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Ukrainian Military Performance and Outlook

The Ukrainian Armed Forces (UAF) continue to face disadvantages in seeking to defend Ukraine's territorial integrity against Russian military forces. On the one hand, since Russia's renewed invasion of Ukraine in February 2022, the UAF has successfully defended against, and in some areas pushed back, Russian forces. On the other hand, this resistance has come with losses in personnel and equipment, and the overall outlook for the war remains uncertain. The Biden Administration and Congress have expressed support for Ukraine's defense of its territorial integrity against Russia's invasion. An understanding of the evolving state of the UAF may be of interest to Congress as it continues to weigh policies potentially supporting Ukraine's defense against Russian aggression.

Personnel

Some observers note that the UAF's initially positive overall performance is due in part to the experience and motivation of its personnel. The UAF has continued to benefit from high levels of recruitment and motivation. High losses, however, pose an ongoing challenge to the UAF's ability to maintain effective and sustained operations.

Since 2014, the UAF has gained important combat experience fighting Russian-led forces in the Eastern Ukraine regions of the Donbas, which has led to a large proportion of trained, experienced veterans among Ukraine's population. These veterans and other volunteers (including foreign recruits, some with previous military experience) were quickly mobilized into Ukraine's new, volunteer Territorial Defense Forces (TDF) and Reserve, without the need for lengthy training. Additionally, the high level of experience and training among the recruits meant they were able to operate artillery, tank, and support systems that traditionally require time for reservists or volunteers to master. These units were crucial in supporting and enabling regular UAF units to spearhead resistance and counteroffensives in multiple areas.

Since the beginning of the 2022 war, Ukraine reportedly has suffered high levels of casualties. In early June 2022, Ukrainian officials estimated losses of up to 100-200 killed in action each day, but officials have not provided precise figures. Losses are likely higher among regular UAF and Special Forces units, forcing a greater reliance on TDF and Reserve units. Due to losses and the need to rotate out troops, Ukraine has had to recruit and train a substantial amount of replacements. Unlike the initial period of war when most recruits were veterans, most new recruits and volunteers have little military experience. As a result, it takes longer for the UAF to train new recruits.

The UAF also faces two major hurdles to training and deploying new personnel. First, like many militaries, Ukraine was in the process of developing a professional

noncommissioned officer (NCO) corps along NATO standards before Russia's 2022 invasion. The UAF did not have a fully developed professional NCO corps by the time of the invasion and continued to deal with issues with retention, professional development, and funding. As described previously, the high proportion of trained veterans, many with combat experience, mitigated to some degree the need for an established NCO corps to train and command new recruits. However, with mounting UAF losses and recruits with no experience as replacements, continuing the development of an effective NCO corps will likely remain a major challenge and a key UAF priority.

Second, the UAF's need for immediate reinforcements creates pressure to train new recruits to only the bare minimum levels. Training recruits to conduct complex operations and operate advanced weapon systems takes longer, but both areas are widely considered necessary for the UAF to sustain combat operations in the current conflict.

Equipment

To date, the UAF also has sustained equipment losses. Some UAF units appear to be operating without mechanized or motorized vehicles support, likely due to losses and maintenance issues. On June 15, Ukrainian Brigadier General Volodymyr Karpenko estimated that some UAF units sustained losses of up to 50% of their equipment. Although this could be an overestimation, it also likely reflects the UAF's need for further support across tanks, armored personnel carriers, and artillery systems.

Ukrainian officials have emphasized their need for long-range rocket and artillery systems to counter Russia's quantitative and qualitative advantage in long-range fire. At the start of the war, Ukraine still relied on Soviet and Russian 122mm and 152mm caliber rocket and artillery systems. Ukraine also had a smaller number of longer-range 220mm and 300mm rocket systems, but it is unclear how many are still in service.

The UAF relies primarily on Soviet-era and Russian equipment. Russia has targeted Ukraine's large defense industry with long-range missile strikes, affecting Ukraine's ability to maintain, repair, and produce equipment and ammunition to sustain operations. Ukraine's capacity to repair and maintain equipment is likely degraded due to Russian targeting, posing a hurdle to the UAF's ability to sustain operations. Additionally, the Ukrainian defense industry is likely unable to produce complex systems in sufficient quantities for its current combat needs. Some Central and East European states maintain defense industries that are compatible with Soviet and early Russian equipment, specifically in their production of small and artillery ammunition. Some observers estimate, however,

that their production capacity is likely insufficient for Ukraine's needs. Due to the artillery-intensive nature of the conflict, the UAF requires ammunition supplies to sustain operations.

Ukraine's air force and air defenses have proven effective thus far at limiting Russian air superiority. Russia retains air superiority in certain regions, however, and continues to target Ukrainian air defenses. It is unclear how many of Ukraine's medium- and long-range air defense systems remain operational, and Russian targeting appears to limit their forward deployment, forcing frontline UAF units to rely on short-range man portable air defense (MANPAD) systems.

Role of U.S. and Western Security Assistance

Since the start of Russia's 2022 war, the United States has provided Ukraine more than \$6.1 billion in security assistance. The United States and European allies and partners continue to contribute training, logistics, intelligence, and military assistance. Observers note the tension between providing equipment and training for immediate use on the battlefield and the training required to effectively employ these systems over the longer term. Another concern is the impact of such assistance on U.S. and Western stockpiles and the time it will take for domestic defense industries to replenish.

Training

Prior to Russia's 2022 invasion, the United States and other allies contributed training and advice to the UAF. Current efforts focus on training the UAF to operate and employ Western security assistance, specifically on advanced systems. Due to the lengthy time required to effectively train and maintain many Western systems, U.S. and European allies are focusing on the minimum training necessary to operate in the field. This approach may facilitate the rapid employment of these weapons on the battlefield. However, without expertise to maintain and repair damaged equipment, the long-term effectiveness of these weapons may be undermined. Observers also note the UAF's need for assistance and training in planning, operations, and logistics.

Equipment

In the initial phase of the war, U.S. and European provision of anti-tank and MANPAD systems appeared crucial in supporting UAF defense against Russian forces. As the war has evolved, however, so have the needs and requests of the UAF. Ukrainian officials note that Russia has had an advantage in artillery, specifically long-range, fire. In response, U.S. and other Western governments are sending Ukraine advanced artillery, mobile artillery, and rocket systems. Once deployed, and if properly utilized, these systems will likely increase UAF capabilities. Observers note that the UAF's ability to repair and maintain these systems will prove decisive. Ukrainian officials also note a need for compatible types of ammunition, especially as the UAF transitions to Western systems.

Current Military Performance and Outlook

Over four months into the war, the UAF appears to be focused on an attrition strategy of grinding down Russian forces and holding territorial lines, specifically in the Donbas. The UAF has demonstrated a willingness to conduct local counterattacks across the country. Ukrainian Special Forces and local partisan forces reportedly have conducted some raids into Russian-controlled territory.

In addition, the UAF command structure appears to have become more centralized, as opposed to the more localized command structure exhibited earlier in the war. The UAF leadership appears to be consolidating reserves to contest Russian advances in the Donbas. Some observers believe the UAF decision to focus on an attrition strategy is designed to exhaust Russian forces. However, with the Donbas a priority for reinforcements, it is unclear if the UAF can sustain counterattacks in other regions. Additionally, the UAF risks exhaustion due to casualties and requires a coherent strategy of rotating forces in and out of combat.

Russia's armed forces retain advantages in force size, equipment (specifically artillery and long-range fire), air support, and electronic warfare. Some observers believe Russia's advantages will probably decrease in time, since Russia's ability to recruit and train new professional soldiers in sufficient quantities without a national mobilization remains questionable. In contrast, Ukraine is likely to continue to recruit large numbers of personnel. As mentioned, training these new recruits to a sufficient standard is expected to last as a core challenge.

These developments remain important factors for Congress to consider when discussing options to support Ukraine's defense. Some observers believe UAF capabilities will increase with continued U.S. and Western security assistance, specifically artillery and long-range missile systems. Continued and sufficient UAF training in the operation and maintenance of these systems will also likely determine the extent of the improvement in UAF capabilities. The UAF has identified additional needs in logistics, medical evacuation and care, and intelligence. Communications problems endure, with Russian electronic warfare and a lack of reliable systems hindering the UAF's ability to coordinate operations. It is also unclear if the UAF will gain the ability to upscale its operations and conduct large-scale offensives to retake territory.

For more information, see the following:

CRS Report R47068, *Russia's War in Ukraine: Military and Intelligence Aspects*, by Andrew S. Bowen

CRS In Focus IF11862, *Ukrainian Armed Forces*, by Andrew S. Bowen

CRS In Focus IF12040, *U.S. Security Assistance to Ukraine*, by Christina L. Arabia, Andrew S. Bowen, and Cory Welt

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