



FROM THE SOIL TO THE STARS



A HALO WAYPOINT CHRONICLE

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HISTORIAN'S NOTE

Halo: From the Soil to the Stars *takes place over September 19-21, 2559—approximately three weeks before deployment to Reach for Operation: WOLFE.*

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DR. CATHERINE HALSEY, PERSONAL JOURNAL ENCRYPTION CODE: GAWAIN SUBJECT: MJOLNIR GEN3

For almost half a century, I have given everything I possibly can to my Spartans. The mind, body, and soul of myself and many others have been scraped away, bit by bit, in the pursuit of saving humanity—first from itself, then from the Covenant... and now, from the cascading fallout of innumerable intricate actions for which there are no end of consequences.

You are called upon once again to lead them over the threshold and into the darkness, to fight against impossible odds. And to win.

You've always been good at that, haven't you John?

To that end, I have something for you. Something you will need.

The Mjolnir exosuit is now complete.

Even though this technology will save humanity in the war to come, I must remind myself that liquid crystal cannot rise on its own. Titanium alloy cannot prevail in the face of extinction. Armor cannot hope.

It all means nothing, until *you* step inside.

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**KC-59, BXR MINING CORPORATION BASE CAMP
0600 HOURS // SEPTEMBER 19, 2559**

The day began like any other.

Henrietta Varadi, along with more than two-dozen of her fellow miners, rolled out of the modest bunks in their subterranean sleeping quarters.

After waking herself up with a brisk shower, Varadi dried herself off, pulled on her BXR fatigues, and headed for the canteen. Same breakfast as ever: two slightly overcooked sausages, beans, mushrooms, and a slice of bacon—not *too* crispy. An unsubtle wink at Jessica as she served up the food, a smile reserved just for her, and that became two slices of bacon—a daily ritual they had both grown familiar with in recent weeks.

Varadi wolfed down her breakfast and returned to her bunk, picking up the book from the attached shelf: a gently used copy of *Rendezvous with Ramen* by the noted chef and food critic Arturo Bustamante. There were a spare fifteen minutes before her shift started and she had arrived at a particularly engrossing anecdote about the three days that Bustamante had spent in Rio de Janeiro visiting a Sangheili-owned establishment. Reading about the alien food was interesting, but the meals and recipes were more of a gateway into the personal stories of these strange refugees who had been given a home on Earth itself.

Alas, the klaxon sounded in short order, forcing her to put the book down a few pages short of her normal quota.

Varadi suited up into her OSTEO gear and met with her team by the imposing circular vault door that separated the base's living quarters and operations center from the mines. After an extensive period of checking pressure seals, internal systems, oxygen filters, and numerous other safety elements, the vault door was opened to reveal the vast cavern beyond.

KC-59—simply nicknamed “Casey” by those who had set up shop on its surface—was a largely desolate planet, but it contained something of immense value to the United Nations Space Command: extensive deposits of titanium.

As had been drilled into her and the rest of the crew from day one, titanium was the bread and butter of humanity's interstellar civilian and military production.

“When you see the cavalry arrive over the hill in M808 MBTs, you're lookin' at a solid wall of titanium,” Varadi recalled Foreman Brine barking at them during her onboarding to the BXR Mining Corporation. *“When a starship's battle plating protects you from the unforgiving vacuum of space and superheated plasma, you won't be sendin' thanks to any god of your choosing, you'll be addressin' your tender heartfelt regards to titanium-A battle plating!”*

Varadi had never expected to hear such a vocally emphatic history lesson about the various everyday uses of titanium and where it could be found. Brine had insisted that it was important they all show the appropriate knowledge and respect for atomic number twenty-two.

But the titanium that Varadi and her comrades were mining here wasn't going to be used for any of those things. Above Casey sat Perihelion Station, a Materials Group facility where the next generation of Mjolnir armor for the Spartans was being developed.

“Y’know what that means?” Foreman Brine had said after she and her fellow miners had been briefed by their Materials Group partners about the Casey job. *“This is the most important goddamn titanium you’ll ever excavate.”*

On that, at least, Varadi knew he was right. When a Spartan stepped onto the battlefield, they represented the culmination of a thousand lives that had built the ultimate weapon. Engineers and scientists who created the armor and augmentations, miners who provided the materials, technicians who kept the armor systems tuned for optimal efficiency and performance...

That was what it meant when folks said Spartans represent hope for humanity. It was not simply about the individual soldier, but the work—and, at times, the sacrifices made—to deliver them to the fight.

Inspiring as it was, sometimes it all seemed so futile, that the sum total of humanity’s resolve in the battle for survival would one day cost them *too* much. Doubt forever seemed to loom over them as new threats arose, casting a long shadow, but Varadi knew she had a part to play.

Her dream would be waiting for her on that distant horizon after this was all over: a brighter future, she hoped, where she ran her own restaurant. Maybe with Jessica, if she liked the idea of leaving all of this behind to start a new life—Rio certainly seemed like a good idea. And if things went *really* well... Varadi figured she could even send a personal invitation to Arturo Bustamante himself.

But until then, she would mine. Duty to humanity still ultimately compelled her, and to bring an end to these conflicts they would need no end of titanium.

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UNSC AMICABLE DISAGREEMENT
1300 HOURS // SEPTEMBER 20, 2559

“So, what’s the deal with this Orca armor?”

“That’s *Orcus*, Private Smith,” Gunnery Sergeant Babatunde corrected in a gruff tone, immediately clocking a smartass disguising their nerves. “And the Corps are eager to find out what hardass *au naturel* grunts like us can achieve with some new toys, starting with how well it holds up from a titanium coffin ride. So buckle up, troopers,” Babatunde’s voice boomed through the frigate’s deployment bay. “Get ready to drop!”

A chorus of “*Oo-rah!*”s sounded off as half-a-dozen Orbital Drop Shock Troopers of the Ninth Platoon stepped off the grated gantry and secured themselves into their drop pods, all clad in semi-powered ORCUS exoskeletons.

Somebody somewhere in the chain of command had apparently taken umbrage with the idea of this armor being developed simply as a drop-in upgrade package for Spartans. Scuttlebutt was that ORCUS was being brought out of development limbo to be tested for more direct and specialized helljumper applications—starting here.

“PFC Núñez,” the gunnery sergeant called out from his pod. “Would you be so kind as to describe to me the manner in which we will be deploying?”

“Feet first, sir!” Private First Class Núñez responded.

“You afraid of heights, Private Smith?”

“No, sir! Can’t get enough of them, sir!”

“How many drops is this for you, Private?”

“F--first one, sir.” Smith’s bravado receded a little and several of the other ODSTs let out knowing laughs.

“You keep your breakfast, lunch, and dinner in that stomach of yours, soldier. We don’t need you making any impromptu paint jobs over this shiny new armor or these cozy luxury pods, you hear me?”

“Understood, sir.”

The hatches of their pods closed, sealing each trooper inside. The frigate’s deployment bay floor then began to open, revealing a glimpse of the planet below—KC-59.

“The light is green,” the voice of one of *Amicable Disagreement’s* bridge officers sounded over their comms. *“Initiating drop.”*

“Ten-four,” Gunnery Sergeant Babatunde confirmed as he appeared on one of the interior screens of Núñez’s pod. *“Express elevator to hell, going down!”*

Núñez tried to steady their breathing, remembering the exercises they had been taught to keep calm and clear-headed during a drop.

But all of a sudden, the pod’s three green status lights had already pitilessly counted down and the next thing Núñez knew the breath had been taken out of their chest as gravity assumed command of their entry vehicle.

The terrestrial surface of KC-59 now filled the pod’s thin vertical viewport and Núñez focused their mind on the information readout of the planet.

Orbital period of seven-and-a-half Earth years... 6519-kilometer radius... thirty-one Earth hour days... surface gravity of 1.1G...

Vast expanses of rocky mountains covered the surface, but the mining craters were by far the most striking feature—tracts of concentric circles,

surrounded by outposts and massive equipment arrays that were gradually becoming ever more visible. A central processing facility housed a skyhook that connected to Perihelion, the planet's orbital station, while others played host to mass drivers that could send their cargo into orbit in a slightly more dramatic way.

"Smith, tighten up your approach vector, you're drifting away from the group!" Gunnery Sergeant Babatunde ordered over the comm.

Núñez watched as Smith made a slight adjustment with the pod's directional control sticks, bringing him back on-course. He seemed to be keeping a level head for a first timer, managing to not overcorrect his movement inwards which would thereby risk a collision with other nearby pods.

"Alright everyone, time to pop your chutes."

Five drag chutes bloomed into view only to instantly vanish from Núñez's viewport as their own pod continued screaming towards the ground below.

Their command returned no response.

Núñez felt the rising swell of fear as their situation crystallized.

"Sir, my chute isn't responding. Please advise."

"Keep calm, Núñez," Babatunde spoke with a reassuringly steady tone.
"Hit your retro thrusters now to slow your descent. Should buy you a little extra time as we work this out."

Núñez hit a button on their seat arm's control panel and allowed a momentary sensation of relief at the immediate feedback, jerking the pod upwards.

It took effort to keep their mind focused and breathing steady. Over the last few days on Perihelion Station, they had been learning the art of

“no-thought” and several Sangheili battle-meditation exercises from Spartan-058. Núñez was light-years away from mastering these methods, but they followed the logic of the teaching: *Thoughts and feelings are directionless paths branching in a deep forest—do not follow them. This is not about an absence of thinking, it is a rejection of being lost in the endless possibilities of thought, uniting body and mind in clarity until it comes as naturally as breathing.*

Simply put in this scenario: attempting to trace the reason back as to why the pod was malfunctioning and who was at fault was irrelevant guesswork.

Focus on the moment. Find the solution. *Live.*

“What now, sir?”

“Initiate a quick reset. It’ll take a few seconds to kick in and force reboot all systems. Just let it do its thing.”

A twist of a control dial and confirmation of intent instantly shut down all internal systems within the pod. The lights of its screens winked out and the Gunnery Sergeant’s image vanished, leaving Núñez to sit in darkness.

Focus on the sound of each breath.

The longest seconds Núñez had ever counted passed—*two... three... four...*—and still the pod was falling. The ground getting closer and closer...

All of a sudden, the screens flicked back on again and Núñez immediately hit the button for the drag chute.

Inertia compensators hadn’t fully come online, but the sudden jolt of deceleration as the chute fired out of the top of the pod had never felt so good. Whatever whoops and cheers Núñez may have wanted to let out, neither their lungs nor their brain allowed it as adrenaline pumped through

their body. Instead, Núñez simply winked a green status light and shifted focus to the landing that was still to come.

“Troopers, thank you for flying with us today at Badass Airlines,” Babatunde said, cutting through the tension. *“Please keep your arms and legs inside the vehicle at all times until landing. And yes, that has been a problem before.”*

Babatunde guided the final stages of their descent until all six pods hit solid ground.

Núñez felt like every bone had been violently pulled from their body and then shoved back in. But as the hatch blew off, Núñez grabbed their stowed MA40 and immediately leapt out of the pod’s harness, their movement assisted by the semi-powered armor. The dark interior of the vehicle was suddenly replaced by rolling rocky plains, a light blue sky, and cotton white clouds.

“Nobody popped,” Babatunde reported.

They had all made it. They were alive.

As the squad regrouped and formed up, Gunnery Sergeant Babatunde inspected each ODST’s armor to confirm all systems were green and no damage had been suffered from the landing. Upon reaching Núñez, he announced, “One of the most valuable lessons a soldier can learn is that technology can break, but *you* mustn’t.” He clapped Núñez on the back. “You stayed calm, followed instructions, and managed to land within an acceptable distance of the squad. Good work, soldier.”

Núñez was suddenly grateful for the polarized faceplate hiding their smile at the hint of admiration from the Gunnery Sergeant.

“Alright, we’ve got a three-click hike to reach the extraction point and get

back to the ship.” The troopers began to fall in line to make the trek. A tone of mischief entered Babatunde’s voice as he added: “Then we go again!”

That was met with a handful of groans, but Núñez simply nodded as they followed, cresting that first hill and watching the sun glint off the edge of the distant peaks.

“Feet first!”

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**PERIHELION STATION
1600 HOURS // SEPTEMBER 21, 2559**

Master Sergeant Marcus Stacker took his moments of rest where he could get them.

The elevator ferrying him to the war games deck of Perihelion Station featured a curved viewport that looked out over the immense mining operation being conducted by the BXR Mining Corporation on and below the surface of KC-59.

A colossal crater, some sixty kilometers in diameter, had been bored into the planet’s surface where extensive deposits of titanium were still in the process of being mined and ferried back up to the station. From the stories his uncle had told him many years ago, Stacker had no end of respect for the folks who signed up for jobs like this—just because it didn’t involve combat (at least, not typically), that didn’t diminish the brass required for jobs that involved a mix of zero-g station maintenance, extreme depths, exotic materials, and countless other quirks he no doubt knew nothing about. All to play a small but essential part in protecting humanity.

For his part, he and the ODSs of the Ninth Platoon had been running exercises to push themselves, their armor, and their opponents to the limit over the last three days.

That hadn't proven difficult when they were training both with and against soldiers of legend—the Spartans of Blue Team, led by the Master Chief himself.

The last seven years of Stacker's military career had, by pure chance, been inexplicably connected to humanity's greatest hero, and it was for that reason that Captain Thomas Lasky had selected him to lead the Ninth Platoon for these exercises.

“You have unique experience, Master Sergeant.” Captain Lasky had said to him aboard *Infinity* a few days ago, before adding with a smirk, *“One day, it’ll make a hell of a memoir.”*

“Nobody’ll believe a word of it,” Stacker had remarked. *“And then the Master Chief literally appeared out of thin air, jumped into a tank, and helped us kick the Covenant’s asses a whole klick across the desert before taking out Requiem’s gravity well so we could go home.’ Hell, sometimes I still don’t believe it.”*

The almost miraculous nature of it all sometimes made the Master Sergeant uncomfortable. He was much more at home dwelling on the tangible: tactics, training, and clinical, routine execution. In Stacker's eyes, the real miracle was the ability to unify a group of soldiers through pride and preparation.

The Spartans and ODSTs had been pitted against each other, four against a whole platoon, utilizing tactical lock-up rounds in a variety of training scenarios. Just as the Spartans had been field testing their new GEN3 Mjolnir armor, so too had the ORCUS exoskeleton been put to the test as drop pods were regularly launched from the frigate *Amicable Disagreement* down to KC-59. Nothing would be able to fully recreate the circumstances of a true combat drop, but zero casualties and successful results on these test runs was a win in Stacker's book.

The elevator came to a stop at Perihelion Station's top level and, with the crispness of a salute, the doors slid open to reveal the ringed, multi-level combat deck.

The top floor of the combat deck played host to the recreation center along with multiple gymnasiums and rooms for sparring. Below that lay the armory and several multi-axis Brokkr devices, machines used to assist the Spartans with putting on and taking off their armor. The third floor down—the “main event,” as it were—was the war games simulation deck, which took the form of a Munera Platform that could also be deployed separately from the station's underbelly if desired.

Stacker had worked closely with the simulation techs of the UNSC's Cartographer Initiative to devise unique challenges over the last few days. The simulator had been configured into a series of arenas that spanned a wide variety of locations—from urban environments on Earth to ancient facilities recorded on different Forerunner installations, everything and anything they had in the system. New rules, new threats, new environmental hazards. Stacker had been throwing it all at them to see just how quickly the Spartans and ODSTs could adjust on the fly.

The concave walls of the deck were lined with a series of screens that were synchronized with the helmet cameras of the Spartans and ODSTs. As he approached, Stacker could tell there was an exercise in progress.

An ODST marksman turned their weapon towards Linda-058, but Fred-104 was sprinting towards Linda's position, weapons holstered, as he blasted the ground with a repulsor equipped to his forearm which launched him some six feet into the air. As the ODST fired, sending two tactical lock-up rounds directly at Linda, Fred tossed a drop wall unit with his other hand which emitted an energy shield that absorbed the first hit. The second shot impacted upon the drop wall unit itself, blasting it apart.

Linda neither hesitated nor flinched in reaction. This had simply bought her time to get a fix on the marksman's position. To Stacker, it looked as if

Linda had fired her rifle and dropped the marksman as she was still in the process of readying her aim.

From one of the nearby sparring rooms, Kelly-087's voice issued a commanding "Again." She and her ODST partner, Lance Corporal Julie Chang, were demonstrating hand-to-hand drills effective against Unggoy and Kig-Yar to a group of fifteen others.

Stacker had seen Kelly in action over the last few days, darting across the simulated battlefield with her thruster module which had been modified to engage a few seconds of active camouflage. She had overclocked the system to recharge faster which reduced the length of the camouflage system to just half-a-second—but that was all she needed to give the illusion of disappearing and reappearing in unpredictable places.

Finally, a couple of rooms over, Stacker caught a glimpse of the Master Chief himself.

There was something almost quaint in seeing the Spartan revered by so many as humanity's ultimate champion spotting for half-a-dozen ODSTs in one of the gymnasiums. Stacker observed the Chief dutifully checking the weights and equipment with every rotation. That came as no surprise given the *terse* history between Spartans and ODSTs, going back to an incident aboard the UNSC *Atlas* where four of the 105th had ended up either critically wounded or dead after an... unfortunate altercation.

That was well over thirty years ago now, but "forgive and forget" wasn't in the service manual for a helljumper. Some of the old guard felt resentment towards those who had gone on to volunteer for the SPARTAN-IV program, and even some of the troopers on Perihelion Station hadn't been enthused about the prospect of serving as "training dummies" for Spartans.

Despite all this, the scene in the gymnasium told its own story as the ODSTs cheered and whooped for Corporal Malika Aswad hitting some kind of record. The Chief gently clamped a congratulatory hand on her shoulder.

The reality was that the presence of the Spartans had naturally created a spectacle that made the ODSTs push themselves harder. That camaraderie was exactly what Stacker had hoped for, but he knew that a soldier's confidence had to be tempered with a reminder of reality. These last few days had offered a safe environment to sharpen their steel, but the only test waiting for them on the battlefield was whether they would make it to the end of the day.

That test would arrive soon enough.

“Attention, all hands,” Stacker spoke into a station-wide comm. “We’re saddlin’ up, it’s time to wrap this party. *Infinity* will arrive at eighteen-hundred hours, after which point we’re back to business as usual.”

They all knew what “business as usual” meant. Evading enemy forces, making house calls to abandoned facilities for resupply runs, choosing which battles to fight... and counting those that didn’t make it back.

Operation: WOLFE was just a few weeks away, and returning to the glasslands of Reach would prove physically and psychologically challenging for all of them. Nobody seemed to know much about the mission itself, but they all had their part to play—that meant being prepared for anything.

And after that? Stacker figured he had a good amount of shore leave banked. Perhaps it was time to finally cash in, make a start on those memoirs...

Like hell, he sighed, watching the Spartans and ODSTs pack up equipment together like a regular band of brothers. He—like everybody else here—was in the fight until the end.

As Stacker began making his own preparations, he found himself humming an old miner’s tune that had been a favorite of his uncle’s.

*Buried in the heart of an ancient moon, he always dreamed of the fight
Glory was won while his brothers were lost, in battles he waged in the night
His life blown away in the blood that he gave, an offering unrecognized
Never became what he already was, the darkness that brings on the light.*