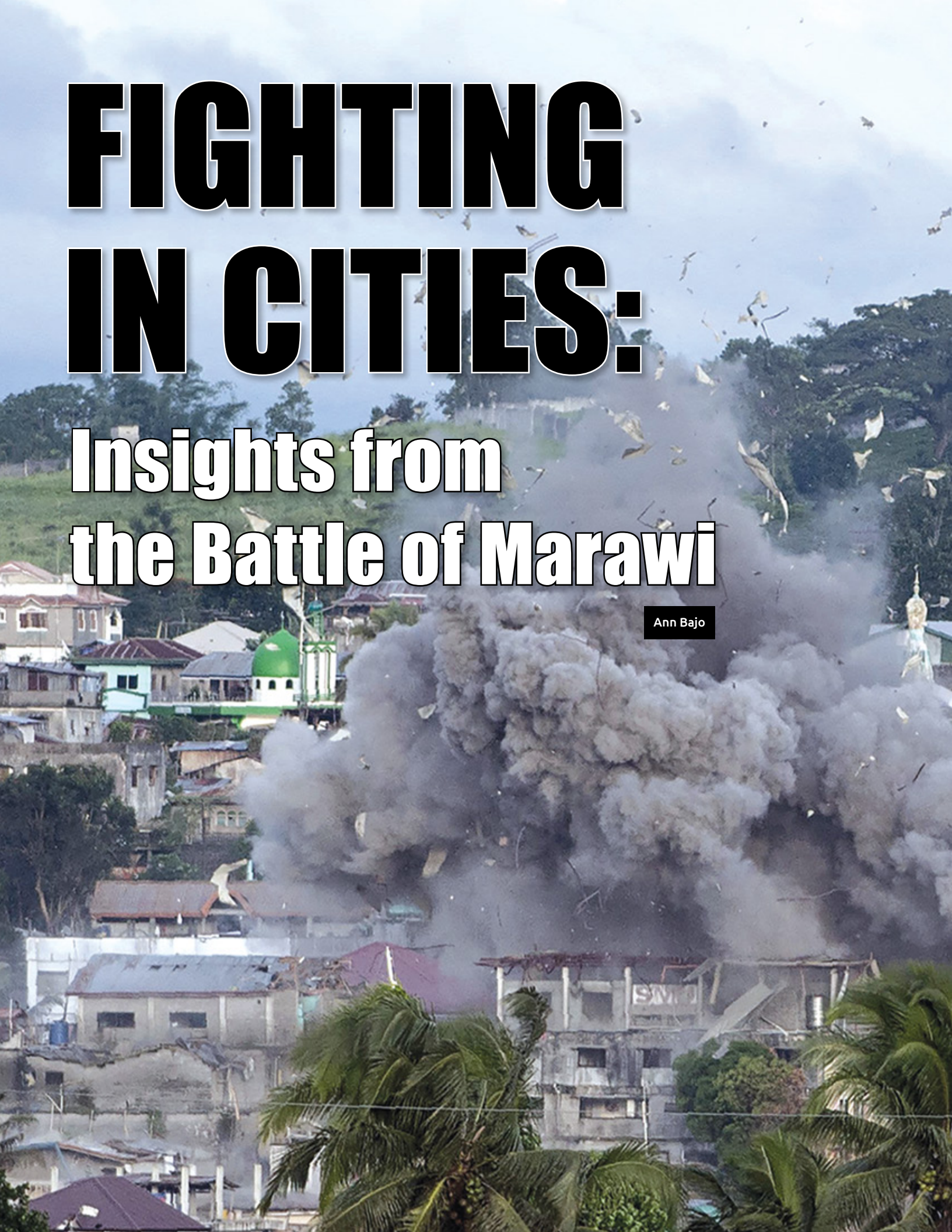


FIGHTING IN CITIES:

Insights from
the Battle of Marawi

Ann Bajo





INTRODUCTION

In 2017, the Battle of Marawi introduced urban warfare to Philippine security forces. It challenged and transformed the way the conventional Armed Forces of the Philippines (AFP) and Special Operations Forces (SOF) approached combat, as they had long employed guerrilla tactics against rebel groups in jungles and mountainous terrain. Although the Philippine government defeated the Maute and Abu Sayyaf terrorist groups and liberated Marawi, victory came at a substantial cost, consuming billions of dollars in rehabilitation costs, displacing thousands of people, and causing hundreds of fatalities. The AFP found itself ill prepared to fight in an urbanized city, and as a result Marawi was left in shambles and there were numerous civilian casualties.¹ Before the Battle of Marawi, the Philippine military's most recent urban confrontation had been the 2013 Zamboanga siege. The developments and the fight in Marawi opened up a new chapter on the future of land warfare for the Philippines. It highlighted the evolution of terrorist groups' tactics, techniques and procedures and showcased the advancement of the Maute–Abu Sayyaf capabilities and equipment.²



Source: rappler.com

This article offers an overview of the Philippine military's experience in urban warfare, highlighting the evolution of the AFP's concept of operations (CONOPS) during the battle and identifying pertinent lessons. The first section describes the Philippines' contemporary experiences in urban warfare, with a focus on the Zamboanga Crisis and a brief overview of the battle. The second section recounts the main operational phases. The third section assesses the AFP's capabilities in urban warfare, examining the following components: ground forces, combat engineers and uncrewed aircraft systems (UAS).

The information put forth in the article is mostly sourced from internally published reports, interviews, and the research notes taken by the author during the deployment to Marawi to document the war for the Joint Special Operations Group (JSOG). It is important to acknowledge that the author had the privilege of being the sole civilian permitted to reside in the main battle area (MBA) for an extended period and that she subsequently authored the JSOG's special operations doctrine. As demonstrated in the article, the Philippines' experience of military operations in urban terrain revealed the AFP's limitations in urban warfare and stressed the need for capability development.

THE PHILIPPINES' EXPERIENCE IN URBAN WARFARE

The Zamboanga Crisis of 2013

The Battle of Marawi was not the first urban battle that the AFP had encountered. On 9 September 2013, the Moro National Liberation Front (MNLF) attacked Zamboanga City. The Philippine government was involved in a long-standing conflict with Moro rebels, rooted in Moro resistance that dated back to the colonial period. The Moro resistance has a long history, beginning during Spanish colonization as the Moros defended their lands and culture. The struggle continued under American rule and against the Manila government, especially due to migration policies favouring Christian settlers. In the late 20th century, the rebel groups gradually transformed into armed factions, each advocating for the rights and autonomy of the Bangsamoro people (Muslim-majority communities in Mindanao). The earliest contemporary armed group was the MNLF, led by Nur Misuari. The Philippine government signed a peace agreement with the MNLF which led to the creation of an autonomous region in the Southern Philippines. Later on, however, another group emerged: the Moro Islamic Liberation Front (MILF), led by Hashim Salamat. That group broke away from the MNLF due to dissatisfaction with Misuari's leadership. The MILF gained strength and numbers, ultimately becoming the most powerful Moro rebel group. The MNLF was deeply dissatisfied with the peace process undertaken by the government with the MILF, which had eventually opted for more diplomatic and peaceful methods to seek official recognition for the Muslim population in a more political context.

The MNLF's dissatisfaction stemmed from the neglect of previous agreements with the MNLF, which were overlooked during negotiations between the Philippine government and the MILF.³ In response, the MNLF tried to raise the flag of the self-proclaimed "Bangsamoro Republik" at Zamboanga City Hall.⁴ The clash lasted nearly three weeks and resulted in the displacement of more than 100,000 people, an estimated 240 civilian casualties, and the closure of Zamboanga City Airport, thus hampering economic activity in the city.⁵ The Battle of Zamboanga was an urban operation under precision conditions imposing severe restrictions on the use of firepower because the enemy forces were thoroughly mixed with non-combatants in the city.⁶ Even the hostages were contained and managed in Zamboanga, which added another layer of complexity. It is worth noting that the SOF personnel who operated in the battles of Zamboanga and Marawi described the former as less strenuous because the structures in the city were mostly shanty houses made of light materials.⁷

SOFs are typically the go-to units of the AFP, and JSOG is made up of the counter-terrorism and readily deployable SOF units of the AFP. Before the attack in Zamboanga, the AFP's intelligence community had gathered information about the MNLF's plans and warnings of an impending assault on Zamboanga City, but that information was not processed effectively.⁸ Despite that, the military focused on organizing a well-equipped elite combat unit. In particular, following the MNLF attack, JSOG deployed the Light Reaction Battalion (LRB) under its operational control (OPCON). The LRB was specifically created to carry out surgical operations and precision strikes designed for close quarters battle (CQB) in places such as buildings, buses and trains. Moreover, it was tasked to conduct highly sensitive operations including neutralization of high-value targets / high pay-off targets (HVT/HPT), hostage rescues and counter-terrorism.

Traditionally, the AFP has tended to activate new units every time a major conflict arises instead of developing the readiness level of existing units, even though the latter would make more sense financially. For instance, instead of improving its intelligence system in response to the Zamboanga Crisis and Marawi, it activated the Light Reaction Regiment (LRR), which led to the creation of the AFP Special Operations Command. That noted, given the success of the LRB in Zamboanga, the Philippine Army (PA) expanded the LRB to the LRR in 2014. At the time, the PA was unaware that the LRR would become one of the key combat units during the Marawi operations. Even the AFP SOF took on new challenges in urban warfare as they prepared to combat local terrorist groups in the Marawi battle.

The Marawi Battle (23 May–23 October 2017)

The Marawi battle was a five-month-long armed conflict between Philippine security forces and local terrorist groups inspired by Islamic State in Iraq and Syria (ISIS), namely the Maute Group and the Abu Sayyaf Group (ASG). Officially known as the Islamic City of Marawi, it is a predominantly Muslim city inhabited by the Maranao ethnic group. The persistence of violence and terrorism in Marawi are influenced by diverse factors, including historical grievances of the Muslim community, economic disparities, ethnic and religious tensions, political instability and inadequate governance, *redo* (clanfeuds), ineffective counterterrorism measures, and challenges related to social cohesion.⁹ The widespread gun culture among Maranao's, together with their tendency to possess weapons, further supported militant groups.¹⁰ Consequently, the violent resistance to government authority in Marawi created conditions conducive to harbouring and recruiting terrorists.¹¹

Leading up to the battle, the AFP recovered video evidence revealing the Maute-ASG's planning for a major attack in Marawi City and other locations throughout Mindanao, a major island in the Philippines long tormented by the presence of Islamic separatists, local warlords, clan militias and communist rebels.¹² The video footage showed Abdullah Maute, one of the founders of the Maute Group, presiding over a meeting with his cohorts, including Isilon Hapilon, the leader of ASG, in which they were planning their clandestine operations in Marawi.¹³ Their primary objective was to raise an ISIS flag at the Lanao del Sur Provincial Capital and declare a *wilayat* (a provincial ISIS territory) in Lanao del Sur. The Maute-Abu Sayyaf Group initially planned to attack Marawi three days after the pre-empted attack on 23 May, in order to coincide with the beginning of Ramadan.¹⁴ They pre-positioned themselves within the city and reconstructed the battleground in a manner that was more favourable to them.¹⁵

The clash began when a mission to capture Isilon Hapilon turned into a deadly firefight.¹⁶ The Maute Group and ASG militants attacked Marawi City, including the military camp, the police station and the city jail, freeing 68 inmates. They occupied several buildings in the city, including the Marawi City Hall, Mindanao State University and the *Amai Papa* Medical Center, and took several civilians hostage at Dansoman College. All of that occurred during the first day of fighting in Marawi City. It turned out that the militants had been planning the attack for several weeks and were better prepared because the battleground was their hometown.

The Battle of Marawi: Crucial Lessons

The battle was high-intensity urban combat with the militants occupying well-thought-out positions to conduct their engagements and ambushes.¹⁷ The choice of Marawi as a battleground was natural for the Maute brothers,

Omar Maute and Abdullah Maute. Marawi served as the Maute's stronghold, and its status as the sole Islamic city in the Philippines rendered it favourable for the religion-inspired militant group.¹⁸ The location also offered easy access to supplies, back-door passage of reinforcements and escape routes.¹⁹ Buildings and structures around the city were fortified and built to stand against clan attacks in view of rampant clan feuds (*redo*) in the area. As a result, in preparation for their 26 May attack, the Maute-ASG fighters were already embedded and well pre-positioned around Marawi City. At that point, the attacking force had the advantage and momentum, which proved disadvantageous for the defending government forces.

The battle started when a Philippines security force special operation prematurely triggered the planned Maute-ASG uprising. AFP and police operations were initially reactive and surprised as they encountered a totally unexpected type and size of threat, including a major attack on the army camp and well-prepared ambushes. The AFP were concurrently trying to mount rescue operations for their trapped comrades, isolate the city and, after several days, manage a massive outflow of refugees. As the battle progressed, government forces learned and adapted, and their CONOPS and task organization were constantly evolving. The Marawi campaign can be divided into three main phases of operations:

- **Phase 1 – Initial Phase:** Implementation of Target Packet Bingo. This involved a special operations mission to capture ASG leader Isilon Hapilon in a hideout, triggering the militant group's planned attack.
- **Phase 2 – Sector Clearing:** Operational Plan (OPLAN) Liberation. This plan involved the implementation of a sector-based plan to clear the city and included the development of the CONOPS in the area of operations (AO) and standing up Joint Task Force Marawi (JTF Marawi), functioning as a mission command post assigning mission-essential tasks to main effort units.
- **Phase 3 – The Final Push:** The MBA and Neutralization of HVTs. This was the final push to clear the MBA and force the enemies toward a constriction area in order to isolate the HVTs. It also included the organization of Joint Special Operations Task Force Trident (JSOTF Trident).

The overarching mission of the AFP was to eradicate terrorist elements in Marawi City.²⁰ It was challenging for the AFP to execute such a campaign, given its lack of experience and capabilities in urban warfare. Consequently, the battle extended beyond the initially anticipated duration and resulted in severe damage to the city and many casualties among its population.



Source: Noel Celis, Getty Images

Phase 1 – Target Packet Bingo

OPLAN Bingo was a special operations mission aimed at executing a high-risk warrant of arrest for Isilon Hapilon at an identified hideout in Basak Malu lot, Marawi City, on 23 May 2017. The mission was designed based on a target packet identified by the Naval Intelligence and Security Group-Western Mindanao.²¹ It was assigned to Joint Special Operations Unit 3 (JSOU3), made up of the 4th Light Reaction Company, elements from the 8th Naval Special Operations Unit and a Philippine Forward Air Controller team.

At the onset, as the government forces approached the safe house where the target was believed to be hiding, they were engaged by Hamilton's cohorts. Unfortunately, JSOU3 had miscalculated the extent of the enemy's foothold in the area. They were caught off guard and found themselves fixed in combat for nearly three days. During the initial encounter, two members of the government troops were killed immediately and one was seriously injured.²² The government forces failed to arrest Hamilton, who managed to escape the raid. The failed execution of OPLAN Bingo to capture Hamilton forced the Maute Group to carry out its uprising prematurely. The battle at the safe house escalated into a larger military campaign in the heart of Marawi City as the Maute and ASG groups emerged from hiding and went on a rampage, attacking establishments in the centre of the city.

In hindsight, two critical factors contributed to the government mission's failure: inadequate intelligence and insufficient rehearsals. First, the intelligence report acquired by the operating units was inaccurate. Operational planning for the previous mission had relied on human intelligence, a photo of the house, and Google maps showing Hamilton's presumed location.²³ Operating units relied on initial estimates of 10 enemy fighters, but it became apparent that there were roughly 100 of them surrounding Hamilton, including in neighbouring houses.²⁴

Second, the AFP had not made a range of contingency plans for the mission and had not conducted contingency rehearsals. The intelligence report indicated that Hamilton was constantly on the move and might unexpectedly move to another location.²⁵ Due to the urgency of the mission, JSOU3 conducted only a partial reconnaissance of the target area and had limited time for a rehearsal, thereby decreasing the mission success rate. The unit also failed to develop a contingency plan for possible scenarios or factor in the reaction of enemies during the operation.²⁶ The hurried planning for OPLAN Bingo can be largely attributed to competition within the intelligence community. Prior to OPLAN Bingo, the AFP, through Joint Task Force Gameplan, had launched a series of military operations to hunt down the ASG leader Hamilton and the Maute brothers, all of which failed.²⁷ The pressure to capture Hamilton and the Maute brothers stemmed from monetary rewards offered by the US government and the Philippines to those who successfully captured the HVTs. The US government offered a \$5 million reward for Hamilton, while President Duterte offered around \$350,000 for Hapilon and \$100,000 each for the Maute brothers.²⁸ The focus of the intelligence community on targeting the HVTs was so intense that actionable intelligence, which could have potentially prevented the battle, was unfortunately lacking.

Given the intensity of the threat posed by the militant groups, Mindanao was placed under martial law in accordance with Proclamation No. 216 issued by President Duterte.²⁹ The operation in Marawi required additional troops as the situation continued to worsen. However, due to limited mobility assets, it took weeks to transport acquired units to Marawi, thus demonstrating the perils of underestimating the enemy's size and capability and the nature of the battle.

Phase 2 – Sector Clearing: OPLAN Liberation

During Phase 2, the reliability of intelligence was once again insufficient to effectively support and sustain all phases of the Marawi battle.³⁰ In the early stages of Phase 2, all the units that responded and were deployed to Marawi described their experience of entering the battle as "being blindfolded." Units were not given accurate estimates of enemy forces, and the operating environment was not well understood. Intelligence briefings were generic and lacked the required tactical information, such as the enemy's strength, location and terrain. The periodic underestimation of enemy strength and the uncertainty regarding enemy locations compromised the effectiveness of operating units.³¹ When some units were hurriedly deployed to augment forces in Marawi, they were logistically unprepared, lacking sufficient personnel and supplies to sustain their operations. The grim situation was aggravated by a "silo culture," which meant that not all operational units were included in intelligence briefings.³² Additionally, some

operational units had to function with limited equipment/facilities and poor or inadequate intelligence analysis, which should have contributed real-time information to the common operational picture throughout the battle.³³

Security forces were initially prevented from entering Marawi. The enemy controlled the Mapandi, Bangolo and Masiu bridges, which were the main entry points to the city, and set up roadblocks and checkpoints.³⁴ In one of the initial encounters, an attempt to attack the enemy frontally across a bridge led to 53 casualties among the Marines.³⁵ In addition, the enemies ambushed an armoured personnel carrier that was supposed to evacuate the casualties but remained trapped in the firefight for five days.³⁶ It took the government forces two months to reclaim the Mapandi Bridge, which opened favourable manoeuvre space for subsequent assaults. Likewise, envelopment as a form of manoeuvre allowed the government forces to achieve a position of advantage. Other units that approached Marawi from the north and northeast found it challenging to enter via the bridge, as the enemy had fortified its position there. In contrast, when approaching from the east, the AFP encountered less resistance. These areas served as an avenue of approach for joint forces in constricting the enemy presence in Marawi.

After moving the forces into position, the AFP implemented OPLAN Liberation, which led to the creation of JTF Marawi, conceptualized as a unit to carry out the following objectives: conduct sustained military operations and insulate areas from extremism; establish civil security and control; and support early recovery and rehabilitation of Marawi.³⁷ The general strategy of JTF Marawi was to divide the city into sectors, number the buildings as a control measure, conduct deliberate room-to-room clearing operations and secure the area. Joint Task Groups (JTG) were created to allow military decision making at an operational level.

Initially, JTF Marawi was composed of seven JTGs that complemented each other's functions, including conducting focused military operations (FMO), rescuing hostages and trapped civilians in the conflict zone, facilitating the movement of internally displaced people and securing critical infrastructure.³⁸ In a three-month clearing operation, FMOs reduced the number of affected *barangays* (the smallest administrative unit in the Philippines) from 96 to 9. Enemy-controlled structures were significantly reduced from 2,500 to 1,000, and the enemy's strength was reduced to 175. Yet JTF Marawi expanded further to 12 JTGs composed of 8,753 security force personnel from the AFP Major Services and Philippine National Police (PNP).³⁹ As the Marawi operations scaled up and the force structure expanded, two prominent operational challenges became apparent: joint operations and command and control (C2).



The following bridges over the Agus River in Marawi were tagged as strategic targets by government forces (in parentheses are the dates the government secured control over them). From top to bottom: Mapandi Bridge (July 20) Bayabao (Banggolo) Bridge (September 1) Raya Madaya (Masiu) Bridge (September 24). Islamic State of Iraq and the Levant-linked militants were concentrated on the west side of the river.

Joint Operations: One of the prominent reasons why joint operations faced challenges was that combat service, particularly in communication, and combat service support, which includes sustenance and logistics, were primarily service-centric in nature. Sustainment support provided by the Army was mainly allocated to Army units and personnel, and the same was true for other major services. This service-centric mindset, i.e. "what belongs to a service remains with a service," caused problems and was counter to the concept of "joint culture." Marawi developed the knowledge and leadership of Filipino commanders in joint, combined arms and urban operations. The battle, arguably the first of its kind in the Philippines, tested the commanders' abilities to make combat decisions when deploying land, naval and air assets simultaneously in urban terrain.

Army and Marine commanders were seasoned and experienced fighters and leaders, and they were particularly skilled in the spontaneous tactics of guerrilla and jungle warfare. Based on this existing skill set, the AFP commanders continued to act spontaneously when it came to joint operations and urban warfare. The spontaneity became a setback because, accordingly, some units were not deployed doctrinally for urban operations.⁴⁰ Joint training and exercises will address deficiencies of combat experience in urban settings. The lack of joint culture between the Army and the Navy was evident in terms of which doctrinal approach, whether land power or naval power, should be adopted by the mission command. Periodic exercises such as *Balikatan* and *Dangit Pa* have remained valuable training platforms, but they are insufficient to inculcate joint culture. The AFP has also developed doctrines, such as joint operating concepts, but these have yet to be ingrained and tested in battlespace.

Command and Control: The Battle of Marawi illustrated that C2 is compromised in the face of differing operating concepts among major services that are task-organized into a joint force.⁴¹ For example, JTG Lawa (headed by an Army commander) was activated to assume control of maritime units from the Special Forces Regiment (Airborne) with riverine assets, the Philippine Coast Guard, and PNP Maritime and Special Action Force Seaborne to secure Lake Lanao. However, the Philippine Navy's Naval Task Unit (NTU) remained in control of JTG Tiger (a Marine commander). NTU was directly supporting JTG Tiger and conducting maritime operations in Lake Lanao in coordination with JTG Lawa. However, JTG Tiger, comprising Marine Battalion Landing Teams (MBLT) and the Marine Special Operations Group, insisted on the Fleet-Marine concept.⁴² Thus, NTU failed to act on direct orders from JTG Lawa without proper clearance from JTG Tiger. It was a predicament which posed a significant challenge during that period, resulting in both a delay in operations and missed targets of opportunity. For example, JTG Lawa was created to ensure the efficient and unimpeded deployment of surface assets, preventing combatants from utilizing the lake as an escape or reinforcement route. However, as the militant group was forced to move toward the constricted area, some combatants escaped via the lake, which JTG Lawa was unable to prevent.

Yet another challenge in terms of jointness and C2 issues was the Mapandi Bridge incident, which resulted in huge casualties for the Marines. JTF Marawi found it difficult to achieve both operational tempo and simultaneous actions.⁴³ The incident was more of a C3 (command, control and communication) failure, as it went beyond the issues of C2 and created communication-related challenges as well. JTF Marawi had allocated each task group a sector in which they were to conduct simultaneous clearing operations to penetrate into the city. This plan involved arranging a Scout Ranger Battalion (SRB) under JTG Musang in the centre, a Joint Special Operations Unit (JSOU) under JTG Vector on the left, and an MBLT under JTG Tiger on the right. The latter was designated to cross the Mapandi Bridge, keeping level with the JSOU. However, the MBLT was able to advance forward of the SRB and the JSOU (who claim that they asked the MBLT to halt) and was left vulnerable as it crossed the Mapandi Bridge. Beyond the bridge, the enemy sprang an ambush, and a wave of them swarmed the MBLT's location, inflicting heavy casualties and rendering the element ineffective. The enemy force was able to exploit the MBLT's position because of a lack of coordination.⁴⁴ Another incident was the fratricidal fires of the Philippine Air Force (PAF) planes onto the 44th and 15th Infantry Battalions, while providing close air support to the infantry units. According to the report, JTF Marawi failed to update ground units and PAF pilots on the disposition of troops in the MBA.⁴⁵

At the beginning, JTF Marawi had a weak C2 command post that deployed its task groups independently, leaving the decisions regarding movement and manoeuvre to tactical commanders in their respective AOs. Although some ground commanders appreciated the flexibility and independence, this produced isolated tactics without considering the operational and strategic issues across the battlefield.⁴⁶ JTF Marawi, as a mission command post, should have provided a common operational picture throughout its commanded units. The Mapandi Bridge incident and fratricidal fires yielded important lessons, emphasizing the need for unity of command and synchronization of efforts among the JTGs. Armed with that knowledge and to ensure synchronization of efforts in the MBA, JSOTF Trident was created as an intermediate SOF level of command to allow prompt decision making without requiring approval from JTF Marawi and to integrate SOF efforts under one command.

Phase 3 – The Final Push: The Main Battle Area and Neutralization of HVTs

By Phase 3, most of the buildings and infrastructure in Marawi and the surrounding areas had already been cleared and secured. The main battle area had been defined and the HVTs and some other enemies had been trapped in the constriction area, located in the southwest corner of the city.⁴⁷ JTF Marawi underwent further refinement in preparation for the concluding push across the MBA. JSOTF Trident provided more focused C2 to synchronize the combat efforts of the different SOF JTGs within the MBA. JTGs operating under OPCON of JSOTF Trident were deployed to encircle the enemy and secure points that would give the government forces an advantage over the enemy.⁴⁸

In Phase 3, the decision was made that JTG Musang would assume the central role in the overall plan to neutralize the HVTs and remaining combatants. JTGs Vector and Tiger were to conduct support operations, destroying enemy reinforcements and holding ground in the sectors assigned to them. JTG Lawa (maritime) was tasked to seal the constriction area from the south to contain the enemy and prevent them from escaping through Lake Lanao, as well as to block the entry of reinforcements and supplies coming from the south to the MBA. The primary weakness during this phase was around the misemployment of SOFs. Typically, SOFs operate in a small force and deploy for a short period of time.⁴⁹ However, throughout the battle, SOFs were overutilized and overexposed. It would have been better to deploy conventional forces, particularly infantry battalions, as the main effort.

The death of Isnilon Hapilon and Omarkhayama Maute on 16 October 2017 marked the end of the 153-day terrorist foothold in Marawi. The killing of HVTs, however, stirred disagreements among operating units over whose

sniping team was responsible for neutralizing Hapilon. Those disagreements underscore the fact that internal competition and a lack of cohesive thinking among operating units have a detrimental effect on military competency. The day following the elimination of the HVTs, Marawi City was declared “liberated” by President Duterte. Nonetheless, the fighting continued and some of the remaining terrorists still held hostages. The PNP even sent a negotiator for the release of the remaining hostages in the area while clearing operations continued.⁵⁰ Former Defence Secretary Delfin Lorenzana formally proclaimed the end of combat operations in Marawi on 23 October 2017.⁵¹

Capability Build-Up: Insights from Marawi

The need to develop capabilities for urban warfare has never been more imperative. The Battle of Marawi serves as an excellent case study, offering valuable insights and lessons that can be identified and applied in relevant contexts. As the events unfolded, it became evident that certain factors favoured the defenders while others favoured the attackers. As noted by Knight and Theodorakis, fighters who have local knowledge, familiarity with the terrain and sophisticated weaponry present a problem that cannot be solved by military leadership and training alone.⁵² The Maute clan and Abu Sayyaf Group held an advantage as the fighting took place in their home town and they were equipped with high-powered weapons such as rocket-propelled grenades.⁵³

The following are some key observations related to the necessary capabilities for urban operations:

1. **Equipment is key:** It is worth noting that in the Marawi battle SOF were utilized more heavily than the conventional forces because the former were better equipped. In particular, SOF were notably more effective at night because they had night-fighting gear. Due to a lack of other forces employable for CQB, in this scenario the SOF were misemployed. Rather than assigning the main effort to infantry battalions, the SOF were also sub-optimally deployed to secure buildings, perimeters and checkpoints throughout the area. Moreover, throughout the campaign the infantry units were given minimal training for urban operations, which are typically highly personnel-intensive; thus, additional troop strength was a necessity. To augment personnel, Ready Reserve Units were activated to secure checkpoints and the perimeter. In addition to the need for more personnel, it was equally crucial to equip troops with basic force protection equipment, night-fighting equipment and modern machine guns to ensure the high readiness of infantry battalions for urban warfare.
2. **Combat engineers are crucial in urban warfare:** During the battle, the AFP became cognizant of the importance of combat engineers for mobility, counter-mobility and survivability in urban warfare. Usually, engineering units in the Philippine military are employed for construction purposes instead of performing combat missions. The 500th Engineer Combat Battalion (ECB) was newly activated at the onset of the battle and played an important role in breaching concrete walls of buildings, conducting search and clear operations and enabling the movement of firepower platforms.⁵⁴ The 500th ECB also conducted road-clearing tasks, allowing ground troops and manoeuvre forces to pass through. As the newly activated combat engineer unit lacked mission-essential equipment, the unit members were compelled to innovate in order to accomplish their mission. Wooden planks were used as ramps and to provide force protection for combat engineers who drive bulldozers, armoured personnel carriers, backhoes and pay loaders.⁵⁵
3. **Uncrewed Aircraft Systems as a Game-Changer:** UASs have emerged as a transformative capability to enhance intelligence, surveillance and reconnaissance (ISR), as well as target acquisition.⁵⁶ Commercial uncrewed aircraft were used by both friendly and enemy forces. Friendly UAVs were marked to distinguish them from the enemy's.⁵⁷ During the Marawi battle, the US and Australia provided Orion surveillance aircraft that offered real-time target identification updates to personnel on the ground. Later on, the AFP was able to acquire Scan Eagle UASs from the US to support ISR for future operations. With that, the use of uncrewed aircraft became a regular feature in AFP military operations.

CONCLUSION

The Battle of Marawi and the experiences of the AFP offer valuable insights for military planners worldwide, serving as an instructive case study. Marawi highlights the challenges that armies face when operating in an urban setting, especially using their existing capability—particularly materiel and equipment. Often, the current kinetic capabilities prove relatively ineffective in urban settings, requiring more munitions and causing substantial infrastructure and collateral damage.⁵⁸ It serves as a crucial reminder that conflicts in an urban environment come with significant costs. Needless to state, the remnants of the devastating war in the heart of Marawi persist.

With the rate of urbanization in the country, it is highly likely that future wars will be fought in cities. The global trend toward urbanization is evident in the Philippines as well. It is one of the fastest-growing countries in the

world, and its population is projected to reach 141.7 million by 2040.⁵⁹ Manila, which has a population of 13.7 million people, is the most populated city in the Philippines and is considered the densest city in the world, and cities in the southern Philippines such as Davao and Cagayan de Oro are also experiencing rapid urbanization.⁶⁰ These patterns indicate that future attacks are likely to occur in cities, leading to potentially high civilian casualties.

In light of the operational environment and the presence of militants, military planners in the AFP and other armed forces should pay attention to the lessons gleaned from Marawi. The event serves as an opportunity for introspection and eventually for the development of capabilities for waging urban warfare effectively. As discussed in this article, some of the key takeaways include the need for highly accurate intelligence that is integrated across all units. Attention must also focus on equipping units with a high number of personnel, all with adequate capabilities/skills and with the proper equipment. As noted above, the AFP's inclination to establish new units rather than improve existing defence systems proved counterproductive, as that approach failed to address the issue of operational readiness and equipping military personnel for modern-day urban battles. Lastly, the events in Marawi also caution us against adopting a heavily service-centric mentality, as it obstructs the development of jointness and the culture that fosters it. In conclusion, these insights underline the urgent need for militaries to prioritize urban warfare, adapt military strategies and comprehensively train their soldiers for the challenges of tomorrow's battlefield.🇵🇭

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