

Monday, May 8, 2017

How The Islamic State Has Fought the Battle for Mosul?

(Interview with military expert Alex Mello)

The battle for Mosul is in its sixth month. It is proving to be the most intense campaign of the entire war against the Islamic State in Iraq. That's in part because the insurgents have changed their defenses from previous fights like in Fallujah and Ramadi. Recently the CTC Sentinel published an article [“Defeat By Annihilation: Mobility And Attrition In The Islamic State’s Defense Of Mosul”](#) detailing how the militants have fought in the city. This is an interview with one of the authors Alex Mello who is an Iraq security analyst at Horizon Client Access. Musings On Iraq [first interviewed](#) Mello back in 2014 about the deteriorating security situation in Iraq. He can be followed on Twitter [@AlexMello02](#).

1. Your article noted that the Islamic State’s defenses in Mosul were different from previous urban battles like Fallujah. How were they constructed in the city? Essentially, in Mosul the Islamic State was faced with the problem of defending a city that was an order of magnitude larger than any of their previous urban defensive battles. Mosul has an urban area around 170 sq kilometers, with a perimeter of

around 60 kilometers. That's some eight times larger than Fallujah, which is around 23 sq kilometers with a 20 kilometer perimeter. Even Ramadi, slightly larger than Fallujah is less than a fifth the size of Mosul. Also unlike in Ramadi, which was 90% depopulated by the time ISF began their clearance operation, about 600,000 civilians, around three quarters to two thirds of Mosul's population remained in the city. I estimate the total IS presence through the entire battle for both east and west Mosul likely never numbered over 2,500-4,000 personnel, only a fraction of which – probably around 450-850 – were engaged in fighting at any one time. ISIL was thus faced with the problem of defending a large urban area with a remarkably low forces-to-space ratio. The assaulting ISF faced a similar problem – the only ISF units capable of conducting effective urban clearance were the Counter-Terrorism Service (CTS)'s ISOF (*Iraq Special Operation Forces*) battalions, but there probably weren't more than nine company-sized ISOF battalions (each numbering around 250-300 men, so 2,250-2,700) simultaneously engaged in combat in Mosul at any one time, supported by a number of IA (Iraqi Army) armored and mechanized units. The majority of IA and Federal Police units in east Mosul were relegated to back-clearance operations or simply holding down cleared terrain. These three factors – the huge size urban area and the low force-to-space ratio for both ISF and insurgents determined how ISIL constructed its defense and how the urban battle developed.

2. When it came to Mosul the Islamic State reversed its previous strategy of a hard defensive shell with a soft core. What kind of positions did IS (Islamic State) build outside of the city?

In previous battles for Ramadi and Fallujah IS used up most of its strength in the battle for the rural outskirts, the “belts” surrounding the urban areas. We saw this in Ramadi in late 2015 and early 2016, when ISF took several months to push the 40 kilometers through the rural Fallujah-Ramadi corridor and to isolate Ramadi city. The clearance of urban Ramadi itself took only a few weeks. The terrain around Mosul is vastly different and unsuited for this kind of defensive fight -- it’s mostly open plains with small, scattered villages instead of dense palm groves, farms and contiguous low-density villages. So instead of putting their main effort in the rural outskirts they kept most of their manpower inside Mosul for the urban fight and ran the battle for the belts as a delaying action, turning these scattered villages into dense defensive clusters using IED emplacements, tunnels, and mortar teams backed up by only a small number of infantry. They also kept a steady stream of huge, up-armored trucks bombs in an effort to blunt ISF and Kurdish momentum, but these proved almost totally vulnerable moving through the open terrain and were mostly intercepted by Coalition airstrikes. In some areas, particularly southeast of Mosul they also used the villages as

anti-tank guided missile (ATGM) ambush areas, hitting Iraqi armor approaching with missile strikes from inside the built-up areas. In the southeastern approaches to Mosul, where IS faced lower-quality Iraqi Army units these defenses succeeded in holding up the ISF advance, but wherever they faced high-quality units such as the ISOF or KDP Zerevani, backed up by the concentrated application of Coalition airpower, their defense collapsed within a couple days.

3. When the Iraqi forces reached Mosul itself what did they run into?

Apart from a thin, outer defensive “crust” – mostly just a berm and a chain of roadblocks and defensive fighting positions running along the edge of the urban area, which ISF managed to punch through within 1-2 days – IS’s defense of east Mosul wasn’t really wedded to the defense of fixed positions or strongpoints. Instead the east Mosul urban area was seeded with a huge number of pre-positioned weapons and ammo caches, VBIED hide sites, bed down sites and “mouse holes” – rows of houses with holes knocked in between the walls, allowing insurgent fighters to move rapidly while evading airstrikes. So they had this entire extensive defensive infrastructure from which local cells could sustain their individual operations and fight a war of movement at the neighborhood level. Combined with the size of the Mosul urban area and

very low force-to-space ratio for the both insurgents and ISF, this resulted in a very fluid, mobile battle. So for example you had ISOF columns penetrating several kilometers into ISIL terrain and then getting cut off and isolated in these huge ambushes. Alternately, you also had IS car bombs penetrating deep into cleared areas and then detonating on ISF strongpoint compounds where they had all their vehicles and personnel clustered together, resulting in heavy losses. Insurgents would also frequently yield a couple residential blocks during the day then launch night counterattacks, or re-infiltrate into cleared areas and leave behind snipers to harass the ISF.

4. One of the insurgents' main defensive weapons has been the car bomb. How have those been changed and adapted since the battle started?

Their use of VBIEDs has been one of the areas where we've really seen some major tactical evolution. In the initial phase of the battle in the rural outskirts the VBIEDs – mostly large, up-armored truck bombs – proved mostly ineffective, although they did have some shock value. Things got more interesting once the fighting moved into the Mosul urban area. IS distributed a huge number of car bombs at forward hide sites scattered across east Mosul, usually houses or villas with garages or

covered driveways to evade Coalition airborne sensors. ISIL was able to exploit the dense urban terrain, which dramatically shortened ISF reaction times to stalk ISF columns along parallel streets, flank them and then close in at high speed and detonate. IS also started to camouflage their car combs, first by painting them in dun-colored camouflage to match the urban terrain, then bright colors with fake tires and windows to resemble regular civilian vehicles or taxis. Another key innovation was using small, commercial off the shelf camera-equipped drones to guide suicide car bombs past roadblocks and onto targets using live video feed and radio.

5. Niqash had a piece saying in previous urban campaigns the Iraqi forces had left an escape route for the Islamic State. This was originally supposed to happen in Mosul with an opening in the west towards Tal Afar. Niqash speculated this was changed due to pressure from Iran, who didn't want any IS fighters getting into Syria. How has the decision to surround Mosul effected the fighting?

On a larger scale, I don't believe involving Syria and the PMU isolation operations significantly altered the progress of the battle. ISIL had months preceding the start of the ISF advance up from Qayyarah to drain their forces from Mosul, and there are plenty of indicators that significant ISIL elements including leadership figures and the families of

ISIL fighters were moved out of the city before the assault started. Once the battle started, the PMU advance to isolate the city by pushing into the historic insurgent support areas west of Mosul in the Jazeera desert probably did limit some “bleed out” of insurgent fighters from urban Mosul into the rural outskirts. However, it’s important to note that a really in-close cordoning off of west Mosul wasn’t accomplished until a few weeks ago and ISIL still had access to the Mosul-Tal Afar corridor.

6. The Islamic State is eventually going to lose Mosul. What do you predict will happen to the group afterward?

That’s difficult to say. After 2011 I was reasonably confident we were going to see a gradual resurgence of the insurgency, though the timeline moved a bit faster than anticipated and I failed to predict the spectacular, wide-scale collapse of the ISF in northern Iraq in June 2014. After Mosul and the remaining ISIL-controlled urban areas in Tal Afar and Hawijah are cleared I think we’ll begin to see a gradual increase in overall insurgent activity. The post-Mosul insurgency is likely to be far more localized and dispersed. As I noted in an article I coauthored in late 2016, in Diyala the insurgency has already fully recovered thanks to the poor performance of provincial security forces and Badr control of the provincial government, though the ceiling for overall insurgency activity in the province is still quite low. A more recent uptick in

insurgent activity has occurred in the western Baghdad belts around Fallujah and Ramadi and north around Tarmiyah, though in Baghdad itself the BOC is doing a good job of keeping VBIED attacks to minimum. In the longer term the trajectory of the insurgency will depend on the progress of reconciliation at the local and national level after the 2018 elections and how large a residual presence Combined Joint Task Force – Operation Inherent Resolve (CJTF) is going to maintain in Iraq to support the ISF as the fight moves into the next phase.