



Air Force Staff Sergeant Jalah Patten, 86th Operations Support Squadron air traffic control tower watch supervisor, left, shows members of Ukrainian armed forces tower simulator system during their visit to Ramstein Air Base, Germany, August 5, 2021 (U.S. Air Force/John R. Wright)

Building Institutional Capacity in the Ukrainian Armed Forces

Sustainment Planning for U.S.-Provided Equipment

By Gary D. Espinas, Tigran Mikaelian, and Michael McCarthy

Gary D. Espinas is the Regional Program Lead for Europe in the Advising and Consulting Division, International School of Education and Advising, at the Defense Security Cooperation University in Arlington, Virginia. Tigran Mikaelian is a Program Manager in the Ukraine Security Assistance Initiative at U.S. European Command. Michael McCarthy is Country Project Coordinator for Ukraine at Booz Allen Hamilton.

Plans to sustain equipment provided by the United States to partner nations usually do not generate much attention or interest. The Total Package Approach used in the foreign military sales system ensures that most gear deliveries come with required spare parts, tools and test equipment,

and other necessary items, but it generally assumes the partner nation has the necessary institutional capacity to incorporate and provide upkeep with a reasonable amount of effort in a reasonable amount of time. This is not always the case, however, as was demonstrated following the illegal incursion by



Soldiers from Ukrainian armed forces use vehicle for cover when advancing on objective during fire team movement and room clearing demonstration as part of Rapid Trident 2019, in Yavoriv, Ukraine, September 20, 2019 (U.S. Army/Kyle Larsen)

Russian forces into eastern Ukraine in 2014 and the subsequent surge in security assistance and security cooperation. The Ukrainian armed forces (UAF), which never had a substantial technical relationship with the Department of Defense (DOD), were suddenly receiving large quantities of vehicles, radars, radios, night-vision devices, and other equipment for their frontline combat units. The UAF maintenance, logistics, and procurement systems, geared toward sustaining Soviet-legacy equipment via state-owned defense enterprises, were unprepared—and unable—to sustain over the long term these new capabilities provided by the United States. Over a 3-year period (2017–2019), a combined team from U.S. European Command (USEUCOM) and the Institute for Security Governance (ISG) worked closely with their Ukrainian counterparts to establish a simple but effective

sustainment planning process, embedded in the Ministry of Defense (MOD) down to the unit level, which provides comprehensive upkeep for U.S.-provided equipment. This process has been institutionalized through MOD directives, has led to the establishment of new sustainment units and practices throughout the armed forces, and has resulted in the potential savings of tens of millions of dollars in U.S. security cooperation and security assistance funding, which is being directed toward the acquisition of new combat capabilities. The USEUCOM-ISG Ukraine Sustainment Planning Team has been recognized for this achievement with the 2019 DOD Sustainment Train, Advise, and Assist of Foreign Forces (Ministerial Level) Award from the Office of the Secretary of Defense (OSD).

An imperative of the 2018 National Defense Strategy is to “strengthen

alliances and attract new partners.”¹ The strategy explains that “by working together with allies and partners we amass the greatest possible strength for the long-term advancement of our interests, maintaining favorable balances of power that deter aggression and support the stability that generates economic growth.”² To this end, Ukraine is an important U.S. strategic partner that has been at the forefront of DOD engagement activities since the 2014 Revolution of Dignity in Kyiv and the Russian aggression in Crimea and eastern Ukraine that followed. Since 2014, the United States has committed approximately \$2 billion in security assistance to help Ukraine defend its territorial integrity, deter further Russian aggression, and make progress toward interoperability with the North Atlantic Treaty Organization (NATO).³ A key program employed by DOD to bolster Ukrainian defense resilience in support of U.S.

national interests is institutional capacity-building: security cooperation projects that enhance the partner nations' ability to exercise responsible civilian control of their national security forces; contribute to collective security; and absorb, apply, and sustain national security competencies.⁴

Sustainment Planning

The USEUCOM-ISG Sustainment Planning Project has been a crucial component of DOD's institutional capacity-building efforts in Ukraine. By assisting the MOD and UAF in creating maintenance plans for military equipment provided by the United States, the project boosts capacity and resilience at the ministerial and strategic levels while enhancing operational capabilities and readiness at the unit level. The sustainment planning project is nested within Ukraine's broader defense reform goals, which are intended to achieve NATO interoperability targets while making the UAF more capable and effective. As outlined in Ukraine's 2016 Strategic Defense Bulletin, which the MOD uses as a roadmap for defense reform, the establishment of efficient logistics systems and effective resource management systems is a key operational objective.⁵

The USEUCOM-ISG Sustainment Planning Project began in 2016 through a request from OSD and the Office of Defense Cooperation in Kyiv, Ukraine, for the MOD and General Staff to establish long-term upkeep plans for the equipment provided to Ukraine through various U.S. security assistance and security cooperation programs. At the time, sustainment requirements were consuming an increasing portion of U.S. funding, limiting the ability to deliver new capabilities, so the U.S. policy objective was to ensure Ukrainian ownership of the maintenance burden. Because the UAF were not integrating U.S.-provided equipment into organic operational and logistics pipelines alongside organic equipment, they had remained dependent on these assistance programs—and thus they were not fully using the gear in ongoing military operations. The UAF were also remaining highly reliant on U.S.-provided sustainment including

spare parts, training, and field services. In 2016, USEUCOM initiated a detailed financial analysis that demonstrated that such maintenance costs were consuming a progressively greater share of U.S. security assistance funds each year. The analysis showed that, if the situation were left to continue, tens of millions of dollars per year—as much as \$40 million to \$80 million over a 5-year period—would be needed to keep the UAF systems operational. U.S. funds and effort expended on sustaining existing items were detracting from the ability to provide new and more advanced capabilities to Ukraine.

To remedy these snowballing costs and in response to OSD and Office of Defense Cooperation requests, the Multinational Joint Commission, a body that oversees international military assistance, training, and advisory efforts, directed the execution of the first sustainment workshop in February 2017. Since then, 14 additional workshops have been held, the most recent in June 2020. The sustainment planning project is designed so that USEUCOM focuses on security assistance programs while ISG addresses the institutional changes required for maintenance-related self-sufficiency. Through the synergy of both organizations, the project has resulted in significant cost savings in U.S. security cooperation and security assistance dollars by transferring sustainment costs to the UAF while also increasing operational readiness rates and combat utilization of U.S.-provided equipment. The project also presents opportunities to facilitate reform in military logistics, procurement, resource management, weapons system life cycle management, and other related areas.

HMMWVs: A Sustainment Success Story

The HMMWV (High Mobility Multipurpose Wheeled Vehicle) was the pilot effort within the sustainment planning project. The UAF currently has more than 200 HMMWVs, with plans to increase this number by hundreds more. The Auto-Transport Directorate in the General Staff is responsible for maintaining the HMMWVs as well as other military rolling stock. Generally,

the HMMWVs are serviced at the 5th Joint Electro-Gas Welding and Automobile Center in Zhytomyr. As the HMMWV inventory grows, the General Staff intends to distribute the maintenance burden by potentially recreating this capability at regional automotive depots aligned with the four military operational commands, while delegating simpler upkeep and servicing functions to the unit level. Based on its engagements with USEUCOM and ISG, the General Staff is now developing maintenance manuals for the HMMWV fleet as well as the employment of HMMWVs based on experiences from combat operations and on training ranges, especially for special operations and airborne forces. Overall, the UAF HMMWV fleet has an operational readiness rate of 86 percent—close to that of the U.S. HMMWV fleet. This rate is a considerable achievement given that Ukraine has been engaged in an ongoing military conflict for the past 5 years.

The HMMWV repair facility at Zhytomyr is a visible demonstration of the resource commitment the Ukrainians have made toward maintaining the fleet of HMMWVs and other light tactical vehicles. It serves as a depot conducting level 3 and level 4 repairs as well as training operators and maintenance personnel. One unique solution that the Ukrainians devised was creating a mobile repair unit that routinely travels throughout the combat zone to provide onsite maintenance and arrange for the transit back to Zhytomyr of any HMMWV that cannot be fixed in the field. The sustainment plans developed with support from USEUCOM and ISG helped develop such solutions. Additionally, the sustainment workshops conducted by USEUCOM and ISG have supported the MOD in developing a planning directive and methodology that includes operational, maintenance, training, and sustainment concepts. The General Staff has operationalized this directive (Military Standard 14.040.006).

Among other major and impactful sustainment workshop projects is Ukraine's several-thousand-strong inventory of secure radios manufactured by

a leading U.S. defense technology firm. The Ministry of Internal Affairs National Guard of Ukraine uses them exclusively as its combat radio of choice, has already established a program of instruction within its existing communications training program, and has trained personnel to operate specialized radio diagnostics and maintenance equipment. The MOD program is not only significantly larger and therefore more complex but also on track to institutionalize the secure radio capability. As of May 2019, then-Chief of the General Staff Main Communications Directorate Major General Volodymyr Rapko requested that all future radio assistance be procured without including any U.S. funding for training, field services, or spare parts. These responsibilities are in the process of being absorbed by the UAF, which built a level 3 radio maintenance facility on the outskirts of Kyiv. Spare parts procurement is done via direct commercial purchases using Ukraine's national budget funds, while field maintenance is planned to be conducted by trained Ukrainian military personnel and a local radio subcontractor. Precise budgetary outlays and staffing to support this plan are under discussion with the newly formed General Staff J6 structure. This major achievement, reached after 2 full years of work and planning, means that several million dollars of U.S. assistance funds are being repurposed annually toward purchases of additional quantities of new radios. All the while, Ukraine's radio readiness is at an estimated 97 percent—despite rigorous ongoing combat operations.

The mechanics of sustainment planning are becoming more complicated as the United States gives increasingly sophisticated systems and the Ukrainian capabilities for sustaining them grow and improve. Recent examples include Ukraine's acquisition of two *Island*-class patrol boats through the U.S. Excess Defense Articles program on November 13, 2019, and the planned procurement of Mark VI patrol boats using a mix of security assistance authorities.⁶ The USEUCOM-ISG effort is already supporting sustainment plans for the two former U.S. Coast Guard cutters.

The Value of Institutional Capacity-Building

Since 2017, the ISG and USEUCOM (ECJ5/8) jointly executed sustainment planning has helped the UAF in appropriately maintaining the weapons systems and military equipment provided by the United States. Initial attempts to work directly with the armaments department of the MOD and the Directorate of Logistics of the General Staff proved unsuccessful, as neither organization had sufficient desire or incentive to systematically address the issue. Instead, ISG and ECJ5/8 employed a disaggregated bottom-up approach, working directly with the units and organizations that owned or managed the equipment. These units then put upward pressure on the Ukrainian military logistics system through requirements and requests. This method has been successful in transferring responsibility for sustainment to the UAF—a primary U.S. policy objective.

Sustainment planning has now become an accepted institutional activity within the UAF units using U.S.-provided equipment and, increasingly, the MOD and General Staff. Ukrainian officers no longer question the necessity of sustainment planning; rather, these officers can typically describe the new MOD Military Standard on Sustainment Planning (derived from the ISG-USEUCOM Sustainment Planning Methodology) and what it means for their activities.

Conclusion

The UAF have demonstrated a commitment to dedicating significant resources to sustaining the equipment provided by the United States. There are now dedicated enterprises for maintaining gear: units for training and maintenance, unit- and depot-level repairs, and mobile and fixed upkeep capabilities with manageable throughput capacities. The UAF are continuing to work toward systemic improvements, many of which require implementing other institutional defense reforms. The goals for many equipment programs include a functional foreign military sales procurement system to reliably acquire

military and dual-use spare parts, fabrication facilities for a variety of components, appropriate contractor technical support and interaction with manufacturers, training programs with a steady student throughput, and, perhaps most importantly, reliable funding streams within the normal budgeting procedures. Some of these efforts have already been partially achieved, while work is ongoing in other areas. However, Ukrainians are now capable of autonomously sustaining most capabilities provided by the United States.

The 2019 DOD Sustainment Train, Advise, and Assist of Foreign Forces (Ministerial Level) Award not only recognizes the important contribution made by ISG and USEUCOM to the UAF but also acknowledges that institutional capacity-building is a critical and effective security cooperation tool that DOD can employ to improve the capabilities of our strategic partners while meeting our own national security objectives. JFQ

Notes

¹ *Summary of the 2018 National Defense Strategy of the United States of America: Sharpening the American Military's Competitive Edge* (Washington, DC: Department of Defense, 2018), available at <<https://dod.defense.gov/Portals/1/Documents/pubs/2018-National-Defense-Strategy-Summary.pdf>>.

² *Ibid.*, 8.

³ “5 Things to Know About the U.S.-Ukraine Defense Relationship,” *Defense.gov*, November 7, 2019, available at <<https://www.defense.gov/explore/story/Article/2011746/5-things-to-know-about-the-us-ukraine-defense-relationship/>>.

⁴ “Institutional Capacity Building,” Defense Security Cooperation Agency, n.d., available at <<https://www.dsca.mil/programs/institutional-programs>>.

⁵ Ministry of Defense of Ukraine Reform Projects Office, “Strategic Defense Bulletin,” 2016, available at <<https://defense-reforms.in.ua/en/strategic-docs>>.

⁶ Bobby Dixon, “U.S. 6th Fleet Turns Over Former Coast Guard Cutters to Ukrainian Navy,” U.S. Naval Forces Europe–Africa/U.S. 6th Fleet Public Affairs, November 15, 2019, available at <<https://www.whs.mil/News/News-Display/Article/2017721/us-6th-fleet-turns-over-former-coast-guard-cutters-to-ukrainian-navy/>>.