



(Illustration provided by the author)

Seventeenth Mechanical Horse

Maj. Phil Reiman, U.S. Army

South China Sea, 2033

“Alright let’s get started,” a voice broke into the headset of Capt. Guy Hubin, U.S. Armed Forces, Land Component (USAFLC), and leader of the 25th Division’s Seventeenth Cavalry Squadron, a “mech horse” recon element currently assigned to Task Force Orange, United Nations Malaysian Assistance Command.

He sat down and sipped a coffee-flavored electrolyte stim and drew a long, calming breath. Any time the USAFLC was about to try and jam a bunch of info into his head, he needed to get his head ready.

“Welcome to Forward Operating Base Dragonville, on the Island of Gold, a-k-a, the mysterious island of Sumatra. I know you’re tired. Getting here is a pain; most of you have never heard of the metropolis of Medan before this, but the point of this briefing is to

welcome you and of course, or-rien-tate you in time and space and information.” The voice, and the exaggerated military “orientate” was surprisingly familiar.

“I am Maj. Teegan, one of the battle captains in this area of operations, and as B-C, I’m responsible for bringing all the new personnel up to speed on the common operating picture. In this brief, I’m going to explain what’s going on and hopefully separate fact and fiction. It’s current as of ...,” there was a pause as an automated sync inserted a new date, “but I’m going to enlighten you on what we’re doing here and why.”

Oh, Teegan, smiled Hubin. He knew Maj. Teegin as a younger, higher-ranking grad of the U.S. Armed Forces (USAF) Battle School. Hubin had been selected, attended, and failed out. Not a bad thing, career-wise. Battle school was a chance to “fail fast,” as they say in the USAF. You could try stuff out consequence-free,



(Map courtesy of Wikimedia Commons)

and Hubin had done just that. He didn't finish in the top half of the Battle School, so he went back to work. The others, the top half, were put in charge of the entire USAF. They got promoted. If they were good, they'd spend most of their careers as generals.

But, in exchange for the right to manage conflict, Battle School grads lost the right to play. Battle School grads became professional coaches, zooming down the sidelines, looking at the big picture and keeping the team focused. Aside from being the starting point for blame when things went wrong, Battle School grads were unrecognized. The honor of leading meant the USAF wouldn't award them any honor above a nicely worded letter. Why should they? thought Hubin. Sitting behind a row of screens was not a Homeric demonstration of courage. Everybody else works.

"First, the enemy's intention is to misinform you." Hubin closed his eyes. He let Teegan's voice fill the dark. "I'm here to set things straight. You are professionals. Educated in the arts of war. One war is over, but its offspring struggle on well afterwards. Things have changed tactically and politically, and my job is to help cut the informational fog. To do that, I am going to jump back almost twelve years into the ancient past."

Just listen, he thought, as lights fell on Hubin's closed lids. There's just so much a person can absorb. He'd had the cultural briefs. He was up to speed on the latest tactics and techniques coming out of this theater. He'd run exercises on his own and with his unit. Can't ever have enough, can we? Is there a point where new info pushed out the old stuff? Overflow?

"In about 2029," continued Teegan, "in a forgotten recess of the central bureaucracy, a metric or a dial or a gauge reached a point where someone decided that the Chinese military-industrial complex had built such sufficient combat power to cross 120 miles of the Taiwan Strait and win a short war. That bureaucrat told his boss, who told her boss, and so on up to the central committee."

"However, that Army, the People's Liberation

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Army Ground Force, or P-L-A-G-F, was like the American Army in 2021: focused on maneuver warfare in large-scale military operations. Iron Age stuff ...” Hubin’s mind drifted.

Memories of tanks; battleships flowed in. Huge pieces of inert, targetable iron. Easy to find and therefore, easy to kill. Find, fight, or fool was USAF doctrine, and he enjoyed fighting simulated tanks. He’d done it in every sort of exercise the USAF could create. From whole-of-service, live-fire exercises to virtual snap drills, finding and killing tanks was - satisfying. No matter how cluttered the data set, he could find tanks. They died properly.

Teegan’s voice pulled him back. “I’ll tell you that the mass of equipment could not go unnoticed. By late 2029, everyone was talking about it. Us Yankees, well, we’d been running short of cash since the roaring 2020s and in a stroke of common sense, or maybe genius, re-organized the military to save money. Out of that crisis came our beloved U-S-A-F.”

Hubin vaguely remembered a world with separate services. Strong traces of those cultures remained, but the change to a single force, the U.S. Armed Forces, was insanely lean compared to its legacy institutions. Small countries with absolutely no resources repeatedly demonstrated surprising world beating agility with a singular force. In the USAF, domains still called themselves “the Army,” but they shared everything important — personnel, pay and even education up to a point. So, there was plenty of tradition around. It took a U.S. budget crisis to force it, but unification happened. Accelerated by the adoption of AI and unmanned systems in 2025, the new USAF unleashed a chain of powerful synergies.

Outside of chance to eliminate needless administrative duplication of personnel, supply, and procurement, the Armed Forces Unified Defense Act of 2024 provided a singular opportunity to abandon all the legacy information systems from the various services. They were dinosaurs evolved in a world where information security was keeping someone from looking over your shoulder. In data age, these systems had to go. Such change couldn’t be done in little steps. Designed from scratch, the change denied America’s enemies that little edge — insecure systems, they had cherished for so long. After 2025, China could only fight what its sensors could see.

“In the intellectually free, commercially adaptive West,” Teegan preached, “we moved away from large-scale maneuver warfare. China stuck on steel and mass. That was Iron Age stuff. Of course, they didn’t ignore what was happening, but it was constrained by what it could do with a conscripted, mass army.” Intellectually free? smirked Hubin. Well, maybe. At least Hubin would agree that the commercial and educational engines outside of China moved faster than whatever the Chinese government would accept.

And, thought Hubin, mass has a quality of its own. Don’t knock on mass. It’s not as good as surprise, but it goes a long way. He drifted for a moment to the Lanchester’s Laws he’d studied in basic. Quick attrition IS the mission; so shoot first EFFECTIVELY. So many bumper stickers standing in for complex ideas, Hubin thought. Maybe I am reaching overflow ...

He refocused on Teegan. “The Three Warfares doctrine is still around. Chinese doctrine changes once a century, so that means that prior to any operation, their ink machine will blast out oceans of psychological and disinformation operations. But that stuff ain’t static. It goes places. Unintended places.

“The Chinese know that an sea of dubious information coupled with a lack of informational education backed by some manufactured verisimilitude—uh, fakes and artificial support—would lead to something. They would exploit that. Maybe the good people of Taiwan would just quit. Disinformation operations don’t require precision.”

The ink machine, as Teegan called it, set up a glorious story for those at home and abroad: false news feeds with oppression, resistance, and of course, surprising victories over enormous obstacles. Throw enough stuff, thought Hubin. Attempting to force textbooks and universities to include tailor-made histories of the “proud people of the peninsula” was predictable.

“.. and predicted.” Teegan’s voice came back to him. “The USAF information operations teams were culturally and tactically ready. I say culturally, because although we take it for granted now, the nation’s digital literacy program only started in 2023. The refocus of the USAF on AI and predictive science meant that the Chinese messaging was anticipated, countered, and dead on arrival. Maybe worse though, is when the wrong people believe it.” Teegan’s image paused. Then flickered in a reflexive pose.



(Photo courtesy of thatsmags.com)

“The only thing worse than the enemy is allies, right? The propaganda flashed down the Malay Peninsula to a rebel group known as Malayan National Liberation Army, the M-N-L-A. Maybe it was PLA agents all along, but it doesn’t matter. The MNLA took these messages as true. They presumed had China’s backing, so started blowing stuff up and it set up a breakaway state. A Peoples’ Republic of Malay, they declared. Now known as the P-R-M.

“Normally, this would be the end of the story as the local government rolled in to crush this fringe group, but on February 10, 2031, the MNLA declared itself—and demanded the world recognize it as a sovereign state. And two days later on February 13, the Chinese surprised the world and offered recognition. Now the Chinese had a new friend with a beach front house on the Strait of Malacca and the South China Sea ... that friend owed them a favor.”

Hubin’s mind wandered through the last eighteen months. A new country, the Chinese mission, and a flotilla of tiny fishing boats of the PRM’s makeshift navy trying to “force recognition from the world” by closing the Strait of Malacca. The ramshackle blockade only brought chaos except, of course, to the Chinese. China was on the side of justice, after all, Hubin remembered the headlines.

Teegan’s image rolled on. “Chinese information operations kicked into high gear. The Americans do this sort of thing all the time, right? Remember Teddy Roosevelt and Panama? Oh, just a small force to generate and sustain host nation security forces in support of a legitimate authority? An oppressed ethnicity struggling for freedom? It’s a great story and info ops are cheap. Worth a shot, right?”

In his visor, Teegan’s image stopped again, flickering as some element in the flow lagged, then began again, “We fight out of fear, interest, and honor. With the creation of the People’s Republic of Malay, China’s newest ‘little brother’ bet China’s carefully curated honor on the PRM’s continued existence. With the world threatening to use force to open the Strait, the People’s Liberation Army Ground Force (PLAGF) diverted a chunk of its Taiwan force to Malay.

“It’s my assessment,” Teegan continued, “that in 2031, over-the-horizon sustainment was beyond the capabilities of the PLA. They hadn’t practiced. Some argue it is cultural. I don’t know, but their planning, always intricate and inflexible, made plans brittle. They couldn’t adapt to a little self-imposed complexity.”

“Do it every day,” Hubin spoke to himself.

“Precisely!” Teegan’s image responded. Hubin started in his chair. He had thought this brief was

input-response enabled, but he should have known his e-guard, the multifunctional sensor and mouth guard, would betray him. Rookie mistake.

“Sorry, please continue.”

The image of Teegan smiled, “Others argue the PLA’s culture, bad news isn’t just bad, but shameful, led the PLA to avoid talking about problems. Perhaps lying to themselves drove inaccurate estimates. It’s not hard to believe that army of three million people is not papered over in more than a few places. Whatever you believe, that expeditionary force landed in February. As all good armies do, it immediately began running out of stuff.”

“Ah, logistics,” muttered Hubin.

“Great point,” responded Teegan’s image. “The line of supply were over the sea. The UN resolutions permitted a the use of force to reopen the strait and a blockade of the PRM seemed low risk. Low risk it may have been in 1850 or 1950, but not today. There was inevitable confusion. Even in the so-called digital ocean—where you can see everyone, the *USS Vigilant* ...”

Hubin remembered the event and he had watched in almost realtime. An accident at sea; a Chinese tanker and an Indian intelligence ship, then a desperate rescue mission and a miscommunication over boarding this intelligence asset. Then, the Indian Navy’s attempt to prevent seizure of their crippled ship by sinking it. But the torpedo was old. Its on-board AI didn’t have the latest target data or friend ID and went pit bull, attacking the nearest large vessel, striking a Chinese cruiser. Now two ships were sinking and twenty minutes after the collision, the world was at war.

War at sea in the digital ocean meant that no one had time to contemplate. It was a cards-on-the-table affair. You started knowing where the other guy’s ships were. Hubin had learned in USAF Battle School that war at sea is a game of attrition. The key was to shoot first since every loss to the enemy was multiplied over time. There was no scouting, just targeting. The fleet that shot first won. A even fight of ten against ten could quickly become seven against one, if you could land your punches first one side started landing punches first. This meant no one could afford restraint.

When that Indian torpedo detonated, the everyone was forced to fight from precisely where they stood. The Chinese AI had already selected a target: the hub of the USAFN’s sea-based network. That

decision was tactically sound, but it would impact the course of nations.

A few moments later, ground-based and sea-launched antiship missiles streaked toward one of a new class of large, networked “constellation” ships, the *USS Vigilant*. Hailed as the new battleship, the *Vigilant* commanded a broad squadron of unmanned vehicles that moved on, above, and below the surface of the sea and directed firepower across thousands of kilometers of ocean. From distant arsenal ships to unmanned undersea hunter-killer teams, the *Vigilant* was a fearsome and adaptable foe.

But when the attack came, the *Vigilant* was maintaining a loose blockade off the east coast of the Riau Islands. That blockade formation was different from what it might have held if it expected attack, but it probably would not have changed its fate. In the four short minutes from the first launch warning, the *Vigilant* was buried under missile fire from every direction. It did everything it was designed to do: launched decoys, activated jammers, powered up energy weapons, and fired counter battery barrages. The first shot has the advantage at sea, thought Hubin, and if a magazine is deep, a volume of fire guarantees a kill. Thirty minutes later, the *Vigilant* went to the bottom.

That first blow was a self-inflicted wound for the PLA. The world is wired, and we watched the attack in real time. Despite attempts to spin the sinking of the *Vigilant* as a warning, the allies were in no mood to listen. Every nation that used the Strait took the safeties off their weapons. I am sure, thought Hubin, that the PLA Navy’s (PLAN) part of the Pacific must have seemed awfully small.

Over the next couple of days, the allies essentially eliminated the Chinese navy. Hunted from every direction, every Chinese ship was a target. The PLAN could not protect itself much less provide for China’s interests on distant shores. The Malay Peninsula was too far to support now, and the clock was running for the PLAGF. No fewer than twenty-five thousand soldiers—probably the finest units in the ground force—were effectively stranded.

The PLAGF did what any reasonable general might do: rely on air resupply and look to bargain its way out with a quick demonstration of force. There was really only one thing option, attack south down

the Malay Peninsula, and threaten Singapore as an enabler of the allied effort. The PLAGF would have some leverage then.

"Are you awake, Captain?" intruded a voice.

"Sorry, drifted off." Hubin grinned. He imagined for a second the algorithm that read his vitals identifying his pre-sleep signs and then alerting the AI version of Teegan. My e-guard is ratting me out. I'll bet it activates some scold function. Someone's job was to program that, he thought. Could he get in trouble for sleeping through an AI? It's probably linked to some discipline database ...

"I should be sorry, not you," Teegan, the real Teegan, spoke up. "The AI can be boring. I had a conflict and I needed to switch to the AI for a bit. Clearly, my avatar is not as compelling ..."

"No sir, just thinking about the *Vigilant*."

"Yeah. Stuff happens fast," continued Teegan.

"Let's see. Okay, the PLAGF soldiers were some of the best in the Chinese army and two days after the *Vigilant* sank, it was apparent that the PLAGF was moving south. And looking for a fight. That brought the air war into focus."

In the sky, thought Hubin, there aren't any good hiding places. Airplanes are fragile. Delicate bound to bases and support systems. Hubin had followed the reports and the USAF Air Component (USAFAC) didn't charge into China. All it had to do was ensure the zone of advantage, the place where the USAFAC could bring fires faster than the enemy, extended over that tiny strip of the peninsula. No reason to risk pricey equipment on deep attacks. For once, the bad guys had to come to them. A cheap network of sensors, vertical launch systems, and

lingering UAVs armed with air-to-air missiles made the peninsula deadly for the PLA Army Air Forces (PLAAAF). It made meaningful resupply impossible.

Teegan gestured to a map, "It was clear where the PLAGF task force was headed. The predictive science and good old common sense gave the same answer for once, a breakout South. As the PLAGF rumbled south with the PLA rocket force sending supporting fires from thousands of kilometers away deep in China.

"The PLAGF was a massive iron army. But that time had passed. The PLAGF's data fabric was less than ideal and targets are much smaller, faster and hide better. Plus, the ground is noisy."

Teegan leaned in close, "I think, as

professionals, we can agree that predictive AI and autonomous systems had moved the tactical calculus to the defensive.

"Yes, sir," agreed Hubin. "The find function is harder in a land environment. But massed units show up. Tanks show up. Log bases show up."

"And they did," nodded Teegan. "Even with the hard-coded rules of engagement demanding three separate sensor IDs, the allied shoot-loop was under ten seconds. Well, that's according to post-engagement data. Even if that stat is wrong, the shoot loop was fast enough to pound everything that moved."

AI Teegan looked somber for a moment, "For about five days, the most dangerous place to be in the world was in a Chinese tank. Then there were no more tanks. Or trucks, or fuel, or comms." Hubin's jaw tightened unconsciously on his e-guard. What must it have been like to slowly realize you were part of a division-level suicide mission?

"PLAGF losses were heavy, but they were ... remote in a sense. Even in a controlled media ecosystem, the home



(Photo courtesy of nationalinterest.org)



front needed answers for planes that never came home. Or ships never returned. Or soldiers just stopped calling. Rumors fill that gap at first, with talk of defeats and confusion. Our cultural specialists knew that the central committee could not bring them back without admitting some sort of dishonor. That would be too shameful, too much credibility lost. So, then big reveal: The Central Committee revealed traitors in the task force." Teegan eyed Hubin closely, "They couldn't go home."

"A few executions among the leadership and the whole thing becomes an unfortunate misunderstanding. China has declared a unilateral cease-fire. The open-source stuff makes it clear; they'll sign anything to end this conflict. Agreements can be renegotiated, right? The cease-fire's holding. The enemy never intended to fight a long war, and now are ready to move on.

Of course, it's insane to us. We see it as cutting your arm off just to avoid looking like your hand was in the cookie jar. But not to them" Teegan paused, reflecting and then started again, "When word got of their alleged dishonor reached the Malay Task Force, several divisions of armed personnel decided to ... displace.

"That's why you're here. These people can't go home. They are armed. Asia has seen anything like this since the Mongols. This vital corner of the world is watching piracy, extortion, and smuggling explode out of control.

The Chinese Luyang III-class guided missile destroyer *Jinan* and other ships in task force. (Photo by MC2 Edward Gutierrez III, U.S. Navy)

These ex-P-L-A-G-F soldiers turned on the PRM and they've crossed the Strait into Sumatra." Teegan paused again, "That's why I wanted the Seventeenth Mechanical here."

Hubin sat quietly, This brief matched the news he'd heard. Rampant lawlessness of the worst kind, lots of men with guns.

"We're designed to impose temporal and physical complexity on the enemy through operations in the zone of disadvantage through deception, disruption, and destruction using networked autonomous weaponry ... " Hubin recited.

"Stop. Autonomous units are more flexible than the schoolhouse doctrine. You know it. Your ratings mean you've shown it." Teegan switched gears with a grin, "you didn't think this whole brief was canned, did you?"

"Uh, yeah." Hubin started, "We're not a big unit. Thirty-six units and seven shepherds. Wouldn't expect a personal welcome."

"Your element is mechanical! The new 'cavalry'! I wouldn't miss it." Teegan seemed genuinely excited. "Uh, are we still going with that label? Big tradition there."

"Yes, sir," said Hubin. "Autonomous units swap out models a lot. It's prototype warfare. Nothing stays the same. I don't know that the next model will look quite so much like horses as they do now and I've heard that the land component may rename us wolf packs or autonomous tactical sensor groups, or something. I like the name. Crossed sabers. It's a good tradition and it builds esprit," said Hubin. "The team has started wearing cowboy hats, unofficially."

"Great! It's important. I like the spirit that comes with the cavalry label. A set of daring heroes on horseback, just when we need them. They don't put that stuff in the manual."

"We don't ride them very often ...", Hubin began.

Teegan cut him off with a wave and leaned in. "I'll bottom line it for you. I have an ego. I like to win. And I don't want to work with just anyone. The Seventeenth has a reliably tested combat efficiency index of 84.7. Most units fumble around south of fifty-five, and even if that score is just in simulations, a CEI like that makes your team unique. I think your mechanical horses can help me win."

What sort of insider assessments does Teegan see? Hubin wondered. Those evals are never the whole story.

Teegan continued, "I know your capabilities. The Seventeenth is a flexible land-component tactical group built around thirty-six mobile autonomous engines, current model is the M-21B, right? All-terrain, with local tactical cloud, and a mission battery of about ten days. An open payload bay for all kinds of stuff and a speed of thirty clicks an hour ..."

"They can't run that fast all the time," said Hubin, suddenly, defensive about his machines. They had names. Nixie, Arion, Nightmare; all horses. It was easy to anthropomorphize stuff that moved. He'd named his barracks vac-bot and here, the bots were big and had four legs. Even if those legs were aluminum alloy, they earned some respect.

"Listen," Teegan persisted, "Your Twenty-Ones are perfect. Fast and strong. All-terrain. Carry anything from mines to nodes for the cloud. And fearless."

Or they don't have sense enough to recognize danger, thought Hubin. They're machines, so sure, they'd

stand as still as Prussian dragoons under fire. Then, at a word, they'd explode in mad, relentless pursuit of a target. The something that wanted to name each Twenty-One ground against their inscrutable, headless bulk. It wasn't just him, they had outsized impact on everyone. A robot the size of a horse running around you was unnerving.

"Maybe not fearless, but can't beat the Seventeenth



(Photo courtesy of Defense Advanced Research Projects Agency, <https://www.darpa.mil>)

for beyond-the-contested-zone recon, sir," said Hubin. "Have you seen Twenty-Ones stalk? They kind of crouch and slowly approach a point, and drop behind some microterrain. Not too stealthy, but a big machine creeping around an observation post will freak out the best soldiers. Aerial drones snoop, but they don't induce terror.

"Stop, we're not here to terrorize anyone," said Teegan. "This mission, in a word is, sales." The major let that sink in.

"Sir?" said Hubin.

"This does not fit into one of our neatly self-imposed buckets. But the enemy didn't surrender. He cut off the offending arm as it were. The arm is still fighting."

"And that sounds like work for line units with lots of sensors and long range fires ..." Hubin suggested.

"Everyone's legal status is complicated. Us, them, everyone. The ROE is constantly changing, but the real constraint is terrain. This is rugged country. Overgrown, overcast overbuilt. Where it's not hilly, it's urban."

Mechanical cavalry can do that, thought Hubin. Small supply footprint and fast. In urban ops, where autonomous units were extraordinarily effective. They didn't make scary noises, but Twenty-Ones whirred

and clanked. It triggered something that got people moving. Strap on a sting-ball kit or a tazer push bar and they were perfect for crowd control and clearing buildings..

"The risk for more conventional units would be high ...," said Teegan.

"And we're machines," finished Hubin. He knew from the day the USAF first suggested using autonomous units to shape the battlefield, he and his Seventeenth Mechanical Cavalry were implicitly expendable.

Designed to fight on the new battlefield, USAF doctrine used heavier, swarming autonomous units—loosely called "cavalry"—to move out of the zone of advantage, where the good guys had overwhelming fires; through the contested zone, where both sides had firepower equality; and into a zone of disadvantage, where friendly fires would be sporadic at best. In that far zone, the mechanical cavalry was not the armored spearhead of the past. It was a networked scouting and raiding element, gathering target data as part of long-duration raids. Like the cavalry armies of the American Civil War, these units drew the enemy's attention away from its main effort. An autonomous swarm in your rear area could not be ignored.

The tradeoff was that the life expectancy of his herd was short. Their continued existence was a function of their speed and small signatures. The Twenty-Ones made that trade pay dividends—for a while. Eventually, the bad guys would hunt them all down.

The Twenty-One series was amazing, but it was not entirely self-sufficient. Things would still go wrong, and someone had to mind them. Capt. Hubin had volunteered to lead the tiny, seven-member team of 'shepherds' that coordinated the thirty-six M-21b units

that composed the Seventeenth Mechanical Cavalry. Dangerous and lonely work, his small team gave him a sense of purpose he never had in heavier line units.

"Hubin, here's the big blue arrow—we've set up repatriation and reintegration centers, but it seems a lot of these guys won't go willingly," frowned Teegan. "It's un-

derstandable. They see themselves as soldiers, warriors. They feel betrayed and dishonored. But they are going to go to these camps. The Seventeenth is to find their camps and move these former soldiers to these centers," said Teegan.

"Sir, this sounds like ..."

"The old west? Yeah, it's not polite, but it definitely echoes those campaigns. These guys don't have a lot long-range fires, so you should be able to get close in most

actions. I'm talking 200 meters. I'm slicing medical and construction elements to support you. Use them as you see fit."

"Construction?" said Hubin.

"You're going out there to help them. They may not want to be helped but help them you will. The clock is running. The Seventeenth will have a heavy-lift aerial insertion southwest of Medan and then will deploy as the latest data directs."

"Yes, Sir" Hubin's mind raced.

"My intent is for you to make contact and then, honestly, make friends. You're going to offer them a new life. Houses, jobs. New identities; I don't care. If that doesn't work ... the ROE authorizes the use of force. You got it?"

"Yes, sir." Hubin was focused on the idea of making friends.

"Last thing, I got a data scientist showing me patterns, I have machine learning making predictions, and I got AI helping me plan, but this is—forceable



(Composite graphic by Chris Gardner, Army University Press; original graphics courtesy of DARPA and sokuup.net)

repatriation—and it's about getting people to change. It will be difficult."

Teegan's tiny image in Hubin's visor stood up. "I expect friction. These guys are desperate and abandoned. Empathy is going to a real skill. Stay flexible. What's your call sign again?"

"Blue Horse. Sir, is that stuff true? Are we giving them new houses and jobs?" asked Hubin.

"Maybe. Everything is can be renegotiated, right? Keep your quilt tight. Dragonville out."

“Hubin had received a card-based AI with his ID tags, and the bot came loaded with an adaptive-learning onboard management system and loaded with routine information.”

Am I going to lie to those guys? thought Hubin. This might be ... challenging. I'll keep my quilt tight alright. Teegan had referenced the poncho-like multispectral camouflage drape that soldiers wore to hide their shape and signatures. Like any good blanket, it was versatile. Use of quilts had spread across the USAF and with it, so had the phrase. Originally, the phrase may have meant something like "keep your powder dry," but it had metastasized into a cliché that suggested hiding. Or keeping the mud off you. Good advice I guess, thought Hubin.

"Time is 0843," a new, softer voice offered. "You were off net for two hours and thirty-seven minutes." Ah, Simone, Hubin thought. She was his personal bot. Hubin had received a card-based AI with his ID tags, and the bot came loaded with an adaptive-learning onboard management system and loaded with routine information.

He named the bot Simone and it was his constant companion. Over countless exercises, Simone grew to know his preferences, his tendencies, and his weaknesses. Simone was everything from a counselor to a crutch. Beyond indispensable, Hubin's progress was a product and reflection of Simone's progress. The bot could conduct routine checks with other bots and made most of his staff work effortless. Better still, Simone's voice seemed uniquely, perpetually calm. Perhaps, Hubin thought, Simone was linked his bio subroutine that focused on the auditory impact of the bot's speech. Who knows. But, he thought, Simone always gave him the

sense that every order was inspired and correct. That was something.

"Simone, I'll need an all-hands when Staff Sgt. Beauphre says all the horses are ready."

"I'll issue a warning order, sir," Simone replied. He cinched his quilt and started to jog. A yellow, blinking square in his visor indicated at one nonfunctional Twenty-One unit nearby. He bit down again and transmitted, "Staff Sgt. Beauphre, what's going on with that horse?"

"Not fixed," came a growled answer.

"OK. Coming to you."

He found Beauphre, the lead roboticist, crouched next an M-21b with its hatches open and one leg bent at an odd angle. Looking for all the world like a statue of a headless horse made out of washing machine parts, the Twenty-One was big. Over two meters high and almost three meters long, this unit had locked up mid stride. Software, thought Hubin.

"What do you think?" asked Hubin.

"Battery cluster still bad. And now one of the boards is out. I think we fried it when we stowed them for movement yesterday. Maybe a bad ground wire. Maybe someone didn't follow the checklist. I don't know, but it won't reset. Hard and soft problem, and it ain't fixable here." Hardware and software, Hubin knew that Staff Sgt. Beauphre could diagnose a failure like no one else. She was talented with robots and if Beau said it was dead, it was dead.

"Alright. Simone, this one's out. Decrement the log and let Dragonville know we're already down one."

"Yes, sir," Simone's voice carried an air of approval. But Hubin was still thinking about how to explain the mission to his team. We're not selling anything sitting here. We'll learn it all out there. In the population ... "

An automated voice squawked in his ear, "HAWK, HAWK, HAWK!"

"Ice! Go Ice! Beau, hand-fire the counters ... " Hubin shouted but Beauphre was already reaching inside the horse. With a grunt, she pulled something and cylinders on the the Twenty-One blasted compressed

gas, desiccant as well as decoys, jammers, and seekers into the air. Like skyrocketers, they leapt off, some with jets of fire or clouds of glitter while others disappeared in a blur of rotors.

Now crouched under his sensor quilt, Hubin coughed back the dust and smoke. Even on the rear-most base? That's nice, thought Hubin. "Was that the whole set?"

"Yes sir, manual trigger sets the whole batch of countermeasures," coughed Beauphre.

"Right. We're burnt." Those ducks bought us time, but we have to move, Hubin thought as his training for ops in the disadvantaged zone triggered a need to move or hide his team. But Teegan's voice broke in, "Blue Horse Six, Dragonville. I have decoys ... six in the air."

Hubin bit down, "Roger, Dragonville. This is how you welcome guests, sir?"

"Fixed targets get all the love. Everyone for a thousand clicks has this place on their hit list. Everything is remote. Even me. Get the Seventeenth to the lift hub, and you can get out and get to work. It will be quieter out there." Teegan's voice sounded drawn suddenly, "Stuff's moving fast. Get going. Dragonville out."

Hubin calculated, we have, maybe, another ten minutes. Depends on whether that drone was part of a shoot loop or just an armed hobbyist. He bit down, "Blue Horse, this is Six. We're moving to local grid ... KL1545367. We'll load the horses on the lift and get out of here. Ping Simone for details. I'll shoot you the mission brief in a few minutes. Acknowledge on movement." Icons flared in his visor as quick "aay-firms" came back, and he began to move.

"Simone, I need to build message brief for the team."

"Yes, sir." A dot flashed in his visor and Hubin started, "Troopers, this one is different. Our day job of wrecking other people's plans is out. It's not a standard, long-duration recon. Our objective is to find the dislocated soldiers operating south of Medan—and here's the wrinkly bit—convince them to move to allied repatriation centers. We're going out to meet them and help them start new lives. Something. We're going out to make friends.

"We are ..." he paused, looking for the right words, "going to have to turn on our feelings. Being abandoned by

your government can't feel good. Called traitors; cut off from family. We're going to ask them to try to make a new life before this gets out of hand. So, we may have to take a few rounds. To build trust."

"Then we'll ask them to relocate. I imagine that a bunch won't want to go and we'll deal with that when it happens."

"But I agree with Task Force leadership. We are the best team for this mission. We've trained to be a force that shapes the battlefield and we're still doing that. Just differently."

He paused again to collect his thoughts. "Make no mistake, making friends is hard. It might take more courage to try and help these guys than it would to light them up." Among the simulations the USAF ran, the least engaging were local governance missions, or "mayor for a day" games as everyone called them. Governance training was required, and the USAF recognized that armies had engaged in some form of governance since the first human civilizations created armies. In truth, armies spent more time doing that than fighting other armies. Perhaps it was seen as too imperial, but most armies had let these arts fade. But the USAF saw local governance as a military skill. It made sense in that whether you were on the frontier or occupied territory, you had to govern after the conflict to win the peace.

"I'm going to take a page out of our local governance training here. We have to offer them 'an alternative to their current situation' just like the book says. We're building trust. We'll find them easy enough. Then we'll have to talk. I don't know what those guys must be thinking."

Simone interrupted, "Sir, Staff Sgt. Beauphre is reporting thirty-five of thirty-six horses are at the vertical lift point." With a bite on his e-guard, Hubin acknowledged.

"Simone, run a coherence check on my recorded message. If it passes, send it to the team." Hubin moved toward the collected icons in his visor. Someone once said you can have battles without cavalry, but they don't get results, Hubin reflected as he moved. Something like that. Today, his autonomous, headless robots were going to enable his team to do a good thing for people who needed it. Maybe the Blue Horse could help this battle have a good result. ■