

INTELLIGENCE INTEROPERABILITY, & ADVISING, & ARTEMIS

by Sergeant First Class Joshua R. Brown



Introduction

Security force assistance brigades (SFABs) operate worldwide across the three levels of warfare: tactical, operational, and strategic. Since October 2021, the 2nd SFAB's Maneuver Company Advisor Team 2120 has been employed in Senegal, building upon a Department of State-funded peacekeeping operations training. This effort is preparing Senegalese trainers for future United Nations (UN) missions across the western and central African regions. Maneuver Company Advisor Team 2120 advisors have planned and are executing tactical and operational-level foundational training, but that is a fraction of what a company-level advising team can do. In this case, the training recipients are the Senegalese Army tactical training centers' cadre tasked with preparing contingents of the Senegalese Army to support various UN missions. Using the *United Nations Infantry Battalion Manual (UNIBAM)* as a common framework, advisors and partners recognize the overlap and differences in doctrine and tactics, techniques, and procedures (TTP) across the tasks a UN infantry battalion must execute while in support of peacekeeping operations.

The Interoperability Nexus

The overlap and differences in TTP are opportunities to build upon a shared understanding of a common military exchange. This type of opportunity is what the team refers to as an *interoperability nexus*, also called an IN. INs are areas where any team geographically at the tactical edge (physical or digital) can strengthen the relationship, enhance the lethality of the combined force, and mature the theater by establishing a mutual understanding of "how." Enhancing INs minimizes differences in execution, enabling combined formations to do the tasks of planning, executing, and communicating (horizontally and vertically) with greater functionality.



A Maneuver Company Advisor Team advisor demonstrates the Aerial Reconnaissance Tactical Edge Mapping and Imagery System airframe to partner forces. (Photo by SFC Michael Ortiz)

INs exist across all levels of the interoperability framework (operational, systems, technical, and procedural) and all war-fighting functions. Three primary lines of effort provide an opportunity to generate greater interoperability. The team must—

- ◆ Identify INs and areas where there are differences.
- ◆ Ensure that there is an observed training requirement at the tactical and operational levels.
- ◆ Demonstrate a willingness to take an innovative approach when confronted with a task. Sometimes a partner cannot procure a particular capability because of limited financial resources. However, some creative thinking and innovative design with commercially procured items used as training aids can reduce the gap and bridge the partner’s material limitations.

These three lines of effort enable advisors and partners to set conditions for both elements’ success. Every IN is an opportunity for partners and advisors to mature an immature theater, regardless of which paradigm, placement, or access an advising team is targeting to develop.

UN doctrine, specifically the *United Nations Infantry Battalion Manual (UNIBAM)* and the *United Nations Military Peacekeeping-Intelligence Handbook (MPKI HB)*, is the common foundation that brought Maneuver Company Advisor Team 2120 advisors together with Senegalese Army counterparts. These two documents describe the common standards for UN elements. They ensure interoperability across planning, operating, and communicating.



A Senegalese Army lieutenant and a Maneuver Company Advisor Team advisor review a sand table in support of the United Nations Multidimensional Integrated Stabilization Mission in the Mali contingent combined arms live fire exercise. (Photo by SSG Dylan Garner)

United Nations Infantry Battalion Manual (UNIBAM)

“The purpose of...[this manual] is twofold. It provides Troop Contributing Countries (TCCs) with guidance on how to train [and] equip units deploying to UN Peacekeeping Missions, and it provides battalion commanders and staff, company commanders, platoon commanders and sub-unit leaders in UN Peacekeeping with a reference to effectively plan and conduct operations and tasks in support of a UN mandate. This manual does not replace national doctrine. Rather, it is designed to highlight UN operational standards, which should be overlaid on existing doctrine, thereby assisting a conventional Infantry Battalion (Inf Bn) operating in its national role to prepare for UN operations as ‘blue helmets.’”¹

United Nations Military Peacekeeping-Intelligence Handbook (MPKI HB)

“The aim of this handbook is to support personnel deployed in MPKI roles in UN peacekeeping operations...Key to understanding peacekeeping-intelligence is its distinction with information...The primary difference between the two is that information is factual reporting about events that have happened, while peacekeeping-intelligence is an assessment—derived from the analysis of the reporting.”²

A critical IN that Maneuver Company Advisor Team 2120 sought to improve is within the first step of the UN military decision-making process, which addresses analysis of the operating environment.³ This includes small unmanned aircraft systems (sUAS) operations and information acquisition, a key focus area for Maneuver Company Advisor Team 2120. Expanding this IN involves deepening the UN peacekeeping contingent’s familiarity with incorporating these skills into the planning phase. The aim is to demonstrate the required skillset to develop an operational to tactical intelligence enterprise and then to include the full breadth of the contingent’s organic sensors and architecture into mission planning. This will result in enhanced situational understanding and lower risk during mission execution, two areas that the current contingent commander and our assessment had identified as a gap. It will also lead to improving our partners’ ability to mitigate anticipated future risk to the force and mission.

Integrating Innovation—Training Fundamentals

Before the 2nd SFAB’s inaugural deployment to Afghanistan in 2019, the National Geospatial-Intelligence Agency’s Warfighter Support Office partnered with the brigade S-2 to train, equip, and field the Aerial Reconnaissance Tactical Edge Mapping and Imagery System (ARTEMIS). Throughout that deployment, the Train, Advise, Assist Command-East G-2 employed ARTEMIS with resounding success. Successes in Afghanistan triggered a similar approach between the National Geospatial-Intelligence Agency and the 2nd SFAB force package (FP) 22-1. To that end, FP 22-1 fielded and employs ARTEMIS in Ghana and Senegal.

ARTEMIS is a low-risk, low-cost mapping platform that places the entire tasking, collection, processing, exploitation, and dissemination (TC–PED) cycle in the hands of the consuming element. Supplying outputs comparable to theater mapping assets (for example, Light Detection and Ranging, known as LIDAR, and Buckeye) at scale, ARTEMIS operationalizes the TC–PED timeline for the tactical consumer. Effectively, a platoon element could reconnoiter a route or objective at 0800, process the data by 1200, integrate it into their common visualization (for example, Tactical Awareness Kit or Google Earth) by 1300, incorporate it into their mission analysis, and still have 7 to 9 hours to rehearse before executing a night mission.

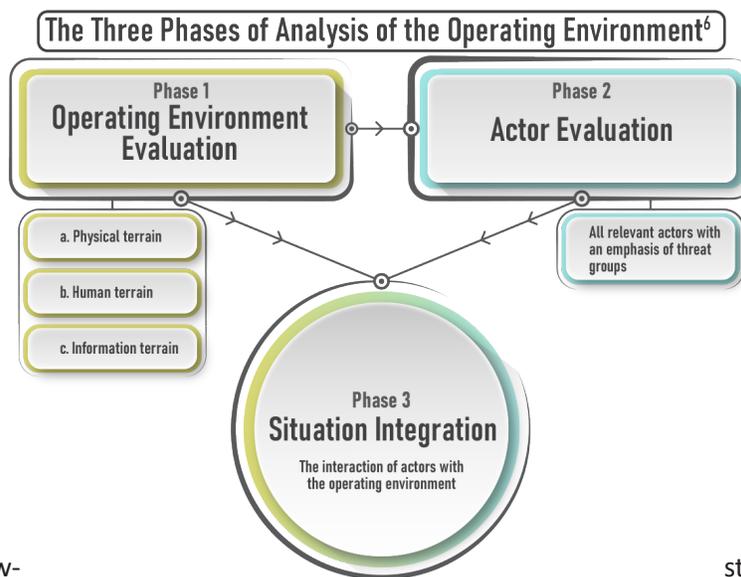
Maneuver Company Advisor Team 2120 developed two TTP exchanges between the United States military and the Senegalese military during the deployment. The first exchange focused on understanding sUAS operations, with an emphasis on shifting the use of sUAS from the execution phase to the planning phase, identified from an assessment and a gap based on prior partner training. To this end, the discussion consisted of breaking down the TC–PED cycle and understanding organic information acquisition assets in terms of sensor, processor, output, and transport (SPOT). The second exchange built on the concepts covered during the first exchange and deepened information acquisition fundamentals, applying these fundamentals to a broader array of assets within a constructive exercise environment. Attendees analyzed the operating environment and then evaluated the “known” actors. Upon working through step one (operating environment evaluation) and step two (actor evaluation) of the analysis of the operating environment in the *United Nations Military Peacekeeping-Intelligence Handbook (MPKI HB)*, attendees developed an information acquisition plan.⁴ This included identifying requirements, assessing assets, tasking assets against the requirements, assessing the collection, and using insights gained to more fully integrate the situation, which

is step three (situation integration) of the analysis of the operating environment.⁵

Coordinated Efforts—Transformational Benefits

The value captured for SFABs lies in using ARTEMIS not merely as an organic information acquisition asset but also as a tool to assist with training processes. The key takeaway is not “how to operate this particular sUAS,” but rather to understand that information acquisition

is a series of techniques designed to achieve specific goals. Regardless of the sensor, we use these techniques and processes at the tactical and operational echelons (and higher echelons, at scale). Deepening this IN is the result of reps and sets, applying the techniques to specific tasks (reconnaissance versus surveillance), different sensors (Soldier as a sensor, publicly available information, and human intelligence), and different conditions and constraints. ARTEMIS is merely the chisel used to widen this specific IN. ARTEMIS is a resource that the advisor can use, coupled with podium instruction, to demonstrate, hands-on, the entirety of SPOT and TC–PED within a compressed timeline. Additionally, using a tool such as ARTEMIS adds the ability to build upon



the transformational relationship between the United States and Senegal, creating a common bond of trust and enhancing our military partnership. This approach allows both elements to gain without an anticipated reciprocal return. It will pave the way for continued placement and access as we share nested objectives against the worldwide threat of terrorism.

Setting Conditions for Continued Success— Assess

The concept of INs transcends warfighting functions. Coupling agile acquisition efforts with grassroots innovation, any advisor on a team can identify a nexus and develop a novel solution to enhance it, as solutions range across DOTMLPF–P.⁷ Sometimes the answer is hardware. Sometimes a standard process or the solution can manifest in a conversation during a shared meal. Regardless, in the case of ARTEMIS and FP 22-1, the solution cart preceded the nexus horse. FP 22-1 arrived in theater with a capability and at once set about fully using it. Assessments and insights gleaned through FP 22-1's experience can help identify future INs for future force package teams. Applying these lessons learned ensures continued success and relevancy. Taken as a whole, these lessons learned contribute to the very essence of maturing the theater in tandem with a partner and a country team who are already identifying new and exciting requirements, with future SFAB force packages as the delivering party and the United States as the preferred partner. 

Endnotes

1. United Nations Department of Peace Operations, *United Nations Infantry Battalion Manual (UNIBAM)* (New York: United Nations, 2020), viii.
2. United Nations Department of Peace Operations, *United Nations Military Peacekeeping-Intelligence Handbook (MPKI HB)* (New York: United Nations, 2019), introduction.
3. *Ibid.*, 105.
4. *Ibid.*, 75.
5. *Ibid.*
6. *Ibid.*, adapted from original.
7. DOTMLPF–P: doctrine, organization, training, materiel, leadership and education, personnel, facilities, and policy.

SFC Joshua Brown serves as the intelligence advisor on Maneuver Company Advisor Team 2120, currently in Thiès, Senegal. He has served at every echelon at 2nd Security Force Assistance Brigade, most recently as the senior signals intelligence sergeant and technical integrator in the brigade S-2. His military education includes the Basic Operator Training Course, the Digital Network Exploitation Advanced Course, the Advanced Individual Terrorism Awareness Course, the Security Force Assistance Advisor Course, and the Digital Intelligence Systems Master Gunner Course. He served as a flight trainer at Alpha Company, 3rd Military Intelligence Battalion (Aerial Exploitation), and as the Task Force Observe, Detect, Identify, and Neutralize (ODIN) liaison to the General Command of Police Special Units. He also served as the Headquarters and Headquarters Company platoon sergeant and operations noncommissioned officer at the 743rd Military Intelligence Battalion. SFC Brown's campaign support includes Operation Freedom's Sentinel. He is currently on assignment to the 207th Military Intelligence Brigade-Theater.