



Mechanics work to fix maintenance issues that are threatening the deployment of U.S. forces to the Pacific theater.

# Strategic Sepsis

Maj. Timothy M. Dwyer, U.S. Army



**Editor's note:** "Strategic Sepsis" is one of many military fiction stories published by Military Review as part of its Future Warfare Writing Program. Imagery includes fake captions to support the storyline. Read more Military Review fiction at <https://www.armyupress.army.mil/Special-Topics/Future-Warfare-Writing-Program/>.

## Four Months until D-Day

It was another boring CUB on the JOC floor. The air conditioner struggled to keep out of the tropical heat, and everything looked damp. The combination of smells from a hundred sweaty people, old food, burnt

coffee, and overheated electronics wasn't great either. Through it all, the G-4 mobility warrant diligently went over an infinite number of Excel spreadsheets. Each one detailed troop movements into theater laid out over time. Scintillating. As a battalion commander, I was paying close attention to every colored block.

Actually, no, I wasn't. My battalion's men and women were already on the ground.

Instead, I daydreamed about Kelly and the kids. We were on comms blackout, and I hadn't talked to her in a few weeks. An unsecured cellphone in modern war was as dangerous as lighting a campfire at the Somme.

The Chinese didn't need any help finding us, and we weren't about to give them any. So, no calls home, no Facetime, no v-chat. I remember finding a shoebox with Granddad's old Vietnam War letters to Grandma. I guess my grandkids will get the same opportunity one day. If I'm lucky.

I checked my watch: 0745. That makes it around 5pm at home. Kelly was probably sitting on the couch with the girls, loudly singing Disney songs and giggling. They'd lose track of time and end up eating dinner at 8 o'clock.

I'd kill to be home with them. Actually, we need to kill so I can get back home to them.

At that thought, I looked back up at the screen. The spreadsheet had turned into an alarming mosaic of reds and yellows. The universal sign of a staff officer about to deliver bad news and take their licks. I'd been zoning out for a while; the G-4 actual was up there talking about maintenance. Never a good sign.

"Ma'am, we have been seeing a significant increase in maintenance deadlines across the division. The current levels are beginning to stress our class VII and IX stocks throughout the AOR. I recommend authorizing cannibalization in order to keep forces moving and allow time for stocks to catch up," the G-4 squeezed out.

I was in the cheap seats, and I could still see the sweat on his forehead. It wasn't from the heat.

"Hold off on that for now. What's causing the issues? Are these deadlines from prepositioned stocks?" Maj. Gen. Patters replied. She maintained her casual tone, but we knew it was just a thin veneer painted over mounting frustration. The countdown had started.

"Well, ma'am. I'm not sure ... but ... I think ..." the G-4 mumbled.

Uh-oh. Blood in the water. I looked over at Lt. Col. Breanna Kass, one of the BSB commanders, and winced, waiting for the hammer to drop. Breanna shook her head back in response, her eyes wide.

"Listen, 4. You're telling me that our entire JRSOI is grinding to a halt because of maintenance issues but you have no clue what the problem is?" the veneer over Maj. Gen. Patters' voice peeled away.

"Well, ma'am ..." the G-4 said, shrinking rapidly.

The CW5 maintenance warrant stood up. The G-4's shoulders visibly relaxed. Chief to the rescue once again.

"Ma'am, there is a laundry list of issues deadlining both our rolling stock and rotary-wing assets. None

of them are on us. These aren't 'we broke the triple-7 because we towed it wrong' problems. Cracked fuel lines, engine failures, class III oil leaks, you name it. We are working with the TSC on solutions, and we will keep the momentum up the best we can. I will let the staff know when I get an update on the class VII and IX resupply pushes," Chief Lima fired off in her matter-of-fact briefing voice.

Maj. Gen. Patters nodded, "Thanks, Chief. Keep me posted, but no cannibalization this early in the JRSOI."

"Roger, ma'am," the chief and the G-4 replied in unison.

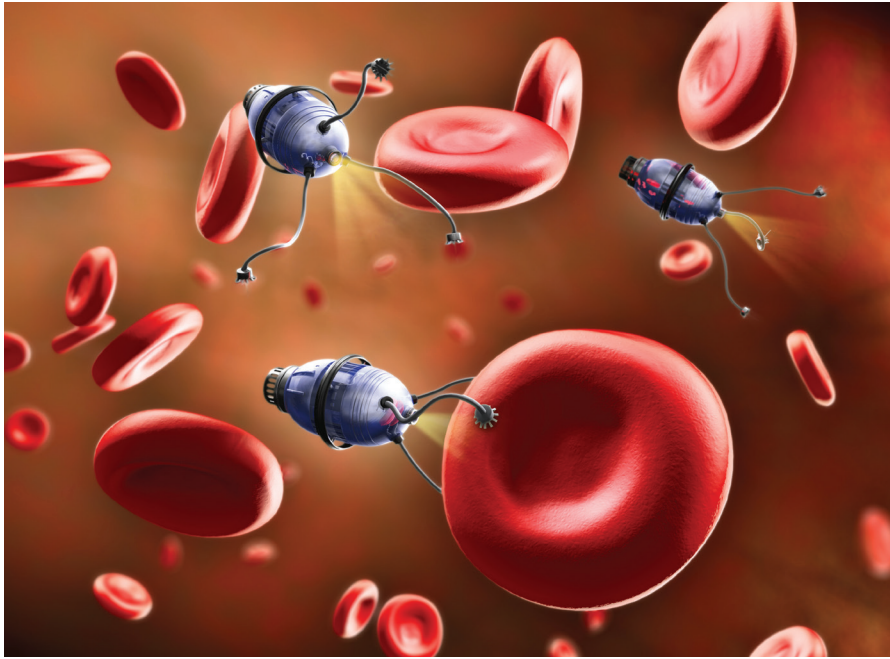
I looked back at Breanna and shrugged. She shrugged back. The problem was obviously wider than what the G-4 briefed. If we were having issues, then it's a safe bet the other divisions were too. I'm sure they'll get it worked out; our G-4 section is a talented group, but it's obviously not a good time to be a maintenance officer. We all saw what a lack of maintenance did to the Russians. That invasion was every shop officer's worst nightmare come true. If we have to start ripping our vehicles apart to fix other vehicles, then we aren't much better. Especially since we haven't even started shooting yet.

## Three Months until D-Day

How did we get here? No, not this crappy tent. No, not this specific island. How did we get into war with China? We all figured World War III would be with Russia. Especially after its Ukrainian debacle. So naïve, it was always going to be China if it was anyone at all. World War III, or the modern equivalent of it. It's been a trope for a century. I wish it could've stayed that way.

I remember being told that all soldiers fight for peace, and I couldn't agree more. Peace is what all soldiers want. All the bravado, chest beating, and cadences about fighting to the death are borne out of necessity. What we really want is to grow old

**Maj. Tim Dwyer** is an explosive ordnance disposal (EOD) officer currently serving as the commander of the U.S. Army EOD Technical Detachment in Indian Head, Maryland. He is a graduate of the School of Advanced Military Studies and his recent assignments include the 20th Chemical, Biological, Radiological, Nuclear, and Explosives Command and the 10th Mountain Division (Light Infantry).



Nanobots travel through the bloodstream and affect blood cells.

watching our grandkids play in the yard. We fight for peace, wishing we didn't have to. If politicians fought half as hard for peace, then we wouldn't be here. Here in this tent, here on this island, here in the Pacific, here in the middle of a war. The war. But here we are. China wanted Taiwan and no one could find a way out without hypersonics, self-cavitating torpedoes, killer drones, and cyber strikes.

Quan Bian, active defense, I don't care what the CCP calls it. Invading Taiwan was a power grab, pure and simple. You can't just invade your neighbors and take their land. That's not how the world works anymore. Now we were on our way to remind the CCP that this is 2035, not 1935. That is, once our forces get into theater. Easy enough for the Navy and Air Force, but it's taking us Army folks a little longer to get into the action.

All those thoughts tore through my mind as I read through the latest SIGACT updates. The Army would get its chance to fight for peace soon enough. For now, it was the Navy, Air Force, Marines, and Space Force doing their share. I never thought I'd wish for another counterinsurgency campaign, but I would definitely take one of those over this. I bet our brothers and sisters in the other services would agree. Large-scale combat operations come with large-scale casualties. Fighting for peace comes with a price.

I shook off that thought. That was enough waxing philosophic. We had a job to do and lamenting the plight of man wasn't going to accomplish it. I pushed back from my plastic field desk and stood up, I had five minutes until the S-2 gave another threat update. Better get moving.

I walked out of the empty tent, past a few other field desks damp with humidity, and into the sticky heat of the day. The sun instantly baked my shoulders and sent fresh rivulets of sweat down my back. Command Sgt. Maj. Hoeger greeted me outside. "All good, sir?" she asked with a salute.

"Absolutely, Sergeant Major. How's the last of our JRSOI going?" I shot back, returning the gesture.

"Other than the maintenance, there are no major issues. Our soldiers are hale, healthy, and motivated. The trip was a lot harder on our vehicles than it was on us," she said, falling in next to me as we walked over to the briefing area.

"We aren't the only ones; let's get another update from the maintenance team after the threat brief," I said with a nod, ducking under the flap of camo netting and entering the briefing space.

"Battalion, ATTEN-TION!" snapped CSM Hoeger as she came in behind me.

The assembled group of soldiers jumped to their feet. All our leadership was there. Company commanders, first sergeants, staff officers, and NCOs.

"As you were," I replied, sitting on my camping stool.

There was a chorus of rustling as everyone found their seat.

"Ok 2, we are all busy so let's make it quick. I'm up on the latest SIGACT update; for those of you who haven't read it, make sure you do immediately following this meeting. Take it away," I said, locking eyes with Capt. Blakely.

"Yes, sir. Today I want to concentrate on the potential use of nanoweapons," he said, pointing to the easel.

The easel had "Biological Nanoweapons" written across the top with a series of shapes and words underneath.

No one shed any tears over the death of PowerPoint. Least of all me. Less PowerPoint meant less time wasted matching font sizes and fixing the numbering in the master slides. It also meant fewer computers, less electricity, fewer ethernet cables. All of that meant a nimbler force and a smaller EMR signature. It reminded me of Corporal Upham in the movie *Saving Private Ryan*. No need for a typewriter when a pencil and notepad can do the job. We had half the generators now

CBRN threats. A threat report from the Division G-2 assesses that there is a moderate likelihood of use by the Chinese given the scale of the upcoming conflict. Pending your questions, sir. That concludes my threat update," Capt. Blakely finished, looking over to the staff seated on a bench.

"Just one question, 2," I asked. Blakely's shoulders tensed a little.

"Yes, sir," he replied.

“This has led to the creation of nanoweapons. The same technologies apply, but they have been weaponized to create battlefield effects. This can theoretically include causing physical damage to tissue like bleeding, degeneration, and dissolution.”

than when I was a lieutenant. I did miss the omnipresent air conditioning though.

Capt. Blakely pulled out a piece of paper and unfolded it.

He began reading. "For everyone's SA, nanotechnology is the use of microscopic machines that are built to have effects at the molecular or cellular level. Most of us have heard about them used in manufacturing, especially in electronics. Naturally, this has led to the creation of nanoweapons. The same technologies apply, but they have been weaponized to create battlefield effects. This can theoretically include causing physical damage to tissue like bleeding, degeneration, and dissolution. But today we are going to concentrate on a different set of potential effects to the human body." None of this sounded good. I hoped it was mostly hype.

"These human effects can take many forms, but the most likely attack includes infecting the brain and disrupting its function or chemistry. This has been a known area of focus by the Chinese military for over two decades," he said, pointing at the easel. "The goal of these attacks would be to disrupt cognition, slow decision-making, cause depression or apathy, and in general degrade the fighting capability of the infected population. The likely effects could vary widely, though, since the brain is incredibly complicated. These weapons are currently classified as WMDs and

"Do we have a list of indicators? Any symptoms we could look for?" I said, trying to sound casual to keep the young captain relaxed.

"Yes, sir. There are several potential indicators we are looking for. I will get you an updated PIR list immediately following the brief. As far as symptoms, most of them are pretty common. Headache, runny nose, confusion, blurry vision. We should also keep an eye out for new or increased signs of depression," he said, counting the symptoms off on his fingers.

"Got it, thank you Capt. Blakely," I nodded.

Our CBRN NCO, Sergeant First Class Almeida, stood up. We all instinctively looked over to her.

"Sir, as Capt. Blakely stated, these are CBRN weapons and the same protection functions apply. Before you ask," she said, raising her hand, "we do not have enough information to know if our masks can protect against nanoweapons. The best we can do is monitor our soldiers for the potential symptoms and stay up to date on the current CBRN threat level."

"Thanks, 2. Thanks Sergeant Almeida. Great run-down as always. Let's make sure we sync with the medical folks to determine what the process is if we suspect an attack. Sergeant Major, do you have anything to add?" I asked, looking to CSM Hoeger.

"Yes, sir. Let's make sure we are keeping an eye on our troops. These nanoweapons are a threat but so are artillery, bullets, and air strikes. Keep this in



perspective. Basic troop leading procedures still apply,” she said with a nod.

“Thanks, Sergeant Major. 4, grab your maintenance team and come see me immediately following this meeting,” I said, looking over to where the S-4 section was seated.

I stood up.

“Clear the way!” the group yelled in unison, jumping to their feet.

“All the way,” I replied, returning their salute before ducking under the camo net and out into the sunlight.

Great, brain-rotting nanoweapons. One more risk to mitigate. Back to Corporal Upham again—why use bio-nanoweapons when bombs and bullets could do the trick? I didn’t know and I hoped I wouldn’t find out. None of that would matter if all our vehicles were broken. Time to get that update from the 4.

## Two and One-Half Months until D-Day

I rolled over and tried to put my arm around Kelly. I woke up when it fell off the side of the cot and the metal frame dug into my skin. I pulled my eyelids open and stared out into the pitch blackness, totally confused.

Where the hell am I? It only took me a moment to recover; the smell was enough to remind me I was in an Army tent.

I clicked the light on my watch: 0321. There was a thought scratching at the back of my brain. Something felt off. Not the tent or the darkness. Something else. I rolled onto my back.

Then it struck me. It was the snoring. Not that people were snoring; there wasn’t an army tent in the history of human conflict that wasn’t filled with snoring in the 80–100 decibel range. The problem was that I could hear it so clearly. Our sole generator was off, and its angelic hum wasn’t drowning it all out. Not good. I peeled myself out of the cot, the sweat sticking the T-shirt to my back, and slipped into my running shoes. My knee popped loudly, and my back crinkled like bubble wrap as I stood up and shuffled down the tent and out the flap.

The night was just as dark as the inside of the tent. There were some stars overhead and chem lights tied to random trip hazards but not much else. Sometimes I missed our old FOBs that were lit up like Times Square 24/7. Not anymore, not when you’re fighting a peer adversary. Light discipline, EMR limits, nuclear attack

drills, casualty numbers in the thousands. Everything old was new again.

I rounded the corner of the tent, careful not to trip over the ropes hammered into the soft ground. There were a few people standing around the generator, hands on their hips. Staff officers aren’t the best group to troubleshoot a generator in the middle of the night and it showed. I sidled up next to the black silhouettes to have a look.

“Hey boss, snoring got you too?” Lt. Mani Patel said with a head nod. I didn’t realize he was standing next to me until he opened his mouth.

“How could it not? I think the Army keeps the whole CPAP industry in business,” I replied.

“That’s the truth and a broken generator definitely doesn’t help our snorers,” Mani said with a laugh.

I pointed at the generator.

“Does it have fuel in it?” I asked, staring blankly at the big metal box on wheels.

“Sure does,” someone else replied. I’m not sure who.

“Then I’m out of ideas,” I shrugged.

“Yup, that’s as far as we got too, sir,” Mani shot back with a chuckle. He was obviously a better chemical officer than a generator mechanic.

At that, I walked around the generator to find the fuel cans. Maybe someone put mogas into it?

I kicked the first can I saw, and it felt full. It looked even fuller. The sides of the can were flexed outward at an alarming angle, like a soda can that someone left in the freezer overnight. Maybe it was the heat? Man, we really needed NCO supervision at a time like this.

Bending down, I unscrewed the top of the fuel can and it gave off a loud \*psssst\* once the top came free. It was like opening a bottle of seltzer. Someone probably filled it with mogas and left it in the sun. Guess it’s time to get dressed, shave up, and head to the CP. I didn’t need any more sleep anyway.

I turned around and almost bumped into Mani.

“Damn, sir. What’s up with that fuel can?” he asked.

“Can fuel cans be broken?” I shrugged.

“That one is, I bet someone put mogas into it,” he replied, jerking his thumb at the distended plastic.

“Nothing we can do about it. I’m going to grab some food and head in,” I said.

“I’m going to grab a few more winks and I’ll see you there, sir,” Mani replied, rubbing his left eye with the back of his hand.



I slid past him and headed back to the tent. Someone would fix the generator and it wasn't going to be me. I guess the S-4 would have more maintenance issues to report in a few hours. Regardless, I still had to figure out how to get the rest of the battalion ready for the fight. We all had jobs to do, and it takes everyone from generator mechanics to generals to win a war. I didn't have a hope of being either one, and I was no help kicking fuel cans in the middle of the night.

A slight headache was chewing away behind my eyes as I shuffled my way through the tent, careful to avoid catching my foot on the leg of a cot. It was probably nothing. We were at war, after all, a headache was the least of my problems. A headache could be caused by about a hundred different things and I'm pretty sure too little sleep and too much coffee was at the top of the list. They were doing the nano blood test at the aid station, though. I'd have to head over there when I got a chance. If I got a chance, there was already too much to do in a day. I quickly changed out of my PTs and into my uniform, grabbing my razor and shoving it into my pocket before heading back out into the night.

Time to get back to work. As they say, sleep is for the weak.

The Division's deployment operations are severely hampered by mounting maintenance issues.

## Two Months until D-Day

"You feeling all right, Sergeant Major?" I asked. "Absolutely, sir. Never better," CSM Hoeger replied, wiping her upper lip with her sleeve.

She looked like a zombie. Her skin was gray, eyes were sunken in, and drops of sweat beaded in her eyebrows.

The battalion TOC was filled to the brim. Shift change had just ended, and the night shift hadn't cleared out yet. The sticky heat was pressing in more than usual. The smell wasn't great either. War is hell, I guess.

"You sure? I can take the BUB and fill you in later," I said, lowering my voice. I didn't want the soldiers to overhear. Appearance is everything and the CSM wouldn't want anyone to think she was soft. Everyone was talking in the cramped tent, though. I doubt anyone could hear our sidebar.

"Roger, sir. I feel fine but I'll head down to the aid station and check on the troops. We can cross load later," she said with a nod.

"Sounds like a good idea. Maybe ask one of the medics to stick you while you're there? Looks like you could use some fluids," I replied, leaning in to whisper.

"Nah, I'm fine, sir. I'll be back in a bit; we still have a few soldiers laid up down there with illnesses and NBIs," CSM stated with a wave of her hand.

I nodded and she stood up. I swore she wobbled a bit when she hit her feet before righting herself and walking down the alley between the field desks and out the tent flap. I hope the medics give her something.

"... 63 this is ... 6 ... io check, over," came the call over the TOC speaker.

"Last calling station, you came in broken and unreadable," came another voice.

"... \*scratch\* ... eck, over," the first voice repeated.

"Last calling station, you came in broken and unreadable," the second voice replied.

I couldn't take it anymore. Between the sweating tent, a cacophony of separate conversations, and the broken radio transmissions I was ready to tear my hair out.

"Attention in the TOC!" I yelled.

"Attention in the TOC!" replied the thirty-something people in the tent.

"Night shift, get out of here. Get some chow and get to sleep. Battle captain, make sure the comms are up and our overlays are updated in accordance with the BUB. I'm going to the brigade main to take the BUB in person," I said, delivering a knife-hand to the different parties in turn.

A chorus of "Roger, sir!" was issued in reply.

The night shift started to funnel out, pausing while I grabbed my helmet and walked my way down the aisle. I pulled open the flap and was out into the morning.

It was warm, but the day's heat hadn't settled in this early. I could feel the vibration of activity as the battalion and our sister formations conducted their own changeovers and prepared for another day of preparing. I walked away from our TOC and over to our motor pool. A few dozen vehicles were lined up in neat rows. My truck was first, and I walked over to the driver's door, sand and rocks crunching beneath my feet. The door stood open, and Sgt. Borman was in the driver's seat trying to turn the engine over.

"Good morning, Sgt. Borman," I said cordially. By the look on his face, I could tell his morning was anything but.

"Mornin', sir," he said, giving the engine another go. I could hear the starter motor whining but not much else.

"Having issues? We just ran this thing last night," I said, putting out my elbow to lean on the rear door.

"It won't start, sir. Ran fine yesterday, topped it off last night. No issues at all. Today it won't start." He replied in staccato. He tried the engine again. No luck.

"Grab the motor sergeant, and get it looked at. I'll grab a different ride up to brigade," I said, giving him a slap on the shoulder.

"No, sir! I'll grab another vehicle and get you up there," he said, trying to jump out of the truck.

"And if you did, this truck would still be broken and there wouldn't be anyone to make sure it gets fixed. I can make my own way; you get this running again. We are going to need it," I said with a nod, turning to walk away.

"Roger, sir," Sgt. Borman said, defeated. He gave the engine another try. It still didn't turn over.

I walked to the end of the motor pool and to the main strip through the camp. The BSB was directly across from us, and Lt. Col. Kass was pulling out in her own vehicle.

Her truck jerked to a stop, her door popped open, and she stuck out her helmeted head.

"Need a ride?" she asked

"Absolutely, you driving?" I replied.

"You walking?" she said, disappearing back inside the vehicle and slamming the door.

I opened the TC door and climbed in, closing it behind me, pulling on my seatbelt, and strapping on my helmet. Safety first.

"I know our job is to drive you guys around and deliver your stuff, but this is getting a bit ridiculous," Breanna said with a smile.

"Yeah, yeah, yeah. Sgt. Borman couldn't get my truck started and I was sick of taking the BUBs over the radio. Figured I'd head up to the main," I said, crossing my arms.

Breanna pulled out onto the main strip and up the slight rise toward the brigade. It was only a mile or so but always felt like a 5K in this heat.

"Damn, broke down again? I swear, I could never understand how a vehicle with fifteen hundred miles on it, that gets worked on every single day, could still break down. One day the Army will learn that if you spend more money on the front end then you save more money on the back end," she said, shaking her head.



Breanna hit the turn signal to turn into the brigade motor pool and waited for a line of soldiers to march past the entrance.

"Speaking of breakdowns, how are you doing? Where is Sgt. Popper?" I asked as the line of troops finally passed and we made the turn.

"About the same as everyone. Fighting through the maintenance issues. Popper was throwing up this morning, so I sent him to the aid station. Said he was feeling dizzy. Must've gotten a stomach bug or something," Breanna said matter-of-factly.

"Sounds like my sergeant major. She won't admit it, but she looked like hell this morning. The heat, the travel, the food, the water. Takes some getting used to, I guess," I replied. "You know it's bad if Hoeger is sick; she is tough as nails," Breanna said, sitting up to see over the nose of the truck.

"You're not wrong. Did Popper get a nanoweapon test?" I asked.

"No clue, I figured the aid station would sort that out. I can't imagine how the Chinese could've infected us here though. I bet they made the tests, maybe it was through those," she said.

"Good point," I replied. The vehicle came to a stop, and I opened the door to hop out and ground guide Breanna into the motor pool. Safety always.

I started walking, listening to the truck idle forward behind me, and returning confused salutes from soldiers wondering why a battalion commander was ground guiding another battalion commander. CSM Hoeger would blow her lid if she saw me right now.

We got the truck parked and Breanna hopped out. We both swapped our helmets for our PCs. "You know what the good news is?" Breanna asked as we walked through the c-wire and into the brigade checkpoint.

"No clue," I said.

"Always the optimist. The good news is that if we are having this much trouble, just imagine what maintenance and healthcare are like in the PLA," she chuckled, pushing through the tent flap.

"You're right, can't be much better," I replied. If our all-volunteer professional force is struggling, I'm sure the "volunteer" PLA is too.

## One Month until D-Day

I ripped open my MRE and dumped it onto the dirty green plastic of the folding table, sliding onto a stool as

it all tumbled out. A random assortment of oversweetened, oversalted food greeted me, and I ripped open the package on top. Salted almonds with artificial smoke flavor added. Just like Mom used to make. I stuffed them in my mouth and moved onto the next thing in the pile. Peaches in syrup. Down they went in a gulp. I learned long ago never to complain about MREs. The only thing worse than an MRE was no MRE. After spending two days in the mountains of Yemen without a Class I resupply I swore I'd never complain about them again. That still holds true but that doesn't mean they taste good. Best to get it over with quickly.

The next package was chicken in pesto sauce. Not my first choice for breakfast but not my last choice either. I skipped the spoon and poured it into my mouth from the package. Mani sat down next to me.

"First, we have to take cold showers, and now we don't get any hot chow. The loggies need to get their act together," Mani said. His hair was still wet. A little too long too.

I rubbed my own head and felt hair between my fingers. We all needed a cut.

"Oh come on, Mani. It's not all bad," I said between bites.

Breanna sat down across from us and plopped her MRE on the table. She nodded. We nodded back.

"I mean, come on. What the hell is the deal? Lt. Col. Kass, do the women's showers have hot water?" he asked.

"You're assuming I shower," she said with a straight face.

Mani turned red, "Well, um ... ma'am," he stuttered.

She laughed, "I'm kidding. Gods, do you really think that little of me? No, we don't have hot water either and it doesn't look like we will anytime soon. I bet if I took my uniform off it would crawl away."

"War is hell, huh? At least we still have showers and chow. Besides, who wants a hot shower when it's 90 degrees out anyway?" I said with a shrug.

"Your glass is always half full, isn't it sir?" Mani chuckled, tearing open his brown plastic MRE bag.

"Yeah right, his glass is empty. He just doesn't let you hear him complaining about it," Breanna said to Mani, picking through her pile of brown plastic packages.

She looked at me, "How is your headache today?" she asked.

"Bad, but it's been worse," I said with a wave of my hand. That was a lie; it felt like my brain was trying to claw its way out of my skull.





Contaminated fuel destroyed engines throughout the theater and ground U.S. operations to a halt. Trucks, tanks, ships, aircraft, and generators were all rendered inoperable.

Mani put his hand to his mouth to finish chewing. “I actually heard something about that. Apparently, a lot of our maintenance people and fuelers have been sick,” he said before taking another bite.

“And ...?” Breanna and I both asked, then shot each other a look.

Mani put his hand over his mouth again. I started drumming my fingers on the table.

“Well, you know how spun up everyone is about a biological nanoweapon attack?” he asked.

“How could we forget? I’ve probably had more nanoweapon tests in the last two weeks than Covid tests in two years,” Breanna replied.

“Seriously though, Breanna. What’s the issue with the showers and chow?” I continued, changing the subject with a mouth full of pesto sauce.

“The same as everything else. Our maintenance issues are off the charts; it seems like everything that can break is breaking,” she said, crinkling her nose at her pile of MRE packages.

“I’ve heard that every morning at the CUB, what’s the problem though? Are we really that bad at maintenance stateside? Did we just ship a bunch of broken equipment?” I put my food down for this one; these maintenance issues had been throwing off the whole division timeline for weeks. Even the corps was backed up.

“Honestly? I have no idea. I know for a fact that all this stuff wasn’t broken when we loaded it on the trains and it didn’t all get broken in transit. I’ve heard that there is some issue with our Class 3, but that is way outside my lane,” she shrugged, finally selecting the vanilla pound cake, and ripping open the package. She flicked off the silica stay-dry pack and took a bite.

“What’s the issue? Are we running out before the war even starts?” I asked.

Mani looked over to her.

“Yes, ma’am. Well, there was tons of intel about a potential attack so us chem folks have been dissecting every event in the theater to figure out if there was a biological nanoweapon involved. I heard through the grapevine that some lab over there has been looking at fuelers and mechanics. They don’t know why yet but it sounded like they were worried about it. Sounds like those groups have been taking the brunt of the illnesses,” he shrugged before taking another bite.

“Sick mechanics would explain a lot of our maintenance hold ups. But why would those groups be sicker than the rest of us?” I said, looking at Mani and Breanna in turn.

“Well, bad fuel could ...” Breanna began before being cut off.

A sergeant ran into the chow area. I didn’t recognize him, but he started talking frantically to some NCOs a few tables over. They all threw down their food and jumped up. Then the six of them took off on a run.

Interesting.

I nodded at Breanna and Mani. “That can’t be good,” I said, standing up.

My head swam as I got to my feet and my skull almost split open. I winced, screwing my eyes closed and pushing the pain down before taking a step.

Breanna gave me a look. I shook my head.

"Definitely not good..." Breanna replied, following me.

Mani stood up silently, chewing with his hand over his mouth again. I didn't wait for him to finish and instead started walking after the group of NCOs. Officers never run unless they're in PT or combat. I didn't count this as either one, so I kept it to a walk.

A fast walk.

I left the overhang of the mess tent, the sun instantly warming up my shoulders and the top of my hat and made a left onto the main strip through base. Soldiers, sailors, airmen, guardians, and marines seemed to be streaming from every nook and cranny onto the main road. All were headed in the same direction. Definitely not a good sign.

A low rumble rose over the crowd, like thunder in the distance. I could see black smoke start to billow up from somewhere over the trees.

I picked up the pace, gravel crunching under my boots as Breanna and Mani fell in on my left and right.

It didn't take long to figure out where everyone was going. I turned a corner and could see some kind of superstructure standing out over the trees. It looked like the top of a ship. All gray metal and antennas rising into the air. As big as a building. Smoke was billowing from somewhere behind it. There was a sizeable crowd gathered, several hundred people all talking over each other filled up the space between me and whatever was up on the beach.

"That's a ship," Mani said vacantly.

"Good thing you're here, we never would've figured that out," Breanna said, wiping sweat off her upper lip with her sleeve.

"No, like a real ship. That's a surface combatant," Mani said, eyes wide.

I couldn't blame him. There was a ship on the beach. Not a boat. But a ship. A big one. The kind that is supposed to be sinking Chinese destroyers and shooting down missiles somewhere out in the ocean.

I spotted a Navy master chief walking against the grain toward me through the crowd. I cut him off.

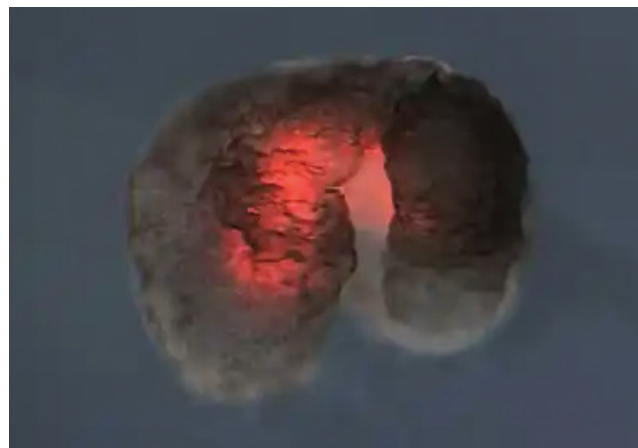
"Excuse me master chief, what's going on?" I asked quickly. He was definitely in a hurry, and I wasn't about to hold up a master chief for too long.

"That's the USS *Thad Cochran*; it was dead in the water and was getting towed back when both tugs lost propulsion. The whole lot drifted onto the beach," he said in a gruff voice. Sweat was pouring down his face.

"How'd that happen?" I asked, gawking at the superstructure above the trees.

"I'm not a mechanic and you're not either, sir," he said with a nod, moving past me.

"This is bad," Breanna said.



Xenobots are living nanomachines.

"Good thing you're here, ma'am. We..." Mani started but Breanna's look stopped him in his tracks.

"Ok, let's get it together," I said to our small group.

"We're no good here, let's stop rubber necking and get back to work," I nodded, turning away from the crowd.

"You're right, I'm headed to the Brigade TOC; they should have an update," Breanna confirmed, quickly walking back up the road.

I fell in behind her, trying to keep up. My battalion CP was in the same direction. Our whole division took up that area of the island.

We were salmon swimming upstream against the crowd of people pushing toward the beach. I guess it wasn't just the Army that was having maintenance issues. Maybe their mechanics were sick too? I had no clue, but a beached destroyer could not be a good sign.

## There Won't Be a D-Day

Well, that was gross. Not the puking. That's no big deal. Easy in easy out. Puking never really bothered me. But, puking into the blue water inside a port-a-john? Gross. I wiped my mouth with some toilet paper and

threw it into the blue water with the rest of my last MRE. Best not to think about it too much.

The port-a-john door slammed behind me as I walked back into the sunlight, sweat pouring from my face. I felt terrible and probably looked worse. It didn't matter. Today was the day that we lost the war. Our division, that is. I don't know about the rest of the coalition and that's the problem. We lost power about twenty-four hours ago, and our comms and networks went down shortly after that. We've been isolated from the rest of the world ever since. I walked over to a pile of tough boxes and took a seat. That was easily the worst CUB I've ever been through. The news was still weighing on my mind. It felt like I was just thrown down a flight of stairs. Twice.

I pulled out my notepad. Maybe writing to Kelly would help me unpack this.

I've been trying to write this letter for the last twenty-four hours. I just couldn't figure out how to start it.

I put my pen to the page, the sweat from my hand dampening the paper.

*Dear Kelly, we lost the war to China and the world will never be the same.*

I stared at the words for a second before ripping off the page and shoving it in my pocket with the other crumpled up letters. No point in self-loathing. We were still breathing, and I wasn't going to give up yet and neither was the rest of the coalition. Refusing to give up and believing we could win were two separate things, though.

I sat there, staring at my lap. A large bead of sweat dripped off my nose and splashed off the front of my pants. A pair of boots planted themselves in front of me and I lifted my eyes up to see Breanna standing there.

"Gods, are you crying?" she asked incredulously, hands crossed over her chest.

"Seriously?" I asked, trying my best to crack a grin.

"Yeah, seriously. You look terrible. Your eyes are totally bloodshot," Breanna shot back.

"Nah, just got done with a Class 1 download and not from the right end, either," I said. I smiled for real this time.

Breanna's nose wrinkled and she took a step back.

"Nasty. Seems like half the brigade is sick. You heading to the aid station? Or are you going to try and infect the rest of us?" she asked. "I'd bet it's more than half. Nah, I'm fine. Just a bad MRE or something," I said with a wave of my hand.

"You sure? What did your nanotest say?" Breanna said, raising her eyebrows underneath the brim of her hat.

"Don't know, I haven't gotten one yet," I said, standing up.

I didn't want to get one.

Breanna took another step back.

"Are you kidding me? How could you not get tested?" she asked. She unfolded her arms and planted her hands on her hips, feet apart.

"I've been busy, and I doubt they can test me without any power anyway," I said with a shrug.

"You should get one anyway; let's head over there. It's on the way back to our battalions," she said, waving at me to follow her as she walked away.

"Does it matter? You heard the update," I said, falling in next to her. She took an additional step to her right, putting more distance between us. I didn't blame her. I probably didn't smell great.

"Of course I heard it, but what else can we do? I'm not going to sit here waiting for a missile to blow my ass off this island. Are you?" she argued.

"No. But what can we do? How did no one figure out what was happening earlier than at the end?" I asked.

"Well, we knew all along that the CCP was planning on using biological nanoweapons," Breanna shrugged.

"Yeah, but we thought they'd be using them on us. I'd never even heard of oil eating bacteria let alone nanobots that could eat fuel," I said.

Mani was walking up the road from our battalion area. He saluted, we saluted back.

"Morning, sir. Ma'am," he said, dropping his salute.

"What now?" I asked. I had no patience left. Or energy to pretend that I did.

"Xenobots, sir," he said.

"What are you talking about?" I replied, more harshly than I wanted.

Mani pressed on, "You said nanobots. They're actually called xenobots, sir. Living nanobots named off a proof-of-concept experiment done years ago."

Breanna and I stopped walking. She turned toward Mani.

"Ok, I'll bite. We got the update Mani. What are we actually dealing with?" she asked.

"Yes, ma'am. Apparently the Chinese bioengineered xenobots based off several strains of marine bacteria that can feed on hydrocarbons. These xenobots literally eat fuel. Mogas, diesel, JP8, oil, you name it. They eat the complex hydrocarbons and release



methane,” Mani said. His eyes were going wide, his face was animated, and he was excitedly talking with his hands.

“So, what does that do to our class 3b supplies?” Breanna asked.

“Oh, ma’am. It destroys them. Our fuel gets turned into a soup of living and dead xenobots. The buildup of methane gas pressure destroys fuel lines, ruptures tanks, and destroys engines. Not to mention

“You don’t,” Breanna said.

“What do you mean?” I shot back.

“If what Mani just said is right. That means that by the time we hit total system failure, which was probably yesterday, then the majority of our fuel systems are infected. All the maintenance issues, all the engine failures, all the blown timelines. That was the nanoweapon attack all along. We’ve had months of these problems. I can’t think of a way to fix an engine whose entire fuel



Apparently the Chinese bioengineered xenobots based off several strains of marine bacteria that can feed on hydrocarbons. These xenobots literally eat fuel.



the methane is flammable, or explosive in the right circumstances,” Mani replied. He was speaking more quickly with every word.

My head was still swimming from everything that had happened this morning. I was thinking with a brain made of cotton balls.

“Ok, fuel poison. Got it. But how did they get enough of this stuff into every fuel tank, every ship, every aircraft, every everything in the entire theater to shut it all down? They would have needed to walk around with millions of gallons of this stuff putting it into everything to have an effect like that. I didn’t see any Chinese spies putting ‘xenobots’ into our generators,” I said, trying to wrap my head around it.

“That’s just it, sir. They didn’t need to. All they had to do was get a few xenobots into a few key fuel stockpiles and bam. The xenobots start eating fuel and reproducing. Then those new xenobots eat more fuel and reproduce more. Every time fuel is downloaded from a storage tank to a pipeline to a tanker or a 978 to a gas tank then the xenobots go with it. They only needed to infect the system once and then the rest of the system infects itself,” Mani said.

Breanna took off her cover and wiped the sweat off her forehead with her sleeve. She put the cover back on.

“Like a bacterial infection,” Breanna said.

“Exactly, ma’am. Like sepsis. Once it’s in your blood, your blood spreads it to everywhere else in your body,” he replied.

“Ok, got it. It’s bad. So, how do we fix it?” I asked.

system is contaminated short of replacing the whole thing,” she replied.

“Ok, so we start replacing fuel tanks,” I said. That wouldn’t be easy, but it’s not impossible.

“No, sir. We can’t,” Mani said, shaking his head.

“Why?” I snapped. My head was pounding.

“Because it isn’t just some fuel tanks. It’s entire engines. Fuel pipelines. Seagoing tankers, fuel depots in the states, aircraft. Gas cans. Anything that touched infected fuel is likely infected and we don’t have a way to get the xenobots out. They eat fuel, you can’t exactly poison them without also ruining whatever they’re in. We can’t fix it. Or at least not before China finishes their seizure of Taiwan. Everything but our subs and carriers run on petroleum. They can’t fight by themselves. Especially not when all our aircraft are grounded,” Mani replied, wringing his hands.

“Won’t this ruin the Chinese fuel supply too?” I asked.

“No, we don’t share our fuel supplies. The USINDOPACOM fuel supply was self-contained and theater specific. We were the only ones using it. Well, us and our allies. They need to quarantine all our equipment ASAP so the rest of our forces don’t get infected too. The rest of the country or the world for that matter. The U.S. economy is going to take a major hit on this,” she replied, looking at the ground. The gravity of her voice was clear.

“Not just the economy, what if this gets out to the rest of the world? This could bring down whole

countries,” I said. I took off my hat and could feel the sweat trickle down my face. I pinched the bridge of my nose trying to relieve some of the pressure in my head.

“Not if they get their hydrocarbons from Russia, Iran, Venezuela, or China,” Ravi replied with a shrug.

That thought hung in the air like a weighted blanket. “But what about all the other illnesses? Are we under multiple different nanoweapon attacks?” I asked, grasping for further implications.

“No, sir. You just have a stomach bug,” Mani replied. ■

---

## Glossary

**AOR**—area of responsibility

**BSB**—brigade support battalion

**BUB**—battle update brief

**CBRN**—chemical, biological, radiological, and nuclear

**CCP**—Chinese Communist Party

**Class 3b**—bulk fuel

**Class VII**—major end items (e.g., tanks, radios)

**Class I**—rations

**Class IX**—repair parts

**CP**—command post

**CPAP**—continuous positive airway pressure

**CUB**—command update brief

**EMR**—electromagnetic radiation

**FOB**—forward operating base

**G-2**—assistant chief of staff, intelligence

**G-4**—assistant chief of staff, logistics

**JOC**—joint operations center

**JRSOI**—joint reception, staging, onward movement, and integration

**MOGAS**—motor gasoline

**MRE**—meal, ready to eat

**NBI**—nonbattle injury

**PC**—patrol cap

**PLA**—People’s Liberation Army

**SA**—situational awareness

**S-2**—battalion or brigade intelligence staff officer

**SIGACT**—significant activity

**TOC**—tactical operations center

**TSC**—theater sustainment command

**USINDOPACOM**—U.S. Indo-Pacific Command

**WMD**—weapons of mass destruction

---

## Photo Attributions

*The photos featured in this FWWP article contain fictional cutlines. The original cutlines can be found below in order of appearance.*

**Page 120:** Photo by Spc. Khalil Jenkins, U.S. Army, <https://www.dvidshub.net/image/6299458/82nd-airborne-division-conducts-vehicle-pmcs-class>

**Page 122:** Nanobots going through the bloodstream and repairing some blood cells. (Digital illustration by Andrea Danti)

**Page 125:** Photo by Spc. Jarod Dye, 121st Public Affairs Detachment, <https://www.dvidshub.net/image/3485718/488th-military-police-company-takes-training-seriously>

**Page 128:** Naval crews work to free the USS *Monssen* after it washed ashore in Holgate during the March Storm of 1962. The boat finally was freed six weeks after the storm. (Photo courtesy of the U.S. Navy)

**Page 129:** Xenobot (Photo courtesy of Wikimedia Commons)