Land the Landing Force

What the future may hold

by Col Keil R. Gentry, USMC(Ret)

The confluence of artificial intelligence (AI), social media, unmanned systems, hypersonics, and additive manufacturing (3D printing) is changing the character of war. These changes pose significant risks to the MAGTF and associated Navy elements. Consider the following situation.

As the amphibious task force moved into the sea echelon area, BGen Ellis sat at his desk aboard the USS *Boxer* musing about the geostrategic forces that brought him here. The lack of nuclear inspections, as a result of the United States withdrawing from the Joint Comprehensive Plan of Action, significantly hindered American intelligence gathering and allowed Iran to restart its nuclear program. Intelligence provided by Israel indicated that Iran now pos-

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sessed nuclear weapons and were close to mating them with existing ballistic missiles. This capability, coupled with Iran's continued bellicose rhetoric, constituted an existential threat to Israel. Additionally, Iran continued to export terrorism and remained an unbalanced power in the Middle East. These factors led the President to order a military operation to topple the Iranian government.

The convergence of these forces resulted in 1st MEB's mission to seize the Bandar Abbas International Airport and the nearby Shahid Bahonar port to al-

low I MEF's fly-in echelon to marry up with the equipment aboard Maritime Prepositioning Ships Squadrons Two and Three. Ideally, this link up would have occurred in friendly territory; however, access to friendly ports in the region was denied. Fortunately, the United States maintained sufficient joint forcible entry capability to accomplish this mission. BGen Ellis was justifiably confident in the MEB's ability to succeed given its modern equipment and training to defeat a peer or near-peer competitor. Successful implementation of the Marine Corps Ground Combat and Tactical Vehicle Strategy resulted in the fielding of the amphibious combat vehicle (ACV). As a result of the Marine Corps Aviation Plan, 1st MEB wielded an air group greater than many national air forces. In addition to kinetic lethality, 1st MEB possessed a robust information environment operations capability.

In preparation for the amphibious assault, cruise missiles and aircraft struck targets in and around Bandar Abbas to disrupt Iranian command and control (C2) systems and render its integrated air defense impotent. At the command "Land the Landing Force," 1st MEB rumbled to life. MH-53Ks with sling loaded M-777s headed toward Hormuz Island to enable artillery support for the landings while ACVs splashed out of well decks, MV-22s raced toward their objectives, and F-35Bs provided networked capability in addition to their weapons systems.

In preparation for the American assault, Iran employed GPS jammers suspended from tethered balloons, providing cover over key locations. As a result, several of the U.S.-launched GPS

Enemy drones could detect sling loads under the heavy-lift helicopters. (Photo by CPl Santino Martinez.)

guided munitions missed their targets and landed in civilian areas, striking a school and a hospital. Iranian videographers rushed to the scene to capture the civilian atrocities. Within the hour, the videos were uploaded to YouTube and picked up by the international media, causing a backlash in the Middle East, at the United Nations, and among some in the American population.

Recognizing the threat years before, the United States had effectively cut off Iran's drone supply through sanctions. What the sanction regime did not account for was advancements in additive manufacturing, which allowed Iran to import seemingly benign material to support domestic production. As a result, Iran developed a suite of unmanned systems. They fielded surface systems similar to weaponized jet skis to counter a maritime threat. Air variants included explosively formed penetrators (EFP) and video capture devices. Harnessing the power of AI,

were sunk and six were mobility kills. The air drones could not match the speed of the MV-22s, but they did not need to. The drones could identify when the Ospreys were most vulnerable. As Marines raced out the back in the landing zones, EFP drones slammed into the aircraft destroying five. The drones could also detect the sling loads under heavy lift helicopters. Taking advantage of the reduced speed and maneuverability, the EFP drones aimed for the main rotor. Six King Stallions along with six M777s and their associated crews were lost that day.

Unbeknownst to the Americans, little green men had deployed to Iran with sophisticated weapons. Among these were Russian hypersonic S-500 surface-to-air missile systems, which took out seven F-35Bs.

Of the four Russian hyper-sonic 3M22 Zircon anti-ship missiles launched against the amphibious task force, two slammed into the port side

lis stepped out of the combat operations center to get some fresh air. He believed that the tide had turned in the Marines' favor. Sensing something, he gazed upward. Moments later, an EFP drone punched through his helmet. In sniper mode, the drone's sensor allowed it to detect the electromagnetic signature associated with a C2 node and the ability to recognize high value targets stored in its database. In this case, it was BGen Ellis' command photo displayed on the unit's website at https://www.imef.marines.mil/Units/1ST-MEB/.

The implications of these converging technologies are clear. The challenge, of course, is how to exploit and counter them. Exploiting the weaponization of social media or Like War, to use Peter W. Singer and Emerson T. Brooking's term, requires centralized guidance and decentralized execution in order not to be out-cycled by the enemy. In practice, key themes and rules of engagement will be developed at the national level and operators will then produce and launch social media salvos. The solution to countering the threat of more capable unmanned systems may lie in fighting drones with drones. Rather than adapt current systems, perhaps the Marine Corps should develop unmanned systems similar to those in the vignette and add to them a counter-drone capability. Regarding hyper-sonics, the Defense Advanced Research Projects Agency is fortunately working on the problem with projects such as Glide Breaker. Of course, a single article in the *Gazette* will not solve these problems, but the collective innovative minds of readers can.

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The Navy had planned for and trained against drone swarms, so they had limited effect against the ships. The one notable exception was a single surface system that made it through the Navy's defenses, because of the clutter of ACVs and landing craft, and into the well deck of the USS *Rushmore* where it discharged its payload of ricin. Unprepared for biological contamination, the stricken LSD was out of the fight.

The Marines were not as lucky. Surface drones slammed into ACVs. Four

of the USS *Bonhomme Richard,* immediately killing 28 Sailors and 2 Marines. Navy damage control leapt into action, saving the ship; however, the crew could not ballast out the 35-degree list, rendering the LHD incapable of flight operations. After a video capture drone filmed the attack and ensuing damage, it returned to its base. Operators immediately downloaded the video, edited it for effect, and launched it to the world via social media. Its effect was amplified by an army of Iranian bots and then further amplified by human posters and Russian bots.

Despite the significant losses suffered by the naval expeditionary force, 1st MEB was ashore and making progress. During a lull in the action, BGen El-