine "tenets," including building smaller satellites and ground systems, avoiding over-classification of programs, eschewing cost-plus contracts and holding industry feet to the fire in performing to contract specifications.

SSC's new(ish) leader, Lt. Gen. Michael Guetlein, also took steps back in March designed to speed acquisition.

Guetlein stamped his reform plans with the motto: "exploit what we have, buy what we can, and build only what we must." This means finding new ways to integrate current space capabilities into operations across DoD, and looking more assiduously at opportunities to buy commercial and allied capabilities before deciding to start a new program to build a bespoke system.



Space Systems Command organization chart. (SSC briefing slide)

As of the end of 2022, however, most of these changes are in the embryonic stages — and some plans already are experiencing delays, such as SDA's launch of its first batch of satellites that has slipped from September 2022 to March 2023. The devil will, as always, be in the details of how plans are implemented, budgeted and contracted. Still, as another old saying goes, a journey of a thousand miles begins with a single step.



### Russia goes to war but Ukrainian resistance wins hearts and minds: 2022 in Review

From Germany's defense investment to the coming expansion of NATO, Russia's invasion sent paradigm-shifting shock waves through Europe.



The Ukrainian Air Force has maintained a high operational tempo since Russia's February 2022 invasion. (Ukrainian Air Force Command)

### By TIM MARTIN

#### on December 23, 2022 at 12:00 PM

BELFAST – Europe's worst security crisis since the Second World War, prompted by Russia's illegal invasion of Ukraine, stands unfortunately as the only logical starting point to open up a look back at the European defense landscape in 2022.

As the conflict continues to rage, 10 months on, it is difficult not to think of the scale of devastation that has seen major Ukrainian cities destroyed by indiscriminate Russian bombing campaigns.

To put matters in perspective, think of Gen. Mark Milley, Chairman of the Joint Chiefs, estimating that 40,000 Ukrainian civilians and 200,000 personnel from Ukrainian and Russian armed forces have "probably" been killed in the war, as of November.

The reaction from European governments and NATO countries to support Ukraine by urgently supplying weapons and increasing defense budgets has to be considered a watershed moment in international relations, marking a display of transatlantic unity few thought possible.



### Russia goes to war but Ukrainian resistance wins hearts and minds: 2022 in Review

Singling out one nation for praise seems trite in the circumstances, given the international outpouring of support, but from a European security point of view, after decades of miserly defense spending and being viewed within NATO circles as a liability, Germany's €100 billion (\$101 billion USD) special arms fund announcement, a matter of days after the war, must be given the credit it so rightly deserves.

That means Germany will acquire best in class aircraft like Lockheed Martin's F-35A fighter jet and potentially become the force within NATO its economic stature so obviously demands. Gone too is long held resistance to weapons exports, with Berlin transferring a variety of equipment to the Ukrainian cause.

The decision by Sweden and Finland to join NATO might also be written in history books as a fearless one, in the context of Russian President Vladimir Putin seeing alliance expansion as a primary motivation to start the war, much less escalate it.

While NATO entry brings with it new strategic security assurances, uncertainty continues to hang over more immediate defense industrial base matters and most pressingly the ability of European governments to replenish munition stockpiles in an expedited manner.

This is not unique of course to Europe, with the Pentagon faced with the same problem, but with civilian lives in Ukraine ultimately depending on those stockpiles increasing, production contracts and procurement approvals should, ethically, not be allowed to proceed at a peacetime pace.

Let me not end on that worrying note, for there have been signs of progress, in relative terms, that the fortunes of Ukraine are changing for the better.

The scenes of joy as residents welcomed Ukrainian forces into the streets of Kherson, upon reclaiming the port city, proved that defiance and resistance are working. Recent reports of Ukrainian drones striking Russian territory, including the Engels-2 airbase that hosts Tu-95 long range bombers, are also being written of as evidence that preemptive strikes are an additional option for Ukraine to counter Russia's cruise missile threat.

Additionally, Moscow's over reliance on Iranian drones is being judged as a sign of desperation, linked to a low level cruise missile arsenal.

All told, Ukraine's most remarkable achievement surely has to be staying in a fight against a would-be superpower that was widely expected to invade and conquer by leveraging an equipment advantage so vast as to induce fear in peer military rivals, the US included.

For now, it is difficult to imagine a ceasefire taking place or a peace agreement being brokered, but those must be priorities in 2023 if Europe is to move away from a nuclear precipice and return to democratic norms.



### With war in Europe, US Army replenished weapons, pushed modernization: 2022 in Review

With all eyes on Ukraine this year, several existing Army weapon lines received renewed interest this year.



An 82nd Airborne 3rd Brigade Combat Team soldier trains with the Integrated Visual Augmentation System (IVAS) as a part of Project Convergence 2022. (TRADOC via Twitter)

#### By ASHLEY ROQUE on December 27, 2022 at 12:00 PM

WASHINGTON — Deterring China in the Indo-Pacific region remains the US Department of Defense's top priority, but Russia's invasion of Ukraine this year provided Army leaders with the opportunity to tout the service's role supporting allies and partner nations via training and weapons deliveries.

Although Army leaders faced a confluence of challenges in 2022 including a recruiting shortfall, problems with military housing and accusations of "wokeness," the year also saw the effectiveness of Army-centric weapons like the M142 High Mobility Artillery Rocket System (HIMARS), Javelin manportable, anti-tank system, and the Stinger anti-aircraft missiles on today's battlefield.

"You don't need armor if you don't want to win," Army Chief of Staff Gen James McConville told reporters during an October 10 press conference when asked about lessons learned from the war and future of the M1 tank.

"You never want to present your adversary with one dilemma... if you just push tanks at them," those can be defeated just like Russian tanks inside of Ukraine, he added. "That's why you want infantry, you want armor, you want attack aviation, you want [long-range] fires [and] intelligence. All those systems working together."



### With war in Europe, US Army replenished weapons, pushed modernization: 2022 in Review

Yes, 2022 provided the service with an opportunity to reassert its contribution to the joint force, and allies and partners, but with that opportunity the service also faced practical challenges like backfilling its weapons stockpile. To do this, the Army issued a variety of contracts, including one for \$14.4 million to Lockheed Martin for the company to bolster its HIMARS production capacity. Another contract soon followed in December for an additional \$431 million for Lockheed to produce these additional launchers.

"This award will enable us to replenish our own inventory while providing critical capabilities for our allies and international partners," Douglas Bush, the Army's Assistant Secretary for Acquisition, Logistics and Technology, said in a December 2 announcement. "We remain committed to getting things on contract as quickly as possible to ensure our stocks are rapidly replenished."

In the same vein, the service also awarded the Javelin Joint Venture between Raytheon Missiles and Defense and Lockheed with a \$311 million contract in September for the production of more than 1,800 Javelins.

Although lots of money was funneled towards the Ukrainian-Russia war this year, 2022 wasn't only about established weapons programs. Army leaders did move forward with developing a variety of new platforms while also changing course on others. Here are just a few of the top decisions unveiled in 2022.

### **Rolling On**

Several Army ground vehicle programs entered new phases this year, while others were stopped in their tracks.

For example, General Dynamics Land Systems (GDLS) was the big winner for the service's new light tank competition, and it received a \$1.14 billion contract to produce up to 96 Mobile Protected Firepower (MPF) vehicles. The company's winning prototype is crewed by four soldiers — a commander, a gunner, a loader, and a driver — and GDLS is in the process of modifying the prototype based on soldier feedback.

BAE Systems was also competing for the MPF contract with a lighter prototype crewed by three soldiers, but it was disqualified earlier in the year due to undisclosed noncompliance issues.

However, 2022 wasn't all bad news for BAE. The Army selected the company's Beowulf as its new Cold Weather All-Terrain Vehicle (CATV) and provided BAE with a seven-year, \$278 million production contract.

BAE also delivered at least 130 Armored Multi-Purpose Vehicles (AMPVs) to the Army by early October, and the first Army unit is set to begin training with the vehicles in January 2023, Program Executive Officer for Ground Combat Systems Major General Glenn Dean, told reporters at the time.

In other ground vehicle news, the Army decided to hold off on pursuing a Robotic Combat Vehicle-Medium (RCV-M) fleet this year and said it will instead first focus on developing an RCV-Light (RCV-L) line. Under this new multi-pronged approach, the service will continue experimenting with the RCV-L prototypes it acquired from QinetiQ North America and Pratt Miller (now owned by Oshkosh Defense) based on a "variant" of the Expeditionary Modular Autonomous Vehicle (EMAV). In parallel, the Army plans to host RCV-L competition and release a draft solicitation by early 2023.

Meanwhile, it is pencils down for the Army's latest attempt at replacing its aging fleet of M2 Bradleys. All five companies participating in the service's Optionally Manned Fighting Vehicle (OMFV) concept design phase – American Rheinmetall Vehicle, BAE Systems, GDLS, Oshkosh Defense, and Point Blank Enterprises – have submitted their bids for the next phase of the program, Breaking Defense confirmed. However, a dark horse may be lurking and seeking one of the three spots available to move on with OMFV development. The Army is expected to announce in the first half of 2023 which teams it has selected to participate in the next 54-month OMFV development stint that includes phase 3 (detailed design) and phase 4 (prototype build and test) activities.

The Army's Common Tactical Truck (CTT) competition is also in a downselect phase, and the service is expected to select up to three teams to proceed with the effort next year. The service is seeking a modified commercial off-the-shelf CTT fleet to perform missions currently conducted by Palletized Load System A1 vehicles, Heavy Expanded Mobility Tactical Trucks (HEMTT) A4, M1088 Tractors, and M915 Line Haul Tractors. Eventually, a final downselect could lead to a \$5.1 billion production contract for 7,265 vehicles.



### **Up In The Skies And Below**

After a multi-month delay this year, Army acquisition officials announced in December that Bell Textron's V-280 Valor tiltrotor had edged out Sikorsky-Boeing's coaxial rotor Defiant X, and will continue on in Future Long-Range Assault Aircraft (FLRAA) development.

Service officials have not yet detailed why they selected the Valor beyond saying that the decision was based on a best-value determination.

"We were seeking the best value approach," Maj. Gen. Robert Barrie, the Army's Program Executive Officer for Aviation, told reporters on December 5. "Using...the requirements that the Army had for us, we then had an evaluation using folks from across the enterprise to go towards a set of factors that would deliver a best value approach to the Army." While declining to spell those factors out, Barrie emphasized the service did a "comprehensive analysis of a variety of factors."

Bell has now received a deal worth up to \$1.3 billion with the initial obligation valued at \$232 million over the next 19 months. These initial dollars will enable the company to continue working on the preliminary design of the aircraft and deliver "virtual prototypes of a potentially model-based system," Barrie said. While Bell will not be building an actual aircraft during this period, if the program proceeds as planned an unspecified number of Valors could be produced under a deal worth up to \$70 billion.

In addition to Valor decision, the service continued developing several missiles this year including Lockheed Martin's Precision Strike Missiles (PrSM) and awarded the company with a \$158 million contract to produce additional early operational capability missiles. The company also delivered the first of four Typhon weapon system prototypes to the Army. Typhon is designed to fire Standard Missile-6 or Tomahawk missiles around the range gap between the PrSM and a Long-Range Hypersonic Weapon also in development.

### **Bring On New Soldier Kit**

When it comes to the individual soldier, the service announced several key acquisition decisions this 2022.

Among them was the decision to award Sig Sauer with a 10-year contract valued up to \$4.7 billion for its Next Generation Squad Weapon (NGSW) program. The company's offering will now be the XM5 NGSW-Rifle (NGSW-R) to replace the M4/M4A1 carbine weapon and the XM250 NGSW-Automatic-Rifle (NGSW-AR) to replace the close-combat force's M249 Squad Automatic Weapon in the Automatic Rifleman role. The service also selected the company's 6.8 mm ammunition for the program.

If the program proceeds as planned, close-combat soldiers will begin receiving these new 6.8 mm caliber rifles and automatic rifles in late 2023.

The Army and Microsoft also moved ahead revamping and testing the Integrated Visual Augmentation System (IVAS) this year a militarized version of the HoloLens 2 heads-up display. However, soldiers continued to experience physical ailments when using the device during operational testing this summer.

As a result, Bush devised a new plan, and as of early December, the Army and Microsoft were working to modify the terms of the existing deal valued up to \$21.9 billion over 10 years. If negotiations are a success, the Army's tentative plan is to field 10,000 initial units of the heads-up display while also working with the company to redesign the form factor.

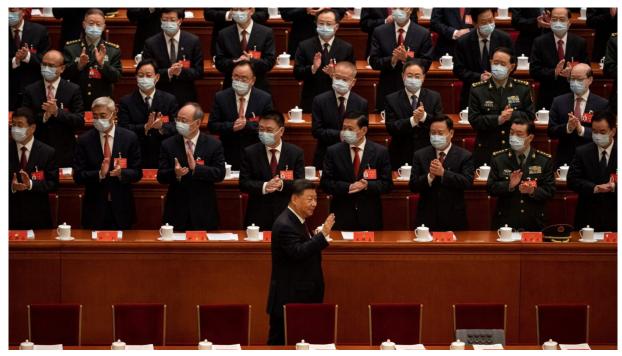
More specifically, the Army wants to field 5,000 IVAS 1.0 systems to schoolhouses for training and to its Army Recruiting Command. The duo will then work together on several improvements under IVAS 1.1 to include a new low-light camera and on software stability. If these changes are adequate, the Army would acquire 5,000 units and field them to non-light infantry units such as Stryker units.

Then under a IVAS 1.2 umbrella, the service wants to redesign the device, in part, to move away from the helmet-like design and towards something soldiers can put on and take off more easily.



### Threats and responses defined the Pacific: 2022 in Review

While China has rapidly built a much more modern military in a remarkably short time, it also faces enormous economic, demographic and national security challenges that aren't always as apparent in Washington.



Chinese President Xi Jinping is applauded upon arrival at the 20th National Congress of the Communist Party of China on Oct. 16, 2022 in Beijing. (Kevin Frayer/Getty Images)

### By COLIN CLARK

on December 27, 2022 at 2:30 PM

SYDNEY — This year was the first where I lived full-time as a resident of the Indo-Pacific. With that came a new understanding of the regional strategic threats and the people who would actually be affected by a major conflict.

The proximity of the Peoples Republic of China and its ability to send large numbers of ships and airplanes to threaten, harass and impinge on the open seas and skies — guaranteed by the law of the sea and hundreds of years of precedent — has been brought home in ways that otherwise feel academic while buffered by the Atlantic and Pacific oceans. That's a good thing, not a bad thing, and I think the real reason why more outlets should invest in having reporters abroad in the region. Even though Sydney is, admittedly, not all that close to China, Beijing's reach is palpable.

While China has rapidly built a much more modern military in a remarkably short time, it also faces enormous economic, demographic and national security challenges. And 2022 seems like the year it finally overreached in the region.

The July visit of US Speaker of the House Nancy Pelosi to Taiwan served as a great example of these dynamics. China is adept at information warfare compared to the United States; they are nimble, respond quickly and shape the environment before a crisis hits, having lots of talking points ready to go on endless repeat. Take Pelosi's trip — although regional experts told us not to worry so much, China had its press team out in force, making it seem Pelosi's visit was the flame to ignite World War III.



#### Threats and responses defined the Pacific: 2022 in Review

And yet, while China wanted to deter Taiwan's friends from offering or providing diplomatic or military assistance, its missile and diplomatic barrages appear to have had the opposite effect, prompting even closer relations between the US, Australia, Japan, South Korea, Taiwan and Vietnam. China appears to be doing a good job of creating something like a pan-Pacific alliance, where almost every country in the region (and some far away, like Britain and much of NATO) now views them as a threat to actively manage and deter.

Another win for Taiwan against its larger cousin came through an unexpected source — the world's reaction to Russia's invasion of Ukraine, which had a much higher profile in the Indo-Pacific than some expected. Australia immediately moved to send hundreds of millions of dollars in aid, as well as cyber support, to Ukraine, and some 20 of the country's highly regarded Bushmaster combat vehicles were on their way to Kyiv by early April. Japan mentioned Russia's invasion of Ukraine as a key reason for doubling its defense spending, announced Dec. 16. (Russia and Japan, of course, have had a feud over the Kuril Islands since the end of World War II, so relations have often been frosty.)

Much of Asia worried that China might take Russia's invasion of Ukraine as a pretext for invading Taiwan. But Russia's poor showing against a much smaller and less well-armed country — one that Russia shares land borders with, unlike China and Taiwan — appears to have given Beijing a lot to chew on.

In China's scorecard, they got one intriguing win (which may end up backfiring) when they got the leader of the Solomon Islands, Manasseh Sogavare, to sign a security pact. It's secret and the prime minister says he won't discuss it unless the Chinese give him permission, so we're not positive what the final version says. But a draft released by Sogavare's opposition appears to say it will grant Chinese military ships the right to call, repair and resupply there and to send troops and police in the event of instability.

As so often with Chinese actions involving smaller countries, they are negotiated in secret and often spark accusations of corruption and lead to a backlash that appears to negate what China was trying to achieve. Since the Solomon's agreement, Australia has signed a security treaty with Vanuatu and appears close to signing one with with Papua New Guinea. The United States came roaring in after the Solomon's agreement was signed, announcing \$810 million in assistance in late September for the far-flung islands Pacific and making the symbolic statement of a White House dinner with President Joe Biden. Since the US and Australian initiatives were announced, Sogovare has repeatedly said he will not allow a Chinese base on his island and considers Australia his country's security partner of choice. We'll see.

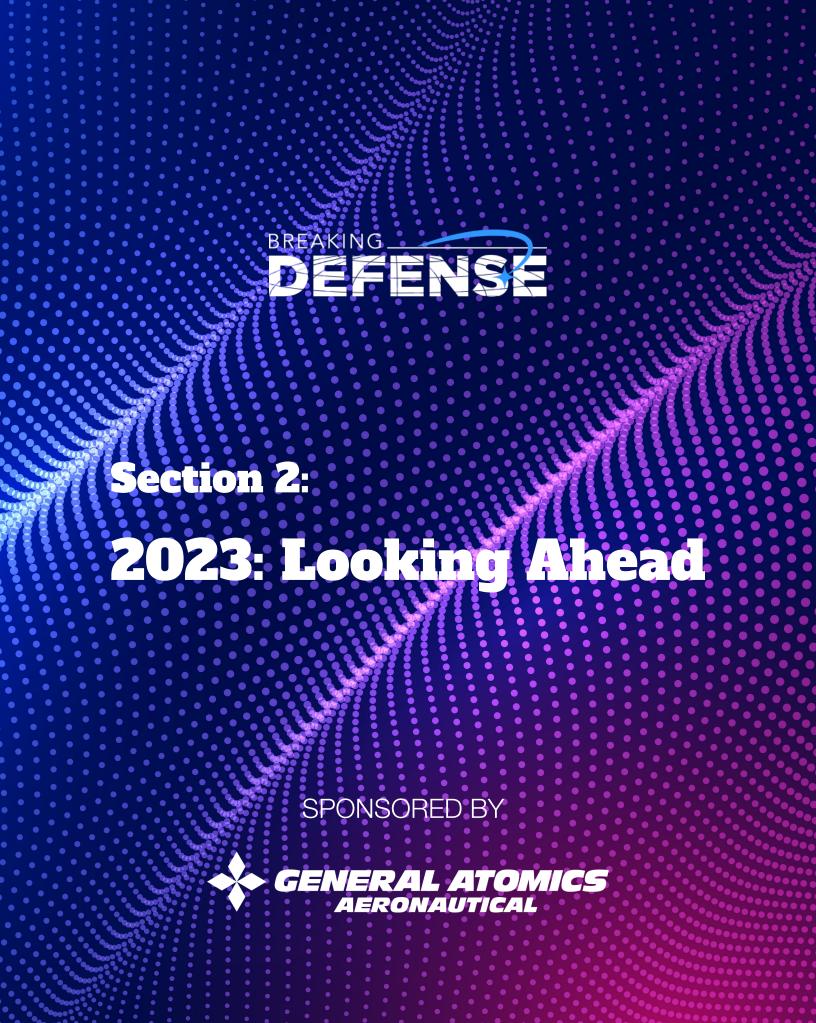
Domestically, a major theme for the year are the growing ties between Australia and its Indo-Pacific neighbors, Japan and South Korea. In a fashion few could have imagined before COVID struck, Japan and Australia are now very close allies. An extraordinary treaty signed by the two countries in January allows military forces from each country to train at each other's bases and to collaborate on humanitarian missions.

At the annual Australian Ministerial meetings, held in Washington earlier this month, Australia and the United States also announced the extraordinary commitment "to invite Japan to integrate into our force posture initiatives" on the island continent.

South Korea has taken a high profile in its dealings with Australia, selling howitzers and supply vehicles, and hoping to sell more than 300 Infantry Fighting Vehicles. They even held a dinner with several hundred attendees, including influential Australians and senior Korean officials, touting a conventional sub they said could be delivered in seven years.

I'd like to include a note here thanking Australian colleagues Andrew Greene of the Australian Broadcasting Corporation, Kym Bergmann of the Asia Pacific Defence Reporter magazine and Gregor Ferguson, former Defense News correspondent here, for helping make Breaking Defense's entry into Australia so much more effective.





### Will Congress and Navy find room to agree on ships? 2023 Preview

Will a new year and a new Congress bring us the first view of a new Navy?



The Theodore Roosevelt Carrier Strike Group transits the Pacific Ocean Jan. 25, 2020. (U.S. Navy photo by Mass Communication Specialist 2nd Class Jason Isaacs)

### By JUSTIN KATZ on December 28, 2022 at 9:30 AM

WASHINGTON — Barring the extraordinary or outright unpredictable, it is nearly certain that next year Congress will empanel its new commission tasked with assessing the "future of the Navy." For all 2023 could bring, I'm most interested in the machinations and, eventually, findings of this group of independent, third-party experts.

The commission is borne out of the Fiscal Year 2023 National Defense Authorization Act, and its purpose is effectively to hand lawmakers and the Pentagon an unmitigated outlook at how the US Navy's fleet, to include its aircraft, should look to fight and win in the future.

Among other things, the commission will be expected to offer concrete numbers for the mix of ships that make up the fleet, a question that has become a political football in recent years. At least ostensibly, they will do so without the natural biases that come into play whenever these types of reports are produced directly by the Pentagon or individual congressional committees.

Prior to the commission's establishment, two outside analysts considered the value of such a panel, and came to very different conclusions.



In an op-ed for Breaking Defense on June 8, John Ferrari of AEI, argued the Navy is at a "tipping point" and an outside panel must be brought in to triage an overwhelming number of issues carefully documented by the expert auditors of the Government Accountability Office.

But later that month, retired four-star Navy admiral James Foggo, now leading the Center for Maritime Strategy, countered the problems of the Navy are indeed well-documented and it is political will that is needed to break the impasse. Another layer of bureaucracy, he said, is unlikely to bring anything new to light.

Whoever's right, this commission will have an opportunity to present the White House, Pentagon and Capitol Hill with an objective outlook on the future. If they do that, without the natural political biases that usually entangle shipbuilding, then they offer a rallying point for all parties involved.

With their final report, which must be submitted by mid-2024, the panel might just push past the circular conversations that we hear year after year on Capitol Hill. If they can do that — and the jury is out on whether they can — then perhaps one more layer of bureaucracy will prove useful.

In the new year, I'll be watching every move this panel makes in the hopes of finding out whether they really will have an impact on the future Navy or whether their work will be so driven by politics that it fades into irrelevancy before it has the chance to make a difference.



## At home and internationally, 'governance' is the space watchword: 2023 Preview

There are a host of open questions bedeviling national and international policyand law-makers as they struggle to get a better grip on both the explosion of commercial players with innovative ideas for space utilization and the growing military interest in space as a tool of, and venue for, war.



Kinetic ASATs could create enormous amounts of dangerous space debris that could harm commercial satellites. (Image: National Space and Intelligence Center)

### By THERESA HITCHENS

### on December 28, 2022 at 2:30 PM

WASHINGTON — Both for the US government and on the international stage, 2023 looks to be the year of space "governance" — as a slew of initiatives launched this year to develop norms, rules and even legally binding regulations for activities on orbit come to fruition. Or not.

There are a host of open questions bedeviling national and international policy- and law-makers as they struggle to get a better grip on both the explosion of commercial players with innovative ideas for space utilization and the growing military interest in space as a tool of, and venue for, war. These range from how to limit the potential for accidental on-orbit collisions in ever-more congested orbits, to how to sort out rights to lunar landings, to how to set norms of responsible behavior for space activities by military forces in order dampen prospects of conflict.



### **Multiple Domestic Initiatives, Interagency Friction**

In the US, a number of government agencies with fingers in the space pie are tackling all these, and other, issues, with eyes on next year for decision-making.

At the top of the food chain is the White House, via both the National Space Council chaired by Vice President Kamala Harris and the National Security Council led by National Security Adviser Jake Sullivan.

The National Security Council is coordinating Biden administration efforts to forward voluntary norms for military activities on orbit, which the US hopes will help shape opinions on the international stage. That effort has already seen some success after the April declaration of a unilateral commitment to eschew testing of destructive, ground-launched anti-satellite (ASAT) missiles began to find traction, with nine other nations following suit this year. More are expected to pick up the baton next year, following a Dec. 7 vote by the UN General Assembly to support a US-proposed resolution that calls on other countries to join in. The vote count was overwhelming: 155 for, nine against, and nine abstentions. (Unsurprisingly, China, Russia and Iran were among the nays.)

US officials are already looking at new ideas and commitments that Washington could bring to the table. One concept under interagency study is a proposal that governments refrain from "purposeful interference" with the command and control systems of other countries' national security satellites.

Meanwhile, the National Space Council is concentrating on filling gaps and avoiding disconnects between the multiple agencies responsible for regulating the domestic space industry.

The Commerce Department's National Oceanic and Atmospheric Administration (NOAA) regulates commercial remote sensing. The Federal Aviation Administration (FAA) regulates safety of launch and reentry of rocket bodies and spacecraft back into the atmosphere. The Federal Communications Commission (FCC) regulates domestic firms use of radio frequency spectrum, including satellite operators. Further, both DoD and NASA impose their own rules and requirements on commercial space contractors.

But a number of new types of on-orbit activities being pushed by commercial firms fall between the cracks, with no one agency having what is often called "mission authorization" authority. These include a number of potential satellite services of interest to the Defense Department, such as satellite repair, orbital refueling stations, on-orbit assembly and manufacturing, and operations in the vast reaches of space in cislunar space between the outer orbit of the Earth and that of the Moon.

A pair of 2019 Space Policy Directives issued by the Trump administration essentially set up Commerce to be the go-to agency for on-orbit missions not now regulated, and eventually establishing a new space traffic management regime to ensure the safety of the ever-more crowded heavens.

NOAA's Office of Space Commerce subsequently was tapped to spearhead those efforts, including taking over from DoD the job of monitoring space objects and warning commercial, civil and foreign operators about collisions. That office earlier this month kicked off a pilot project, with the help of DoD, that will run through early February designed to show what can be done using only commercial capabilities. It would be surprising if Commerce does not follow up in 2023 with a formal contract for data on satellites in the geosynchronous orbit belt.

However, with the change of administration interagency squabbling about future authorities once again has been simmering behind the scenes.

In particular, the Transportation Department and the FAA have revived their interest in a piece of the regulatory pie, according to several industry and government sources. The question of FAA's role versus that of Commerce was a hot-button issue for Congress back in 2019, and up to now lawmakers still have not moved to grant any agency regulatory powers over new kinds of commercial space activities.

Meanwhile, the FCC has been jumping into the regulatory breach, and announced on Nov. 30 a draft "notice of proposed rulemaking" that would seek comment on streamlining its own licensing procedures for new types of space activities, such as large constellations in low Earth orbit. The commission, which is independent from the executive branch, approved the notice at its Dec. 21 meeting.



So the National Space Council has a complicated job in 2023 and beyond.

First, it has to figure out what new rules should be developed. It is clear from the council's series of "listening sessions" to gather industry input that it wants to take a "light hand" on regulations.

It is unclear, however, whether the proposal Harris has asked the staff to send her by March 7 will address the more controversial question of which agency, or agencies, will be tapped to implement new rules. And the biggest question of all is how the White House will handle the congressional question.

"We know that we're going to have a proposal for the vice president and there will be some response from the executive branch," Diane Howard, who director the council's commercial operations, said Dec. 13 at the annual Galloway Symposium on space law.

She pushed back, however, at a recent Reuters report that the decision would take the form of an executive order. "We don't know that it's going to be an executive order," she cautioned. "There are a number of mechanisms that are available to us, one of which an executive order."

### International Norm Setting: Slowly, Slowly

The UN Open Ended Working Group on Reducing Space Threats held two meetings in 2022, and will hold two more meetings in 2023, the first of which has been scheduled for Jan. 30 through Feb. 3. The most recent meeting, Sept. 12 to 16 in Geneva, Switzerland, was widely hailed as a success despite Russian efforts to push it off the rails. The US has been active in the meeting, for example lobbying for inclusion of its ASAT moratorium.



UN Photo/Jean-Marc Ferré

Meanwhile, the UN Committee on the Peaceful Uses of Outer Space (COPUOS) in Vienna, Austria, will be looking at how to further implement the 21 "best practice guidelines" for ensuring the safety and sustainability future space usage approved in 2019. COPUOS this year established a follow-on Working Group on the Long Term Sustainability of Outer Space Activities to get into the nitty gritty how countries should apply the guidelines. The working group has a five-year mandate.

The State Department on July 8 issued a solicitation to US industry for inputs on implementation, noting that the guidelines "address a number of key issues, including guidance on national level policy and regulatory frameworks for space activities, safety of space operations, scientific research and development, international cooperation, and capacity-building to ensure that developing nations can establish conducive national policies for safe space operations."

Further, UN member states will be preparing next year for the UN Summit of the Future planned for November 2024, where space also will be on the agenda. The agenda for the summit includes "a dialogue on outer space to ensure that it is used peacefully and sustainably."

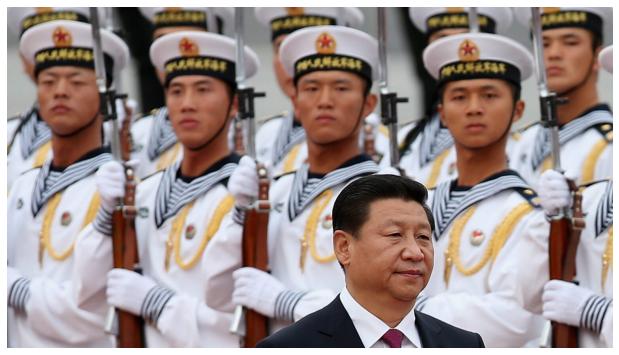
Richard Buenneke, senior space policy advisor at the State Department's Bureau of Arms Control, Verification and Compliance, on Nov. 2 told the CyberSatGov 2022 conference that the summit will be "an important opportunity for UN member states... to take stock of a broad range of challenges to space security and sustainability."

However, all the UN efforts likely will have to continue to struggle with Russian obstructionism stemming from Moscow's anger at the international opprobrium it has come under following its invasion of Ukraine.



### Indo-Pacific turmoil ahead as Aussies and allies shift their strategies, and China wobbles: 2023 Preview

It may be the beginning of a new era in Australian defense, with plans to buy Abrams tanks and hundreds of Infantry Fighting Vehicles scaled back to free money for weapons designed to deter.



Chinese People's Liberation Army navy soldiers of a guard of honor look at Chinese President Xi Jinping (Front) during a welcoming ceremony for King Hamad Bin Isa Al Khalifa of Bahrain on Sept. 16, 2013 in Beijing. (Photo by Feng Li/Getty Images)

### By COLIN CLARK on December 29, 2022 at 9:30 AM

SYDNEY — As China grapples with managing COVID-19 while reopening its faltering and debt-laden economy in 2023, US allies and partners will be making fundamental strategic decisions about their management of the rising state with a rapidly growing military. So with the new year comes a host of critical questions.

Will Manila invite the American military back to Subic Bay, the iconic naval base, and allow US troops to operate regularly from five other bases around the country?

The answer seems increasingly likely to be yes, with Chinese harassment of Philippine vessels and its persistent patrols in areas claimed by Manila helping the new government find clarity. The Subic Bay shipyard was purchased by the US-based private equity firm Cerberus Capital Management earlier in 2022. And there are persistent reports of efforts to bring the US Navy back to the vast port.

Will Australia forge a new strategic way ahead and commit to building a force more focused on long-range strike and reconnaissance, with beefed up force projection capabilities when its Defense Strategic Review is publicly revealed in March? Prime Minister Anthony Albanese made clear in a Dec. 19 interview with the Sydney Morning Herald that his country's defense spending will almost certainly increase beyond the 2 percent increase pledged by the previous government.





INDOPACOM map of the Pacific. (INDOPACOM)

This looks like it may be the beginning of a new era in Australian defense, with plans to buy Abrams tanks and hundreds of Infantry Fighting Vehicles scaled back to free money for weapons designed to deter. He largely dismissed tanks and other heavy weapons for what he derisively said amounted to "defending western Queensland."

In addition to its defense review, Australia will join the US and UK in unveiling the path ahead for the AUKUS nuclear-powered attack submarines, which Albanese staunchly defended in his interview with the SMH.

A crucial part of that will be whether and how the US Congress, the Pentagon and the State Department change the rules and laws governing the sharing of nuclear and other sensitive technology with Australia, and how the government then implements those changes. Congress will, of course, be fractured between a weak Republican majority in the House and a thin Democratic majority in the Senate, so making bold legal changes more difficult. And the White House will have to lead the federal government to the path it wants them to take to ensure Australia can build, deploy and maintain a small fleet of nuke boats.

Back in Asia, will Japan, which has just publicly committed to doubling its defense budget, actually buy new weapons to make its counterstrike capability real? When and at what scale? How will Australia and Japan's remarkably close defense relationship coalesce? What will the recently declared intent by the US and Australia to invite Japan "to integrate into our force posture initiatives" on the island continent really mean? Perhaps Japanese troops, for instance, will begin to spend months exercising and training in Australia, alongside the US Marines and Air Force pilots.

What roles will Indonesia and Malaysia play in the complex dance between the United States, its allies and partners and China? Will they caution the major military powers against angering China while, at the same time, taking steps to bolster their own militaries and exercising with US allies and partners?

Perhaps most difficult to predict is how Russia will manage its Pacific defense forces, especially, as currently looks likely, its forces operating against Ukraine continue to degrade, taking heavy casualties and exhausting Moscow's weapons stockpiles. Continued joint exercises with China seem likely, given how important China's quiet and uncertain support for Russia's illegal invasion of Ukraine has been to Moscow. Will Russia have to reorient some of its Pacific forces to the west as those killing Ukrainians die and are wounded, leaving units in need of rebuilding?

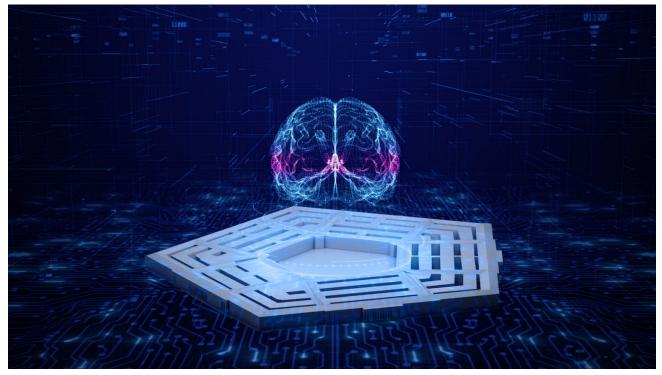
Underlying all of the above is the grim question, how will China react? Will Xi, weakened by the most brazen public criticism since the Tianamen Square revolt and his economic problems, come roaring back? Or will China spend the year regrouping and reconsidering its economic and defense policies?

Many of these questions may be answered in 2023, perhaps bringing with them an altered balance of power in the Pacific.



### Potential cloud protests and maybe, finally, more JADC2 jointness? 2023 Preview

For the Defense Department in 2023, the spotlight is its enterprise cloud contract, JADC2 and AI investments.



Pentagon grapples with growth of artificial intelligence. (Graphic by Breaking Defense, original brain graphic via Getty)

By JASPREET GILL on December 29, 2022 at 2:30 PM

WASHINGTON — After military information technology and cybersecurity officials ring in the new year, they'll be coming back to interesting challenges in an alphabet soup of issues: JWCC, JADC2 and CDAO, to name a few.

Of all the things that are likely to happen in the network and cyber defense space, those are three key things I'm keeping an especially close eye on in 2023. Here's why:

### **Potential JWCC Protests**

On Dec. 7, the Pentagon awarded Amazon Web Services, Google, Microsoft and Oracle each a piece of the \$9 billion Joint Warfighting Cloud Capability contract after sending the companies direct solicitations back in November.

Under the effort, the four vendors will compete to get "task orders." Right now, it's unclear when exactly the first task order will be rolled out or how many task orders will be made.

It's also possible that just like the Joint Enterprise Defense Infrastructure contract, JWCC could be mired in legal disputes, particularly when it comes to which vendor gets what task order.



### Potential cloud protests and maybe, finally, more JADC2 jointness? 2023 Preview

"As you know, with any contract, a protest is possible," Lt. Gen. Robert Skinner, director of the Defense Information Systems Agency, told reporters Dec. 8 following the JWCC awards. "What we really focused on was, 'Here are the requirements that the department needs.' And based on those requirements, we did an evaluation, we did market research, we did evaluation to see which...US-based [cloud service providers] were able to meet those requirements... The decision based on whether there's a protest or not really didn't play into it because we want to focus on the requirements and who could meet those requirements."

Sharon Woods, director of DISA's Hosting and Compute Center, said at the same briefing that "under the acquisition rules, the task orders, there's a \$10 million threshold and a \$25 million threshold on protests."

"So it's really dependent on how large the task order is," she added.

If there is a protest, the DoD could potentially see delays in a critical program its been trying to get off the ground for years now.

### A New Office To Oversee JADC2

After a year of a lot of back and forth about the Pentagon's Joint All Domain Command and Control effort to better connect sensors to shooters, a new office has been stood up with the aim of bringing jointness to the infamously nebulous initiative.

In October, DoD announced the creation of the Acquisition, Integration and Interoperability Office housed within the Office of the Secretary of Defense. Dave Tremper, director of electronic warfare in Office of the Undersecretary of Defense for Acquisition and Sustainment, will lead the office, and the first task will be finding how to "truly get JADC2 across the department," Chris O'Donnell, deputy assistant secretary of defense for platform and weapon portfolio management in OUSD (A&S), said Oct. 27.

The creation of the office came a few months after Deputy Defense Secretary Kathleen Hicks said she wanted more high-level oversight of JADC2 and following complaints from military service officials.

### Tracking The CDAO

It'll be interesting to see what the new Chief Digital and Artificial Intelligence Officer Craig Martell and his office will accomplish over the next year. Martell, a former Lyft exec, was tapped as the Pentagon's first CDAO earlier in 2022.

As CDAO, Martell has some big responsibilities and can't pull on any prior Pentagon experience. When the CDAO officially stood up June 1, the office absorbed the Joint AI Center, Defense Digital Service and Office of Advancing Analytics — all key parts of the Pentagon's technology network. And there are plans to permit the chief data officer to report directly to the CDAO. (The CDO is "operationally aligned" to the office and has been rolled into one of its directorates, according to an internal DoD memorandum that was obtained by Breaking Defense in May.)

Already Martell's priorities have slightly shifted: He initially thought his job would entail producing tools for DoD to do modeling, but over the first few months on the job, there's been a focus on "driving high quality data." During his remarks at the DIA DoDIIS Worldwide Conference Dec. 13, Martell said what most people think and demand of artificial intelligence is "magical pixie dust."

"What they're really saying is, excuse my language, 'Damn, I have a really hard problem and wouldn't it be awesome if a machine could solve it for me?" he said. "But what we really can deliver in lieu of that — because I'm here to tell you that we can't deliver magical pixie dust, sorry — but what we can deliver is really high quality data."

Martell is also working to further other DoD efforts like zero trust, the Joint Warfighting Cloud Capability and JADC2. The Pentagon has set an ambitious goal of implementing zero trust across the department by 2027 and released a zero-trust strategy in November. The question remains as to what exactly a full implementation of zero trust will look like.



## A pivotal year for Army weapon modernization programs awaits: 2023 Preview

From replenishing weapons stockpiles to exploring lessons learned from the war in Ukraine, Army leaders have a busy year ahead.



US Army squads under FORSCOM compete for the title of "Best Squad" in August 2022. (US Army/ Pvt. Kyler Hembree)

### By ASHLEY ROQUE on December 30, 2022 at 9:30 AM

WASHINGTON — A variety of factors may alter Army priorities in 2023, including the progress of the ongoing war inside Ukraine. Just how long should the service keep munition production lines ramped up to replace dwindling US stockpiles? How should service officials fold lessons learned from the ongoing war into new weapons programs?

As Army leaders mull over some of these questions, they are also billing 2023 as a pivotal year for their weapon modernization programs and a chance to show they can move beyond past acquisition missteps such as the Future Combat System.

Here are just a few of the 2023 storylines we at Breaking Defense are watching for from the Army next year.

### **Planning For A Rainy Day**

Washington was once again planning its pivot toward the Indo-Pacific region to counter America's top strategic competitor, China, when Russia invaded Ukraine in February. Although the Biden administration has asserted that its priority remains China, the Defense Department spent 2022 drawing up plans to send Kyiv roughly \$19.3 billion in security assistance, helping train Ukrainian military forces on how to use these new weapons and corralling allied and partner countries together to support Ukraine.



aircraft missiles, National Advanced Surface-to-Air Missile Systems and more. The service, in conjunction with the Pentagon at large, is now identifying ways to refill its weapon stockpiles and in 2022 moved forward with plans to ramp up production of several weapons lines via a funding infusion.

The big question, though, is how long the DoD wants to keep these production lines cranking at a higher rate, and if industry can keep up with the demand.

"There's kind of a bulge of money in '22 and '23," Douglas Bush, the Army's Assistant Secretary for Acquisition, Logistics and Technology, told reporters during a November 21 press event. However, the department's forthcoming fiscal 2024 budget request and the future fiscal 2025 Program Objective Memorandum will need to "look at a longer-range projection of how high do we keep these production lines for how long?" he added.

Some of these answers should emerge next year.

### **Ukraine And Weapon Modernization**

Some Army leaders have already identified lessons the service has taken from Ukraine, but more remains to be divined, especially how it may alter weapon modernization plans.

"It's a little early to translate lessons learned from Ukraine into all of our requirements process for our major weapon systems," Army Under Secretary Gabe Camarillo told reporters on December 7. However, he noted that the entire DoD is closely monitoring activities on the ground in Eastern Europe and looking for ways to adapt where possible.

Questions abound about what role tanks will play in the future battlefield, but Army leaders contend that ground vehicles like the M1 Abrams are here to stay.

"You don't need armor if you don't want to win," Army Chief of Staff Gen. James McConville told reporters during an October 10 press conference.

The Director of the Next Generation Combat Vehicles Cross Functional Team, Brig. Gen. Geoffrey Norman, has also asserted that the tank will remain in the Army's arsenal. However, he said the service is studying which weapons are destroying the tanks in Ukraine to plot for the future.

"Is it tank-on-tank direct fire engagements or is it top attack from anti-tank guided missiles [or] artillery sensor fuse munitions?" he told Janes on October 11. "We're taking a hard look at that through the intelligence that's coming from what's happening.... How are we protected against that? What, if anything, do we need to do differently, both from the material standpoint, but also from a tactics and a doctrine standpoint."

Such questions are not relegated to the service's ground combat vehicle fleet, and continue to percolate around the Future Attack Reconnaissance Aircraft (FARA) competition. JJ Gertler, a senior analyst with the Teal Group, told Breaking Defense earlier this month that the fight inside Ukraine has demonstrated the "challenging environment" such attack helicopters will face on battlefields.

Decisions about modifying existing weapons or requirements for new ones could begin emerging in 2023.

### **Modernization Aspirations**

The Army Future Command (AFC) will celebrate its five-year anniversary in August 2023, an entity established to help the service untangle its requirements and acquisition communities and field new weapons more quickly. In the intervening years since its inception, tensions between the AFC and acquisition side of the house emerged, and several high-profile development programs have hit roadblocks including the Optionally Manned Fighting Vehicle (OMFV) and the Integrated Visual Augmentation System (IVAS).



Despite these challenges, Army leaders are billing 2023 as a seminal moment where it will have 24 new technologies either being fielded, undergoing testing, or participating in experiments. The list of capabilities ranges from the Precision Strike Missile (PrSM) and a long-range hypersonic weapon to robotic combat vehicles (RCVs) and the service's new light tank built by General Dynamics Land Systems (GDLS).

Although the Army's definition of 24 new capabilities in 2023 is broad, it will likely face some setbacks or delays along the way and it may need to make tough decisions about the road ahead for programs that aren't performing.

### **Race For The Prize**

Several weapon modernization programs are poised for downselects in 2023 including the Army's fourth attempt to replace its aging fleet of M2 Bradleys. Five teams — American Rheinmetall Vehicle, BAE Systems, GDLS, Oshkosh Defense, and Point Blank Enterprises — participated in the service's recent OMFV concept design phase and Breaking Defense confirmed that all five teams have submitted their bids for the upcoming phases. But other companies may also be seeking one of the three available spots.

Stay tuned for a decision from the Army in 2023 when it announces the teams participating in the next 54-month OMFV development stint for phase 3 (detailed design) and phase 4 (prototype build and test) activities.

The service is also expected to make downselects in two other competitions — the Common Tactical Truck and RCV-Light (RCV-L).

### **Recruiting And Readiness**

McConville has been a proponent for growing the Army's active-duty component above 500,000 soldiers while also acknowledging that the service must strike the right balance between funding a force of this size and paying for new weapons programs.

"I think the Army should be bigger, but ... we're going to deliver the best army we can with the resources we get," the four-star general said during a February 10 virtual Heritage Foundation event. "Do you want a big stick [or do] you want a sharp stick? I believe in a sharp stick and I want to make sure that ... every person the United States Army counts."

However, striking the balance between soldiers and weapons development programs was not the Army's problem for 2022. Recruiting was.

The service ended FY22 with 466,000 active-duty soldiers, 10,000 fewer people than planned, Army spokesperson Sgt. 1st Class Anthony Hewitt, told Breaking Defense in a December 20 email. It also missed its recruitment goal by 25 percent, or roughly 15,000 soldiers, and only brought in 44,900 new soldiers, he added.

As a result, for FY23 the Army is anticipating missing its end strength goal of 473,000 and settling between 445,000 and 452,000 active-duty soldiers.

For now, Army leaders have said service readiness remains high and can meet its broader requirements. However, cracks could emerge next year and beyond, and the service may need to increase reliance on its reserve component or take other steps.

