

ISR for the Human Domain

Facilitating mission success in a new strategic era

by Thomas Adamo, Capt David Fisher & the IdOps Stakeholders Staff

The National Defense Strategy of 2018 redirects the Marine Corps to focus on the reemergence of long-term strategic competition—of which a joint intelligence, surveillance, and reconnaissance (JISR) operational construct will be critical for the Marine Corps and the joint force—to establish and maintain decision advantage and win on the battlefield both in the information environment and the cognitive domains of enemy and neutral networks. As the Marine Corps develops future warfighting concepts for operations in the information environment, we must navigate through the increasingly complex information domains to rapidly sense, understand, and influence information available to hostile forces. To accomplish information superiority, we must consider the human domain behind the information environment.

The human domain is as complex and dynamic as the individuals who comprise it, and it ranks among the most complex of system-of-systems problems commanders face. Identity intelligence (I2) is capable of significantly bolstering commanders' understanding of human terrain, affording them decision advantage in navigating the human domain across the spectrum of conflict. I2 is defined in *Joint Publication 2-0, Joint Intelligence*, (Washington, DC: Joint Staff, October 2013), as the intelligence resulting from the processing of identity attributes concerning individuals, groups, networks, or populations of interest. I2 has proven to be an invaluable tool in supporting counterinsurgency (COIN) and counterterrorism (CT) operations because it helps commanders achieve a level of

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understanding of the human terrain in their areas of responsibility in such a way as to meaningfully impact decision making and drive operations at the tactical level (the point of human interaction, whatever the shape and form of that interaction). Sensing the enemy (denying adversary anonymity) is an irrefutable requirement for targeting and force protection operations, as well as understanding the dynamics at play across the human domain is critical to successful intelligence preparation of the battlespace. Indeed, I2 has been leveraged to great effect on the battlefield in support of these activities. Identifying threat actors directly enables commanders to protect their forces and assets, and relentlessly pursue enemies who have an intimate understanding of local population dynamics. In turn, these activities have improved host-

nation security, enabled partner-force action, and added credibility to U.S. forces' interactions with partner forces. The effectiveness of I2 in supporting operations in a COIN environment is now a matter of record. However, the successes commonly attributed to the employment of I2 on these battlefields represent only a portion of the discipline's utility.

In great power competition, the critical value of I2 is not as glaringly obvious as in COIN and CT operations. The value of identifying, characterizing, and understanding key nodes and cells of a network is pervasive for understanding the information environment and sensing, tracking, neutralizing, and defeating enemy capabilities. We must recognize that I2 will continue to play an integral role in a future characterized by strategic competition because

it is an intelligence discipline that is mission tailored to provide ISR in the human domain. When appropriately applied, I2 can help commanders allocate resources against threat actors in the physical domain by supporting understanding of the human terrain and analyzing key nodes of a network: people behind the capabilities. In fact, the understanding of individuals and groups that I2 can provide will almost certainly afford commanders with additional options for delivering effects through information domains that would otherwise be impossible. Behind every strategic capability, every asymmetric effort, every proxy conflict, and every influence operation is a network of key actors, facilitators, experts, and leaders who can be impacted (kinetically and informationally) to influence, shape, co-opt, and defeat adversarial activities across the range of military operations and in all domains of conflict. The joint force must rapidly adapt the lessons learned in I2 tradecraft over the past eighteen years of conflict to the reality of peer competition. We ignore this opportunity at our peril because adversarial forces have been exploiting this domain since its inception.

Whether the intended targets of such

operations are an adversary's military force, the civilian population in the battlespace of a foreign country, or a host-nation's population during disaster relief operations, identifying and understanding the human beings on the receiving end is a requirement for both developing delivery methods and measuring effectiveness (if you cannot understand the results of your fires, you should assume you missed altogether). Put simply, ISR is as relevant to the human terrain in a Commander's battlespace as it is to any of the other dimensions of that battlespace.

Landing at Cenauria: How I2 Enabled Marine Success against a Peer Competitor

A MEF is assigned battlespace in the sovereign territory of Centauria, a peer adversary against whom other means of statecraft have failed to achieve acceptable results. Prior to amphibious forced entry of Cenauria, the MEF elements leverage a robust I2 analytic capability to identify key enemy force operational commanders responsible for centers of gravity and asymmetric capabilities threatening the MEF's ability to conduct operations outlined in the Cenauria campaign plan. I2 then

facilitates JISR tasking to locate the key enemy commanders, enabling the MEF to prioritize targeting efforts to strike the commanders' networks and cripple their critical capabilities, thereby removing an asymmetric advantage and decreasing enemy forces' ability to oppose MEF operations.

The MEF conducts amphibious forced entry and is establishing a lodgment for follow-on force flow. The battlespace is primarily farm land, small villages, and one small city. It is surrounded by heavily forested, mountainous terrain; this terrain is impassible and nestles the few major roads in and out of the area of operations. The majority of the MEF's combat power is dedicated to establishing defensive positions on key terrain along these egress routes which will be utilized by follow-on forces. The mountains and foliage have provided excellent cover and concealment for retreating enemy forces and afford them the opportunity to aggregate up to the platoon level and conduct harassing attacks against perceived gaps in the MEF's rear area. In the first days, many of the local populace took up active resistance against Marines, regarding them as invaders and fearing reprisals if they were observed collaborating with or receiving aid from the Americans. However, as enemy forces consumed or absconded with civilian provisions during their retreat, the local populace is hungry and has begun receiving humanitarian assistance in the MEF's rear area. To make matters worse, the civilian populace from a major city to the north has begun a mass exodus toward the MEF's battlespace. As follow-on forces begin to flow into theater, the MEF has been directed to construct camps in the rear area to manage the security and humanitarian aid for these internally displaced persons (IDPs). Intelligence reporting indicates that enemy special forces in plain clothes have been directed to blend in with the local population and infiltrate these camps to conduct sabotage and organize local resistance to destabilize the rear area, disrupt force-flow, and discredit the notion that American forces represent security for the civilian populace.

As construction of the IDP camps



Various kits available for deployed forces to track and interact in the human terrain. (Photo provided by author.)

begins, Marines providing security at the sites and interfacing with the local population in the various hamlets and villages are aided by the Identity Dominance System–Marine Corps (IDS-MC).

The IDS-MC is a multi-modal (fingerprint, iris, face), biometric collection system that provides the ability to collect, share, match, and store identity information. IDS-MC allows Marines to collect biometric and biographic information on the local populace they encounter as they provide security, manage the flow of IDPs at checkpoints, and distribute humanitarian aid. Marines with MOSs ranging from infantry, law enforcement, counterintelligence/human intelligence, and logistics were trained on this equipment long before their embarkation and exercised its employment during pre-deployment training as well as while en-route. The information collected is uploaded to the Department of Navy Identification and Screening Information System where it is analyzed to characterize friend from foe. The intelligence Marines employed throughout the MEF are fully task saturated in supporting the ACE and GCE; the ability to exploit large amounts of data collected by the IDS-MC is not feasible for these analysts.

Luckily, the infrastructure and ex-

perience of reachback support for this type of analysis has been well-developed, rehearsed, and in practice for nearly a decade. This capability cut its teeth providing direct analytic support to forward deployed Marines conducting operations in COIN environments. While the tradecraft has continued to evolve, the fundamentals have been honed against thinking, acting, real-world adversaries. However, the scope of their mission has dramatically expanded since the cell's inception, and its integration was written into the operations plan for this operation long before escalation and conflict. Now this team is working around the clock to process, analyze, and disseminate the results of this mass collection effort in realtime.

A Marine assisting with the distribution of humanitarian aid in Kutown, one of the many villages in the area of operations, collects biometric data using the IDS-MC Handheld. She was here last week and sees familiar faces lining up to receive humanitarian aid, noting that they look worse than they had last week. About half-way down the line, while scanning one individual, she receives an alert through the IDS. In the time since she scanned this same individual last week, I2 analysts were able to cross-reference the individual's name and photograph with a name and

description of an individual reported as a local militia leader in a series of intelligence reports drafted by Marines interfacing with the local population at another nearby village. The individual is detained, and a search of his person reveals several hand-written notes and digital media. These notes and electronics are scanned and sent back to the I2AC and determined to be instructions to gather all of the food distributed to this village and deliver it to provided coordinates at the foot of one of the mountains for pickup by an enemy platoon-sized element still active in the MEF's rear area. As a result, the enemy platoon is located and destroyed within the following days. Additionally, the local population in Kutown, no longer on the brink of starvation and being forced to turn over much of their food to their own military forces, becomes forthcoming with the identities of other militia leaders in villages where they have family and friends.

At Aytown, another village in the area of operations, locals are gathering with their belongings in the town center before departing to an IDP camp when an explosion kills and injures several, scattering the rest behind locked doors. Through an interpreter, law enforcement Marines dispatched to the scene learn that one of the local shop owners claims the explosion was the result of a mortar attack conducted by Marines against the local population in order to reduce the strain on logistics being caused by the influx of humanitarian aid. Marines collecting forensic evidence from the scene are able to use the Expeditionary Forensic Exploitation Capability to collect latent fingerprints from a piece of metal debris from the explosive device. These prints are matched to two individuals: one enrolled at an IDP camp checkpoint and the other, a shop owner in Aytown, enrolled during aid distribution. Both are detained and additional exploitation reveals residue from the explosives used in the device in the village. Through the individual at the IDP camp, Marines are able to identify a network comprised of local militia leaders, plain-clothed enemy soldiers, special operations forces, and intelligence officers from Saturnia: Cen-



We have to be able to navigate through an increasingly complex environment to gather and process information. (Photo by LCpl Tanner Lambert.)



Marines conducting biometric exploitation. (Photo by Cpl Samuel Guerra.)

auria’s more-powerful anti-U.S. neighbor, attempting to organize and arm resistance for an attack against security forces at the camp. Back at Aytown, flyers published in the native language are posted describing the event and offer a reward for the shop owner—he is turned over the next day at the IDP camp’s ECP as the village reports for enrollment and entry.

Both of these stories—and others like them—are also published to social media platforms used throughout the nation of Centauria as operations continue. These posts tell the story of United States Marines successfully navigating the human terrain of Centauria, efficiently identifying and apprehending hostile actors while striving their utmost to treat the civilian populace with humanity and respect. These posts

are, of course, refuted as propaganda by the government of Centauria, but the biometric evidence cited in the accounts adds to their credibility. The evidence of Saturnian lethal aid and hybrid conflict activities generates diplomatic demarches and leads to the political isolation of Saturnia by the U.N. and international community. As coalition forces punch out from the foothold gained by the MEF, they note that civilians in rural areas are more likely to report individuals attempting to redirect aid, are discouraging active resistance within their communities, and militia members either depart with retreating enemy forces or refuse to fight all-together. Intelligence reporting indicates that, theater-wide, the enemy has judged the tactic of embedding special operations forces within IDP camps to

be ineffective because civilians willing to migrate to these locations will report anyone who they feel jeopardizes their chances of receiving much-needed aid. The use of robust I2 capabilities during this operation ensures identity dominance among the populace of Centauria, facilitates effective ISR to identify and destroy key enemy capabilities, and helps contain the conflict by constraining Saturnian involvement.

The MAGTF’s ability to effectively employ and leverage I2 will be critical to affording commanders in-depth understanding of future battlefields, ultimately enabling mission success through decision advantage. I2 capabilities resident within the Marine Corps have already proven invaluable to identifying friend-from-foe, supporting force protection, and enabling target intelligence in COIN operations. I2 is already enhancing the MAGTF’s ability to navigate and fight in the information environment. The lessons learned by employing I2 in the COIN fight can and must be adapted to achieve advantage over peer adversaries, and to prepare for great power competition across the spectrum of conflict. I2 will continue to play a crucial role in informing how commanders engage peer adversaries in the human domain. However, this capability will be especially valuable in driving operations in the information environment, where an understanding of how individuals and groups will act and react is essential to achieving desired effects, let alone “information dominance.”

