



A graphic illustration simulates past and future Army combat medic technology on the battlefield. (AI-generated image by NCO Journal)

The Medic's Journey: *A Tale of Two Battles*

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At the crack of dawn, an infantry company from the 1st Battalion, 3rd Brigade Combat Team, approached a remote village. The company, tasked with searching for civilians, was conducting combat operations in the rural areas near the Pakistani border. Now, as they entered the village, all was eerily quiet and still.

Suddenly, an unknown enemy force attacked, breaking the silence with a fierce crescendo of machine gun and rifle fire, the bursts accompanied by squealing mortars. Shrapnel hissed from improvised explosive devices overhead.

Cpl. Andrea Morales, the platoon medic, ducked

quickly for cover — her heart rate spiking and adrenaline surging, pulsing through her body. She'd only been here a short time, and she couldn't believe she was already under fire!

In times like these, some Soldiers question their decision to become medics. But today, that thought fell away quickly for Morales, as the impact of bullets all around reminded her of her unit's mission. Her training came into clear focus: She knew, as the other Soldiers did, that a dependable medic is the most critical person in a firefight.

As explosions erupted, she huddled in the middle of a destroyed building, its stability compromised by

the vibrations sent from high explosives detonating all around. Morales couldn't mistake the acrid smell and taste of burning debris from houses, cars, and human remains.

The cries of injured Soldiers were terrifying. Morales would need to perform the combat medic's tasks without hesitation. Crouching behind a crumbling wall, she slowed her breathing and focused her mind. She had to control her physiological reactions and counter the situation's intensity. She needed a steady hand and clear mind to treat the wounded.

Her goal was to save as many lives as she could and evacuate the wounded as soon as possible.

"Easier said than done," she thought.

She'd heard stories from veteran medics. Managing the reality of combat wasn't easy, a hard truth Morales struggled to face. Supplies were limited, and evacuation windows could be few and far between. Accomplishing the mission and treating casualties quickly and efficiently was necessary to bring them home.

Everyone could hear the crack of artillery fire and other sounds of destruction. The continuous noise made distinguishing friendly outgoing fire from incoming enemy salvos impossible. The relentless bursts of improvised explosive devices nearby momentarily dampened the screams of the injured.

Morales took a deep breath, collected her thoughts, and went diligently to work. Soon, she was bombarded by dozens of casualties carried to her location, victims suffering from blast injuries and head traumas.

All this — under the ominous threat of chemical, biological, radiological, and nuclear (NBC) exposure — complicated her steadily increasing workload. She couldn't think about what could be but what was. And that was the screams of the wounded.

"Focus," she told herself.

She repeated the *MARCH, MARCH* to herself, using the acronym to stay on task: **M**assive bleeding, **A**irway, **R**espiration, **C**irculation, and **H**ypothermia prevention.

Two infantrymen, barely out of high school and with minimal first responder training, reported to her as combat lifesavers and waited for assignment.

"Oh, thank God," she breathed, relieved to have extra hands.

She directed them to several patients to check for signs of life and to control major bleeding. Consolidating the casualties was needed, but her unit was spread all around the town, with enemy fire still pressing overhead.

Eventually, together with the two combat lifesavers, she established a Casualty Collection Point, which allowed her to consolidate and organize the wounded into triage categories. As soon as she did, her first sergeant radioed the news to all the elements of the company, and the wounded continued to arrive.

Morales placed a red cross outside the building and combined the remaining combat lifesaver supplies with her own. As the casualties poured in, she could now efficiently perform a quick assessment and place Soldiers in appropriate priority areas.



Cpl. Andrea Morales, the platoon medic, tends to a casualty during an enemy attack near the Pakistani border, while bullets impact around her. (AI-generated image by *NCO Journal*)



Sgt. 1st Class Morales works with tools and resources she couldn't even dream of years before as a corporal. She wears augmented reality glasses that overlay critical medical data into her field of view while allowing her to stay situationally aware of her surroundings. (AI-generated image by NCO Journal)

The increase in casualties caused medical supplies — such as tourniquets, gauze, and other bandages — to run out within the first hour. One of the young combat lifesavers cleverly began collecting as many belts as possible to use as tourniquets.

Morales urgently radioed a request for resupply, only to be told it wouldn't be available for a few hours. Her only concern was doing the most she could with what she had to keep her patients alive.

She moved from one of them to the next, controlling bleeding, opening airways, and offering words of comfort when able. Some injuries were beyond her capabilities and resources. Without enough whole blood or access to advanced medical treatment, she knew many of her patients wouldn't survive.

She could sense the fear in one of her combat lifesavers' voices when he asked, "What else can we do?" She quickly assessed what was needed and realized she hadn't documented anything. The thought of patient documentation was a luxury she couldn't afford.

She responded with confidence, "We do our best and don't stop until help arrives."

The next several hours went by slowly, with the wounded continuously calling for help and Morales scrambling to respond. Air medical evacuation was impossible due to the enemy fire. All other available evacuation assets were overwhelmed.

Morales and her two helpers worked tirelessly to

stabilize and comfort as many patients as possible. As the situation settled and 3rd Brigade reasserted security, her platoon initiated a walking blood bank. However, a greater supply was needed. She struggled to decide which patients had the best chance of survival if they received blood, knowing she couldn't collect enough to help everyone.

Dawn turned to dusk, and still no evacuation assets had arrived. Temperatures began to drop. Morales and her team gathered every blanket and article of clothing they could find to help keep their patients warm. It was one of the only supports they had left to offer.

Devastatingly, by the time evacuation assets were available, only five casualties survived long enough to benefit from them. Morales handed them off, relieved they were finally able to receive advanced medical care, but she was mentally and physically exhausted, and tormented by the patients she lost.

Summoning up her last energy reserves, Morales prepared herself and her team for the next wave of wounded, knowing the nightmare was far from over.

In the Year 2035

Rapid technological advancements in medicine and casualty care practices were introduced with time, and continuous combat has created a new type of war. Electronic warfare, sensors, and drones now dominate the battlefield.

Daily casualty numbers grew from tens to hundreds and sometimes even to thousands. Troops conduct

operations across hundreds of miles, moving faster and relying heavily on drones and unmanned aerial systems to observe and engage the enemy at extended ranges.

Sgt. 1st Class Morales was dead center in an engagement in a heavily populated urban center. She reflected on how different this type of chaos was from years ago when she was just a corporal. This time, she was not alone in her struggle. Yet, she found herself in an all-too-familiar position: crouched behind a destroyed wall, filled with the same intense adrenaline she experienced on her first deployment.

It took her a moment to center herself, calm her nerves, and prepare to work, but her body somehow remembered what to do. Although she now had tools and resources she had never dreamed of years before, the basic lifesaving steps and her “MARCH” mnemonic remained just as relevant. Equipped with years of experience, training, and the newest fielded medical technology, she was ready.

“As ready as I can be,” she reassured herself.

The division launched its offensive. A swarm of drones scouted ahead, identifying ideal casualty locations and scanning for signs of life.

Morales’ augmented reality glasses activated, overlaying critical medical data into her field of view while allowing her to stay situationally aware of her immediate surroundings. She could see Soldiers’ biofeedback almost immediately, indicating significant hemorrhaging, fractures, and vital signs, allowing her to prioritize care efficiently ahead of time.

Each Soldier with a sensor locator could be spotted quickly and consolidated in the platoon casualty collection point, already marked with a preliminary triage suggestion. Her combat lifesavers had the data to

decide which patients needed their help first.

Once Morales’ supplies began to dwindle, the logistics sensor triggered a robotic autonomous system, which promptly and automatically delivered what she needed so she could continue saving lives. These robots, equipped with advanced medical algorithms, could anticipate needs and deliver medications, intravenous fluids, diagnostic equipment, tourniquets, and bandages. They also moved patients, easing the physical burden on Morales and her team.

The scene was transformed as casualties arrived at the Role 1 aid station. Based on the data streams, the medics requested whole blood, delivered on an unmanned aerial system moments before the casualties started to arrive.

An autonomous casualty evacuation platform stood ready to transport the most critical patients to the division medical mobile shelter. The most advanced equipment and providers were staged in this sterile environment. Priority casualties were in surgery in less than an hour, and the rest received whole blood while they waited for the next evacuation window.

Morales was thankful that getting resources on time helped her prioritize and treat patients appropriately. She could better delegate tasks to her combat lifesavers and consult with providers for more advanced treatment preparation or advice.

Through secure messaging channels, Morales consulted with a neurosurgeon stationed thousands of miles away in San Antonio, Texas, and managed to stabilize a severe case in preparation for further treatment after evacuation. Telemedicine allowed them to share real-time data and imaging, enabling expert guidance despite the distance.

“Prepare for the Golden Window,” her first sergeant exclaimed. “We have a small window to stabilize and evacuate these patients.”



Morales knew advanced technology couldn't replace her basic Soldier skills, medical education, and training. Still, they enabled her to make well-informed decisions, see a more complete picture of casualties on the battlefield, and treat them more effectively. (AI-generated image by NCO Journal)

Morales' team worked to prepare the four most critically wounded patients for evacuation, aided in part by the autonomous stabilizer beds. Following remote guidance, data from her glasses, and her continuous triage, her team knew precisely which patients to send when the window opened. The autonomous evacuation platform launched with the four most critical patients, giving them the best chance of survival.

As the chaos settled, Morales looked around and sighed with relief. She was thankful she still had energy and enough supplies, and she felt prepared for the next imminent wave of casualties.

Her advanced skills and emerging technologies drastically changed the outcomes for the wounded. Her mission remained the same, but she was more confident than ever in her unit's ability to save lives.

Combat medics are critical in the heat of battle, especially during large-scale combat operations (LSCO). Morales' superiors told her she embodied the resilience and adaptability needed to navigate such a complex landscape. Through innovation and technological advancements, she and her fellow medics were no longer just surviving the chaos; they now navigated it with the precision and confidence required to make a difference.

As each deployment ended, Morales couldn't help but reflect on everything she'd experienced. She thought about her first time — when she was inexperienced, unprepared, and ill-equipped. She felt sad for the patients she treated but hadn't been able to save. She remembered the months after the deployment when she struggled to cope with the realities she faced and the trauma she saw.

She was thankful to be on the other side now, where young medics and Soldiers would not likely experience such intense helplessness and despair. It was almost hard to believe how the Army's continuous transformation efforts had enhanced every stage of a combat medic's role.

Her augmented reality goggles seamlessly connected with the fielded drones, equipped with sensor payloads, giving her and her team critical biometric data to prepare accurately for casualties.

In the collection point facility, the autonomous systems delivered needed supplies to the medics' hands at the right moment, saving precious moments in lifesaving efforts.

Her team's energy never flagged, in part because the autonomous stabilizer beds relieved them from some additional physical labor.

The communications systems gave her accurate and timely updates on when evacuation teams were inbound, and even more amazingly, she was able to connect virtually with specialists worldwide for difficult cases.

She knew these technologies couldn't replace her basic Soldier skills, medical education, and training. Still, they enabled her to make well-informed decisions and see a more complete picture of the battlefield.

Sure, things were not perfect, but she knew they were better equipped and capable now and in the future. As she packed her gear and prepared for the journey home, she felt a sense of pride in how far she and the Army had come in this environment thriving with advanced technology. The future for combat medics seemed full of hope as the Army leveraged human-machine-integrated technologies to increase the survivability of the close combat force and enhance support response capabilities.

Despite the challenges ahead, Morales knew she was ready to face them. She was confident that she and those she trained would continue to make a difference in the lives of the wounded.

In the future there would be another deployment, in another war, in another place. Morales' continuous effort and ability to integrate new advanced systems would always be required to keep her, and the younger medics under her leadership, proficient and prepared for whatever the future fight might bring. ■

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