

Fighting a Peer Adversary

Part 1: Observations and recommendations from MAGTF Warfighting Exercise 1-20

by LtCol Chris Niedziocha

MAGTF Warfighting Exercise 1-20 (MWX 1-20) was a large-scale, free play, force-on-force exercise conducted at Marine Corps Air Ground Combat Center Twentynine Palms, CA, between 1–9 November 2019. Nearly 10,000 Marines and Sailors drawn from across the Marine Corps participated in the event, which was held immediately after Integrated Training Exercise (ITX) 1-20.¹ 2dMarDiv was the primary training audience.

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Major units participating included the 2d, 3d, 7th, and 10th Marine Regiments, elements of MAGs 29 and 31, and Combat Logistic Regiment 2. 40 Commando, a British Royal Marine Battle Group, participated in the exercise as part of the adversary force (Ad-

For). In the exercise scenario, 2dMarDiv acted as the GCE for a notional joint task force higher headquarters. MAGTF Training Command, the unit responsible for training aboard Marine Corps Air Ground Combat Center, played the role of the joint task force headquarters.² The Division was tasked with protecting critical infrastructure and blunting an enemy offensive, setting the conditions for the introduction of follow-on forces that would ultimately restore the territorial integrity of the host country. Specific focus points during the exercise were decision making, command and control in the communications degraded and denied environment, fieldcraft, and tactics. The entire exercise was unscripted. The force-on-force training rewarded creativity, initiative, and problem solving.

The purpose of MWX was to make 2dMarDiv better at fighting a peer competitor. The AdFor did not precisely model a specific threat, but II MEF uses the Russians as a pacing force. Many of the advantages and shortcomings the Russians possess are shared by other potential adversaries, such as the Chinese. We expect the Russians to employ conventional units in conjunction with special operations forces and irregular forces. The Russians are biased toward the offense. They employ armor and mechanized infantry in conjunction with long-range rocket and self-propelled artillery. Their artillery bests ours in mass, lethality, range, mobility, and armor protection. They rely on reconnaissance units and cross cueing from plentiful and decentralized electronic warfare (EW) and unmanned aerial



Decisions matter. (Photo provided by the author.)

systems assets to implement their kill chain. They operate under an umbrella of sophisticated and widely distributed self-propelled and man portable air defense assets complemented by tactical aviation: combat proven fixed- and rotary-wing aircraft.

Frontline and elite Russian units push EW assets down to the tactical edge and do not appear encumbered by authorities or operational security concerns in their employment of EW. The Russians have some weaknesses. We still believe the quality of their troops, individual equipment, and training is not up to first-rate western military standards. They are centralized and their mechanized formations are bound to mobility corridors and have long logistic tails.³ All of these characteristics were possessed by the AdFor. The AdFor was not constrained in any manner. They fought hard and they fought well; they were truly a worthy adversary.

The lessons and observations contained in this article were drawn from 1st Bn, 6th Marine Regiment's (1/6) participation in ITX and MWX. Some observations confirmed existing beliefs, whereas others were a complete surprise. The opinions that follow are those of the author; however, conversations with peers, seniors, and subordinates in and out of 2dMarDiv validate most of what follows. First, here are some observations about MWX.

MWX sought to replicate major combat operations against a peer and largely succeeded. MWX was not actual war, but the stress, uncertainty, friction, and opposing, independent will of the AdFor were real. The AdFor at MWX were well trained, resourced, and highly motivated. The quality of the AdFor met and at times exceeded the quality of the exercise force. 7th Marines formed the base unit of the AdFor with 40 Commando, 4th Tank Battalion, CLB-7, and other attachments representing a much larger force. During the first two thirds of MWX, the AdFor had complete air dominance. AdFor tactical aviation was provided by elements of MAG 31 and numerous squadrons from around the Marine Corps.

Many of the conditions we anticipate experiencing in the next war



Camouflage became second nature for Marines during MWX 1-20. (Photo by LCpl Juan Magadan.)

were present at MWX. The MAGTF did not have air superiority as well as any advantage in surface fires, EW, or signals intelligence assets. This lack of multi-domain dominance pushed participants out of their comfort zone. MWX tested the leadership, stamina, decision making, and fieldcraft of all who participated. The fear of failure, embarrassment, and being beaten was real. Both sides learned and adapted throughout the exercise.

The execution of MWX, in conjunction with studying our enemy, has uncovered shortcomings in our manning, equipment, and training. The Marine Corps can better prepare for the first day of the next war by improving the capabilities, equipment, and manning of the force. There are quick wins that can be implemented tomorrow with an immediate and noticeable increase in lethality of the force. Some are long-term projects that cut across the entire DOTMLPF⁴ spectrum but are worth undertaking nonetheless. I will explain the biggest shortcomings facing the GCE exposed by ITX and MWX and make recommendations. I have sequenced the observations and issues in ascending order of complexity for the fix: the easiest problems are first with the biggest science projects coming at the end. My assessment of difficulty was based on how many as-

pects of the DOTMLPF framework the potential solution would have to cut across, whether the problem is already well defined and the degree of institutional resistance a change would likely encounter. This assessment is highly unscientific and largely my opinion.

Fieldcraft, Concealment a Command and Signal Discipline Matter

Fieldcraft, concealment, and signal discipline are as valid today against a peer as they were against the North Vietnamese Army in the 1960s. As a result of fighting a counterinsurgency for over fifteen years, we have neglected our ability to use cover, concealment, deception, and fieldcraft. These skills proved remarkably effective against the AdFor (and the exercise force) during MWX. Concealment, light discipline, use of terrain masking, and signal discipline prevented both sides from establishing an accurate picture of the battlefield. During MWX, good fieldcraft, concealment, and signal discipline preserved combat power and prevented the attrition of assets used later as the Division transitioned to the offense.

Nearly every tactical plan developed in the past twenty years has a stage or phase called "shaping" where fires, especially aviation, are used to destroy assets creating conditions necessary for

maneuver forces to succeed. Three observations about shaping:

- If you cannot sense, you cannot shape.
- Shaping took far longer than we thought it would because the exercise force and AdFor both employed excellent fieldcraft and camouflage.
- Properly concealed assets are resistant to detection by even the most sophisticated airborne sensors as long as they do not run (creating a heat signature), emit in the electro-magnetic spectrum, or move around, especially on roads.

During MWX the AdFor conducted shaping using ground and airborne intelligence, surveillance, and reconnaissance with complete air dominance. They were able to find some targets but few high value or high payoff targets. When a target was found, it was usually the result of chance or poor fieldcraft. Examples of this were combat service support areas on well-defined terrain features (road intersection) and poor discipline in the rear area: driving to main and forward command posts, driving during daylight, or driving at night with lights on.

However, there is good news here. The Marine Corps is undergoing a fieldcraft and camouflage renaissance since ITX began including force-on-force. Units are practicing individual concealment measures like painting rifles, covering headlights, and managing their emissions in the electro-magnetic spectrum. Units have a renewed emphasis on blackout night driving, vehicle camouflage, and use of radar scattering nets. Command posts have been pared down dramatically, and every piece of rolling stock taken onto the “battlefield” for MWX was scrutinized.

A related aspect of fieldcraft is emissions control (EmCon) which proved very important at MWX. Every unit in 2dMarDiv during MWX either had their own EmCon procedures or followed the Division’s Standard EmCon levels are preferable. Units practiced loading tactical assembly areas and the defense in radio silence and made hard decisions on when to radiate. A warning: EmCon must be based on the threat. Simply “going dark” and



Combat operations centers and command posts must be small, mobile, and well camouflaged.
(Photo by LCpl Corey Matthews.)

not radiating does the enemy’s job for him. Do not needlessly deny yourself use of the electro-magnetic spectrum. If there is no threat detection capability or delivery asset within range and you are able to mask your signal using terrain or a directional antenna, use the electro-magnetic spectrum.

There are several low probability of detection communications assets that allow a unit to communicate while being hard to locate. Employment of basic communications discipline helps in the battle of signatures. Using low power, directional antennas, and encrypted frequency hopping nets all minimize the likelihood of detection. HF communication is not the mysterious lost art we sometimes claim it is. Units that use HF communications regularly are good at it—period. HF voice and data (but not HF ALE)⁵ are difficult to locate. One glaring capability gap is the ability to wire in a defense. We have no field phones or wire gear anymore. We should immediately re-field the TA-1 and TA-312 if they are still around. Maneuver units need something basic and need it quickly.

We must sustain the occurring institutional learning and resource it. Cammie netting is a requirement—lots of it. Units should have enough to cut up and apply directly to vehicles and still

have enough to use in the traditional net and pole method. Fieldcraft should be taught in entry-level schools and advanced courses while also having its own standalone course. Certain foreign militaries are very good at fieldcraft and camouflage. The Japanese Ground Self-Defense Force and the Royal Marines excel at fieldcraft. In tactical engagements, units with good fieldcraft had the advantage of surprise. The AdFor (and exercise force) generally knew where the enemy would be but did not know with the degree of precision required to target. Well-concealed units were overflowed by aircraft routinely and both exercise force and AdFor units both allowed their enemies to close within small arms range while remaining undetected. The added advantage to good fieldcraft is that even after unmasking in the close fight, most target acquisition means are visual. Not presenting a well-defined outline makes marksmanship harder since it is difficult to pick an aimpoint.

Force-on-Force and Decision-Making Training Matters—and It Works

Our weapons are no better than our adversary’s, we have no advantage in tactical EW assets, our logistic lines of support are vulnerable, and we will be fighting an “away game” against an

enemy using interior lines on ground of his choosing. What is our advantage? We can make better decisions faster and embrace uncertainty, chaos, confusion, and human factors in war. The best way to improve decision-making ability is to conduct regular multi-echelon force-on-force training complemented by garrison practical application. Many units focus exclusively on small units to the detriment of training higher echelons. Often people talk about how good squads make good platoons, and good platoons make good companies. That is a true but incomplete observation. Having good squads does not have to come at the expense of a having a battalion competent in all warfighting functions.

Good squads do not ensure you can plan and coordinate fires, communicate in a communications degraded and denied environment, avoid culmination through survivable tactical logistics, and command and control the unit. Good squads must be enabled by responsive fire support; be tied into higher and

adjacent units with effective, survivable communications; supplied with the ammo, food, fuel, batteries, and water they need; and have the ability to mass when required—all while fighting an enemy trying to do the same to you. Train the entire unit at the same time using free play force-on-force in addition to small unit focused training. This ensures you will be prepared to fight a peer adversary.

Effective force-on-force and decision-making training can be done with tools available now. Use ITESS (Instrumented Tactical Engagement Simulation System) regularly.⁶ The issued tactical decision-making kits are effective. Do tactical decision games and *Kriegspiels*.⁷

Participate fully in Marine Corps Training and Operations Group events like SPARTAN FURY, SPARTAN WINTER, and SPARTAN DAWN.⁸ Force-on-force training works and can be done down to the squad level. Force-on-force training is the best way to understand where you are weak and re-orient your focus onto what really matters—beating an independent willed opponent. Force-on-force training at scale stresses every echelon and simultaneously prepares an entire unit for war. Training in this manner replicates the uncertainty, stress, and friction we all felt during MWX and will feel during the next war.

Notes

1. ITX is one of two Service-Level Training Exercises. From *Combat Center Order 3500.14A, Marine Air Ground Task Force Training Command Integrated Training Exercise Order*:

The purpose of ITX is to prepare units for combat, under the most realistic conditions possible. The primary focus of training is at the battalion and squadron level and below. ITX will be heavily reliant on combined arms training events that incorporate live fire and maneuver. ITX is a Marine Air Ground Task Force (MAGTF) integration training exercise executed within a standardized scenario that facilitates the readiness assessment of Exercise Forces (ExFor). The use of a standardized scenario that requires units to execute their mission essential tasks under fixed conditions allows MAGTF to assess ExFor units against established training and readiness standards. For units not formally assessed, ITX provides unique Block I-III training opportunities not otherwise attainable. The end state is a challenging, realistic training exercise that

produces combat-ready forces capable of operating as an integrated MAGTF.

2. Information available at <https://www.2ndmardiv.marines.mil>.

3. Center for Army Lessons Learned, Asymmetric Warfare Group, *Russian New Generation Handbook, No. 17-09*, (Fort Meade, MD: April 2107).

4. DOTMLPF means doctrine, organization, training, materiel, leadership and education, personnel, and facilities. The term comes from the Joint Capabilities Integration and Development System. The DOTMLPF spectrum includes every aspect that must be considered when successfully defining a military requirement.

5. HF ALE means high frequency, automatic link establishment. It refers to HF (between 3 and 30 MHz) communications in which both stations constantly scan available frequencies to find the best frequency to communicate on. It is not considered low probability of detection since it constantly sends out a signal to determine the quality of the link between the two stations based on a number of environmental conditions. HF ALE is effective as it reduces most of the trial and error traditionally associated with HF communications.

6. ITESS refers to Instrumented Tactical Engagement Simulation System, the current instrumentation system available to Marine units for force-on-force training. It consists of a laser and receivers and position location information. The information can be captured and “replayed” on imagery to conduct a high fidelity debrief of an engagement.

7. A *kriegsspiel* (literally wargame in German) is a moderated, force-on-force war game played out on a map. It stresses military decision making and tactics. It differs from a tactical decision game in that it is played out against a live enemy with a moderator.

8. Marine Corps Training and Operations Group runs a series of planning exercises focused on different threats. They are part classroom instruction, part planning clinic, part practical application. I have first-hand experience with SPARTAN FURY and SPARTAN WINTER, they were both excellent.




OBSERVATION POST

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- General James N. Mattis, USMC (Ret)



Read the Submission Guidelines at mca-marines.org/wp-content/uploads/Observation-Post.pdf