



ARMY-2022 Recap

Samuel Bendett and Jeffrey Edmonds

Summary

This year, the Russian Federation hosted the Army-2022 military expo and forum from August 15 to 21, near Moscow. Attendance was purportedly nearly 1.9 million people, including delegations from 85 countries. Over 1,500 exhibitors displayed over 20,000 military weapons and systems with small Army-2022 satellite events taking part across Russia as well.

The event, the seventh since its inception in 2015, included numerous military competitions by international teams from nations including Iran, Sudan, Zimbabwe, and Venezuela. Multiple Army-2022 related events also took place in China, Iran, Kazakhstan, and other countries, with military teams competing in weapons and systems use and management, along with displaying different combat skills.

During Army-2022, multiple government contracts worth together over 520 billion rubles (over \$8 billion) were signed with domestic defense entities and enterprises. Multiple Russia-based military analysts noted that the 2022 forum featured fewer cutting-edge technological platforms, instead featuring modernized systems and weapons that are in demand today. The Russian MOD signed contracts for the manufacture of more Orlan-10, Orlan-30, Eleron-3, and Orion drones, which are currently used in Ukraine.

Numerous systems showcased and discussed during this expo were influenced by Russia's ongoing invasion of Ukraine and the resulting international sanctions that are impacting the domestic defense sector and the civilian high-tech and industrial economies. Import-substitution was also a key topic of discussion, along with deliberations about the future of the domestic industrial and high-tech workforce. The Russian defense establishment, government representatives, and military and civilian academia also discussed Russia's place in the current international system, and deliberated future geopolitical environment and warfare.

Main developments

The Russian Ministry of Defense (MOD) has announced the official creation of an AI department for artificial intelligence implementation in weapons development. During the announcement, the MOD discussed the need to consolidate and better manage different AI-related R&D efforts across its departments, research institutions, and defense-industrial corporations. Given statements emphasizing the importance of AI to the Russian MOD, this department may be central in crafting policies and directing actual work. Existing military AI R&D efforts will likely report to this department.

The head of this new AI department, Dr. Vasily Yelistratov, gave an interview to Russian media outlets, noting the cross-cutting nature of AI and the "intellectualization" of weapons in the Russian military, especially in high-precision and ground-, air-, and sea-based weapons systems. He further said that personnel training on weapons, on systems, and in tactics and concepts is still key, despite the emphasis on "smarter" machines that can presumably phase out human operators and combatants, noting that the "war of the future is a war of machines." Yelistratov characterizes the current historical period as one of transition from classical warfare methods to warfare that features more "intellectual" advanced technologies. He emphasized that humans will need to adjust to the eventual integration of those technologies.

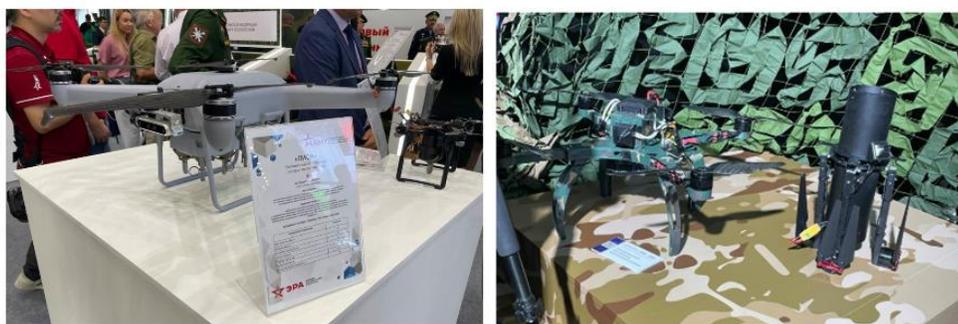
Another AI center, announced by Deputy Prime Minister Dmitry Chernyshenko, will focus on finding and analyzing effective AI solutions for business, science, and government. The government plans for the center to open in September. This center will combine the resources of more than 2,000 participants in the national AI ecosystem, such as research institutes, authorities, technology corporations, communities, and developers. The idea of this National AI Center was floated first in 2018, when the MOD co-chaired an inaugural event on AI development in Russia and the world.

Several weapons and systems presented during the forum drew heavily on Russia's ongoing experience in Ukraine. Examples are a small Zala quadcopter (left), and an "Oduvanchik" drone (right). Both are supposedly made to phase out Chinese-made DJI Mavic drones.



Sources: <https://www.ixbt.com/news/2022/08/14/zala-421-24-dji.html>; <https://tass.ru/armiya-i-opk/15644809>.

Also presented was a new "Fox" quadcopter (left), made specifically for psychological ops—to harass Ukrainian soldiers in the nighttime by dropping munitions nearby, causing stress and anxiety. [CNA comment: This seems odd, because if the Russians knew where the adversary was, it would certainly be more beneficial to bomb their actual position.] Another Ukraine-influenced weapon was a small foldable quadcopter (right) that can also double as a loitering munition.



Sources: <https://tass.ru/armiya-i-opk/15505307>; <https://tass.ru/armiya-i-opk/15470885>.

Two other major updates (shown on the following page) were the optionally manned/robotic BMP-3 IFV (left), and the Ural truck company's robotic version of its signature vehicle equipped with visual recognition software for remote control and autonomous operation in dangerous areas (right).



Sources: <https://ria.ru/20220816/robot-1809891480.html?in=t>; <https://ria.ru/20220815/gruzovik-1809606435.html>.

Another Ukraine-influenced drone design by the Russian defense manufacturers at ARMY-2022 resembled an American Switchblade design (left). Additionally, Russia's Kronstadt enterprise announced that it is starting work on the final design for the Grom loyal wingman UCAV (right).

ВНЕШНИЙ ИННОВАЦИОННЫЙ ТЕХНОПОЛИС "ЭРА"
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Sources: <https://gadget.com/ru/161015-v-rossii-hotyat-sozdat-kopiyu-drona-kamikadze-switchblade-300/>; <https://tass.ru/armiya-i-opk/15536309>.

Two other UGVs presented were the combat “Bogomol,” or “Praying Mantis” (left), and the logistics “Platforma-Mule” (right).



Source: “Two new UGVs were presented at ARMY-2202 this week—combat ‘Bogomol’ (Praying Mantis) and logistics ‘Platforma-Mule’” <https://tass.ru/armiya-i-opk/15520191>.

Other major announcements included the unveiling of an “Arkturus” submarine concept that can carry a UUV complement (left), along with the Surrogat large UUV (right) that can mimic submarine signatures for training and warfare.



Sources: <https://ria.ru/20220816/arktur-1809879651.html>; <https://topwar.ru/200663-anpa-surrogat-v-novyj-variant-mnogoobeschajuschej-koncepcii.html>.

The Rubin Design Bureau exhibited an improved Klasevin-2R UUV version (left) that has a diving depth of 6,000 meters and a range of 150 km, capable of working autonomously or remotely controlled via a hydroacoustic communication channel. It also displayed the Yunona UUV (right) for underwater search and inspection work, rescue operations, mapping, topography research, and other tasks at a depth of up to 1 km. The Almaz-Antey defense enterprise displayed a model of its Sarma deep-water UUV (center) that can conduct Arctic exploration.



Sources: <https://tass.ru/armiya-i-opk/15475323>; <https://tass.ru/armiya-i-opk/15475695>; <https://rg.ru/2022/08/15/koncern-almaz-antey-predstavil-odnu-iz-samyh-krupnyh-ekspozicij-na-armii-2022.html>.

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Michael Kofman, Research Program Director
Russia Studies Program / Strategy, Policy, Plans, and Programs Division

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