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ON THE COVER:

Vladimir Putin and Recep Tayyip Erdoğan

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Xi Urges Accelerated Development of Cutting-Edge Weaponry, Military Modernization



GEN. Li Shangfu head of the Central Military Commission's Equipment Development Department (Li is second from the right).

Source: https://upload.wikimedia.org/wikipedia/commons/2/2c/Zhang_Youxia_%282017-12-07%29_02.jpg
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By Peter Wood
OE Watch Commentary

Speaking in October at the People's Liberation Army's (PLA) annual all-service equipment conference, which sets priorities for military modernization, President Xi Jinping delivered a speech describing China's major efforts to catch up with other military powers, particularly since 2012. In the accompanying excerpted article from the PLA's official news outlet *China Military Online*, Xi describes China's weapons development as having shifted from importation and imitation to indigenous development and greater self-reliance. While Xi acknowledges continuing gaps, the Chinese military has tried to improve management of weapons and equipment development programs.

In 2016, China significantly restructured its top-level organizations guiding equipment development for the PLA, replacing the General Armaments Department with an Equipment Development Department (EDD) directly subordinate to the Central Military Commission (CMC), China's top military body.

In a related development, the CMC and each of China's Joint Theater Commands appear to have also established a Military Requirements Bureau under their Joint Staff departments. The bureaus are intended to help their respective organizations more quickly address changing requirements, whether related to training or necessary equipment. At the same time other organizations with oversight of long-term planning, particularly the Science and Technology Commission were also upgraded. Engagement with non-traditional parts of the defense industry and expanding cooperation with scientists and institutions outside of the industry have also been prioritized to improve the PLA's access to cutting-edge research. Taken together, these efforts will enable the PLA to better coordinate efforts between services while also responding to technological change more swiftly.

The Chinese Communist Party (CCP) had set several important milestones for military modernization, many of which are looming. In the speech, Xi referred to the PLA's centennial goal, which entails accelerating mechanization and integration of informationized and intelligent (smart) systems by 2027. There is no guarantee that China will meet these deadlines. For example, the goal of completing mechanization of the PLA by 2020 appears to have been revised. Even more ambitious milestones lie ahead: the CCP wants the PLA to achieve world-class status as a military by mid-century. Efforts set since 2012 to make the PLA a potent, modernized force, and to improve the underlying processes that drive modernization, are paying off.

“Since the 18th National Congress of the Communist Party of China (in 2012), the state of weapons and equipment technology has been improved and accelerated the speed of development as the entire military has consistently made the development of weapons and equipment a strategic priority, guided by the requirements of combat operations, and closely following trends in international military technology. At the same time, we must also realize that China faces significant gaps in many respects when compared with the requirements for safeguarding national security and development interests...”

Source: “加快推进武器装备现代化——认真学习贯彻习主席在全军装备工作会议上重要指示 (Accelerate the modernization of weapons and equipment——Conscientiously study and implement Chairman Xi's important instructions at the military equipment work conference),” *China Military Online* (official news outlet for the People's Liberation Army), 27 October 2021. http://81.cn/jfjbmap/content/2021-10/27/content_301725.htm

The PLA held an equipment work conference for all military services in Beijing. President Xi extended sincere greetings and important instructions to the delegates and all comrades working on the front lines of weapons and equipment and spoke highly of the leapfrog development and historic achievements of the Chinese military's weapons and equipment development during the course of the “13th Five-Year Plan” (2016–2020), clarifying the fundamental, directional, and overall major issues of weaponry and equipment construction. This has important practical significance and far-reaching guiding significance for accelerating the implementation of the “14th Five-Year” plan (covering 2021-2025) and creating a new chapter in weaponry and equipment development.

Without adequate equipment, we cannot begin to discuss the art of war. Weapons and equipment are an important symbol of military modernization, an important foundation of the preparation for military struggle preparations, an important support for national security and national rejuvenation, and an important weight in international strategic competition. Only by possessing advanced weapons and equipment and truly improving our defensive capabilities can we offer a real deterrent. Building a People's Army with advanced weapons and equipment is the goal of [the Chinese Communist Party]. In the course of its long-term development, our military has successively gone through the development stages of importation, imitation, and indigenous research and development. It has successively produced a large number of advanced weapons

Continued: Xi Urges Accelerated Development of Cutting-Edge Weaponry, Military Modernization

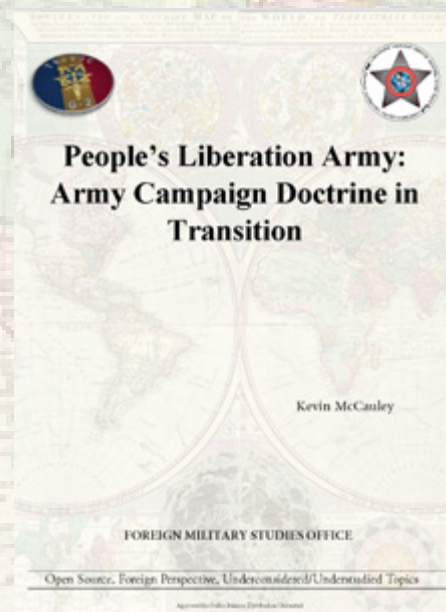
Source Continued: “加快推进武器装备现代化——认真学习贯彻习主席在全军装备工作会议上重要指示 (Accelerate the modernization of weapons and equipment——Conscientiously study and implement Chairman Xi’s important instructions at the military equipment work conference),” *China Military Online* (official news outlet for the People’s Liberation Army), 27 October 2021. http://81.cn/jfjbmap/content/2021-10/27/content_301725.htm

and equipment and high-precision technology as represented by the “Two Bombs and One Satellite” [China’s successful Manhattan Project-like effort to develop atomic and hydrogen bombs in the 1960s and launch an artificial satellite in 1970].

Promoting the leapfrog development of our military’s equipment construction and providing material and technical support for enhancing the country’s strategic capabilities, especially military strength, are the great mission placed on the PLA by the Party and the expectation of the PLA’s officers and enlisted. Since the 18th National Congress of the Communist Party of China (in 2012), the state of weapons and equipment technology has been improved and accelerated the speed of development as the entire military has consistently made the development of weapons and equipment a strategic priority, guided by the requirements of combat operations, and closely following trends in international military technology. At the same time, we must also realize that China faces significant gaps in many respects when compared with the requirements for safeguarding national security and development interests, or with the requirements for winning an informatized war, and compared with the world’s strongest military powers. At present, a new round of scientific and technological revolution, industrial revolution, and military revolution are evolving rapidly. The degree of informatization of modern warfare continues to increase, and the characteristics of intelligence are increasingly emerging. This provides a rare opportunity for advancing the modernization of weaponry and equipment and also creates tougher demands. In the face of changing times, wars, opponents, and technological changes, we can only be determined and strengthen our sense of urgency. Only by working hard, focusing more proactively on tomorrow’s war to accelerate the development of weapons and equipment, and stepping up the construction of a modern management system for weapons and equipment can we fully create a new situation in weapons and equipment construction and make positive contributions to the realization of the goal of the army’s centennial struggle.

People’s Liberation Army: Army Campaign Doctrine in Transition Kevin McCauley September 2020

This monograph examines current People’s Liberation Army (PLA) Army campaign doctrine, with a discussion of PLA theorists’ vision of the evolutionary development of warfare to provide context for current doctrine as well as potential future direction. The PLA develops doctrinal joint and service campaign scenarios for possible offensive and defensive operations. PLA campaigns represent the operational level of war between strategic operations and tactical combat. The PLA’s current focus on specific campaigns provides insight into Beijing’s perception of potential conflict scenarios. The campaign scenarios provide commanders and staff data on command and control, coordination, combat actions, support, and other critical campaign elements for specific operational environments. The description of each campaign’s operational environment and combat actions provides valuable support to operational planning and a context for staff and unit training for their specific operational mission. The Army campaigns are executed as components of a joint campaign, or as a primarily independent Army campaign with support from other services.



<https://community.apan.org/wg/tradoc-g2/fmso/m/fmso-monographs/351019>



PLA soldier participates in a tactical shooting competition.

Source: <https://upload.wikimedia.org/wikipedia/commons/9/9a/PLA-TACSHOOTER2021.png> Attribution: CC BY 4.0

PLA Experimenting with Formations To Optimize Combat Effectiveness

By Peter Wood
OE Watch Commentary

A brigade in northeastern China appears to be experimenting with new combat formations. In the accompanying excerpt from the People's Liberation Army's (PLA) newspaper *PLA Daily*, the unnamed brigade, which is under the 78th Group Army based in northeastern China, reallocated units down to the squad level to better suit mission requirements and terrain. Units under the 78th Group Army appear to have long been at the forefront of the PLA's experimentation with, and transition to, combined arms battalions (See "New Type" PLA Units Emphasize Mobility, Joint Operations," *OE Watch*, October 2018). In this exercise, the brigade testing the new formation was representing the blue team, or "enemy" force. This gave the red PLA force the chance to test itself against an unusual and more effective fighting force while

“Precise deployment of forces is an important part of winning future ‘informationized’ wars. Only by continuously improving the accuracy of the allocation of forces and use of firepower can we better unlock the full combat effectiveness of the troops, achieve functional integration and complement each other’s advantages.”

experimenting with new ways of allocating forces. The “mixing and matching” method proved successful in both defensive and offensive scenarios during the exercise.

In the article, the blue team brigade leader notes that allocation of forces will be essential to prevail in “informationized” warfare characterized by high tempos and deep integration of sensors, communications, and precision fires. Modularity and organizational flexibility will be essential to bringing the maximum amount of combat power to bear

while allowing quick responses to new threats. Currently, the PLA is quickly adopting new command systems and testing new formations and equipment to improve its proficiency in combined arms operations. (See “PLA Fields New Integrated Command Platforms, Improving Combined Arms Operations,” *OE Watch*, December 2021). While new equipment is arguably equally important, finding new ways to use existing or new formations, and adopting a mindset that would allow such innovation, may prove key in future conflicts.

Source: Zhang Guangxuan [张光轩], “第78集团军某旅 ‘按需混编’ 精准释放战斗效能 (Brigade under the 78th Group Army ‘Mixes’ Units Correctly to Release Full Combat Efficiency),” *PLA Daily* (official newspaper of the PLA), 11 February 2022. http://www.mod.gov.cn/power/2022-02/11/content_4904656.htm

On the eve of the Spring Festival, a brigade of the 78th Group Army and a related unit conducted a realistic confrontation exercise. Acting as the opposing force, the brigade used an “on-demand mixing” method to organize its troops and firepower for combat operations instead of the static, pre-allocated method used before, which allowed the unit to optimize combat formations and improve the effectiveness of combat command.

Precise deployment of forces is an important part of winning future ‘informationized’ wars. Only by continuously improving the accuracy of the allocation of forces and use of firepower can we better unlock the full combat effectiveness of the troops, achieve functional integration and complement each other’s advantages.” According to the brigade’s leader, in this exercise, the opposing force broke up existing units and instead reallocated each squad to a new ad hoc mixed unit to better suit the mission requirements and terrain. Each combat unit has a designated commander and deputy. Compared with the previous grouping method, this “on-demand mixing” mode enables more precise use of force and firepower and more efficient and efficient combat command.

At the exercise area, Zhang Peng, the commander of the opposing force, organized the force into 18 operational units after leading the battalion, company, and platoon commanders to conduct repeated surveys of the defensive positions before the battle. After the battle started, Zhang Peng directly ordered each operational unit to enter the fight in response to the attacking forces. Their reaction speed and the efficiency of the deployment of troops and firepower were significantly improved.

“The opponent’s reaction is too fast!” admitted the commander of the attacking team at the end of the exercise. “The main reason for the failure of our attack is that the opposing team was able to respond quickly, and the coordination of forces and fires is more effective.” In the following iteration of the exercise, the opposing force switched from defense to attack and again ‘mixed’ forces to suit the terrain and mission. The result of the new tactics was clear—another decisive win.

China Issues Fifth Mobilization Order To Kick Off Annual Military Training

By Cindy Hurst
OE Watch Commentary

The accompanying article published by the Central Military Commission's (CMC) official newspaper *Jiefangjun Bao* is a possible indication of a heightened level of urgency and war preparedness in China. The article discusses a training competition that the 82nd Group Army held in early 2022, with higher requirements and more rigorous standards. This marks the fifth year in a row that President Xi Jinping, Chairman of the CMC, has issued a mobilization order to kick off military training. These exercises have become more refined and high tech, adding cutting-edge technologies such as big data, unmanned aerial vehicles (UAVs), and artificial intelligence on the frontline of training. They have introduced advanced simulators, including bio-simulation and virtual

reality technologies, which simulate various types of combat injuries, creating a more realistic combat scenario.

According to *Jiefangjun Bao*, participants broke 16 training records during the competition. The article attributes some of the records to new processes, technologies, and equipment, such as new command-and-control equipment that has been in service for just over a year. A system of rewards and punishment, meant to increase the soldiers' level of confidence and motivation, is also in place. While the article focuses on the specific exercise of only one group army, it describes the training activities as "a microcosm of troops from the entire armed forces obeying Chairman Xi's orders and focusing on military training."

“Chairman Xi Jinping issued a mobilization order to the entire armed forces to begin training in the new year, clearly requiring that "[troops] comprehensively advance the transformation and upgrade of military training, resulting in elite forces capable of fighting and winning.”

Source: Geng Tao and Zhou Yuan, “第82集团军某旅群众性练兵比武拉开新年度训练序幕——奖牌之争折射训练之变 (Mass Training and Competition Held by 82nd Group Army Brigade Kicks off the New Year of Training),” *Jiefangjun Bao* (People's Liberation Army Daily. The official newspaper of the Central Military Commission), 20 January 2022. https://www.81.cn/sydbt/2022-01/20/content_10124683.htm

At the beginning of the new year, Chairman Xi issued a mobilization order to the entire armed forces to begin training in the new year, clearly requiring that "[troops] comprehensively advance the transformation and upgrade of military training, resulting in elite forces capable of fighting and winning." This was the fifth year in a row that Chairman Xi has issued a mobilization order to kick off training, sounding a contemporary bugle call for troop training and war preparedness, and undoubtedly advancing the military training of our armed forces toward a new stage of all-round transformation and overall improvement. The gratifying scene that took place on the competition ground of a certain brigade of the 82nd Group Army was a microcosm of troops from the entire armed forces obeying Chairman Xi's orders and focusing on military training. At a new starting point in the new year, units throughout the armed forces must use higher requirements and more rigorous standards to continue to set in motion a wave of enthusiasm for combat-realistic military training, and greet the opening of the 19th Party Congress with high spirits and first-rate training results.

On the competition ground, while operating a new command and control equipment that had been in service for only a little over a year, Staff Sergeant Xie Kun was the first to complete the subject [of competition] and set a new record. Faced with multiple obstacles, heavy equipment transport vehicle driver Zhao Pengcheng drove the vehicle with speed and broke the training record that had been maintained at the brigade for many years... At the beginning of the new year, a certain brigade of the 82nd Group Army held a mass training and skills competition, unfurling the curtain on the new year's training. One after another, officers and soldiers broke 16 training records of the brigade.

... The combat-realistic level of the units' training has been constantly rising. Many gratifying changes were taking place on the training ground.

... Last year, the brigade introduced bio-simulation and virtual reality technologies to simulate various types of combat injuries, making battlefield rescue training more closely adhere to actual combat.

... the brigade took the initiative to apply cutting-edge technologies such as big data, UAVs, and artificial intelligence on the frontlines of training. It upgraded and rebuilt eight new-type training fields, set up terminals for military vocational education and study, and established multiple types of high-tech training facilities that adhere closely to [the requirements of] actual combat. Multiple training courses on dangerous and difficult subjects can be carried out in all weather conditions and in high efficiency.

... This brigade focused on training and combat readiness to establish a reward and punishment mechanism. More than 90 percent of the meritorious service indicators were used for military training, allowing training elites to be commended and to receive rewards. This [mechanism] motivated officers and soldiers to actively exert efforts to fight and win on the battlefield. Since its establishment, the brigade has participated in various types of military skills competitions organized by the higher-ups and won 38 first place awards.

Chinese AI Researchers Claim Success in Teaching Drones To Win Dogfights

By Cindy Hurst
OE Watch Commentary

The accompanying excerpt from the Hong Kong-based *South China Morning Post* (SCMP) references a report published in the Chinese peer-review journal, *Acta Aeronautica et Astronautica Sinica*, that researchers have developed an artificial intelligence (AI) system capable of teaching Chinese combat drones how “to win dogfights thousands of times faster than comparable American technology.” According to the researchers, the ability to learn at a higher speed could help drones to identify a human pilot’s “cheating maneuvers” and outperform them in complex, large-scale air combat. They put the system to the test by simulating combat between a drone and a test fighter. The researchers claim that after conducting 800,000 simulations, the drone was able to win most of its encounters. They compared the results to a “similar dogfight competition conducted in the United States in 2020,” which they say took more than 4 billion rounds of training to achieve the same result. The test took place in Jianyang, Sichuan Province, at the

Aerodynamics Research and Development Center, the largest research and testing institute of aerodynamics in China. The SCMP article notes the growing role of drones in defense, explaining that most military drones are designed for surveillance, early warning, communications,

“A main focus of the Chinese military AI program is to develop new algorithms that can get high performance out of a slow computer.”

or attack. They normally cannot handle the sophisticated, fast-paced action needed in a dogfight, which requires more calculation and swifter movement since their computer chips are slower and possess more conservative technology. The AI program’s focus is to develop new algorithms that increase performance rate.

Source: Stephen Chen, “Chinese AI Team Claims Big Win in Battle to Teach Dogfights to Drones,” *South China Morning Post* (Hong Kong's most prominent online English-language daily), 30 January 2022. <https://www.scmp.com/news/china/science/article/3165330/chinese-ai-team-claims-big-win-battle-teach-dogfights-drones>

Researchers in southwest China say they developed an artificial intelligence system that can teach Chinese combat drones to win dogfights thousands of times faster than comparable American technology.

The (US) Heron system defeated the pilots in all five dogfights, taking more than 4 billion rounds of “training” to achieve the result.

The researchers in Sichuan said their system took just 800,000 simulations to win most of its encounters.

Huang said that their new AI system was selective, choosing only the best data for the next round.

Most military drones have been designed for surveillance, early warning, communications or to attack ground targets. These systems cannot handle fast-paced, sophisticated actions such as dogfights because an enormous amount of calculation must be done quickly, according to some military researchers.

A main focus of the Chinese military AI program is to develop new algorithms that can get high performance out of a slow computer.



China’s cyber policy appears to have three vectors—peace activist, espionage activist, and attack planner—that dominate China’s cyber policy. Some are always hidden from view while others are demonstrated daily. Three Faces of the Cyber Dragon is divided into sections that coincide with these vectors.

China-Russia Pledges of Deeper Cooperation Show Tangible Results

By Peter Wood
OE Watch Commentary

Russian President Vladimir Putin visited Beijing in early February, and Russia and China took the opportunity to cement their increasingly close relationship further. The accompanying excerpts from Putin's public letter and a joint statement, both published by Chinese state media outlet *Xinhua*, give some sense of the future direction of this relationship. Central to both the letter and the joint statement is the expressed desire to expand cooperation across a wide range of areas, including space exploration, development of the Arctic, transportation, science, and technological development.

The two countries have successively upgraded relations from a constructive partnership (1994), to strategic partnership of coordination for the 21st century (1996), to a comprehensive strategic coordinated partnership (2011), to a new-era Sino-Russian comprehensive strategic coordinated Partnership (2019) (See "China Upgrades Relations with Russia," *OE Watch*, July 2019). These titles have been accompanied

“...We continue to expand local currency settlements and establish mechanisms to counteract the negative effects of unilateral sanctions. The Agreement between the Russian Government and the Chinese Government on Settlement and Payment signed in 2019 became an important milestone in this work.”

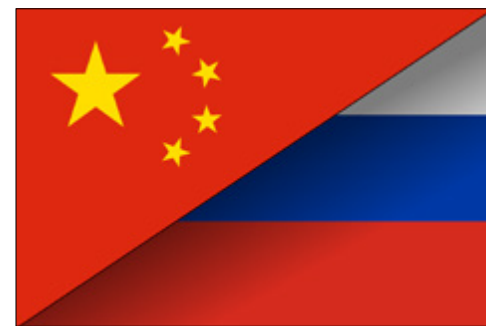
by real improvements in the two countries' levels of cooperation. In particular, Putin's letter highlighting the importance of joint efforts to improve each side's ability to use local currencies in payments has helped Russia mitigate the effects of international sanctions.

Cooperation in the energy sector has further benefited both sides as China looks to transition its energy grid to use more natural gas as a cleaner and more efficient alternative to coal while Russia is diversifying and expanding its sales of oil and gas. The two sides have steadily opened new transportation links to improve cross-border trade, including a bridge connecting Heihe and Blagoveschensk along the Amur River, which forms part of China's northeast

border with Russia (See "New Bridge to Connect Russia's Far East with China's Northeast," *OE Watch*, February 2020). In Putin's letter, these links and improving trade have taken on additional importance as both countries look to expand trade after the negative effects of the global pandemic.

The joint statement expands upon the pledges of economic cooperation mentioned in Putin's letter, promising increasing connectivity across Eurasia and cooperation in developing the Arctic. The statement also systematically touches upon issues of concern to each side, ranging from core interests such as the "One China" Principle and the status of Taiwan, to the historical account of Russia's role in World War Two. It devotes significant time to defending their respective interpretations of democracy and positioning Russia and China as defenders of the post-World War Two international system and global security. While both sides likely harbor some doubts about the long-term value of cooperation due to the massive inequalities in the size of their respective economies and populations, improving trade and scientific cooperation as well as backing each other diplomatically could pay significant dividends in expanding both countries' national power in the near term.

“The two sides reiterated that they firmly support each other's core interests, national sovereignty and territorial integrity, and oppose external interference in the internal affairs of the two countries.”



Chinese and Russian Flags.
Source: Image by Author. Permission to use image granted by author

Source: “普京通过新华社发表署名文章《俄罗斯和中国：着眼于未来的战略伙伴》 (Putin published a signed article through Xinhua News Agency ‘Russia and China: Strategic Partners for the Future’),” *Xinhua* (PRC State News agency), 3 February 2022. http://www.news.cn/2022-02/03/c_1128325398.htm

....We continue to expand local currency settlements and establish mechanisms to counteract the negative effects of unilateral sanctions. The Agreement between the Russian Government and the Chinese Government on Settlement and Payment signed in 2019 became an important milestone in this work.

A mutually beneficial energy alliance is being formed between our two countries. In addition to the long-term delivery of oil and gas to China, we also plan to implement a series of large-scale joint projects. One of the projects is the construction of four new generating units at China's nuclear power plant from last year, with the participation of the Russian State Atomic Energy Corporation. All of this greatly enhances the energy security of China and the entire Asian region.

We believe that the two countries have extensive opportunities to develop partnerships in the information and communications industry, medicine, and space exploration, including the application of national navigation systems and the implementation of the International Lunar Research Station project. The “Year of Science and Technology Innovation” held 2020-2021 and hosted by both countries has injected a huge impetus into strengthening bilateral relations.

Accelerating the socio-economic development of Siberia and the Far East is one of Russia's strategic tasks. These regions are the regions closest to China. We plan to actively develop local cooperation, attract Chinese investment and technology, and expand global transportation and trade routes. For example, modernization and upgrading of the Baikal-Amur and Trans-Siberian railways have already begun. Its capacity will be

continue on 9

Continued: China-Russia Pledges of Deeper Cooperation Show Tangible Results

Source Continued: “普京通过新华社发表署名文章《俄罗斯和中国：着眼于未来的战略伙伴》 (Putin published a signed article through Xinhua News Agency ‘Russia and China: Strategic Partners for the Future’),” *Xinhua* (PRC State News agency), 3 February 2022. http://www.news.cn/2022-02/03/c_1128325398.htm

doubled and a half by 2024 by increasing the volume of transit freight and shortening transit times. In addition, the port infrastructure in the Russian Far East has also been developed. All of these will further enhance the complementarity of the Russian and Chinese economies.

... We have the same position on international trade issues. We advocate maintaining an open, transparent and non-discriminatory multilateral trading system based on the rules of the World Trade Organization, and agree to restart the global supply chain. As early as March 2020, Russia proposed an initiative to build a “green corridor” for trade without any sanctions, political and administrative barriers. The implementation of this initiative will help overcome the economic impact of the pandemic....

Source: “中华人民共和国和俄罗斯联邦关于新时代国际关系和全球可持续发展的联合声明 (Joint Statement of People’s Republic of China and the Russian Federation on International Relations in the New Era and Global Sustainable Development),” *Xinhua* (PRC State News agency), 4 February 2022. http://www.gov.cn/xinwen/2022-02/04/content_5672025.htm

... The two sides will actively promote the cooperation between the joint construction of the “Belt and Road” and the Eurasian Economic Union, and deepen the practical cooperation between China and the Eurasian Economic Union in various fields. Improve the level of connectivity in the Asia-Pacific and Eurasian regions. The two sides are willing to continue to promote the parallel and coordinated development of the joint construction of the “Belt and Road” and the “Greater Eurasian Partnership”, promote the development of regional organizations and the process of bilateral and multilateral economic integration, and benefit the people of all countries in the Eurasian continent.

The two sides agreed to further deepen pragmatic cooperation in Arctic sustainable development...

The two sides expressed deep concern over the severe challenges facing the international security situation, and believed that the people of all countries share a common destiny, and no country can and should not achieve its own security by breaking away from world security and at the expense of the security of other countries. The international community should actively participate in global security governance to achieve common, comprehensive, cooperative and sustainable security.

The two sides reiterated that they firmly support each other’s core interests, national sovereignty and territorial integrity and oppose external interference in the internal affairs of the two countries.

The Russian side reiterated that it abides by the one-China principle, recognizes that Taiwan is an inalienable part of China’s territory, and opposes any form of “Taiwanese independence.”

China and Russia oppose external forces undermining the security and stability of the two countries’ common surrounding areas, oppose external forces interfering in the internal affairs of sovereign countries under any pretext, and oppose “color revolutions”, and will strengthen cooperation in the areas mentioned above.

... The two sides believe that individual countries, military-political alliances or alliances seek direct or indirect unilateral military superiority, harm the security of other countries through unfair competition and other means, intensify geopolitical competition, exaggerate rivalry and confrontation, seriously undermine the international security order, and undermine global strategic stability. . The two sides oppose the continued expansion of NATO, and call on NATO to abandon the ideology of the Cold War, respect the sovereignty, security, interests, and diversity of civilizations, history and culture of other countries, and view the peaceful development of other countries in an objective and fair manner. The two sides oppose the establishment of a closed alliance system in the Asia-Pacific region and the creation of confronting camps, and are highly vigilant of the negative impact of the “Indo-Pacific strategy” promoted by the United States on the peace and stability of the region. China and Russia have always been committed to building a security system in the Asia-Pacific region that is equal, open, inclusive, and not targeting third countries, and maintains peace, stability, and prosperity.

China Deepens Information Security Cooperation with Central Asian Neighbors

By Peter Wood
OE Watch Commentary

2021 marked the 20th anniversary of the founding of the Shanghai Cooperation Organization (SCO). The SCO, a multilateral association of China, India, Kazakhstan, Kyrgyzstan, Pakistan, Russia, Tajikistan, and Uzbekistan with four additional observer states, was created to ensure security and maintain stability across Eurasia.

While its focus was initially on traditional counterterror military and police operations, there has been a steady expansion of emphasis on cyber and information security cooperation. The excerpted article published on the website of the China Institute of International Studies, *CIIS.org*, provides an outline of the development of this cooperation and China's future plans. Written before the outbreak of political violence in Kazakhstan in January 2022, the article provides a snapshot of how China regards its international cooperation efforts in security spheres, and more generally, influence on its neighbors. SCO members have signed joint documents on information security likening the potential disruptive capabilities of information technologies to weapons of mass destruction. As such, they emphasize the need to better grasp these technologies to adequately address what the SCO refers to as the “three forces”—terrorists, separatists, and extremists.

The full article also highlights the role of cyber exercises in China's engagement with the SCO over the past decade. Were it not for the pandemic, the fourth iteration of biennial cyber-



Shanghai Cooperation Organisation.
Source: [https://en.wikipedia.org/wiki/File:Shanghai_Cooperation_Organisation_\(logo\).svg](https://en.wikipedia.org/wiki/File:Shanghai_Cooperation_Organisation_(logo).svg)
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terrorism exercises would have been held in Xiamen, Fujian Province in December. The first exercise was held in 2015, with subsequent exercises in 2017 and 2019. These exercises involved capture the flag, cyber forensic investigations and collaborative intelligence collection exercises, identifying terror organizations' methods of recruiting members, identifying affiliated individuals, and carrying out coordinated arrests.

Taken together, China appears to be equipping its neighbors with the tools to carry out both traditional counterterrorism operations using modern technologies, and improving their ability to counter dissent or any threat to social stability. The 2018 SCO Qingdao Summit announced the desire to expand SCO far beyond its original size and remit. As repeated in official readouts at the time, the meeting “marked a new start as the SCO began to transform from an organization of mainly landlocked Central Asian countries to one of regional cooperation between coastal and hinterland countries.” Cybersecurity and information cooperation—especially with an emphasis on public security, counterterrorism and internal control—will continue to be a springboard for deepening and expanding the impact of the organization. As Central Asian countries react to the fallout from recent political upheaval in Kazakhstan, China is likely to double down on the promotion of these tools.

“...in the future, information security cooperation within the Shanghai Cooperation organization should proceed from a strategic and long-term perspective, improve its position, strengthen its capabilities, expand its horizons, and promote the development of regional and global network governance in a more benign and orderly direction.”

Source: Deng Hao [邓浩], Li Tianyi [李天毅], “上合组织信息安全合作：进展、挑战与未来路径 (SCO Information Security Cooperation: Progress, Challenges, and Future Path),” *CIIS.org* (Website of the China Institute of International Studies, a directly-affiliated research institute or think tank for the PRC Ministry of Foreign Affairs), 24 September 2021. https://www.ciis.org.cn/yjcg/sspl/202109/t20210924_8175.html

This year marks the 20th anniversary of the establishment of the Shanghai Cooperation Organization (hereinafter referred to as the “Shanghai Cooperation Organization”). Security cooperation has always been the top priority of the SCO cooperation and is the biggest highlight of the SCO's two decades of development. In the past 20 years, Central Asia, the core area of the SCO, has not been rendered chaotic (lit. “Middle Easternized” [被中东化]) and has always maintained a stable overall situation. The effective security cooperation of the SCO has contributed greatly to this. Over the past 20 years, the economy of the SCO has generally improved. The economic aggregates and per capita GDP growth of its member countries have both been higher than the world average. The security provided by the SCO has contributed a lot. Information security cooperation is the “rising star” of the SCO's security cooperation and a new force for the SCO's security cooperation. It plays an increasingly important role in maintaining regional security and stability. The SCO is standing at a new starting point in the history of the third decade, and maintaining information security faces new challenges and pressures. In the future, the SCO information security cooperation should further strengthen the sense of a community of shared future, continuously enhance the ability to respond to information security threats, increase international cooperation, and strive to build a peaceful, safe, fair and open information space.

The SCO information security cooperation started in 2005. Over the past 16 years, the SCO's information security cooperation has continued to expand from consensus to action and has made positive progress, showing great potential and good prospects...

In the Declaration of the Fifth Astana Summit of the Shanghai Cooperation Organization in 2005, the heads of member states proposed for the first time the prevention of information terrorism. This is the first time that the SCO has raised the issue of information security in an official cooperation document. This opened the prelude to the SCO's information security cooperation. The SCO's security cooperation has begun to expand from the traditional field to cyberspace. On June 15, 2006, on the occasion of the fifth anniversary of the establishment of the SCO, the heads of the SCO member states held the sixth summit, which further clarified the need to maintain information security and jointly deal with the military, political, criminal, and terrorism they are facing... It was also at this summit that the heads of member states signed the first special

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Continued: China Deepens Information Security Cooperation with Central Asian Neighbors

Source Continued: Deng Hao [邓浩], Li Tianyi [李天毅], “上合组织信息安全合作：进展、挑战与未来路径 (SCO Information Security Cooperation: Progress, Challenges, and Future Path),” *CIIS.org* (Website of the China Institute of International Studies, a directly-affiliated research institute or think tank for the PRC Ministry of Foreign Affairs), 24 September 2021. https://www.ciis.org.cn/yjcg/sspl/202109/t20210924_8175.html

document on information security cooperation-the “Statement of the Heads of State of the Shanghai Cooperation Organization on International Information Security.” The statement expressed concern about the use of information and communication technology to damage personal, social, and national security, and believed that information security threats would bring serious political, socio-economic consequences to countries and regions and the world, and trigger the instability of societies in various countries, which may cause It is a worldwide disaster equivalent to the use of weapons of mass destruction...

On September 13, 2013, the SCO held the 13th Bishkek Summit of Heads of State. The declaration adopted at the meeting clearly stated that it is necessary to build a peaceful, safe, fair and open information space based on the principles of respect for national sovereignty and non-interference in internal affairs and advocate the formulation of a unified information space national code of conduct. This is a new understanding of member states on national information security cooperation. The Dushanbe Declaration of the 14th SCO Heads of State Summit in 2014 further stated that member states support the right of all countries to manage the Internet on an equal basis and support and guarantee their respective sovereign rights to Internet security. This has further improved the SCO’s position on international information security issues.

On June 9, 2017, the heads of state of the member states signed the “Statement of the Heads of State of the Shanghai Cooperation Organization on Joint Fighting against International Terrorism” at the 15th SCO Summit in Astana. They believed that comprehensive measures should be taken to combat terrorism, particularly the spread of ideology and extremism, through the prevention of the use of the Internet and other propaganda to incite terrorism and extremism, and conduct recruitment activities.

On October 11, 2020, at the 20th Moscow Summit, the heads of the member states signed the “Statement of the Shanghai Cooperation Organization Heads of State Council on Ensuring Cooperation in the Field of International Information Security” and the “Shanghai Cooperation Organization... The Statement on Combating the Spread of Terrorism, Separatism, and Extremism... calling on the international community to work closely in the information field to jointly build a community with a shared future in cyberspace...

In order to effectively carry out information security cooperation, the SCO has gradually established and continuously improved corresponding cooperation mechanisms and systems in the course of practice, which has provided the necessary means and legal guarantees for the SCO’s information security cooperation.

In terms of mechanism construction, regional anti-terrorist agencies are the primary support of the SCO’s information security cooperation. This institution is one of the two permanent institutions of the Shanghai Cooperation Organization. Since its establishment in 2004, it has been committed to promoting coordination and cooperation among member states in combating the “three forces” (terrorists, separatists, and extremists)...

At the 20th SCO Moscow Summit in 2020, President Xi Jinping emphasized..in the future, cooperation within the SCO should proceed from a strategic and long-term perspective, improve its position, strengthen its capabilities, expand its horizons, and promote the development of regional and global network governance in a more benign and orderly direction.



THE RUSSIAN WAY OF WAR

by Lester W. Grau and Charles K. Bartles

At any given time, assessments of the Russian Armed Forces vary between the idea of an incompetent and corrupt conscript army manning decrepit Soviet equipment and relying solely on brute force, to the idea of an elite military filled with Special Operations Forces (SOF) who were the “polite people” or “little green men” seen on the streets in Crimea. This book will attempt to split the difference between these radically different ideas by shedding some light on what the Russian Ground Forces consist of, how they are structured, how they fight, and how they are modernizing.

Russian Motorized Rifle Divisions To Gain an Electronic Warfare Battalion

By Charles Bartles
OE Watch Commentary

Traditionally, Russian motorized rifle divisions and brigades each have an organic electronic warfare (EW) company. However, according to the excerpted articles from Russian newspaper *Izvestiya* and state-owned news agency *Radio Sputnik*, future motorized rifle divisions will have their EW company upsized to an EW battalion. According to *Radio Sputnik*, Colonel General Alexander Zhuravlyov, the commander of the Western Military District, stated that this change “will significantly increase the reconnaissance capabilities of the formation and reduce the time it takes to obtain necessary information.” *Izvestiya* notes that these new battalions will be equipped with the R-330Zh Zhitel jammer, the Borisoglebsk-2 EW suite, and the RB-341V Leer-3 EW/unmanned aerial system (UAS). Although EW companies already have the Zhitel and Borisoglebsk-2, the RB-341V Leer-3 will be a new capability at the brigade/division echelon. Previously, only the echelons above the maneuver brigade/division had this system. It is important to note that, aside from the RB-341V Leer-3 and more kit, these EW battalions will most likely closely resemble the EW companies from which they are derived, maintaining their tactical focus. This means that the EW

battalions found in the motorized rifle divisions are far different from the EW battalions found at the Combined Arms Army level in terms of purpose, structure, and equipment, which includes the Palantin, Krasukha-S4, etc., as this type of an EW battalion has more of an operational focus.

The accompanying excerpted article from the weekly military and defense-focused newspaper *Voyenno-Promyshlennyi Kuryer* discusses the value of the RB-341V Leer-3 to security forces during the recent unrest in Kazakhstan. According to the article, “There is no doubt that the use of the Leer-3 system not only severed communications between the combat groups and their foreign controllers, but also provided Kazakh security forces their geolocation data.”

The inclusion of the RB-341V Leer-3 in more numerous, lower-level, tactical units show the importance Russia places on cell phones in modern warfare. The RB-341V Leer-3 is not just envisaged to do cell phone jamming and geolocation, but also to influence the population by way of sending short message service (SMS) and audio messages, and eventually, even digital files.

“According to Colonel General Alexander Zhuravlyov, the battalion's addition to the division ‘will protect significant sites, increase the reconnaissance capabilities of the formation, and reduce the time it takes to obtain necessary information.’”



RB-341V Leer-3 with Orlan-10 UAV.

Source: Vitaly Kuzmin, <https://photos.smugmug.com/photos/i-QX8bGpH/0/X3/i-QX8bGpH-X3.jpg>
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Orlan-10 UAV of the RB-341V Leer-3.

Source: Vitaly Kuzmin, <https://photos.smugmug.com/photos/i-JRLBkqD/0/X3/i-JRLBkqD-X3.jpg>
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Source: “Россия усилила радиоэлектронную борьбу на границе с Украиной (Russia has stepped up electronic warfare on the border with Ukraine),” *Radio Sputnik* (state-owned news agency, news website platform and radio broadcast service), 25 January 2022. <https://radiosputnik.ria.ru/20220125/razvedka-1769436630.html>

Russia's Western Military District (WMD) has deployed a new battalion of electronic warfare systems in Belgorod Region, which borders on Ukraine, Russian news agency RIA Novosti reported on 25 January.

“A separate electronic warfare battalion became part of the Vislenskaya [3rd] Motorized Rifle Division of the Western Military District. Subdivisions of the new military unit are deployed in Belgorod Region,” the Western Military District said...

According to Colonel General Alexander Zhuravlyov, the battalion's addition to the division “will protect significant sites, increase the reconnaissance capabilities of the formation, and reduce the time it takes to obtain necessary information”...

“The [electronic warfare] battalions will be equipped with Zhitel, Leyer-3 and Borisoglebsk-2 electronic warfare systems can conduct electronic intelligence and suppress the operation of communication and navigation systems...”

Continued: Russian Motorized Rifle Divisions To Gain an Electronic Warfare Battalion

Source: Bogdan Stepovoy, Roman Kretsul, Andrey Fedorov, “Ценность помех: в Западном округе создают батальоны радиоэлектронной борьбы (The Value of Jamming: Electronic Warfare Battalions Are Being Created in The Western Military District),” *Izvestiya* (large circulation Russian newspaper), 2 February 2022. <https://iz.ru/1285283/bogdan-stepovoi-roman-kretcul-andrei-fedorov/tcennost-pomekh-v-zapadnom-okruge-sozdaiut-batalony-radioelektronnoi-borby>

Electronic warfare battalions will be formed as part of several divisions of the Western Military District. The new units will protect troops, socially significant sites, and industrial facilities from strikes by precision-guided munitions. The battalions are equipped with complexes capable of suppressing enemy GPS systems, communications and navigation. The first such military unit was formed in Belgorodskaya Province and became part of the 3rd Guards Motorized Rifle Division. Experts note that this is an effective defense along the Russian border...

The battalions will be equipped with Zhitel, Leyer-3 and Borisoglebsk-2 electronic warfare systems can conduct electronic intelligence and suppress the operation of communication and navigation systems, military expert Aleksey Leonkov told Izvestiya...

"Operating as part of a division, the systems can carry out reconnaissance and jam sources of communication and control, as well as transmit the coordinates of aviation and artillery targets for strikes," said Leonkov. "Each of them has its own specialization. The R-330Zh Zhitel jammer is designed to detect, find and jam signals and satellite communication stations, as well as navigation systems, including GPS. Such actions prevent UAVs, cruise missiles and other PGM from orienting themselves on the ground when striking... The Leyer-3 complex includes three Orlan-10 drones, which are used to jam cellular GSM communications... The main task of "Borisoglebsk-2" is the detection and suppression of various communication channels, including radio navigation systems.

“There is no doubt that the use of the Leer-3 system not only severed communications between the combat groups and their foreign controllers, but also provided Kazakh security forces their geolocation data... The loss of a unified command and control by the terrorists and their inability to coordinate actions led to a completely natural result - the elimination of combat groups...”

Source: Vitaly Orlov, “«Леер» спас казахстан от сползания в пропасть (‘Leer’ Saved Kazakhstan from Sliding into the Abyss),” *Voyenno-Promyshlennyy Kuryer* (weekly newspaper focusing on military and defense industry complex issues), 25 January 2022. <https://vpk-news.ru/articles/65512>

On January 12, the Vietnamese edition of Soha published information about the use of Leer-3 electronic warfare systems by the CSTO peacekeeping contingent in Kazakhstan. According to the authors, this capability was one of the decisive factors in ensuring the successful outcome of the counter-terrorist operation of the Kazakh security forces. "There is no doubt that the use of the Leer-3 system not only severed communications between the combat groups and their foreign controllers, but also provided Kazakh security forces their geolocation data" the report says. The loss of a unified command and control by the terrorists and their inability to coordinate actions led to a completely natural result - the elimination of combat groups...

New drones capable of replacing cell towers have successfully passed the combat test program on the territory of the Syrian Arab Republic and have been officially adopted by the Russian Armed Forces. They have the ability to send audio and SMS messages to subscribers, and in the near future it is planned to add the ability to transfer video files. Since 2015, the drones that were part of the Leer complex have successfully suppressed base stations, but could not effectively resist 3G and 4G networks, which in turn created certain difficulties when interacting with smartphones. In modernized drones, these problems are solved. They "jam" the base stations, taking their place and becoming their virtual twins.

According to Denis Kuskov, CEO of the analytics company Telecom Daily, the "fake base station" created by the drone, unnoticed by the user, intercepts traffic and connection control, depriving him of the ability to connect to another base station. An operator controlling an unmanned aerial vehicle as part of the RB-34IV Leer-3 gets the opportunity to generate calls and SMS messages to all subscribers within its coverage area...

Russia Modifies Short-Range Air Defense Systems To Combat UAVs

By Chuck Bartles
OE Watch Commentary

The accompanying excerpted articles from Russian government news agency TASS and Russian newspaper *Izvestiya* discuss how existing close-range air defense systems are being modified to defeat small unmanned aerial vehicles (UAVs). According to TASS, the Russian defense industry manufactures soft-kill (electronic suppression) and hard-kill (physical destruction) anti-UAV weapons. The latest version of the Russian Aerospace Forces' (VKS) Pantsir self-propelled anti-aircraft gun and missile system is the Pantsir-S1M, which will reportedly be capable of physically destroying UAVs while also electromagnetically interfering with their operation.

The *Izvestiya* article explains how the Russian Ground Forces intend to physically destroy small UAVs by way of the Verba man-portable anti-aircraft missile system (MANPAD). According to *Izvestiya*, the 9K333 Verba (SA-25), a modernized variant of the 9K38 Igla (SA-18) produced by KB Mashinostroyeniya, has a more sensitive seeker, enabling it to find smaller targets, such as small UAVs. In addition, the Verba may be

used as part of an integrated air defense system and can acquire data from other sensors to facilitate targeting. Although the Verba has no reported soft-kill capability as with the Pantsir-S1M, this does not mean that the Ground Forces are not pursuing soft-kill capabilities. Russian Ground Forces' air defenses usually work closely with, and are close to, electronic warfare units that practice this skill; therefore, adding it to air defense systems is not necessary.

“Today, the Russian defense industry manufactures two types of anti-UAV weapons - soft-kill (electronic suppression) and hard-kill (physical destruction). According to the manufacturer, the new Pantsir-S1M is capable of operating in both modes.



9K333 Verba MANPAD.

Source: Vitaly Kuzmin, <https://photos.smugmug.com/Military/ARMY-2016-Static-part4/i-GXpqd8Q/0/a8347be1/M/Army2016-552-M.jpg>



Missile of the 9K333 Verba MANPAD.

Source: Vitaly Kuzmin, <https://photos.smugmug.com/Military/ARMY-2019-Exhibition-pavilions/i-nXrbftn/0/ec20d1fe/X3/Army2019Pavilions-069-X3.jpg> Attribution: CC BY-NC-ND 4.0



Pantsir-SM.

Source: Vitaly Kuzmin, <https://www.vitalykuzmin.net/Military/ARMY-2019-Static-part-3/i-GMsTdcn#>

Source: Vasily Kuchushev, “Панцирь-С1М и электромагнитные ружья: Как армия России будет бороться с беспилотниками (Pantsir-S1M and Electromagnetic Weapons: How the Russian Military Will Fight Drones),” TASS (Russian government news agency), 13 December 2021. <https://tass.ru/armiya-i-opk/13166705>

It is difficult to imagine a modern army of any state without unmanned aerial vehicles (UAVs). The tactics of their application are constantly being improved. Already today, there is a concept of using a whole swarm of drones, when one large target can be attacked by hundreds of small and cheap UAVs. The experience of modern military conflicts in Syria and Nagorno-Karabakh has shown that attacking UAVs are one of the most effective strike weapons. At the same time, small and ultra-small UAVs are actively used not only by the military, but also by terrorists...

According to the chief designer of "Pantsir" Valery Slugin, the anti-drone functions were originally part of the air defense missile system's concept. However, at the time the system was created in the mid-90s, they were quite large. Over time, the dimensions and flight altitude of the UAV decreased, which became a serious problem for most radars. The main difficulties arose in the detection, tracking and guidance of missiles at such a target. To intercept smaller drones, the Pantsir's radar was upgraded. The new radar can see up to 75 km, and simultaneously detect and track up to 40 targets...

Today, the Russian defense industry manufactures two types of anti-UAV weapons - soft-kill (electronic suppression) and hard-kill (physical destruction). According to the manufacturer, the new Pantsir-S1M is capable of operating in both modes. With the help of the latest electronic equipment, the Pantsir-S1M can suppress the operation of drone navigation equipment at a distance of 15-18 km.

According to Sergei Mikhailov... the modernized air defense missile system is capable of becoming the basis of tactical air defense. "On the basis of Pantsir-S1M, an effective modular air defense network can be built, capable of covering military units from small-sized and attack UAVs, high-precision weapons and, of course, military aviation - aircraft and helicopters. The complex fully complies with modern A2/AD [anti-access and area denial]. (The theory of the formation of air defense, allowing to block the enemy's access to critical areas)", - said Sergei Mikhailov.

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Continued: Russia Modifies Short-Range Air Defense Systems To Combat UAVs

Source Continued: Vasily Kuchushev, “Панцирь-С1М и электромагнитные ружья: Как армия России будет бороться с беспилотниками (Pantsir-S1M and Electromagnetic Weapons: How the Russian Military Will Fight Drones),” *TASS* (Russian government news agency), 13 December 2021. <https://tass.ru/armiya-i-opk/13166705>

For the most effective defense against unmanned aerial vehicles in Russia, an echeloned electronic countermeasures system for small-sized UAVs is being developed. The system provides reliable protection of territories and facilities from both individual drones and their groups, including swarms of drones.

“With its [the “Verba” man-portable anti-aircraft missile system] help, they will try to create an “anti-drone dome” and intercept not only drones, but also precision guided aircraft munitions...”

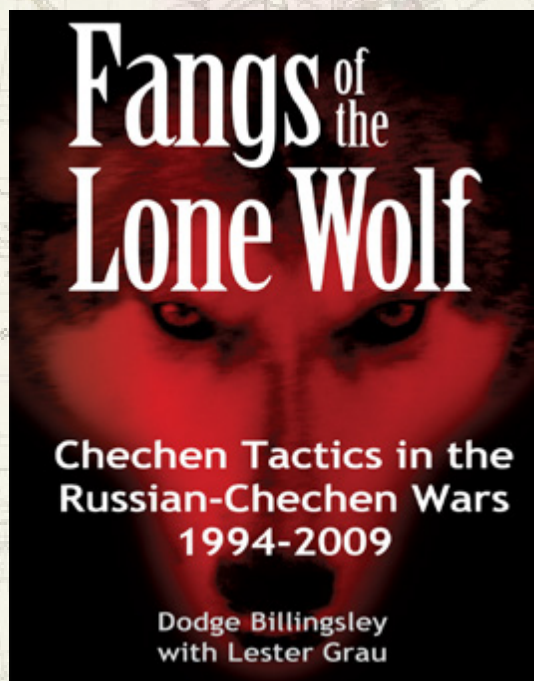
Source: Anton Lavrov, Bogdan Stepovoy, Andrey Fedorov, “Укрыться под «Вербой»: над Белоруссией проверят «антидроновый купол» (Taking Cover Under ‘Verba’: An ‘Anti-Drone Dome’ Will Be Over Belarus),” *Izvestiya* (large circulation Russian newspaper), 21 January 2022. <https://iz.ru/1280053/anton-lavrov-bogdan-stepovoi-andrei-fedorov/ukrytsia-pod-verboi-nad-belorussiei-proveriat-antidronovyi-kupol>

Russian and Belarusian troops will be covered from the drones of a potential enemy. The Verba man-portable anti-aircraft missile systems (MANPADS) will be used for at the upcoming “Union Resolve-2022” large-scale maneuvers for the first time. With its help, they will try to create an “anti-drone dome” and intercept not only drones, but also precision guided aircraft munitions...

The crews of these complexes will be distributed over a large area in order to create a protective dome. In addition to intercepting the drones themselves, they will also experiment with intercepting aviation weapons - guided bombs and missiles... According to the developers, the new, much more sensitive homing head has dramatically increased the ability to deal with small objects, such as UAVs. Compared with the anti-aircraft systems of the previous generation, the capabilities of the new missile have doubled, especially at a distance of more than three kilometers. In addition, they can be linked into a single system with long-range air defense systems and receive external target designation [data]...

The Verba complex is capable of hitting aircraft, helicopters, cruise missiles and drones at altitudes from 10 to 4500 meters and at a distance of up to 6 kilometers. MANPADS received a missile with a unique three-spectral homing head, which sees targets in the ultraviolet, near and mid-infrared ranges. It is capable of distinguishing an airplane or helicopter from a thermal decoy on approach and choosing the right target...

For the first time, the [command-and-control system] set includes a ‘Garmon’ portable radar, which, depending on the modification, monitors the airspace within a radius of 40-80 kilometers... two types of radars have been developed. The first one is lightweight, and can not only be transported by motor vehicles or armored vehicles, but also carried. The second is mounted, as a rule, on a tracked chassis and has higher target detection characteristics. The Barnaul-T automated tactical air defense complex integrates the Verba into the overall air defense system and can use information about air targets coming from other, more powerful radars. It allows you to create a scenario for the actions of anti-aircraft gunners, allocate targets based on capabilities, positions, combat readiness and the state of ammunition...



FANGS OF THE LONE WOLF

by Dodge Billingsley with Lester Grau

Fangs of the Lone Wolf is about combat experience in urban, mountain and fairly open terrain. It is not a comprehensive history of conflict. This book is a series of snapshots — of vignettes — describing the difficulty, the hardship, the victories and the defeats of the participants. It is an examination of the raw data of combat in a foreign land, and is aimed to advance the professional military study of conflict.

Robot-Enhanced Vehicles Planned for Arctic Equipment Evacuation

By Les Grau
OE Watch Commentary

Special terrain requires special equipment, and Russia's new recovery vehicles will improve its combat capabilities in the Arctic. According to the pro-government newspaper *Izvestiya*, the Russian military has mounted the REM-KL recovery vehicle super structure on the tracked articulated multipurpose DT-30PM vehicle. The REM-KL can reportedly pull 13 tons and its 9.8-meter hydraulic crane can lift 950 1-ton loads with a reach of 8 meters and 3 tons with a reach of 3 meters. Its hydraulic winch has a traction force of 10.5 tons and a pulling force up to 20 tons. Further, the MTR-K reconnaissance vehicle's recovery capabilities, traditionally fitted on a wheeled chassis, are being fitted to the GAZ-3344-20 articulated tracked transport vehicle and being

designated as the MTR-G. The MTR-G's reported lifting capacity is some 3 tons. The MTR-G does double duty as an NBC reconnaissance vehicle. The two new Arctic vehicles will work as a team to recover and repair ground forces equipment. The addition of an on-board unmanned aerial vehicle (UAV) search capability should greatly aid Russia's ability to find broken-down and disabled vehicles in rugged terrain.

Russia employs such purpose-built tracked articulated vehicles in a variety of ways: as mobile kitchens and bakeries, mortar and artillery platforms, communications vehicles, command posts, troop transports, and supply vehicles. They readily cross snow, ice, and swamps and can swim bodies of water.

“Arctic Troops will be equipped with robot tow-trucks and repair vehicles that will be capable of working with any damaged equipment at a Temperature of -50 or below.”

Source: Aleksei Ramm and Bogdan Stepovoi, “Северный почин: арктические войска вооружат роботами-эвакуаторами (Equipping the Arctic forces with robot tow trucks and repair vehicles),” *Izvestiya* (Moscow based pro-government newspaper), 3 December 2021. <https://iz.ru/1258603/aleksei-ramm-bogdan-stepovoi/severnyi-pochin-arkticheskie-voiska-vooruzhat-robotami-evakuatorami>

Arctic Troops will be equipped with robot tow-trucks and repair vehicles that will be capable of working with damaged equipment at a Temperature of -50 or below. Special Arctic recovery and repair subunits will be incorporated into the Russian Ground Forces soon. Special tow trucks and mobile repair shops, mounted on articulated prime movers are part of the subunit's TO&E equipment. Their primary advantage is their capability to tow a heavy vehicle at minus 50 degrees or below... The vehicles are robotized and permit the crew to accomplish their work without leaving the heated cab. If necessary, their equipment will help find a vehicle on the battlefield and eliminate the malfunction on the spot. The arctic "repairmen" will be involved with not only trucks and armored vehicles. They will be able to work with such complex types of weapons as S-300 and S-400 air defense systems, "Bal" and "Bastion" missile systems, and with future robotized platforms....

The evacuation and repair subunits will deploy to main garrisons and repair the entire range of ground forces equipment. The REM-GT heavy repair and recovery vehicles and the MTR-G technical reconnaissance vehicles will become the main "work horses" of the arctic repair detachments that are already at a high degree of readiness. The vehicles will undergo state tests in arctic conditions in the near future. After this, the arctic subunits' organization and staff structure will be determined.

The new heavy-duty REM-GT repair and recovery vehicle is based upon the DT-30PM articulated tracked transport vehicle. It is designed for maintenance, field repair, and recovery of all types of equipment, which are deployed in the arctic zones. The MTR-G technical reconnaissance vehicle is mounted on the GAZ-3344-20 articulated tracked transport vehicle. It will transport the maintenance subunits' specialists to reach marooned equipment, assess its state, and render needed assistance on the spot.

The new repair vehicles function in the Arctic and the Far North, Siberia, and the Far East. At low temperatures or in wind squalls, the crew use the robotized manipulators to take even the heaviest models of military equipment undertow, without leaving the heated cab.

According to Military Expert Aleksey Khlopotov, "In northern conditions, the combat capability of the entire arctic grouping depends on the functions of the rear services units. The new repair and recovery vehicles will precisely help to support them. The North is permafrost, snow during the winter and swamps in the summer. The tracked all-terrain vehicles with low ground pressure have been adapted for operating in those conditions. They will go where wheeled vehicles get stuck. This will help provide repair and recovery of equipment on inaccessible terrain.

Khlopotov pointed out that the DT-30PM articulated tracked transport vehicles are already well known in the Ground Forces. The "Tor-M2DT" and "Pantsir-SA" are air defense missile systems that are part of the arctic force's inventory and are also mounted on these vehicles.

Vehicles for the recovery and repair of equipment are being delivered to the Ground Forces now. The Ministry of Defense previously reported that the wheeled version of the powerful REM-KS would arrive in the Western Military District inventory by the end of 2021. They will conduct the recovery and repair of the "Iskander" short-range ballistic missile systems in the field. The REM-GT and MTR-G will operate in tandem in field conditions and combat. The equipment reconnaissance specialist must first arrive at the location of the combat in order to assess the amount of work and damage. If necessary, its crew will be able to assist the soldiers and officers to extract the stalled vehicle or to conduct minor repairs on the spot.

The vehicle is equipped with navigation and night vision instruments, a 360-degree video surveillance system, and an unmanned aerial vehicle. This package permits the conduct of searches at a distance of 10 kilometers at any time of day and practically in any weather. It will also be indispensable in peacetime during the conduct of search and rescue operations in accessible areas of the North. The MTR-G has equipment for radiation and chemical reconnaissance. During large-scale operations, the crew needs to know that the terrain is not contaminated with toxic agents and that the atmosphere does not pose a danger for personnel in order to begin work or to call for backup.

The articulated REM-GT is capable of operating autonomously. The all-terrain vehicle is equipped practically with that same suite of hardware as the maintenance reconnaissance vehicle but does not have an unmanned aerial vehicle. The vehicle has been adapted for functioning in a cold

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Continued: Robot-Enhanced Vehicles Planned for Arctic Equipment Evacuation

Source Continued: Aleksei Ramm and Bogdan Stepovoi, “Северный почин: арктические войска вооружат роботами-эвакуаторами (Equipping the Arctic forces with robot tow trucks and repair vehicles),” *Izvestiya* (Moscow based pro-government newspaper), 3 December 2021. <https://iz.ru/1258603/aleksei-ramm-bogdan-stepovoi/severnyi-pochin-arkticheskie-voiska-vooruzhat-robotami-evakuatorami>

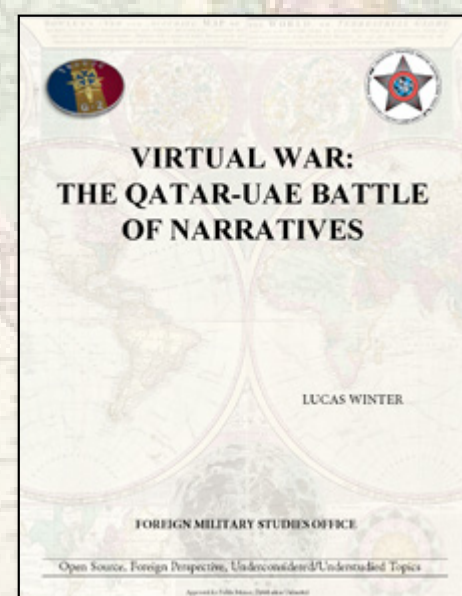
climate to the maximum extent possible. In particular, it has robot manipulators that can take any damaged equipment in tow. The video cameras provide 360-degree visibility and assist the crew in this extraction.

Depending on the type of equipment, which they will have to repair, the crew can rapidly select or change the machine tool sets, the necessary spare parts, and the necessary expendable supplies. These are located in the rear vehicle articulated compartments. This stockage will permit the crew, without outside help, to repair ground force vehicles and tanks or the combat modules of air defense systems. The time required for the REM-GT to prepare for movement at a temperature of -50 degrees is 30 minutes.

Izvestiya previously reported that repair and recovery regiments formed in each military district. During combat, each of them is capable of forming several quick response teams, which will function in an autonomous mode directly at the front line.

VIRTUAL WAR: THE QATAR-UAE BATTLE OF NARRATIVES Lucas Winter May 2020

For much of the past decade, Qatar and the UAE have been engaged in a battle of narratives. Their ongoing dispute dates to 2011 and is rooted in foreign policy and ideological disagreements. Following a hack of the Qatari News Agency in 2017, the nature of Qatari-Emirati competition shifted from being primarily the purview of government officials, spokespeople, journalists, analysts and authors, to one where coders, influencers, trolls and cybersecurity experts played a vital role. Since then, both countries have worked to increase their capabilities in the cyber and informational domains. Their relationship in these domains has evolved into one of strategic competition. This paper looks at how these dynamics may affect the regional operational environment, with a particular focus on the cyber and informational domains.



<https://community.apan.org/wg/tradoc-g2/fmso/m/fmso-monographs/329799>

Latest Russian Population Figures Show Continued Declines

By Ray Finch
OE Watch Commentary

Recent data regarding Russian population trends are again a cause for concern. The first excerpt from the independent, pro-business source *RBC*, analyzes recent population data from the Russian Statistic Agency Rosstat. The article points out that the “natural” Russian population declined by 1.04 million people during 2021, resulting in a “permanent population” of 145.478 million people. The article stresses that the decline continued “for the fourth year in a row” for a total decrease of 1.4 million people. The article quotes a Russian medical official who claims that the “high level of population decline is associated with ‘super-mortality from COVID’—in the form of direct causes or concomitant diseases.” This article concludes by citing expert officials who assert that “excess mortality... would have a long-term negative impact on the Russian economy.”

Russian population figures have often been a source of contention. The Russian government conducted a nationwide census in late 2021,

and while the official results will not be released until later in 2022, some Russian sources are already beginning to question the validity of the census numbers. The second excerpt from the moderate and popular *Svobodnaya Pressa* claims that “the 2021 census is 100% fiction.” After providing a brief history of how census data has been collected and manipulated in the past, the article quotes a Russian academic who says “the current census is generally taken out of thin air.” The article includes anecdotal evidence that suggests many Russians did not participate in the recent census. If there is truth to the quote that “demography is destiny,” then Russia faces an uncertain and potentially challenging future unless it can address its population decline.

“... I believe that their results are unreliable, not trustworthy. The current census is generally taken out of thin air...”

Source: Ivan Tkachev, “Естественная убыль населения в России за год превысила 1 млн человек (The natural population decline in Russia for the year exceeded 1 million people),” *RBC* (independent, pro-business source), 28 January 2022. <https://www.rbc.ru/economics/28/01/2022/61f3bbaa9a794767f04fdaa7>

The natural population decline in 2021 for the first time in the history of the modern Russian Federation reached 1.04 million people. The last time the indicator approached this level was in 2000. The main reason was the pandemic. As of January 1, 2022, the permanent population of Russia amounted to 145.478 million people, having decreased over the year by almost 693 thousand people (minus 0.5%).... In general, the decline in the population of Russia is recorded for the fourth year in a row. During this period, the population of the country decreased by 1.4 million people, follows from the data of Rosstat....

A high level of population decline is associated with the “supermortality from COVID” - in the form of direct causes or concomitant diseases, Kalabikhina emphasizes...

... Both ACRA and the VEB Institute emphasized that excess mortality (demographic footprint) would have a long-term negative impact on the Russian economy.

Source: Ivan Rybin, “Русский миллиард: Перепись населения обернулась очередной фальшивкой (Russian billion: Population census turned into another fake),” *Svobodnaya Pressa* (moderate, popular source), 9 February 2022. <https://svpressa.ru/society/article/324647/>

... On February 9, 1897, 125 years ago, the first general population census was held in the Russian Empire. Prior to this, the state was limited to administrative and police accounting, that is, it deduced figures practically “from the lantern.” Today, in the 21st century, the authorities of the Russian Federation have returned to the vicious practice of autocracy, no one believes the data of 2021....

... However, what is happening today is even worse.... How many of us at the moment - in fact, it is not clear. But obviously not 146 million people, the 2021 census is 100% fiction

“I also had complaints about previous censuses, I believe that their results are unreliable, not trustworthy. The current census is generally taken out of thin air,” said Grigory Yudin, a sociologist and professor at the Moscow Higher School of Social and Economic Sciences.

“We don't know how many people we have. Serious demographers say that there are actually 90 million of us. I have two female students who were engaged in the population census in different parts of Moscow. One counted 6.5 thousand people in her area, and the other - 8.5 thousand. Where there are 6.5 thousand, they said to write down 10 thousand people, and where there are 8.5 thousand, they ordered to write down 12 thousand. Thus, in these areas, a population of 30% was attributed. It seems that this situation was also throughout Russia,” said the famous historian Andrei Fursov back in 2012.

“I conducted a roll call in my social circle, and it is large, and on my FB page, not a single person was revealed who would have seen a live census taker. Those who answered that they participated in the census did it on their own through the State Services website, including me. And this, of course, does not correlate in any way with the data announced by the organizers - more than 99% of the population took part in the census...” said political scientist Alexander Kynev. The author of these lines also has a large social circle, and completely similar data. No one came to anyone, to his friends, acquaintances, relatives, too....

Russian Invasion of Ukraine Detrimental to Turkey

By Ihsan Gündüz
OE Watch Commentary

The accompanying articles highlight that Russia's invasion of Ukraine poses significant risks to Turkey's already troubled economy, energy security, and defense industry regardless of Turkey's position in this conflict as it balances its NATO obligations with its relations with Russia. According to the first article from globally read security news site *al-Monitor*, the war will have crippling consequences for the Turkish economy since Russia is Turkey's key economic partner in many sectors, including tourism, construction, and energy. The second article from anti-Turkish government daily *Sözcü* states that sanctions targeting the Russian banking system will negatively impact Russian projects in Turkey, including the construction of the Akkuyu Nuclear Power Plant that Turkey contracted to a Russian company for development. The war in Ukraine will also make trade routes in the region insecure and negatively impact Turkey's economic interests and trade with other countries in the region. Furthermore, according to the *Sözcü* article, the war will likely disrupt the flow of natural gas to Turkey, leading to an energy crisis since Russia is the largest natural gas supplier to Turkish markets. The two countries have nearly completed the construction of two natural gas pipelines carrying Russian natural gas to Turkey and some European countries.

The third article from independent Turkish news agency *Anka Haber Ajansı* highlights that Russia's invasion of Ukraine will also have significant implications for the Turkish defense industry. Defense cooperation between Ukraine and Turkey is significantly larger than Turkey's widely reported TB-2 drone export to Ukraine. Ukraine's two major firms in aviation engine and manufacturing, Ukrainian Motor Sich and Ivchenko Progress, a Ukrainian state-owned company, provide engines for the Turkish defense company



Vladimir Putin and Recep Tayyip Erdoğan.

Source: Russian Presidential Executive Office, kremlin.ru/events/president/news/62936, via Wikimedia, [https://commons.m.wikimedia.org/wiki/File:Vladimir_Putin_and_Recep_Tayyip_Erdogan_\(2020-03-05\)_03.jpg](https://commons.m.wikimedia.org/wiki/File:Vladimir_Putin_and_Recep_Tayyip_Erdogan_(2020-03-05)_03.jpg), Files from Kremlin.ru Attribution: CC-BY-4.0 | Russia photographs taken on 2020-03-05

Baykar's Bayraktar Akıncı drone and the Turkish Aerospace Industries' T929 ATAK 2 attack helicopter. Turkey is also building a MilGem-class corvette for the Ukrainian navy, which the article notes, is one of the biggest exports for the Turkey's defense industry. The article points out that the conflict will hinder Turkey's ability to sustain the supply of subsystems and products to its defense industry from Ukraine.

“... conflict... poses a significant risk to the Turkish defense industry.”

Source: Amberin Zaman, “Russian invasion of Ukraine would spell more economic turbulence for Turkey,” *al-Monitor* (a globally read security news site with regionally based reporting), 07 February 2022. <https://www.al-monitor.com/originals/2022/02/russian-invasion-ukraine-would-spell-more-economic-turbulence-turkey>

War would bring Turkey under intense pressure from its Western allies to join putative sanctions against Russia, a critical trading partner and supplier of natural gas. Turkey will do its best to remain neutral, as signaled anew by Erdogan in comments to reporters en route home from Kyiv.

Ukraine has bought at least 20 drones from Turkey since 2018 and has used one only once in combat against Russian-backed separatists in Donbas in October 2021, eliciting growls from Moscow.

However, Turkey's worries go beyond having to balance its NATO commitments with Russia, a key economic partner and since 2016 security partner in Syria. An actual war could have crippling consequences for Turkey's battered economy.

In Ukraine, Turkey's flourishing defense cooperation would likely suffer in a Russian attack as well.

Recent deals between Turkey and Ukraine include the supply of gas turbines for Turkish-designed naval vessels by Ukraine's Zorya Mashproekt. Ukraine has ordered four of the MilGem class corvettes for itself.

Tourism, which Erdogan is banking on to help with an economic recovery ahead of parliamentary and presidential elections that are scheduled to be held by 2023, is also at risk.

... At best, Turkey can provide the two sides with “an optional diplomatic channel of communication” through which their respective messages are relayed.

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Continued: Russian Invasion of Ukraine Detrimental to Turkey

Source: Dünya Taşlardan, “Rusya-Ukrayna krizi Türkiye’yi nasıl etkiler? (How does the Russia-Ukraine crisis affect Turkey?),” *Sözcü* (an anti-Turkish government daily), 22 January 2022. <https://www.sozcu.com.tr/2022/dunya/rusya-ukrayna-krizi-turkiyeyi-nasil-etkiler-6904478/>

A possible war may involve significant losses for Turkey. First of all, if there is a war situation in the Black Sea, it will be difficult for tourists to come from both Russia and Ukraine this summer. Another problem is that Turkey meets most of its wheat needs from Russia and Ukraine. Since the war situation will also affect these imports, there may be rapid price hikes in food products...

In case of war, natural gas pipelines such as TurkStream and BlueStream in the Black Sea, which seem to be an important source of income for Russia, may also be attacked. Such a case may lead to a natural gas crisis in Turkey. By inviting both the Ukrainian and Russian presidents to Turkey, Turkey is actually signaling that it will remain neutral in this crisis with its mediation offer...

Turkey does not recognize and does not implement the sanctions imposed by the USA and EU countries on Russia. In this sense, we can say that there is an understanding and cooperation between the two countries. Although Turkey may not implement the Russian sanctions, especially the sanctions that would be applied in the banking system will negatively affect the Russian projects in Turkey. The construction of Akkuyu Nuclear Power Plant may be delayed.

Since there will be no dollar circulation, Russia may have to pause its projects. Again, as the Black Sea will become a war zone, the use of commercial roads will be difficult, which will be reflected in the prices.

Source: Arda Mevlütoğlu, “Turkey - Ukraine Defense Cooperation In Russia’s Crosshairs?,” *Anka Haber Ajansı* (an independent Turkish news agency based in Ankara), 06 February 2022. https://ankahaber.net/AnkaReview/Columnists/turkeyukraine_defense_cooperation_in_russias_crosshairs_73570

President Recep Tayyip Erdogan and his Ukrainian counterpart Volodymyr Zelensky signed several agreements on Feb. 3, during Erdogan's visit to Kyiv. The deals included a free trade agreement and a pact on cooperation in advanced technologies, aviation, and space...

Turkey's sale of armed drones to Ukraine has come under harsh criticism by Russia. The TB2, however, is not the only subject of the rapidly enhancing defense industry cooperation between Kyiv and Ankara. Ukraine has become a preferred supplier for Turkey, especially for engines. A potential conflict, therefore, poses a significant risk to the Turkish defense industry...

Ukraine has two major firms in aviation engine design and manufacturing, Motor Sich and Ivchenko Progress...

The Bayraktar TB2's manufacturer, Baykar Savunma, has developed a strategic reconnaissance/surveillance and strike drone that is designated Bayraktar Akinci. The Akinci can be powered by various types of turboprop engines, among them the Ivchenko Progress AI-450T... Baykar Savunma signed another deal with Motor Sich for the MS500 engine for the Akinci drone.

The drones are not the only area of engine procurement from Ukraine. Turkish Aerospace Industries (TA) signed a contract with Motor Sich for the TV3-117 turboshaft engines last June for use with the prototypes of the T929 ATAK 2 next-generation attack helicopter project. The Ukrainian company is also offering the same engine for the T925 10-ton class general-purpose helicopter project of TA.

Marine gas turbine specialist Zorya Mashproekt has become a candidate for supplying gas turbines for Turkish-designed naval vessels, mainly for the MilGem class corvettes... The MilGem sale to the Ukrainian Navy is one of the biggest defense exports of the Turkish defense industry...

An armed conflict between Russia and Ukraine poses a major risk for sustaining the supply of subsystems and products to Turkey. The level of risk depends on the scale of the conflict.

In a limited-scale conflict scenario, where the clashes occur in and around the Donbas region, there is a lower risk of Ukrainian defense industry facilities being targeted by Russian armed forces...

The second scenario is a full-scale invasion of Ukraine by Russian armed forces. This scenario is the worst for Turkey and the region. In such a case, defense industry facilities as well as strategic industrial and infrastructure elements would be primary targets for the Russian military. The destruction of manufacturing facilities as well as the loss of skilled personnel would deal a devastating blow to the Ukrainian defense industry as well as to Turkish defense projects.

There may definitely be other scenarios involving intervention by external actors, diplomatic resolution, or various types of armed conflict. However, one thing is certain: a conflict of any type or scale would be a worst-case scenario for Turkey.

Wagner's Questionable Operations in Africa

By Robert Feldman
OE Watch Commentary

In 2021, Russia's Wagner Group, a Kremlin-linked private military force, made a significant difference in the Central African Republic (CAR) when somewhere between 1,200 and 2,000 of its mercenaries, aided by 300 Rwandan soldiers, prevented rebels from capturing CAR's capital, Bangui. Wagner's success was initially lauded by much of CAR's populace, but as the accompanying excerpted article from South African *Institute for Security Studies* notes, those feelings of appreciation for restoring security have morphed into anger as Wagner has been accused of human rights abuses against civilians. As the article states, Wagner has a mixed record in several African nations, including Libya, Sudan, and Mozambique.

In addition to the Wagner Group's human rights record, people are asking questions about how the organization is paid. As the article notes, no one has seen a contract between Wagner and CAR, leading to allegations that lucrative mining deals are the paramilitary force's method of payment. Further muddying the waters is the government of Mali, which denies the presence of the Wagner Group, claiming instead that it only has Russian instructors on its soil. Perhaps unsurprisingly, the Wagner Group does not care that it is supporting undemocratic regimes. This is particularly obvious in Mali, where Wagner did not arrive until after Colonel Assimi Goïta's coup. Still, as the article points out, despite the anguish of Western countries over Wagner's involvement



The arrival of Russian military equipment, including these BRDM-2 armored vehicles, along with members of the Wagner Group helped prevent a rebel army from taking the Central African Republic's capital in 2021.

Source: UN Security Council/Wikimedia Commons, <https://commons.wikimedia.org/wiki/File:RussiansinBangui.png>
Attribution: Public Domain

in Africa and the backlash of some African nations over the deplorable human rights abuses committed by the organization, there is grudging acceptance that in some beleaguered nations, Wagner has helped stabilize the situation by driving off terrorists.

“If no one else can provide it, African countries may continue to turn to the likes of Wagner...”

Source: Peter Fabricius, “Wagner’s Dubious Operatics in CAR and beyond, *Institute for Security Studies* (South African think tank), 21 Jan 2022. <https://issafrica.org/iss-today/wagners-dubious-operatics-in-car-and-beyond>

Russia has established a strong military presence in the Central African Republic (CAR) over the past four years, clandestinely using dubious actors like the military company Wagner, which is allegedly close to President Vladimir Putin. Wagner has become the deniable vanguard of a major Russian push into Africa, many analysts believe.

France has threatened to completely withdraw military support to Mali. Sweden has already announced its exit from the European force Takuba because of Wagner’s arrival. Such decisions are difficult because they may further weaken the fight against the common enemy – violent extremism.

But Wagner’s growing presence on the continent also poses some difficult questions to the international community, including the West. The problem is not only about democracy but also stability and security. If no one else can provide it, African countries may continue to turn to the likes of Wagner – though it’s too soon to judge its overall effectiveness either.

He says complicating any analysis or comparison is that Russia’s involvement in the CAR and elsewhere in Africa is probably more covert, so it’s hard to know just where it is and what it’s doing. (There are rumours that Russia has its eyes on Burkina Faso, for example.)



Geoff Demarest’s *Winning Irregular War* is about a broader set of conflicts than just ‘insurgency.’ In its 144 sections, Geoff Demarest uses a distinct, reconciled, more effective strategic grammar that draws on the disciplines of law and geography over political science. As Geoff Demarest puts it: “I hope that some of the ideas in it will be contagious.”

Iranian Authorities Arrest Alleged Deputy Leader of Royalist Terrorist Group



Jamshid Sharmahd, after his August 2020 arrest.

Source: Islamic Republic News Agency, <https://img9.irna.ir/d/f2/2020/08/02/4/157271087.jpg>

By Michael Rubin
OE Watch Commentary

While the broader Iranian population may not be revolutionary, Iranians have increasingly come out into the streets to protest government abuses and declining living standards. Although nearly three-quarters of Iran's current population was born after the Islamic Revolution and has no direct experience with the shah's regime, photos of pro-monarchy graffiti and videos of pro-shah chants increasingly circulate on social media from inside Iran.

It is against this backdrop that the trial of a suspect called "Masmatos," accused of being a member of royalist terror group "Tondar," becomes important. In the excerpted article from news media outlet *Fars News Agency*, the Iranian prosecutor announces the arrest and accuses Tondar of responsibility

for the 2008 bombing of a popular Shi'ite congregation hall in Shiraz that reportedly killed 14 people and injured more than 200 others. The article also accuses Tondar of attempted attacks ranging from a bomb plot against the Sivand Dam, trying to use "cyanide bombs" at the Tehran International Book Fair, and an explosion at the shrine of Imam Khomeini, the leader of the Islamic Revolution who died in 1989.

After the Shiraz bombing, Iranian security forces arrested two suspects, Mohammad Reza Ali Zamani and Arash Rahmanipour. Iran accused them of royalist links and subsequently tried and executed them in 2010. Iranian security forces claim to have arrested Tondar leader Jamshid Sharmahd in August 2020; he is still in the custody of the Iranian intelligence service. The Iranian press identifies the mysterious "Masmatos" as the second-in-command of Tondar's military wing and says he also had knowledge of the assassination plot against Iranian nuclear physicist Massoud Ali Mohammadi, who died in a bombing outside his home in 2010. At the time, the Iranian government attributed that bombing alternately to Israel and to the Mujahedin al-Khalq, an organization that frequently conducts terrorism inside Iran.

The fact that the Iranian government is now seeking to reattribute past attacks to proponents of the past monarchy may reflect the government's desire to tarnish the image of the monarchy for a new generation of Iranians. At the same time, the fact that the late shah's son, Reza Pahlavi, the most recognizable opposition figure among Iranians, lives in the United States likely means the Iranian government will use "Tondar" to accuse the United States of being a state sponsor of terror in order to negate U.S. accusations of Iranian state terror sponsorship.

“Tondar is one of the counterrevolutionary groups in which supporters of the Pahlavi regime are active.”

Source: "Nafar-e Devvom Shakheh Nizami Goruhaj-e 'Tondar' Dastgir Shod (Number Two Person in the Military Branch of the 'Tondar' Gang Arrested)," *Fars News Agency* (news media outlet with close ties to Iran's defense and security establishment), 2 February 2022. <https://www.farsnews.ir/news/14001113000785>

... The number two member of the military branch of the Tondar [Thunder] group was arrested by anonymous soldiers of Imam al-Zaman [in this context: elite intelligence forces]. The man, identified as "Masmatos" was detained by the intelligence forces. Tondar is one of the opposition and counterrevolutionary groups in which supporters of the Pahlavi regime are active. Some experts believe this group was founded in the first decade of the 21st century or, more specifically, 2005. The more precise name of this group is the Royal Society of Iran. According to available information, Fathollah Manouchehri (also known as Foroud Fouladvand) was the leader of the group in the first years of its establishment up until 2007, after which Jamshid Shahrmasad took over the group's leadership.

On Saturday, 1 August 2020, news broke that the Ministry of Intelligence had arrested Jamshid Shahrmasad, the leader of the Tondar terrorist group. Tondar was responsible for many crimes, such as the bombing of the Sayyid al-Shohada Hosseiniyah in Shiraz, a bloody incident in which many innocent people were martyred, as well as the attempt to blow up the Sivand dam in Shiraz. Masmatos was also the first person to publish the news of the assassination of nuclear scientist Martyr Ali Mohammadi.

Iran's Prosecution of Arab Separatist Highlights Supposed Saudi Ties

By Michael Rubin
OE Watch Commentary

Iran has a centuries-long history of separatist movements, often backed by foreign powers, including Portugal, Great Britain, and Russia. Many separatist movements took on an ethnic character, with various minorities—Kurds and Azeris, for example—claiming their own homelands. Iran's Arabs, many centered on the towns of Khorramshahr and Ahwaz, also agitated for independence beginning in the first decade of the 20th century. Saddam Hussein sought to weaponize these sentiments during his 1980 invasion of Iran. While Iranian Arabs did not defect to Saddam in any substantial numbers, the late Iraqi leader was correct to see the Khuzistan region as rife with discontent. Iranian Arabs not only chafe at overt discrimination, but also resent the fact that Tehran redistributes Khuzistan's oil wealth outside the province while Khuzistan remains underdeveloped compared to the rest of Iran.

It is against this backdrop that the Iranian government is particularly sensitive toward ethnic separatist movements in Khuzistan. The excerpted article by Iran's official state broadcaster, *Islamic Republic of Iran Broadcasting*, details an investigation into alleged Ahwazi terrorist Habib Asyud (a.k.a. Habib Chaab or Habib Farajullah). Asyud had lived in Sweden for 14 years but, in October 2020, Iranian intelligence lured him to Turkey and kidnapped him to Iran, where he stands trial for "spreading corruption on earth," a catch-all capital offense that the Iranian government uses to execute captured oppositionists.

Asyud is openly separatist. In Sweden, he founded the Arab Struggle Movement for the Liberation of Ahwaz (the capital of Khuzistan). Still,

it is not clear if there is any truth to Iran's accusation that he is responsible for terrorism. In the excerpted article, the prosecutor reveals evidence that purports to tie Asyud to the Saudi king and suggests that the Saudi King himself directed Arab Struggle Movement attacks on Iranian civilians. Iranian hardliners will likely use such accusations to undercut any efforts for rapprochement with Saudi Arabia. Elsewhere, the prosecutor suggests that Asyud also has ties to former Israeli Prime Minister Benjamin Netanyahu and the Mossad, Israel's intelligence service.

The prosecutor also accused Asyud of bombings in Dizful and Abadan, pipeline attacks, and the bombings of various government offices in Ahwaz, suggesting that the Arab Struggle Movement, under the name Harakat al-Nidal, was responsible for a 2018 attack on an Iranian military parade in Ahwaz that killed 30 and injured 70. The Islamic State claimed responsibility for the attack.

Iranian trials are not free and fair and the excerpted reports of the trial make it appear to be a show trial. While Asyud also holds Swedish citizenship, the Iranian government will likely execute him. However, Tehran will seek to distract from accusations of Iranian-sponsored terrorism by, with false equivalence, accusing European governments of engaging in the same behavior. Iran has already issued INTERPOL red notices for Iranian Arab dissidents in Europe and the Middle East.

“Why does the King of Saudi Arabia send an invitation to a terrorist?”

Source: “Hamkari Habib Assoud ba Servis-e Ettela’at-e Arabistan (Habib Assoud cooperates with the Saudi intelligence service),” *Islamic Republic of Iran Broadcasting* (Iran's official state broadcaster), 2 February 2022. <https://www.iribnews.ir/fa/news/3351923>

Amin Vaziri, the prosecutor's representative, today unveiled documents regarding Habib Asyud's cooperation with the Saudi intelligence service. He said, “The elements of this terrorist group went to Saudi Arabia under the guise of Hajj to carry out the plans dictated by the Saudi intelligence service. These plans included actions against innocent citizens of the Islamic Republic of Iran.

The next image displayed in court showed Yaqub Nisi meeting with the king of Saudi Arabia. Yaqub Nisi was the spokesman for the terrorist group Harakat al-Nidal, which was responsible for the 4 September 2018 terrorist attack against the Armed Forces, which resulted in the martyrdom of 25 of our innocent compatriots. Can you believe he meet the top official in Saudi Arabia? Later in the court, he showed a picture of the invitation of the King of Saudi Arabia sent to Isa Mehdi al-Fakher.

In response to the display of these images, the prosecutor's representative said, “Why does the King of Saudi Arabia send an invitation to a terrorist arrested in the Netherlands? Because the plans of the Saudi intelligence service against innocent Iranian citizens.”

The prosecutor's representative also said that Habib Asyud had been under the special support of Sweden all these years and had infiltrated associations, organizations and even charities to recruit and organize people into terrorist groups.

Russia and China To Help Iran Build New Airports

By Michael Rubin
OE Watch Commentary

Iran is a huge country, almost four times the size of Iraq and six times the size of the United Kingdom. It can take eight hours or more to travel by road between Tehran and Isfahan or Isfahan to Shiraz. In order to facilitate transport, the Iranian government has long subsidized domestic air travel. The price of an Iran Air ticket from Tehran to its second largest city Mashhad, 560 miles away, is just \$38 at the real exchange rate. Other fares are cheaper. As such, domestic air travel is very popular among Iranians.

While the newer Imam Khomeini International Airport, in the desert between Tehran and Qom, handles most international flights, the older Mehrabad airport within Tehran's city limit is the primary domestic hub serving the capitol. The excerpted article from pro-regime and security focused *Fars News Agency* examines Iranian government planning for the future of Iran's national air transportation infrastructure and mentions completion of upgrades at Tehran's Mehrabad Airport. It suggests that Iran is turning to both Russia and China to upgrade existing airfields and build ostensibly new "world class international airports," that would necessitate large runways that could also accommodate Russian and Chinese military aircraft.



Tabriz International Airport, in northwest Iran.

Source: Hamshahri <https://media.hamshahrionline.ir/d/2019/03/19/4/4320141.jpg>

“In the long run, we need a number of world class international airports.”

Source: “Hamkari Chin va Rusiya ba Iran baraye Sakht-e Chandin Farudgah Bayn Almelli dar Sateh Jahani (China, Russia to Help Iran Build Several World-Class International Airports),” *Fars News Agency* (Iranian media outlet with close ties to the Iranian defense and security apparatus), 2 February 2022. <https://www.farsnews.ir/news/14001112000609/>

Siavash Amir Makri today told reporters on the sidelines of a commemoration marking the anniversary of the historic return of Imam Khomeini on 1 February 1979, and the inauguration of various projects at Mehrabad Airport that Iran's Airport Company is responsible for managing, directing, and developing 53 airports across the country...

He added: In previous years, relying on domestic production capacity and knowledge-based companies, we provided most of our equipment needs from domestic production. He continued, “Recently, we have had projects such as advanced radar, switching and navigation aid systems and runway lighting system at Ardabil airport, and have reached self-sufficiency in these fields.”

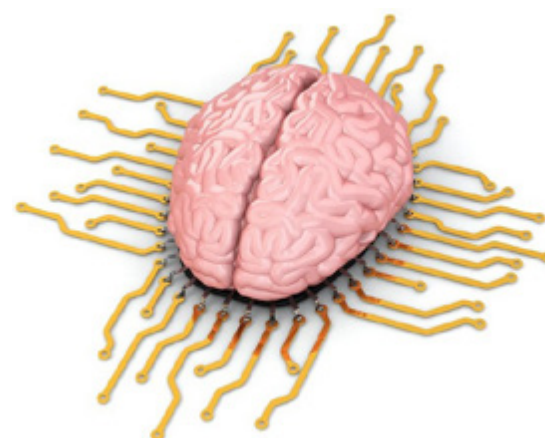
Regarding the promotion of interactions with China and Russia, he said, “Our plan in the field of airports, considering the interactions with China and Russia, will be the construction of new airports in accordance with the needs of the country in some areas.”

The chief of Iran Airports Company said, “After technical and specialized discussions, projects will aim for the next 20 to 25 years since existing airports will meet the needs of the industry for the next 15 years, but in the long run we need a number of world class international airports.”

THE MAD SCIENTIST LABORATORY BLOG

Mad Scientist Laboratory engages global innovators to report on the Operational Environment (OE), emergent disruptive technologies and their convergent impacts, and the changing character of warfare.

<https://madsciblog.tradoc.army.mil/>



Iran-Backed Iraqi Group Attacks Abu Dhabi with UAVs in Support of Yemen's Houthis

By Lucas Winter
OE Watch Commentary

A little-known group calling itself the “True Promise Brigades” claimed a 2 February attack on Abu Dhabi, United Arab Emirates (UAE), involving multiple unmanned aerial vehicles (UAVs). The group’s only other known prior activity was an early 2021 UAV strike on the Yamama Palace in Riyadh, Saudi Arabia. The Abu Dhabi attack caused no known material damage. It came on the heels of a two-week span that saw Yemen’s Houthi-controlled military forces launch three separate missile and UAV attacks targeting Abu Dhabi and Dubai, the two main cities in the UAE. The timing of the True Promise Brigades’ attack implied a potential link between them and the Houthis, reinforced by supportive tweets from the Houthi-led forces’ influential military spokesman, such as the first accompanying tweet, in which the spokesman thanked the group. On social media, the True Promise Brigades eschew national identification and call themselves “sons of the Arabian Peninsula.” The second and third accompanying passages from pro-Iran outlets hint that the

group operates from the Iraqi desert, is associated with Iran-backed Iraqi militias, and is under the command of the Iranian Islamic Revolutionary Guard Corps’ international wing, the Quds Force. The article from the pro-Iran Lebanese influential daily *al-Akhbar* argues that the Abu Dhabi attack is directly tied to Iraqi politics. Specifically, the article’s author sees it as a response to perceived Emirati meddling in Iraqi politics and its support for factions opposed to Iranian influence in Iraq. The article from the pro-Iran Lebanese media channel *al-Mayadeen*, meanwhile, places the attack in the context of Yemen and sees it as a response to coalition escalation in Yemen. The attack’s key message, according to the article, is that Iranian allies are capable of linking the Yemeni and Iraqi arenas and conducting semi-coordinated actions targeting Saudi Arabia and the UAE from both directions.



Map of the Middle East and the Arabian Peninsula.

Source: Abuk Sabuk via Wikimedia Commons https://commons.wikimedia.org/wiki/File:Middle_east_CIA.jpg

“... the UAE has become vulnerable to attacks from more than one direction...”

Source: Yahya Sare'e (Houthi-controlled military spokesman), *Twitter*, 3 February 2022. <https://twitter.com/army21ye/status/1489295787616047106>

We send our congratulations on the jihadist operation carried out by the True Promise Brigades-Sons of the Arabian Peninsula against the Emirati enemy yesterday, Wednesday. We thank them for this honorable, responsible and solidary stance with our dear people against the client Emirati enemy.

Source: (The Emirati Impasse Deepens: A New Front... from Iraq),” *al-Akhbar* (pro-Iran influential Lebanese daily), 4 February 2022. <https://tinyurl.com/w7xb8a88>

Whatever the group's identity, the event itself confirms that the UAE has become vulnerable to attacks from more than one direction. This creates greater risks for Emirati security, against the background of its aggression in Yemen and its blatant interference in the internal affairs of Iraq. Washington seems to have handed over the file of the new ruling arrangement to the UAE following the October 10 elections, in which Muqtada al-Sadr, Massoud Barzani and Muhammad al-Halbousi achieved the largest victory, all of whom are allies or friends of Abu Dhabi. The latter has also moved closer to Turkey, allowing for arrangements to be made resulting in the unification of the al-Halbousi and Khamis al-Khanjar blocs, and the re-election of al-Halbousi, who is considered the UAE's man in Iraq, as Speaker of the House of Representatives. This in turn opened the way for the installation of a “majority coalition” that excluded Iran's allies, which is a great risk for Iraqi security and for which the Crown Prince of Abu Dhabi, Mohammed bin Zayed, bears responsibility...

Source: (Iraq's ‘True Promise Brigades’ Entry into the Yemen War... Clashes or Linking),” *al-Mayadeen* (pro-Iran Lebanese media channel), 8 February 2022. <https://tinyurl.com/3p4skyt>

This Iraqi group is very interested in the Yemen war, and it is almost specialized in it. In addition, it seems that it is interested in standing up to Saudi Arabia and the UAE in particular... It is very likely that the strike on Abu Dhabi carried a political message: “Don't forget that the arenas can be linked when the time comes.” Let us note that the strike came after a crazy escalation carried out by Saudi Arabia and the UAE, and after American supplies to Abu Dhabi, including warplanes, and the dispatch of the American destroyer “USS Cole” to the Gulf to support the UAE navy, and talk of a possible ground attack from the Yemeni coast... These intensive messages, whether military or political, come in the context of a clear linking of the arenas, especially since leaders in Ansar Allah wrote on their Twitter accounts that the confrontation would not be with Sanaa alone in the event of any major US invasion of Yemen.

Yemen's Houthis Employ Iranian "358" Loitering Anti-Aircraft Missile

By Lucas Winter
OE Watch Commentary

The Iranian "358" missile appears to be an increasingly important weapon for Yemen's Houthi-led military forces. The 358 missile is classified as surface-to-air, but in early January, it was seemingly used as a surface-to-surface missile to target the provincial leader of the pro-secessionist Southern Transitional Council (STC) in Shabwah Province. On 14 January, a 358 was used to shoot down a Chinese-manufactured Wing Loong II unmanned aerial vehicle (UAV) belonging to the Saudi-led coalition, according to several open-source analysts on *Twitter*. It is unclear how many of these missiles are in Houthi possession. Since 2019, several of them have been seized from Yemen-bound vessels in the Arabian Sea. A 358 was also found in Iraq last October.

According to an October 2021 article from the prominent Yemeni news website *al-Masdar Online*, the 358 is a key Iranian weapon developed to counter U.S. aircraft, particularly UAVs. The missile ships in three

parts and once assembled can be launched from mobile positions, such as small trucks. It does poorly against fast-moving targets but can be effective against helicopters and some UAVs. The article from *al-Masdar Online* implies that it may be the Houthi-led military forces' most effective air defense missile, potentially having been used to bring down a variety of aircraft, including an Apache helicopter, Wing Loong UAVs, Scan Eagle and RQ-20 UAVs manufactured by the United States, and the Karayel UAV manufactured by Turkey. This sentiment is echoed by analysis from the Egyptian think tank *Egyptian Center for Strategic Studies*, which considers the 358's presence in Yemen and Iraq as indicative of "a new shift in Tehran's strategy in using its proxies in the region," one which puts new emphasis on defending against aerial attacks.

“... It seems that Iran has transferred this type of missile to its allies in Yemen to test it against the American planes owned by the Saudi and Emirati air forces participating in the war...”

Source: @3Mr_o_o (pro-Houthi, Iraq-based "Observer of political and military affairs"), *Twitter*, 3 January 2022. https://twitter.com/3Mr_o_o/status/1478359982097813511#Yemen

The mercenary Ali al-Jabwani, head of the Transitional Council in Shabwa governorate, survived an attack in the Usaylan area yesterday. The images released from the attack show a missile similar to the famous 358 missile.

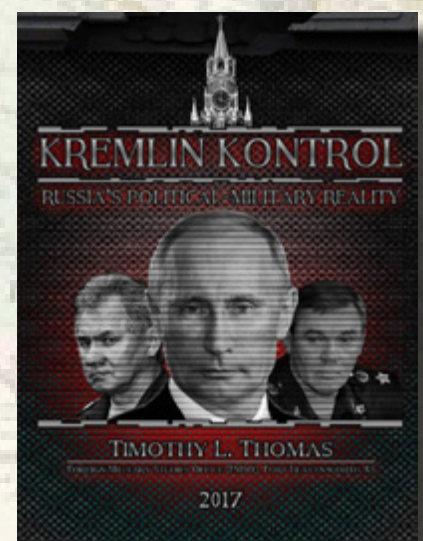
Source: @AlgerianAircra1 (Algeria-focused "Aircraft Tracker" account interested in "Aircraft News and Novelties related to Defense and Aviation"), *Twitter*, 14 January 2022. <https://twitter.com/AlgerianAircra1/status/1481988325774925825>

It appears that the Houthis in Yemen have shot down another Wing Loong II UCAF aircraft from the Saudi coalition. Judging by the video, it seems that an Iranian missile known as the 358 was used - a large, relatively slow missile with large wings.

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KREMLIN KONTROL RUSSIA'S POLITICAL MILITARY REALITY by Timothy L. Thomas

In 2016, Russian President Vladimir Putin and Chief of the General Staff Valery Gerasimov instituted sweeping changes that have reorganized the country's security forces and reestablished the nation's military prowess. This study, *Kremlin Kontrol*, aims to describe how control over the security services and the military have hastened those changes.



TERRORISM AND TRANSNATIONAL CRIME

Continued: Yemen's Houthis Employ Iranian "358" Loitering Anti-Aircraft Missile

Source:

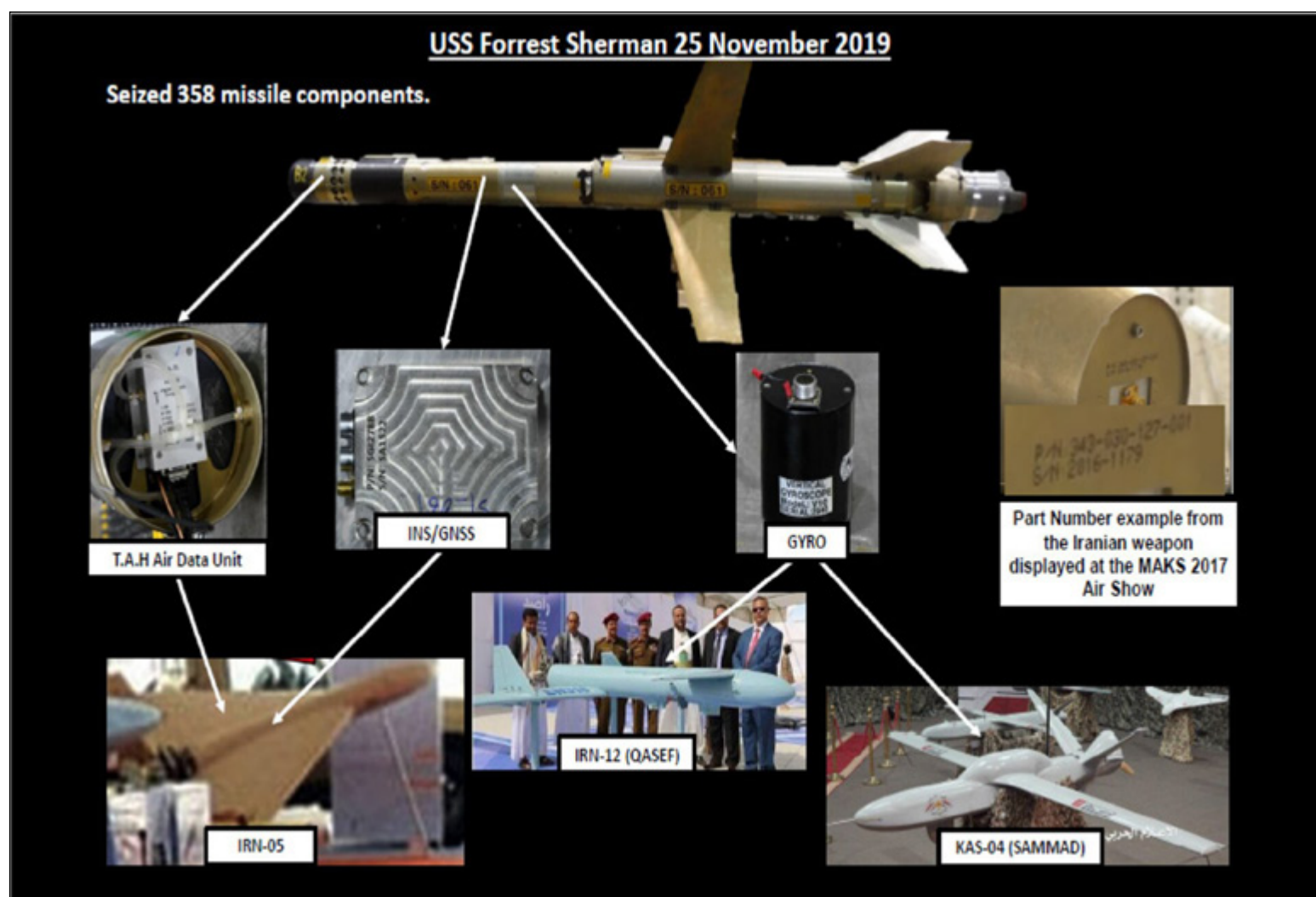
من "صلاح الدين" العراقية الى "مارب" اليمنية.. صواريخ دفاع جوي إيرانية بأيدي مليشيات طهران
(From Iraq's Salahuddin to Yemen's Marib... Iranian Air Defense Missiles in the Hands of Tehran's Militias)," *al-Masdar Online* (prominent Yemeni news website), 24 October 2021. <https://almasdaronline.com/articles/239284>

But the situation has changed significantly since mid-2019, when the Houthi militia announced in June that its air defenses had managed to shoot down a U.S.-made MQ9 drone in Hodeidah Governorate, using a "domestically developed" missile. In August of the same year, the militia's military spokesman said: "We have the ability to neutralize a large number of enemy aircraft."... It seems that Iran has transferred this type of missile to its allies in Yemen to test it against the American planes owned by the Saudi and Emirati air forces participating in the war. Iran considers this missile as its armor against American aircraft...

Source:

تهديد الأجواء... ما وراء حائط الصواريخ الإيراني في الشرق الأوسط
(Threat to the skies... Behind the Iranian missile wall in the Middle East)," *Egyptian Center for Strategic Studies* (Egyptian think tank), 2 November 2021. <https://marsad.ecss.com.eg/64307/>

The unique design of this missile, and its subsequent reappearance in other regions in the Middle East, was an indication that it might be the main player in all the shootdowns that have taken place in Yemen recently, such as the downing of a "Scan Eagle" drone last June, in Serwah District, Marib Governorate ... In sum, the appearance of the "358" missile in Iraq, and before that in Yemen (and it may have been used recently in Syria), indicates a new shift in Tehran's strategy in using its proxies in the region. This strategy now includes air defense, after it was previously limited to missile power, and then drones.



One of the five, near-fully assembled uniquely Iranian-designed and manufactured Three-Five-Eight surface-to-air missiles that were a part of the shipment seized by the USS FORREST SHERMAN in November (2019).

Source: CENCTCOM, Steve McLeod, <https://www.centcom.mil/MEDIA/NEWS-ARTICLES/News-Article-View/Article/2087998/us-dhow-interdictions/> Attribution: Public Domain

Mozambique Struggles with Post-Conflict Recovery in War Torn Cabo Delgado

By Jacob Zenn
OE Watch Commentary

On 4 February, the international affairs focused Brazilian publication *portalrhn.com* published the excerpted article on northern Mozambique's transition from active military conflict to post-conflict reconstruction. According to the article, many civilians in Cabo Delgado remain displaced and lack medical care, while attacks by militants loyal to the Islamic State in Iraq and Syria persist. For example, the militants carried out 20 attacks in the last two weeks of January, torching 2,800 homes and forcing 14,000 people to flee their villages. The article indicates the military has retaken almost all the territory that the militants captured in 2021 but have not been able to prevent continued attacks on civilians.

Based on interviews with Medicines Sans Frontiers (MSF) personnel in the area, the article suggests that in addition to providing security, the military needs to find ways to provide medical care and protection against cyclones to aid displaced people. If the military fails to do so, MSF warns the humanitarian crisis will spiral out of control, which will then affect the broader post-conflict recovery.

In fact, further military support to Mozambique is expected in coming months. A 3 February article from South Africa-based *news24.com* noted that South African president Cyril Ramaphosa promised to continue South Africa's deployment of 1,500 troops to Mozambique



Praça dos Heróis na cidade de Pemba, Cabo Delgado, Mozambique, VOA.

Source: https://commons.wikimedia.org/wiki/File:Pra%C3%A7a_dos_Her%C3%B3is_na_cidade_de_Pemba,_Cabo_Delgado,_Mozambique,_VOA.jpg Attribution: CC x 2.0

and allow for new investment to assist Mozambique's post-conflict recovery. According to the article, this will be essential to restoring normalcy to Cabo Delgado and allow for the reconstruction of northern Mozambique and the alleviation of the humanitarian crisis. The article notes that Tanzania and Rwanda are also deploying forces to secure northern Mozambique and revitalize its economy, signaling a regional effort in ending the insurgency.

“With the onset of the rainy and cyclone seasons, the cumulative impact of years of conflict and the worsening humanitarian emergency, it is more important than ever that Medicines Sans Frontiers teams have unrestricted and safe access to the area...”

Source: “Ataques e violência em Cabo Delgado deslocam milhares de pessoas no início da temporada de ciclones (Attacks and violence in Cabo Delgado displace thousands of people at the start of cyclone season),” *portalrhn.com* (Portuguese language international affairs focused Brazilian publication), 4 February 2022. <https://portalrhn.com.br/mocambique-ataques-e-violencia-em-cabo-delgado-deslocam-milhares-de-pessoas-no-inicio-da-temporada-de-ciclones/>

A significant part of Cabo Delgado's population is now extremely vulnerable to displacement and the lack of access to medical care. Local authorities have reported more than 20 attacks on four villages in the last two weeks with 2,800 homes damaged or destroyed by fire. This is the biggest wave of displacement in recent months. “Violent attacks and continued insecurity in several districts of central Cabo Delgado have led thousands of people to leave their homes with only what they could carry, just as the cyclone and rain season is starting,” says Raphael Veicht, chief of the Médecins Sans Frontières (MSF) emergency unit.

With the onset of the rainy and cyclone seasons, the cumulative impact of years of conflict and the worsening humanitarian emergency, it is more important than ever that MSF teams have unrestricted and safe access to the area so they can provide people with the necessary care. It is absolutely crucial that medicines and medical supplies can be imported quickly without bureaucratic delays.

Source: “We are fighting to bring peace’: Ramaphosa visits insurgency-hit Mozambique,” *news24.com* (South Africa based on-line news), 3 February 2022. <https://www.news24.com/news24/southafrica/news/we-are-fighting-to-bring-peace-ramaphosa-visits-insurgency-hit-mozambique-20220203>

President Cyril Ramaphosa visited northern Mozambique, supporting the government's latest effort to reassure neighbours and investors that an Islamist uprising is under control. Over the last week, Mozambique has tried to reassure neighbours and investors that their efforts are worthwhile. Tanzanian President Samia Suluhu Hassan visited last Friday and TotalEnergies boss Patrick Pouyanne met Nyusi in Maputo on Monday. Rwandan forces last week also allowed journalists a rare visit, to see how life is slowly returning to some of the hardest-hit areas.

TERRORISM AND TRANSNATIONAL CRIME

Uganda and Rwanda Target Militants in Congo

By Jacob Zenn
OE Watch Commentary

The first accompanying excerpt from the Rwanda-centric media outlet *taarifa.rw* discusses the continued counterterrorism collaboration of Rwanda's neighbors, Uganda and the Democratic Republic of the Congo (DRC). The cooperation is meant to combat militants loyal to the Islamic State in Iraq and Syria (ISIS) in the insurgent Allied Democratic Forces (ADF), based in the DRC. According to the article, the two countries' forces have opened a second axis for launching an offensive against the ADF. The article notes that originally Uganda entered the DRC with the DRC government's permission because the ADF conducted two bombings in Kampala, but Uganda has increased coordination with the DRC to more effectively combat the ADF.

The second accompanying excerpt from the Ugandan publication *pulse.ug* also emphasizes a retaliatory objective for Uganda's latest troop deployment to the DRC. Besides the ADF's bombings in Kampala, the group also began attacking markets located near Uganda's northern border with the DRC. After the ADF stole food and medicine and retreated, numerous displaced people crossed into Uganda, which created an additional humanitarian crisis for Uganda. Further, the article notes the Ugandan army suspected that ADF members were operating in Uganda by disguising themselves as refugees. This incentivized Uganda to enter the DRC to push the ADF back from the border.

As the final excerpt from the pro-government Rwandan *Daily New Times* reports, there is a growing perception that the conflict in the DRC is



Ugandan soldiers on parade.

Source: Master Sergeant Carlotta Holley Source: https://commons.wikimedia.org/wiki/File:Ugandan_soldiers_on_parade.jpg Attribution: CC x 2.0

now a regional affair. According to the article, Rwandan President Paul Kagame is calling for collective regional military action to combat the ADF and the Rwandan government is opening lines of communication with Uganda to resolve their border issues as another means to address the ADF's regional threat. In addition, the article mentions Rwanda's increasing collaboration with Burundi to target other militia groups besides the ADF, and with Mozambique to combat ISIS-loyal militants in that country. This suggests that Rwanda is increasingly acquiring regional military influence.

“In order to fight them more effectively, our two countries [Uganda and DRC] have recently agreed to pool their efforts in order to carry out joint operations against this common enemy.”

Source: “Uganda Sends More Troops To DRC,” *taarifa.rw* (Rwanda-centric media outlet), 3 February 2022. <https://taarifa.rw/uganda-sends-more-troops-to-drc/>

Uganda's government says it has sent an extra number of troops into neighbouring Democratic Republic of Congo to bolster its fight against the Allied Democratic Forces rebels. Last year in November, thousands of [Ugandan] troops crossed into DRC on invitation by President Félix Tshisekedi to “fight against armed groups, in particular the Ugandan rebels of the ADF”. Uganda gladly accepted the invitation and responded by conducting aerial and artillery bombardment of ADF bases deep in the jungles of DRC.

The attacks in October and November [2021] prompted the Ugandan military to deploy in eastern DRC in late November to take on the Islamist fighters.

Source: “Thousands of refugees flee into Uganda after an ADF attack,” *pulse.ug* (Ugandan publication covering Ugandan affairs for a global readership), 7 February 2022. <https://www.pulse.ug/news/thousands-of-refugees-flee-into-uganda-after-an-adf-attack/522ex8c>

Uganda's Minister of State for Relief, Disaster Preparedness and Refugees, Esther Anyakun, said that the ADF reportedly broke into pharmacies and shops as residents fled at their approach. The rebels allegedly made off with food and medicine. The refugees that crossed into Uganda were registered by Uganda Red Cross with the help of the Office of the Prime Minister and The United Nations High Commissioner for Refugees (UNHCR). Only days before this fresh influx of refugees, residents in Bundibugyo and Ntoroko districts were advised not to accommodate refugees fleeing battle in the Democratic Republic of Congo. These refugees, Ugandan authorities said, would have to be reported to the Refugees' Reception Center and be registered.

Source: “Security problems in DR Congo affect the whole region,” *newtimes.co.rw* (pro-government Rwandan daily), 8 February 2022. <https://www.newtimes.co.rw/news/security-problems-dr-congo-affect-whole-region-kagame>

President Paul Kagame has called for collective efforts by regional leaders towards the end of security challenges in the Democratic Republic of Congo, mainly associated to armed militia groups based in the country. He said that Rwanda was ready to play her part in resolving the security challenges stemming from the neighbouring country. The head of state also weighed in on Rwanda's ties with neighboring countries, which he said were on a promising trajectory.

GLOBAL OPERATIONAL ENVIRONMENT



Aerial spraying of glyphosate.

Source: Carolyn Parsons via Wikimedia, https://commons.wikimedia.org/wiki/File:Palouse_Aerial_Spraying_02.jpg Attribution: CC BY-SA 4.0

Colombia's Constitutional Court Halts Push for Aerial Spraying of Coca Crop

By Ryan Berg
OE Watch Commentary

In January, Colombia's constitutional court halted President Iván Duque's plan to return to aerial spraying of glyphosate as a means of eradicating coca. According to an article posted in one of Colombia's oldest dailies *El Tiempo*, the court stopped the order because the Colombian state had not sufficiently guaranteed the communities

impacted by the decision to return to aerial spraying the right to prior consultation. Prior consultation is a process that will take many months to complete, effectively shelving the decision on aerial spraying. Environmental authorities, in conjunction with the police, will have to complete this process in accordance with regulations set forth by the constitutional court, according to center-left Argentine news outlet *Infobae*. The outlet states that in 2020, Colombia had nearly 150,000 hectares of coca cultivation. Despite intensifying a program of manual coca crop eradication after signing a peace deal with guerrillas in 2016, Colombian officials want to return to aerial eradication to deal with a resurgence in violence and drug trafficking. The timeline for a final decision outlined by the court kicks the decision into the ongoing presidential election, forcing candidates to debate the issue. It also comes at a time when Colombia's instability is high and its violence surging due to the expansion of drug trafficking activity along the border regions with Venezuela.

“The environmental authority could not make a decision about the modification... without first carrying out the process of prior consultation with all the ethnic communities likely to be affected by the spraying activity.”

Source: “Glifosato: Corte tumba plan de manejo ambiental y ordena consulta previa (Glyphosate: Court buries environmental management plan and orders prior consultation),” *El Tiempo* (one of Colombia's oldest dailies generally described as politically-centrist), 20 January 2022. <https://www.eltiempo.com/justicia/cortes/glifosato-corte-tumba-plan-de-manejo-ambiental-y-ordena-consulta-previa-645910>

The environmental authority could not make a decision about the modification... without first carrying out the process of prior consultation with all the ethnic communities likely to be affected by the spraying activity, taking into account that the court itself noticed partial overlaps between these groups and the areas of influence of the project... The Court determined that in the process, in effect, the right to participation of the peasant communities residing in the municipalities where the program will eventually be carried out was ignored.

Source: “Corte frustra planes de Duque de reanudar fumigaciones antidrogas en Colombia (Court frustrates Duque's plans to resume anti-drug spraying in Colombia),” *Infobae* (Argentine news outlet generally seen as center-left politically), 19 January 2022. <https://www.infobae.com/americas/agencias/2022/01/19/corte-frustra-planes-de-duque-de-reanudar-fumigaciones-antidrogas-en-colombia/>

In 2020, Colombia had 143,000 hectares of coca, the plant that serves as the raw material for cocaine, according to the most recent UN report. The government, which links drug trafficking with the resurgence of violence after the peace process with the Marxist guerrillas in 2016, intensified the program of manual eradication of drug crops. However, the government insisted on the need to fumigate with glyphosate to significantly reduce the cultivation area.

Peruvian President Castillo Oversees Dizzying Turnover in Government

By Ryan Berg
OE Watch Commentary

Peru's President, Pedro Castillo, has had trouble retaining ministers. Castillo announced yet another new cabinet—the fourth in his six-month tenure, according to Spanish-language *CNN en Español*. Such rapid cabinet turnover has contributed to a sense of chaos engulfing the country and mounting questions over the president's ability to survive the rest of his term. Castillo's approval ratings have fallen steadily since his inauguration. Shortly after swearing in the new cabinet, the Spanish-language version of the popular British outlet *BBC en Español*, began reporting on scandals in the personal lives of newly appointed ministers. The outlet reports that the hoped for centrist cabinet did not materialize; rather, most of Castillo's chosen ministers are loyalists and Marxists from his Free Peru Party. In recent years, Peru's political climate has been highly volatile. Presidents have rarely finished their terms. In 2020, the country had three presidents in just one week. Peru's constitution pits the Congress against the President, with the Congress capable of impeaching the president for the vague and ill-defined idea of "moral incapacity." Peru's political instability has the potential to spill over into international supply chains: the country is the second largest producer of copper in the world, and the sector has seen recent strikes at mining sites connected to the political environment.



The swearing-in of Peruvian President Pedro Castillo.

Source: Flickr, <https://www.flickr.com/photos/presidenciaperu/51340618647> Attribution: CC BY-NC-SA 2.0

“Castillo also recalled the political instability that Peru has experienced in the last five years, where there have been up to four presidents and a dissolved Congress.”

Source: “Pedro Castillo anuncia que nombrará a nuevo gabinete, su cuarto en seis meses (Pedro Castillo announces that he will appoint a new cabinet, his fourth in six months),” *CNN en Español* (Spanish-language version of the popular U.S. outlet), 4 February 2022. <https://cnnespanol.cnn.com/2022/02/04/pedro-castillo-el-presidente-de-peru-anuncia-que-nombrara-a-nuevo-gabinete-su-cuarto-en-seis-meses-orix/>

Castillo will appoint a new president of the Council of Ministers, who, in turn, will appoint new heads of ministries. It will be the fourth cabinet in just six months of government...Castillo also recalled the political instability that Peru has experienced in the last five years, where there have been up to four presidents and a dissolved Congress, and said that citizens, especially the poorest “do not want to see more confrontations, nor obstructionist and anti-democratic behavior, nor vacancy announcements, announcements of the closing of Congress.”

Source: “Pedro Castillo nombra su cuarto gabinete en 6 meses, ¿por qué no consigue estabilizar a Perú? (Pedro Castillo appoints his fourth cabinet in 6 months, why can't he stabilize Peru?),” *BBC en Español* (Spanish-language version of the popular British outlet), 5 February 2022. <https://www.bbc.com/mundo/noticias-america-latina-60269518>

The last government of Peru lasted just over 72 hours. The ministerial cabinet that was sworn in by President Pedro Castillo on Tuesday, the fourth government in six months, is expected to last a little longer...The truth is that the short life of Castillo's cabinets has exposed the instability that has characterized his presidency. Since he came to power against all odds, Castillo has alternated executives of diverse orientation, which has led his critics to accuse him of leading the country in an erratic direction, and several of his ministers had to resign in the midst of the scandal and challenged in Congress.

U.S. CAATSA Sanctions Hurt Turkey's Defense Agreements with Third Parties

By Karen Kaya
OE Watch Commentary

In April 2021, the U.S. government started imposing the Countering American Adversaries Through Sanctions Act (CAATSA) on Turkey because of Turkey's purchase of S-400 missile systems from Russia, making Turkey the first NATO member to be subject to these sanctions. The accompanying article from the pro-government *Trhaber.com* examines the first example of a Turkish defense contract with a third country, in this case Pakistan, falling through due to the CAATSA

sanctions. The excerpt reports that Pakistan has cancelled a \$1.5 billion contract to buy 30 of the type T-129 ATAK combat helicopters from Turkish Aerospace Industries. As the passage reports, American Honeywell made the helicopters' turboshaft engine, so permission was needed from the United States for an export license, which could not be granted because of the CAATSA sanctions. The passage also notes Pakistan has now turned to China to buy their Z-10ME combat helicopters.



Turkey's T-129 ATAK Helicopter .

Source: wiltshirespostter, via Wikimedia Common [https://commons.wikimedia.org/wiki/File:BG12-1001_\(14662033896\).jpg](https://commons.wikimedia.org/wiki/File:BG12-1001_(14662033896).jpg) Attribution: CC BY-SA 2.0

In addition to the defense deals with third parties falling through, like this example with Pakistan, the CAATSA sanctions also have other, less quantifiable negative impacts on the Turkish defense industry. As the second excerpt from an interview with a Turkish defense expert featured on *Medyaskopetv.com* via *YouTube* points out, the Turkish defense industry has effectively become "contaminated" or "black-listed." He predicts that any Western country, or any "non-Western country wanting to have good relations with the U.S." will have major reservations about doing business with the Turkish defense industry. He notes this is not a technical issue, but a diplomatic one.

“The US's military embargo against Turkey has resulted in the loss of an important contract. Pakistan decided against the ATAK helicopters it was waiting to buy from TUSAŞ [Turkish Aerospace Industries]...”

Source: “ABD taş koydu, Pakistan ATAK helikopterinden vazgeçti! 1,5 milyar dolarlık anlaşma iptal (The USA prevented it, Pakistan [changed its mind] on the ATAK helicopter! The \$1.5-billion-dollar deal is cancelled),” *Trhaber.com* (Turkish pro-government news site), 5 January 2022. <https://www.trhaber.com/savunma/abd-tas-koydu-pakistan-atak-helikopterinden-vazgecti-15-milyar-dolarlik-h27804.html>

The US's military embargo against Turkey has resulted in the loss of an important contract. Pakistan decided against the ATAK helicopters it was waiting to buy from TUSAŞ [Turkish Aerospace Industries] for three years. The 1.5 billion dollar contract, which was the biggest export deal [in a single contract] for the Turkish defense industry, foresaw the sale of 30 combat helicopters to Pakistan.

But the T129 ATAK helicopters' LHTEC CTW800-4A turboshaft engine is made by the American company Honeywell, so permission was needed from the US for an export license. Despite Ankara's communication efforts, no official response was received from Washington. The attitude of the White House and Congress resulted in Turkey losing this 1.5 billion dollar contract.

The T-129 ATAK helicopters had been tested by the Pakistani Army multiple times in difficult terrains, and had successfully proven that it was the most effective combat helicopter in its class. The ATAK helicopter had garnered great admiration from Pakistani pilots, but are unable to reach [those pilots] due to the U.S. preventing the process.

...The sad development for the Turkish defense industry, was announced by Pakistani military spokesperson Babar Iftikar in a press briefing. Iftikhar said, in response to a question, that they have decided against the T-129 ATAK purchase from Turkey due to the delays, and have instead started talks with China to buy their Z-10ME combat helicopter. The U.S.'s blockage of Turkey enabled China to export more products.

Source: Işın Eliçin with Mevlütoğlu, “Trump yönetiminden Ankara'ya S-400 yaptırımları - Konuk: Arda Mevlütoğlu (S-400 sanctions to Ankara by the Trump Administration – Guest: Arda Mevlütoğlu),” *Medyaskopetv.com* via *YouTube* (reputable, independent Turkish media platform), 15 December 2020, <https://www.youtube.com/watch?v=UPzR50sc6Fs>

In a way, the Turkish Defense Industry Directorate (SSB) has been contaminated / blacklisted. In this case, other Western countries or companies, or any non-Western country that has or wants to have good relations with the U.S. and their institutions, may have reservations regarding doing business with Turkey's Defense Industry Directorate... This is not a directly technical issue, it's more of a diplomatic issue.

India Orders More Domestically Produced Self-Propelled Artillery Systems

By Matthew Stein
OE Watch Commentary

In August 2020, the Indian government introduced the first of several import ban lists for the armed forces. These lists included various items that the armed forces must procure from Indian manufacturers as part of Prime Minister Narendra Modi's "Make in India" initiative, which Modi introduced in 2014. Indian officials had hoped the initiative would help the country's defense industry develop, but it has had limited results in the years since as the Indian armed forces have often looked abroad to acquire various weapons and equipment. The accompanying excerpted articles report on two recent developments aimed to improve the country's defense industry and meet operational requirements.

The first article from English-language independent news magazine India Today reports that the Indian government cancelled multiple deals to acquire new systems and that "this decision is being viewed as a strong message to the domestic defence sector." The article notes that "many other deals are under review," including one for a "Russian VSHORAD (very short-range air defence) missile system for the Army." The article also mentions that this decision came after a review meeting last year, during which officials believed additional measures needed to be taken to better fulfill the "Make in India" initiative.

The second article from India Today reports that India's defense ministry is preparing to "place a repeat order of 200 more 155mm tracked self-propelled howitzers" and that it is the "largest order placed with an Indian private sector defence firm." The article notes that the



Indian K9 SPH at Ladakh during Indo-China Clashes.

Source: https://commons.wikimedia.org/wiki/File:Indian_K9_SPH_at_Ladakh_during_Indo-China_Clashes_.jpg
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defense ministry previously purchased 100 K-9 Vajras and put these into service "with the Indian army's three strike corps ranged across the plains of the Punjab and the semi-deserts of Rajasthan." It also mentions that the Indian Army deployed a few K-9s into Ladakh last year as part of a trial and that the systems are designed to operate in mountainous terrain with a harsh climate.

Overall, it is unclear what domestic substitutes Indian officials will look for in response to the cancelled deals. The order for more K-9s is not mentioned as a replacement for a cancelled deal, though it will provide India's defense industry with a boost and the systems can operate on the Line of Actual Control in Ladakh. The reports show how Indian officials are now pushing harder to improve the country's defense industry.

“A large number of these guns will be specially modified with uprated engines to operate in the high altitude cold deserts of Ladakh and Sikkim.”

Source: "Manjeet Negi, "Govt cancels chopper, missile import deals under 'Make in India' push," *India Today* (English-language independent news magazine), 14 January 2022. <https://www.indiatoday.in/india/story/govt-cancels-chopper-missile-import-deals-under-make-in-india-push-1900263-2022-01-14>

The central government has cancelled multiple deals for the purchase of short-range Surface-to-Air missiles and a tender for the purchase of 14 choppers for the Indian Coast Guard. This decision is being viewed as a strong message to the domestic defence sector.

A decision in this regard was taken during a meeting of the Ministry of Defence (MoD) in New Delhi on Friday...Many other deals are under review, including the purchase of six more P-8I surveillance aircraft and Klub anti-ship cruise missiles for the Navy and Russian VSHORAD (very short-range air defence) missile system for the Army.

The initiative came after PM Modi chaired a review meeting with officials of the Ministry of Defence last year...Officials who attended the meeting last year felt that strong measures need to be taken to ensure that the country moves firmly towards Aatmanirbhar Bharat in the defence sector...

Source: Sandeep Unnithan, "What's behind a massive order for Made-in-India howitzers," *India Today* (English-language independent news magazine), 23 January 2022. <https://www.indiatoday.in/india-today-insight/story/what-s-behind-a-massive-order-for-made-in-india-howitzers-1903375-2022-01-23>

The defence ministry has begun moving files to place a repeat order of 200 more 155mm tracked self-propelled howitzers worth over Rs 10,000 crore.

This significant order, to be placed with Larsen & Toubro (L&T) sometime this year, is the largest order placed with an Indian private sector defence firm and is a potential booster dose for the government's plan to modernise the military, create an industrial defence base and reduce defence imports.

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GLOBAL OPERATIONAL ENVIRONMENT

Continued: India Orders More Domestically Produced Self-Propelled Artillery Systems

Source Continued: Sandeep Unnithan, “What’s behind a massive order for Made-in-India howitzers,” *India Today* (English-language independent news magazine), 23 January 2022. <https://www.indiatoday.in/india-today-insight/story/what-s-behind-a-massive-order-for-made-in-india-howitzers-1903375-2022-01-23>

... L&T had delivered 100 K-9 Vajras for Rs 4,500 crore in partnership with South Korean defence firm Hanwha Defense. The contract was signed in May 2017 and the 100th gun delivered to the army on February 2021...

... A new order, which could be placed by this year, will see the guns start to roll out of Hazira by 2023 with all deliveries completed before 2028... The army’s five existing regiments of Vajras (each regiment has 18 guns, not counting the two in reserve) were acquired not for the mountains, but to operate with the Indian army’s three strike corps ranged across the plains of the Punjab and the semi-deserts of Rajasthan.

... Late last year, three K9s were moved up into eastern Ladakh on a trial basis. A senior artillery officer in the Udhampur-based Northern command was a key mover behind this unusual deployment. The guns drove up from Leh to the forward areas of eastern Ladakh on their own power (instead of a tank transporter-trailer), demonstrating their ability to operate independently...

What seemed to have been forgotten was that these guns had been originally designed to operate in South Korea, a rugged mountainous country with a hostile neighbor and with climatic conditions that could mimic those of eastern Ladakh...



OEWATCH

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Armenia Acquires Russian Helicopters as Part of Armed Forces Modernization

By Matthew Stein
OE Watch Commentary

A few months after the end of the 2020 Nagorno-Karabakh War, which resulted in significant Armenian losses, the Armenian government announced it would modernize the country's armed forces. At the August 2021 Russian-sponsored International Military-Technical Forum "Army-2021" in Moscow, Armenian Defense Minister Arshak Karapetyan stated that he was looking to acquire modern weapons and equipment from Russia and noted a need for unmanned aerial systems (UAS). While Karapetyan did not announce any acquisitions made during the forum, the accompanying excerpted article reports on the recent delivery of Russian helicopters to Armenia and provides a look at one area where Armenian officials are modernizing the country's armed forces.

“The air force received the four Mi-8MTV-5 helicopters in an assault configuration...”

The article from independent Russian-language news website *Eurasia Daily* reports that the Armenian Air Force received four Mi-8MTV-5 helicopters in January. The article notes this variant of the Mi-8 helicopter can conduct a variety of tasks and referenced Karapetyan's statement from last year. The Armenian Air Force reportedly has 11 Mi-8MTVs already in service, though they are older variants and less versatile than the Mi-8MTV-5. Overall, the helicopters are not as significant as the Armenian acquisitions of the Iskander ballistic missile system or the Su-30SM multirole fighters before the 2020 war; however, the helicopters mark an acquisition that took place during the modernization of the Armenian Armed Forces and will play a role in this. It also illustrates how Russia continues to be one of the main providers of military equipment for Armenia.

Source: “Армянская армия пополнилась боевыми вертолётами (The Armenian army is being reinforced with combat helicopters),” *Eurasia Daily* (independent Russian-language news website), 25 January 2022. <https://easily.com/ru/news/2022/01/25/armyanskaya-armiya-popolnilas-boevymi-vertoletami>

The Armenian Air Force received new multipurpose helicopters on 25 January, reports the press service of the Ministry of Defense of Armenia...

It is noted that the helicopters that entered service are designed to perform landing, fire support, transport, and medical tasks... The air force the received four Mi-8MTV-5 helicopters in an assault configuration...

Armenia will take practical steps to increase military-technical cooperation with Russia, then Defense Minister Arshak Karapetyan said in an interview on 24 August 2021. Yerevan, as part of an ongoing modernization of the Armenian Army after the war in Karabakh, plans to purchase only modern weapons, Karapetyan said...



Russian Air Force Mi-8MTV-5.

Source: [https://en.wikipedia.org/wiki/File:Mil_Mi-17-V5_\(Mi-8MTV-5\),_Russia_-_Air_Force_AN1905918.jpg](https://en.wikipedia.org/wiki/File:Mil_Mi-17-V5_(Mi-8MTV-5),_Russia_-_Air_Force_AN1905918.jpg) Attribution: CC BY 3.0

Book Review: A Look Back and Forward at Turkey's "Strategic Depth" Foreign Policy Doctrine

Karen Kaya
February 2020

“Strategic Depth (Stratejik Derinlik)” is a Turkish book published in 2001. This was a time when international relations theorists were describing new frameworks of world order and security modalities following the end of the Cold War and bi-polar world. Works such as Francis Fukuyama's “End of History” and Samuel Huntington's “Clash of Civilizations” were icons of this intellectual period. It was in this context of a changing international system that Turkish International Relations Professor Ahmet Davutoğlu (who later served as Foreign Minister between 2009-2014 and Prime Minister

between 2014-2016) attempted to define Turkey's position in his book “Strategic Depth.” From around 2002 to 2012, the foreign policy that Davutoğlu outlined in his book was considered the doctrine and roadmap for Turkish foreign policy.



Indonesia Takes Measures Against Chinese Naval Incursions

By Jacob Zenn
OE Watch Commentary

On 15 January, the mainly centrist leaning Indonesian-language website of *Republika Merdeka*, *dunia.rmol.id*, published the excerpted article on Indonesia's evolving strategy towards China in the South China Sea and adjacent waters. According to the article, China forced Indonesia into conflict due to Chinese coast guard ships' encroachment into the Natuna Sea, and Chinese demands that Indonesia not extract resources from that sea. The article notes that Indonesia argues the sea is part of its internationally recognized exclusive economic zone (EEZ) and is unwilling to acknowledge in the international arena that any dispute exists over its own maritime territory.

The article examines Indonesia's strategy of outreach to navies in Southeast Asia, which are also seeing China make competing assertions to their own South China Sea territorial claims. For example, Indonesia invited maritime security officials from five other Association of Southeast Asian Nations (ASEAN) members, including Brunei, Malaysia, Singapore, the Philippines, and Vietnam, to a meeting in early 2023 to discuss responses to China's assertiveness in the sea. However, the article also concludes that China may take retaliatory actions against those countries if they participate in the proposed meeting.

In particular, the article focuses on Indonesia's relationship with Vietnam. The Vietnamese Coast Guard and Indonesian Maritime Security Agency, Baklama, signed a memorandum of understanding in January to cooperate on mutual maritime security. In addition, the article noted that Indonesia was discussing with Russia's state oil company to connect a pipeline from the Natuna Sea to Vietnam's offshore network. Indonesia already completed the drilling for this project, which, according to the article, Indonesia considered a Baklama victory over China. It is unclear, however, what effect Russia's increasing reliance on China because of the Kremlin's war in Ukraine might have on Indonesia's pipeline project with Russia.

In anticipation of any Chinese naval actions to take control of the Natuna Sea, the article notes that Indonesia is strengthening its



Singaporean Navy RSS Tenacious and RSS Justice along with Indonesian Navy KRI Diponegoro and KRI Malahayati during 2021 Eagle Indopura Joint Exercise.

Source: Dispen Koarmada II (II Fleet Command Information Service)
[https://commons.wikimedia.org/wiki/File:Singaporean_Navy_RSS_Tenacious_and_RSS_Justice_along_with_Indonesian_Navy_KRI_Diponegoro_and_KRI_Malahayati_during_2021_Eagle_Indopura_Joint_Exercise_\(1\).jpg](https://commons.wikimedia.org/wiki/File:Singaporean_Navy_RSS_Tenacious_and_RSS_Justice_along_with_Indonesian_Navy_KRI_Diponegoro_and_KRI_Malahayati_during_2021_Eagle_Indopura_Joint_Exercise_(1).jpg)
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“China is showing its strength. It not only objected to Indonesia's drilling operations on [Indonesia's] own territory, but also sent coast guard ships to the area to pressure Indonesia.”

defenses. This includes building an additional runway to improve aerial surveillance of the sea, as well as a new submarine base. Further, the country is expanding defense cooperation with three countries outside of Southeast Asia, including Japan, India, and Australia, to deter Chinese naval operations in the Natuna Sea.

Source: “Indonesia Bersiap Menantang China di Laut China Selatan, Akankah Diikuti Negara ASEAN Lainnya? (Indonesia Prepares to Challenge China in the South China Sea, Will Other ASEAN Countries Follow?),” *dunia.rmol.id* (mainly centrist leaning Indonesian-language website of *Republika Merdeka*), 15 January 2022. <https://dunia.rmol.id/read/2022/01/15/519533/indonesia-bersiap-menantang-china-di-laut-china-selatan-akankah-diikuti-negara-asean-lainnya>

China has officially opened another front in its hostilities in the South China Sea. China's behavior ultimately pushed Jakarta to confront the defend its own territory because the disputed area by China was actually in the Indonesian Exclusive Economic Zone (EEZ).

Jakarta has gone its own way by seeking support from the Russian state oil company Zarubezhneft to construct a pipeline in the Natuna Sea to link up with Vietnam's offshore network. Indonesia's Maritime Security Agency (Bakamlu) has claimed success in the endeavor, which some analysts have called “Indonesia's great victory over China.” China had repeatedly reminded Indonesia to stop the project and stated it was a violation because it infringed on Chinese territory. China is showing its strength. It not only objected to Indonesia's drilling operations on its own territory, but also sent coast guard ships to the area to pressure Indonesia

The latest initiative that Indonesia has taken is to invite officials in charge of maritime security from five other ASEAN countries to meet early next year to discuss how to respond to China's assertiveness in the South China Sea. The Vietnam Coast Guard and the Indonesian Maritime Security Agency last month also signed a memorandum of understanding on cooperation in strengthening maritime security and safety between the two powers. And the Indonesian military is extending the runway of an air base so that additional aircraft can be deployed, along with constructing a submarine base and developing defense cooperation with Japan, Australia, and India