The last time the U.S. military faced a peer adversary was before the fall of the Berlin Wall. The last time the U.S. military incurred high-volume mass casualties numbering in the hundreds per battle was at the height of the Vietnam Conflict. To that end, the Marine Corps’ last single mass casualty event resulting in hundreds lost was the bombing of the Marine Barracks in Lebanon in 1983 where the Marine Corps sustained 240 killed in action (KIA) and 151 wounded in action (WIA) in a single mass casualty event. In Iraq, from 2003 to 2016, the Marine Corps had 853 KIA and 8,642 WIA; and in Afghanistan, from 2001 to 2015, Marine Corps had 378 KIA and 4,955 WIA. While the losses in Iraq and Afghanistan were significant and heavily taxed the casualty management processes, the casualty volume was nowhere close to past mass casualty losses incurred when the Nation faced peer adversaries. Recently, the Marine Corps has seen multiple smaller mass casualty events with less than 50 wounded or deceased per event in combat and non-combat. Recently, there were two mass-casualty events involving units from the 1st MarDiv. The historical context and lessons learned from recent combat and non-combat mass casualty events, along with the lessons learned with notional high-volume mass casualties during MAGTF Warfighting Exercise (MWX) 3-21 and 3-22, showed that the systems, mindset, and processes for high-volume mass casualties are not ready. Specifically, the casualty management process is insufficient to support the high volume (hundreds/thousands) of casualties anticipated in a peer threat crisis/contingency. The Marine Corps is not ready.

Historical Context

MWX is a five-day force-on-force exercise that takes place in Twenty-nine Palms twice a year, according to LtCol Andrew Hornfeck, the Officer in Charge of Service Level Training.
at the MAGTF Training Command (MAGTF-TC). MWX 3-22 was the ninth iteration of this force-on-force exercise since the summer of 2019. MAGTF-TC facilitates the exercise training that can scale from battalion on regiment to regiment on division level. MAGTF-TC is the executive agent to conduct force-on-force exercises against a peer adversary and thinking enemy. As the 1stMarDiv CG, MajGen Roger B. Turner Jr put it this way during the MWX 3-22 rehearsal of concept drill, “MWX is where Marine units go to practice their trade in peer v. peer multi-domain combat at scale at every echelon.” According to Coyote-6, Col Fridrik Fridriksson—the Tactical Training Exercise Control Group Commanding Officer, in 2019 when MajGen Turner was the CG of MAGTF-TC—MWX design was deliberately adapted to replicate the experience of fighting a peer adversary. At the time, there were many indicators that great power competitors were becoming more of a pacing threat.

In the 5-day force-on-force exercise against a peer adversary force at MWX 3-21, the 1stMarDiv Exercise Force incurred 2,670 notional casualties and 1,651 notional casualties in MWX 3-22. Coyote-6 opined that the casualty volume, albeit notional, is realistic to expect against a peer threat, especially since the Marines have not fought a peer threat during the lifetime of anyone currently serving. For historical context: in the Battle of Tarawa, approximately 1,700 American casualties were sustained; 1st Marine Regiment (1stMarReg) alone sustained 1,749 casualties over 10 days during the Battle of Peleliu; and in the 16-day Battle of Chosin Reservoir, there were approximately 2,500 U.S. troops killed in action. The force-on-force peer threat training at MWX that generates notional casualties is the premier training opportunity for Marines and sailors in the Administration and Logistics Operations Center, which includes the G-1, G-4, and medical planners. Appreciating the sheer notional casualty volume amidst fatigue, fog, and friction at tempo provides the most realistic rehearsal for managing casualties.

**Lessons Learned**

**Command Relationships and Requests for Information**

Command relationships matter, and gaps seem to exist in leaders knowing the roles and responsibilities within command relationships when it comes to mass casualty events. Since 2020, 1stMarDiv units sustained two mass casualty events. Battalion Landing Team 1/4 Mar (BLT 1/4) was involved in an Assault Amphibious Vehicle (AAV) non-combat mishap in July 2020. The GCE for the Special Purpose MAGTF Force-Crisis Response 2/1 Mar was involved in the Hamid Karzai International Airport (HKIA) suicide bomber event in August 2021. These two devastating mass casualty events combined resulted in 11 deceased and 2 injured and 10 KIA and 25 WIA, respectively. In both mass casualty events, information flow was very challenging, misinformation was reported before official Personnel Casualty Reports (PCR) were submitted, there were challenges with operational security (OPSEC), and the casualty management process was strained at every echelon.

**The force-on-force peer threat training at MWX that generates notional casualties is the premier training opportunity for ... the Administration and Logistics Operations Center ...**

Marine Corps Central Command, Marine Corps Central Command, Joint Task Force-Crisis Response 5/15, Special Purpose MAGTF-Crisis Response, 1 MEF, 1stMarDiv G-1, 1stMarReg, 15th MEU, BLT 1/4, and 2/1 all fielded an initial onslaught of requests for information (RFIs) during both mass casualty events. From the onset, when it came to information flow about the casualties, command relationships were hazy. While BLT 1/4 and 2/1 Mar had command relationships in place, the task-organized units’ had stakeholders from both in and out of their immediate command relationships. There were leaders at every echelon from the White House and Congressional offices to the parent unit for BLT 1/4 and 2/1 Mar and media outlets calling for information. Stakeholders wanted to know what happened, what was going on, how many Marines and sailors were deceased and wounded, if notifications had been made to families, and much more. There were calls from media outlets and concerned families, philanthropic organizations, and companies that wanted to offer travel accommodations for families of the fallen; the phones and emails seemed endless in the early hours, days, and weeks of the mass casualty events.

1/4 Mar is organized under 1stMarReg, under 1stMarDiv, but at the time of the AAV mishap, the battalion had executed a change of operational control to the 15th MEU and BLT 1/4 had attached an element from the 3d Assault Amphibious Battalion. The 15th MEU was subordinate to I MEF. 2/1 Mar is also organized under 1stMarReg, under 1stMarDiv, but at the time of the mass casualty event at HKIA, 2/1 Mar had executed a change of operational control to the Special Purpose MAGTF-Crisis Response, which is organized under I MEF, but was under Combined Task Force 5/15 operational control, which organized was under Marine Corps Central Command. There were stakeholders thirsting for information from every direction.

The RFI volume disrupted and delayed the casualty management process according to Capt Zachary Nickless, the Casualty Branch Operations Officer. Capt Nickless shared further that the Casualty Branch case manager section has 12 personnel and can increase to 27 personnel. Mass casualty events the size of the AAV mishap and the HKIA event strain the limited resources at Casualty Branch.
In the first 24 hours of the HKIA event, the 1stMarDiv Assistant Chief of Staff G-1 augmented the existing Division Casualty Operations Cell (CASOC) and became a central point of contact for collecting and managing information and RFIs. 1stMarDiv G-1 has a standing CASOC that can scale as needed to meet casualty management requirements.10 The CASOC was able to redirect RFIs from Casualty Branch and keep stakeholders informed, which satiated the information requests significantly and kept the resources at Casualty Branch dedicated to the notification requirements for the families of the deceased or wounded service members.

Who needs to know and how will they be informed are critical questions in casualty management. The lesson learned from the mass casualty events involving 1stMarDiv units is that the information demand will be high and having processes in place that can quickly respond and scale up for high-volume mass casualties is critical.

**Combat Reports vs Personnel Casualty Report**

The PCR submitted via the program of record, DCIPS-Forward, is the only official means for reporting casualties.11 During both mass casualty events, there were instances where higher headquarters took combat report information as fact; however, when the PCR emerged, the official information was considerably different. For example, there was a casualty reported as KIA, but the Marine was WIA and later died from wounds received in action—a different casualty status.12 Without exercising patience for accurate reporting, the high demand for fast information can quickly turn unofficial reports into word passed to stakeholders erroneously.

Hasty unofficial reporting, when not tempered with the deliberate effort to submit an accurate PCR, creates additional friction and confusion in a mass casualty event and slows the next of kin notification process. Leaders have become accustomed to the level of detail and rapid casualty information reporting pace during combat in Iraq and Afghanistan. The fast information flow pace expected during the last two decades of war is unsustainable when facing a peer threat in a contested communications environment. Accurate casualty reporting takes time, often several hours, especially in a high-volume mass casualty. Initial casualty data can be incomplete; however, it must have secure communications means to be passed and must be accurate. The timeline and information gathering challenges will be exacerbated in a peer threat crisis or contingency due to volume and available communication means.

**OPSEC Challenges/Enforcement**

When everyone has a cellphone, service members and civilians alike, preventing information spread is extremely difficult. Despite being in River City, families received unofficial informal casualty notifications in both mass casualty events. The Marine Corps Warfighting Publication (MCWP) on OPSEC defines River City as an “[OPSEC tool that limits communications] ... River City conditions provide procedures to control outgoing paths from ships and shore systems (e-mail, web browsing, plain old telephone system, cell phones) for the purpose of OPSEC and force protection.”13 The lesson learned is that all Marines and sailors need to be more familiar with what River City means and appreciate the sanctity of the casualty notification process. Information will not flow quickly during a mass casualty event. The tempo required for accuracy and process precision must be a managed expectation for Marines and sailors at every echelon; this will require utmost discipline for the Marines and sailors in proximity to a mass-casualty event for operational security and process reasons.

In the BLT 1/4 AAV mishap, the BLT 1/4 Alpha CE was on the USS MACKIN ISLAND planning the next event in the exercise sequence of events while the Bravo Command Element from the USS SOMERSET was integrated with the mechanized company during the AAV mass casualty event. The ship and afloat units were in River City, which limited the adjutant, operations officer, and command team to using a single telephone system asset in the BLT commander’s stateroom for incoming and outgoing communications. According to Maj Learlin ‘Joey’ Lejune III, the BLT 1/4 Operations Officer at the time, the limited communication assets, balanced with the need to guard information surrounding a tenuous ongoing rescue and recovery added friction to the situation. With only one telephone system, the incoming RFIs flooding in exhausted the resources available to the command element at a critical time. The BLT Adjutant, then 1stLt Kyra Dotson, along with the BLT Engineer Platoon Commander, then 1stLt Hannah Montague, began shift work to monitor the single phone line and update higher headquarters as information became available through the various reporting channels. The challenge to avoid speculation into the precise circumstances of the accident, the immediate RFIs received regarding individual training qualifications, and the inability to maintain OPSEC amongst units that were ashore at San Clemente Island all further compounded the friction experienced by the staff in dealing with the immediate aftermath and reporting requirements surrounding the event.

**MWX Notional Casualties Volume**

The volume of notional casualties anticipated and incurred during both MWX 3-21 and 3-22 led to the realization that in a peer-threat crisis or contingency, communications will be contested. Further, using an unclassified network for reporting casualties inside the weapons engagement zone (WEZ) is untenable. According to LtCol David Burton, 1stMarDiv G-6, when faced with a peer threat, units will operate over a Secure Internet Protocol Router (SIPR) and other secure means. LtCol Burton stated, “Non-secure Internet Protocol Router (NIPR) will be available, but not prioritized and the lack of priority will make that form of communication intermittent, thereby not meeting the requirement of timely and accurate reporting. If NIPR were available, it would be an undesirable platform for communicating due to the inherent vulnerabilities in NIPR.” Additionally, when fighting a peer adversary, electromagnetic conditions would restrict available means of communica-
tion. Information about casualties will need to originate over SIPR to keep the information flow as unrestricted as possible. Since the casualty data originates on SIPR, at some point, it will need to convert to the unclassified system to go into the reporting program of record.

The program of record for officially reporting casualties is DCIPS-Forward. DCIPS-Forward is solely a NIPR system: it has a limited mass casualty function, cannot receive uploaded rosters, is non-collaborative, and does not have a mechanism for seeing or producing a running roll-up of all the casualties for internal tracking and keeping stakeholders informed. Tactical-level units operating inside the WEZ need a way to convert PCR data received over classified channels into an unclassified format in order to input the data into DCIPS-Forward to rapidly facilitate the notification process.

Actions Taken

Since the program of record for officially reporting PCRs is only available on NIPR, 1stMarDiv G-1 created and experimented with a hybrid-reporting model. Using a tactical SIPR chat-server, the unit S-1 sends PCR data originating inside the WEZ to the 1stMarDiv G-1 CASOC. The CASOC can be located at the division’s main or rear command nodes outside the WEZ. In the chat server, the reporting unit submits 21 lines of PCR data. When the CASOC receives the PCR data, an Excel-based tool converts the data into PCR format and creates a casualty-tracking roster. The CASOC also converts data from SIPR to NIPR by using an Electronic Data Interchange-Personal Identifier-based formula to pull required data from a pre-populated manning document and transposing the event, location, status, and remarks data received on SIPR from the unit inside the WEZ. The CASOC then enters the data into DCIPS-Forward on NIPR and submits it to Casualty Branch. Once the unit in the WEZ has the PCR data, the transfer of that information to the CASOC and Casualty Branch happens in under 90 minutes on average.

There is a proposed replacement for DCIPS-Forward currently in the test phase. The proposed system can receive uploaded Excel rosters with PCR data to create hundreds of individual PCRs originating from a mass casualty event. In practice, the hybrid model was simple and efficient during MWX 3-21 and 3-22; it also worked seamlessly with the test version of the proposed new program of record. The tactical-level user inside the WEZ with SIPR/secure access is the intended hybrid-model user. Using this method during MWX 3-21 and 3-22 enabled rapid and accurate reporting for thousands of notional casualties.

1stMarDiv G-1 trained subordinate and adjacent units on the hybrid model for reporting casualties and rehearsed at ten exercises, including two MWX iterations and Steel Knight 22 (an exercise between 1stMarDiv and Expeditionary Strike Group-3 focused on sea denial, naval warfighting, and sea combat capabilities). The division G-1 codified the hybrid model in the Annex E for division operational plans, captured lessons learned in after-action reports, and briefed the hybrid model and lessons learned at the fall 2021 Force Sync G-1 Summit.

Casualty Branch has taken action in the aftermath of the HKIA event as well. Specifically, Casualty Branch collaborated with the Operations Analysis Directorate and Combat Development and Integration to develop a scalable mass casualty augmentation model, according to the Casualty Branch Operations Officer, Capt Nickless. The data-driven scalability model identifies required augmentation for the Casualty Branch to maintain current expectations from policy and law in the event of high-volume mass casualty events from a peer threat crisis or contingency.

To mitigate the massive information requests, Casualty Branch designed an RFI Cell that activates in the event of a mass casualty to bifurcate RFIs from the information flow that supports notifications. Additionally, Casualty Branch created an information-sharing page within Microsoft TEAMS, where unit stakeholders can access mass casualty event trackers to stay informed. During MWX 3-22, Casualty Branch key staff embedded with MAGTF Staff Training Program to form a G-1 response cell to provide feedback for 1stMarDiv G-1, test a proposed new DCIPS version, and experience notional high-volume mass casualty reporting. The experience and lessons learned from Casualty Branch personnel working with 1stMarDiv G-1 during MWX 3-22 can inform needed service-level policy and program changes.

Way Ahead

At the tactical level, pre-deployment briefs should include verification of who stakeholders are in and out of the reporting chain in a mass casualty event. Including a clear understanding of command relationships and additional stakeholders will streamline communication in a mass casualty event. Units at every echelon, down and in and up and out, must rehearse and be level on the reporting processes. Promulgating the information about stakeholder access to the Casualty Branch TEAMS-based mass casualty tracker, educating the force about the 1stMarDiv’s approach to casualty management procedures used at the tactical level, codifying procedures in tactical standard operating procedures at echelon, and updating the Casualty Manual are all actions that should continue zealously.

The true way ahead for lasting change is for HQMC Manpower and Reserve Affairs to do a deep analysis of the many aspects of the casualty management process that need to be right-sized or made fit-for-purpose through scalability to meet the casualty volume estimated in a peer threat crisis or contingency. Additionally, the Service needs to seek guidance from the Secretary of Defense on the decision authority for scaling-up casualty management support and thresholds for maintaining the current notification policies, identify who decides when hundreds of service members are re-tasked to be case managers for thousands of casualties, and establish the point at which the Marine Corps no longer conducts the currently expected in-person notifications with full casualty briefs and follow-on services to the families of the fallen. Notification by Western Union telegram was the fallback plan in wars of the past; what is the
In the absence of updated guidance and policy, the Service is not ready for the high-volume mass casualties in a peer threat crisis or contingency. This is a no-fail mission.

Notes


4. Ibid.

5. MAGTF Training Command Marine Corps Air Ground Combat Center, Combat Center Order 3500.16A, (Twentynine Palms, CA: May 2020).


9. Ibid; and “Marine Corps Releases Command Investigation into the Assault Amphibious Vehicle Mishap off the Coast of Southern California on July 30, 2020.”

10. 1st Marine Division, Division Order 3040.7D, Casualty Reporting Procedures for 1st Marine Division, (Camp Pendleton, CA; 2021).

11. (DoDI 1300.18).

