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THE FALL OF REACH

ERIC NYLUND

BASED ON THE BESTSELLING VIDEO GAME FOR XBOX®



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First Gallery Books trade paperback edition March 2019

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Manufactured in the United States of America

10 9 8 7 6 5 4 3 2 1

Library of Congress Cataloging-in-Publication Data is available.

ISBN 978-1-9821-1161-8 ISBN 978-1-9821-1162-5 (ebook) For Syne Mitchell.

She watched my six, patched me up, and provided transportation to my DZ every day—
no soldier could ever ask for better support in the field . . . or a better wife.

FORE WORLD

When Bungie, Eric Nylund, and Microsoft teamed up to create the novel *Halo: The Fall of Reach,* it was one of those *things*—an interesting and sudden opportunity—the kind of thing where you simply don't think about what's coming next. You react (Eric cranked that thing out in record time) and sit back, or rather, move on to other business. We were launching and supporting not only a game, but an entire business, a console that would go on to be the home base for Halo for another ten years.

The Fall of Reach wasn't the first novelization of a video game; there had been several, in fact, before that. All had differing layers and measures of success. But *The Fall of Reach* did something unexpected.

I won't bother talking about sales or success as it relates to dollars and numbers, or bestsellers' lists, but it reached a level of success that was unprecedented and would continue for years to come with Eric and other authors thriving in this "new" space.

It bridged the invisible gulf between story, universe, game, and imagination. It was a brilliantly executed matrix of material that connected these disparate elements and cohesively pulled it all together, making Halo, a game built on suddenness and mystery,

feel immediately like it had been around forever, and that we the players were just tuning in, catching a universe in motion at a particularly exciting moment.

The idea started when Nancy Figatner, then part of the Halo franchise team, and Jordan Weisman (founder of Shadowrun creators FASA, among other things) decided that book publishing was something that Microsoft's nascent console business ought to be attached to. They worked to find a good publishing partner and writers to germinate the idea, and ended up working with Eric Trautmann, Eric Nylund (of course), and Bungie to begin the novel.

Eric did something remarkable. He fleshed out, in just a few short weeks, a nascent universe that we've continued to build on, and continued to connect the dots between those disparate stars, some of which were planted in the Halo firmament in *The Fall of Reach*.

Reach wasn't just a piece of deliberate universe-building, but a careful exercise in crisis avoidance. Eric had the challenge of not only creating believable characters with history and impact, but ensuring they didn't step on the toes of a story that's still in motion. This is not an enviable task—and it takes a patient, understanding, imaginative type of writer to create grand fiction with those kinds of restrictions.

And yet Eric was somehow able to use those restrictions not as training wheels or prison bars, but rather as a high-tensile spring-board from which to launch a whole new aspect of the universe—one grounded in the dirt and blood of the Spartan program as it existed—rather than the mystery and awe of the universe where the Master Chief is the last standing Spartan.

It seems absurd on its face to talk about the scale of those two facets of the Halo universe, but in some ways *The Fall of Reach* is smaller and more personal, while at the same time deeper and denser than the wide-open enigmas and vistas of the game.

Whereas Halo is all about loneliness and exploration, *The Fall of Reach* is about a different kind of journey—that of childhood to adulthood and that of innocence to war, for both its protagonist and the species he champions.

And the process itself was almost as grueling as the Spartan training. Eric had very limited access to Bungie—hard at work finishing the game—and basically had to rely on a large drop of information (the seeds of the fabled story bible) from Jason Jones and Bungie, while his writing partner and co–heavy lifter at the time, Eric Trautmann, consolidated feedback and information from the team and filtered it to and with Eric Nylund. And again, all this in a hypercompressed timeline to take advantage of a narrow window of opportunity.

The book went from conception to final print in a staggering four months.

It was a collaborative effort, but often blindly so. In the riot of noise for the launch of the game, the book took a backseat, but only for a short drive. As the game exploded in popularity, people became curious about the backstory of this deliberately obfuscated protagonist. Putting yourself in the Master Chief's MJOLNIR boots was probably one of the most satisfying experiences gamers ever had, but curiosity about a universe you're inserted into, literally midbattle, propelled sales of the novel. And it just continued to sell.

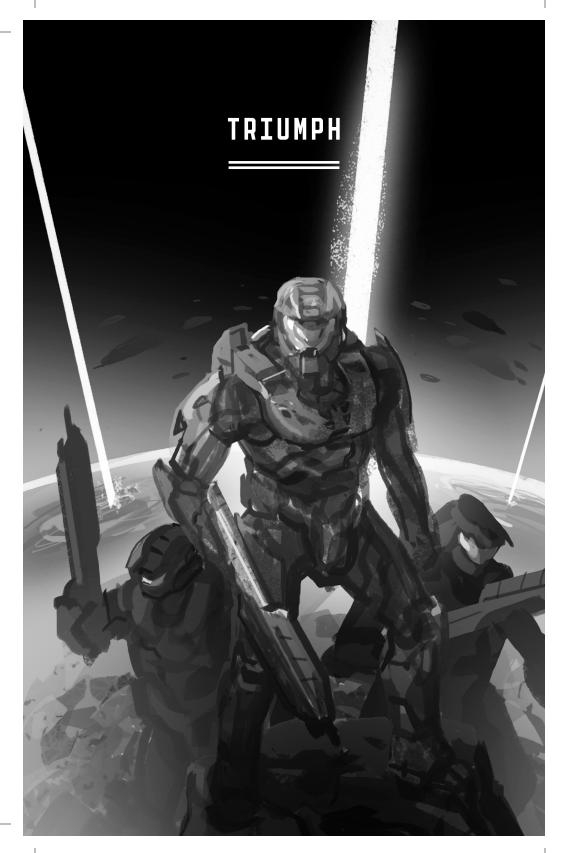
We've made a lot of Halo novels since then, with a broad range of writers, and one thing remains the same, from Eric Nylund to Karen Traviss to Greg Bear and beyond: the Halo sandbox of characters, events, and emotions is a perfect playground for prose.

And this is literally just the beginning.

Frank O'Connor Redmond, WA 2010



THE FALL OF REACH



PROLOGUE

0500 Hours, February 12, 2535 (Military Calendar) / Lambda Serpentis System, Jericho VII Theater of Operations

ontact. All teams stand by: enemy contact, my position."

The Chief knew there were probably more than a hundred of them—motion sensors were off the scale. He wanted to see them for himself, though; his training made that lesson clear: "Machines break. Eyes don't."

The four Spartans that composed Blue Team covered his back, standing absolutely silent and immobile in their MJOLNIR combat armor. Someone had once commented that they looked like Greek war gods in the armor... but his Spartans were far more effective and ruthless than Homer's gods had ever been.

He snaked the fiber-optic probe up and over the three-meterhigh stone ridge. When it was in place, the Chief linked it to his helmet's heads-up display.

On the other side he saw a valley with eroded rock walls and

a river meandering through it . . . and camped along the banks as far as he could see were Grunts.

The Covenant used these stocky aliens as cannon fodder. They stood a meter tall and wore armored environment suits that replicated the atmosphere of their frozen homeworld. They reminded the Chief of biped dogs, not only in appearance, but because their speech—even with the new translation software—was an odd combination of high-pitched squeaks, guttural barks, and growls.

They were about as smart as dogs, too. But what they lacked in brainpower, they made up for in sheer tenacity. He had seen them hurl themselves at their enemies until the ground was piled high with their corpses . . . and their opponents had depleted their ammunition.

These Grunts were unusually well armed: needlers, plasma pistols, and there were four stationary plasma cannons. Those could be a problem.

One other problem: there were easily a thousand of them.

This operation had to go off without a hitch. Blue Team's mission was to draw out the Covenant rear guard and let Red Team slip through in the confusion. Red Team would then plant a HAVOK tactical nuke. When the next Covenant ship landed, dropped its shields, and started to unload its troops, they'd get a thirty-megaton surprise.

The Chief detached the optics and took a step back from the rock wall. He passed the tactical information along to his team over a secure COM channel.

"Four of us," Blue-Two whispered over the link. "And a thousand of them? Piss-poor odds for the little guys."

"Blue-Two," the Chief said, "I want you up with those Jackhammer launchers. Take out the cannons and soften the rest of

them. Blue-Three and Five, you follow me up—we're on crowd control. Blue-Four: you get the welcome mat ready. Understood?"

Four blue lights winked on his heads-up display as his team acknowledged the orders.

"On my mark." The Chief crouched and readied himself. "Mark!"

Blue-Two leaped gracefully atop the ridge—three meters straight up. There was no sound as the half ton of MJOLNIR armor and Spartan landed on the limestone.

She hefted one launcher and ran along the ridge—she was the fastest Spartan on the Chief's team. He was confident those Grunts wouldn't be able to track her for the three seconds she'd be exposed. In quick succession, Blue-Two emptied both of the Jackhammer's tubes, dropped one launcher, and then fired the other rockets just as fast. The shells streaked into the Grunts' formation and detonated. One of the stationary guns flipped over, engulfed in the blast, and the gunner was flung to the ground.

She ditched the launcher, jumped down—rolled once—and was back on her feet, running at top speed to the fallback point.

The Chief, Blue-Three, and Blue-Five leaped to the top of the ridge. The Chief switched to infrared to cut through the clouds of dust and propellant exhaust just in time to see the second salvo of Jackhammers strike their targets. Two consecutive blossoms of flash, fire, and thunder decimated the front ranks of the Grunt guards, and most importantly, turned the last of the plasma cannons into smoldering wreckage.

The Chief and the others opened fire with their MA5B assault rifles—a full automatic spray of fifteen rounds per second. Armorpiercing bullets tore into the aliens, breaching their environment suits and sparking the methane tanks they carried. Gouts of flame traced wild arcs as the wounded Grunts ran in confusion and pain.

Finally the Grunts realized what was happening—and where this attack was coming from. They regrouped and charged *en masse*. An earthquake vibration coursed through the ground and shook the porous stone beneath the Chief's boots.

The three Spartans exhausted their AP clips and then, in unison, switched to shredder rounds. They fired into the tide of creatures as they surged forward. Line after line of them dropped. Scores more just trampled their fallen comrades.

Explosive needles bounced off the Chief's armor, detonating as they hit the ground. He saw the flash of a plasma bolt—side stepped—and heard the air crackle where he had stood a split second before.

"Inbound Covenant air support," Blue-Four reported over the COM link. "ETA is two minutes, Chief."

"Roger that," he said. "Blue-Three and -Five: maintain fire for five seconds, then fall back. Mark!"

Their status lights winked once, acknowledging his order.

The Grunts were three meters from the wall. The Chief tossed two grenades. He, Blue-Three, and Blue-Five stepped backward off the ridge, landed, spun, and ran.

Two dull thumps reverberated through the ground. The squeals and barks of the incoming Grunts, however, drowned out the noise of the exploding grenades.

The Chief and his team sprinted up the half-kilometer sandstone slope in thirty-two seconds flat. The hill ended abruptly—a sheer drop of two hundred meters straight into the ocean.

Blue-Four's voice crackled over the COM channel: "Welcome mat is laid out, Chief. Ready when you are."

The Grunts looked like a living carpet of steel-blue skin, claws, and chrome weapons. Some ran on all fours up the slope. They barked and howled, baying for the Spartans' blood.

"Roll out the carpet," the Chief told Blue-Four.

The hill exploded—plumes of pulverized sandstone and fire and smoke hurtled skyward.

The Spartans had buried a spiderweb pattern of Lotus antitank mines earlier that morning.

Sand and bits of metal pinged off of the Chief's helmet.

The Chief and his team opened fire again, picking off the remaining Grunts that were still alive and struggling to stand.

His motion detector flashed a warning. There were incoming projectiles high at two o'clock—velocities at over a hundred kilometers per hour.

Five Covenant Banshee fliers appeared over the ridge.

"New contacts. All teams, open fire!" he barked.

The Spartans, without hesitation, fired on the alien fliers. Bullet hits pinged from the fliers' chitinous armor—it would take a very lucky shot to take out the antigrav pods on the end of the crafts' stubby meter-long "wings."

The fire got the aliens' attention, however. Lances of fire slashed from the Banshees' gunports.

The Chief dove and rolled to his feet. Sandstone exploded where he had stood only an instant before. Globules of molten glass sprayed the Spartans.

The Banshees screamed over their heads—then banked sharply for another pass.

"Blue-Three, Blue-Five: Theta Maneuver," the Chief called out. Blue-Three and-Five gave him the thumbs-up signal.

They regrouped at the edge of the cliff and clipped onto the steel cables that dangled down the length of the rock wall.

"Did you set up the fougasses with fire or shrapnel?" the Chief asked.

"Both," Blue-Three replied.

"Good." The Chief grabbed the detonators. "Cover me."

The fougasses were never meant to take down flying targets; the Spartans had put them there to mop up the Grunts. In the field, though, you had to improvise. Another tenet of their training: adapt or die.

The Banshees formed into a "flying V" and swooped toward them, almost brushing the ground.

The Spartans opened fire.

Bolts of superheated plasma from the Banshees punctuated the air.

The Chief dodged to the right, then to the left; he ducked. Their aim was getting better.

The Banshees were one hundred meters away, then fifty meters. Their plasma weapons might recycle fast enough to get another shot . . . and at this range, the Chief wouldn't be dodging.

The Spartans jumped backward off the cliff—guns still blazing. The Chief jumped, too, and hit the detonators.

The ten fougasses—each a steel barrel filled with napalm and spent AP and shredder casings—had been buried a few meters from the edge of the cliff, their mouths angled up at thirty degrees. When the grenades at the bottom of the barrels exploded, it made one hell of a barbecue out of anything that got in their way.

The Spartans slammed into the side of the cliff—the steel cables they were attached to twanged taut.

A wave of heat and pressure washed over them. A heartbeat later five flaming Banshees hurtled over their heads, leaving thick trails of black smoke as they arced into the water. They splashed down, then vanished beneath the emerald waves. The Spartans hung there a moment, waiting and watching with their assault rifles trained on the water.

No survivors surfaced.

They rappelled down to the beach and rendezvoused with Blue-Two and -Four.

"Red Team reports mission objective achieved, Chief," Blue-Two said. "They send their compliments."

"It's hardly going to balance the scales," Blue-Three muttered, and kicked the sand. "Not like those Grunts when they slaughtered the 105th Drop Jet Platoon. They should suffer just as much as those guys did."

The Chief had nothing to say to that. It wasn't his job to make things suffer—he was just here to win battles. Whatever it took.

"Blue-Two," the Chief said. "Get me an uplink."

"Aye aye." She patched him into the SATCOM system.

"Mission accomplished, Captain de Blanc," the Chief reported. "Enemy neutralized."

"Excellent news," the Captain said. He sighed, and added, "But we're pulling you out, Chief."

"We're just getting warmed up down here, sir."

"Well, it's a different story up here. Move out for pickup ASAP."

"Understood, sir." The Chief killed the uplink. He told his team, "The party's over, Spartans. Dust-off in fifteen."

They jogged double-quick up the ten kilometers of the beach, and returned to their dropship—a Pelican, scuffed and dented from three days' hard fighting. They boarded and the ship's engines whined to life.

Blue-Two took off her helmet and scratched the stubble of her brown hair. "It's a shame to leave this place," she said, and leaned against the porthole. "There are so few left."

The Chief stood by her and glanced out as they lifted into the air—there were wide rolling plains of palmgrass, the green expanse of ocean, a wispy band of clouds in the sky, and setting red suns.

"There will be other places to fight for," he said.

"Will there?" she whispered.

The Pelican ascended rapidly through the atmosphere, the sky darkened, and soon only stars surrounded them.

In orbit, there were dozens of frigates, destroyers, and two massive carriers. Every ship had carbon scoring and holes peppering their hulls. They were all maneuvering to break orbit.

They docked in the port bay of the UNSC destroyer *Resolute*. Despite being surrounded by two meters of titanium-A battle plate and an array of modern weapons, the Chief preferred to have his feet on the ground, with real gravity, and real atmosphere to breathe—a place where he was in control, and where his life wasn't held in the hands of anonymous pilots. A ship just wasn't home.

The battlefield was.



The Chief rode the elevator to the bridge to make his report, taking advantage of the momentary respite to read Red Team's after-action report in his display. As predicted, the Spartans of Red, Blue, and Green Teams—augmenting three divisions of battle-hardened UNSC Marines—had stalled a Covenant ground advance. Casualty figures were still coming in, but—on the ground, at least—the alien forces had been completely stonewalled.



A moment later the lift doors parted, and he stepped on the rubberized deck. He snapped a crisp salute to Captain de Blanc. "Sir. Reporting as ordered."

The junior bridge officers took a step back from the Chief. They weren't used to seeing a Spartan in full MJOLNIR armor up close—most line troops had never even seen a Spartan. The

ghostly iridescent green of the armor plates and the matte black layers underneath made him look part gladiator, part machine. Or perhaps to the bridge crew, he looked as alien as the Covenant.

The view screens showed stars and Jericho VII's four silver moons. At extreme range, a small constellation of stars drifted closer.

The Captain waved the Chief closer as he stared at that cluster of stars—the rest of the battlegroup. "It's happening again."

"Request permission to remain on the bridge, sir," the Chief said. "I . . . want to see it this time, sir."

The Captain hung his head, looking weary. He glanced at the Master Chief with haunted eyes. "Very well, Chief. After all you've been through to save Jericho Seven, we owe you that. We're only thirty million kilometers out-system, though, not half as far as I'd like to be." He turned to the NAV Officer. "Bearing one two zero. Prepare our exit vector."

He turned to face the Chief. "We'll stay to watch... but if those bastards so much as twitch in our direction, we're jumping the hell out of here."

"Understood, sir. Thank you."

Resolute's engines rumbled and the ship moved off.

Three dozen Covenant ships—big ones, destroyers and cruisers—winked into view in the system. They were sleek, looking more like sharks than starcraft. Their lateral lines brightened with plasma—then discharged and rained fire down upon Jericho VII.

The Chief watched for an hour and didn't move a muscle.

The planet's lakes, rivers, and oceans vaporized. By tomorrow, the atmosphere would boil away, too. Fields and forests were glassy smooth and glowing red-hot in patches.

Where there had once been a paradise, only hell remained.

"Make ready to jump clear of the system," the Captain ordered.

The Chief continued to watch, his face grim.

There had been ten years of this—the vast network of human colonies whittled down to a handful of strongholds by a merciless, implacable enemy. The Chief had killed the enemy on the ground—shot them, stabbed them, and broken them with his own two hands. On the ground, the Spartans *always* won.

The problem was, the Spartans couldn't take their fight into space. Every minor victory on the ground turned into a major defeat in orbit.

Soon there would be no more colonies, no human settlements—and nowhere left to run.

SECTION I

REVEILLE



CHAPTER 1

0430 Hours, August 17, 2517 (Military Calendar) Slipstream space unknown coordinates near Eridanus Star System

ieutenant Junior Grade Jacob Keyes awoke. Dull red light filled his blurry vision and he choked on the slime in his lungs and throat.

"Sit up, Lieutenant Keyes," a disembodied male voice said. "Sit. Take a deep breath and cough, sir. You need to clear the bronchial surfactant."

Lieutenant Keyes pushed himself up, peeling his back off the formfitting gel bed. Wisps of fog overflowed from the cryogenic tube as he clumsily climbed out. He sat on a nearby bench, tried to inhale, and doubled over, coughing until a long string of clear fluid flowed from his open mouth.

He sat up and drew his first full breath in two weeks. He tasted his lips and almost gagged. The cryo inhalant was specially designed to be regurgitated and swallowed, replacing nutrients lost in the deep sleep. No matter how they changed the formula, though, it always tasted like lime-flavored mucus.

"Status, Toran? Are we under attack?"

"Negative, sir," the ship's AI replied. "Status normal. We will enter normal space near the Eridanus System in forty-five minutes."

Lieutenant Keyes coughed again. "Good. Thank you, Toran." "You're welcome, Lieutenant."

Eridanus was on the border of the Outer Colonies. It was just far enough off the beaten path for pirates to be lurking . . . waiting to capture a diplomatic shuttle like the *Han*. This ship wouldn't last long in a space action. They *should* have an escort. He didn't understand why they had been sent alone—but Junior Lieutenants didn't question orders. Especially when those orders came from FLEETCOM HQ on planet Reach.

Wake-up protocols dictated that he inspect the rest of the crew to make sure no one had run into problems reviving. He looked around the sleep chamber: rows of stainless steel lockers and showers, a medical pod for emergency resuscitations, and forty cryogenic tubes—all empty except the one to his left.

The other person on the *Han* was the civilian specialist, Dr. Halsey. Keyes had been ordered to protect her at all costs, pilot this ship, and generally stay the hell out of her way. They might as well have asked him to hold her hand. This wasn't a military mission; it was baby-sitting. Someone at Fleet Command must have him on their blacklist.

The cover of Dr. Halsey's tube hummed open. Mist rippled out as she sat up, coughing. Her pale skin made her look like a ghost in the fog. Matted locks of dark hair clung to her neck. She didn't look much older than him, and she was lovely—not beautiful, but definitely a striking woman. For a civilian, anyway.

Her blue eyes fixed upon the Lieutenant and she looked him over. "We must be near Eridanus," she said.

Lieutenant Keyes almost saluted reflexively, but checked the motion. "Yes, Doctor." His face reddened and he looked away from her slender body.

He had drilled in cryogenic recovery a dozen times at the Academy. He'd seen his fellow officers naked before—men and women. But Dr. Halsey was a civilian. He didn't know what protocols applied.

Lieutenant Keyes got up and went to her. "Can I help you—"

She swung her legs out of the tube and climbed out. "I'm fine, Lieutenant. Get cleaned up and dressed." She brushed past him and strode to the showers. "Hurry. We have important work to do."

Lieutenant Keyes stood straighter. "Aye, aye, ma'am."

With that brief encounter, their roles and the rules of conduct crystallized. Civilian or not—like it or not—Lieutenant Keyes understood that Dr. Halsey was in charge.



The bridge of the *Han* had an abundance of space for a vessel of its size. That is, it had all the maneuvering room of a walk-in closet. A freshly showered, shaved, and uniformed Lieutenant Keyes pulled himself into the room and sealed the pressure door behind him. Every surface of the bridge was covered with monitors and screens. The wall on his left was a single large semicurved view screen, dark for the moment because there was nothing in the visible spectrum to see in slipspace.

Behind him was the *Han*'s spinning center section, containing the mess, the rec room, and the sleep chambers. There was no gravity on the bridge, however. The diplomatic shuttle had been designed for the comfort of its passengers, not the crew.

It didn't seem to bother Dr. Halsey. Strapped into the navigator's couch, she wore a white jumpsuit that matched her pale skin,

and had tied her dark hair into a simple, elegant knot. Her fingers danced across four keypads, tapping in commands.

"Welcome, Lieutenant," she said without looking up. "Please have a seat at the communication station and monitor the channels when we enter normal space. If there's so much as a squeak on nonstandard frequencies, I want to know instantly."

He drifted to the communication station and strapped himself down.

"Toran?" she asked.

"Awaiting your orders, Dr. Halsey," the ship AI replied.

"Give me astrogation maps of the system."

"Online, Dr. Halsey."

"Are there any planets currently aligned with our entry trajectory and Eridanus Two? I want to pick up a gravitational boost so we can move in-system ASAP."

"Calculating now, Doctor Hal—"

"And can we have some music? Rachmaninov's Piano Concerto Number Three, I think."

"Understood, Doctor—"

"And start a preburn warm-up cycle for the fusion engines."

"Yes, Doc—"

"And stop spinning the *Han*'s central carousel section. We may need the power."

"Working . . . "

She eased back. The music started and she sighed. "Thank you, Toran."

"You're welcome, Dr. Halsey. Entering normal space in five minutes, plus or minus three minutes."

Lieutenant Keyes shot the doctor an admiring glance. He was impressed—few people could put a shipboard AI through its paces so rigorously as to cause a detectable pause.

She turned to face him. "Yes, Lieutenant? You have a question?"

He composed himself and pulled his uniform jacket taut. "I was curious about our mission, ma'am. I assume we are to reconnoiter something in this system, but why send a shuttle, rather than a prowler or a corvette? And why just the two of us?"

She blinked and smiled. "A fairly accurate assumption and analysis, Lieutenant. This *is* a reconnaissance mission . . . of sorts. We are here to observe a child. The first of many, I hope."

"A child?"

"A six-year-old male, to be precise." She waved her hand. "It may help if you think of this purely as a UNSC-funded physiological study." Every trace of a smile evaporated from her lips. "Which is precisely what you are to tell anyone who asks. Is that understood, Lieutenant?"

"Yes, Doctor."

Keyes frowned, retrieved his grandfather's pipe from his pocket, and turned it end over end. He couldn't smoke the thing—igniting a combustible on the flight deck was against every major regulation on a UNSC space vehicle—but sometimes he just fiddled with it or chewed on the tip, which helped him think. He stuck it back into his pocket, and decided to push the issue and find out more.

"With all due respect, Dr. Halsey, this sector of space is dangerous."

With a sudden deceleration, they entered normal space. The main view screen flickered and a million stars snapped into focus. The *Han* dove toward a cloud-swirled gas giant dead ahead.

"Stand by for burn," Dr. Halsey announced. "On my mark, Toran."

Lieutenant Keyes tightened his harness.

"Three . . . two . . . one. Mark."

The ship rumbled and sped faster toward the gas giant. The pull of the harness increased around the Lieutenant's chest, making breathing difficult. They accelerated for sixty-seven seconds . . . the storms of the gas giant grew larger on the view screen—then the *Han* arced up and away from its surface.

Eridanus drifted into the center of the screen and filled the bridge with warm orange light.

"Gravity boost complete," Toran chimed. "ETA to Eridanus is forty-two minutes, three seconds."

"Well done," Dr. Halsey said. She unlocked her harness and floated free, stretching. "I hate cryo sleep," she said. "It leaves one so cramped."

"As I was saying before, Doctor, this system is dangerous—"

She gracefully spun to face him, halting her momentum with a hand on the bulkhead. "Oh yes, I know how dangerous this system is. It has a colorful history: rebel insurrection in 2494, beaten down by the UNSC two years later at the cost of four destroyers." She thought a moment, then added, "I don't believe the Office of Naval Intelligence ever found their base in the asteroid field. And since there have been organized raids and scattered pirate activity nearby, one might conclude—as ONI clearly has—that the remnants of the original rebel faction are still active. Is that what you were worried about?"

"Yes," the Lieutenant replied. He swallowed, his mouth suddenly dry, but he refused to be cowed by the doctor—by a *civilian*. "I need hardly remind you that it's my job to worry about our security."

She knew more than he did, much more, about the Eridanus System—and she obviously had contacts in the intelligence community. Keyes had never seen an ONI spook—to the best of his

knowledge anyway. Mainline Navy personnel had elevated such agents to near-mythological status.

Whatever else he thought of Dr. Halsey, he would assume from now on that she knew what she was doing.

Dr. Halsey stretched once more and then strapped herself back onto the navigation couch. "Speaking of pirates," she said with her back now to him, "weren't you supposed to be monitoring communication channels for illegal signals? Just in case someone takes undue interest in a lone, unescorted, diplomatic shuttle?"

Lieutenant Keyes cursed himself for his momentary lapse and snapped to. He scanned all frequencies and had Toran cross-check their authentication codes.

"All signals verified," he reported. "No pirate transmissions detected."

"Continue to monitor them, please."

An awkward thirty minutes passed. Dr. Halsey was content to read reports on the navigational screens, and kept her back to him.

Lieutenant Keyes finally cleared his throat. "May I speak candidly, Doctor?"

"You don't need my permission," she said. "By all means, speak candidly, Lieutenant. You've been doing a fine job so far."

Under normal circumstances, among normal officers, that last remark would have been insubordination—or worse, a rebuke. But he let it pass. Normal military protocol seemed to have been jettisoned on this flight.

"You said we were here to observe a child." He shook his head dubiously. "If this is a cover for real military intelligence work, then, to tell the truth, there are better-qualified officers for this mission. I graduated from UNSC OCS only seven weeks ago. My orders had me rotated to the *Magellan*. Those orders were rescinded, ma'am."

She turned and scrutinized him with icy blue eyes. "Go on, Lieutenant."

He reached for his pipe, but then checked the motion. She would probably think it a silly habit.

"If this is an intel op," he said, "then . . . then I don't understand why I'm here at all."

She leaned forward. "Then, Lieutenant, I shall be equally candid."

Something deep inside Lieutenant Keyes told him he would regret hearing whatever Dr. Halsey had to say. He ignored the feeling. He wanted to know the truth.

"Go ahead, Doctor."

Her slight smile returned. "You are here because Vice Admiral Stanforth, head of Section Three of UNSC Military Intelligence Division, refused to lend me this shuttle without at least one UNSC officer aboard—even though he knows damn well that I can pilot this bucket by myself. So I picked one UNSC officer. You." She tapped her lower lip thoughtfully and added, "You see, I've read your file, Lieutenant. All of it."

"I don't know—"

"You do know what I'm talking about." She rolled her eyes. "You don't lie well. Don't insult me by trying again."

Lieutenant Keyes swallowed. "Then why me? *Especially* if you've seen my record?"

"I chose you precisely *because* of your record—because of the incident in your second year at OCS. Fourteen ensigns killed. You were wounded and spent two months in rehabilitation. Plasma burns are particularly painful, I understand."

He rubbed his hands together. "Yes."

"The Lieutenant responsible was your CO on that training mission. You refused to testify against him despite over-

whelming evidence and the testimony of his fellow officers . . . and friends."

"Yes."

"They told the board of review the secret the Lieutenant had entrusted to you all—that he was going to test his new theory to make slipspace jumps more accurate. He was wrong, and you all paid for his eagerness and poor mathematics."

Lieutenant Keyes studied his hands and had the feeling of falling inward. Dr. Halsey's voice sounded distant. "Yes."

"Despite continuing pressure, you never testified. They threatened to demote you, charge you with insubordination and refusing a direct order—even discharge you from the Navy.

"Your fellow officer candidates testified, though. The review board had all the evidence they needed to court-martial your CO. They put you on report and dropped all further disciplinary actions."

He said nothing. His head hung low.

"That is why you are here, Lieutenant—because you have an ability that is exceedingly rare in the military. You can keep a secret." She drew in a long breath and added, "You may have to keep many secrets after this mission is over."

He glanced up. There was a strange look in her eyes. Pity? That caught him off guard and he looked away again. But he felt better than he had since OCS. Someone trusted him again.

"I think," she said, "that you would rather be on the *Magellan*. Fighting and dying on the frontier."

"No, I—" He caught the lie as he said it, stopped, then corrected himself. "Yes. The UNSC needs every man and woman patrolling the Outer Colonies. Between the raiders and insurrections, it's a wonder it all hasn't fallen apart."

"Indeed, Lieutenant, ever since we left Earth's gravity well, we've been fighting one another for every cubic centimeter of

vacuum—from Mars to the Jovian Moons to the Hydra System Massacres and on to the hundred brushfire wars in the Outer Colonies. It has always been on the brink of falling apart. That's why we're here."

"To observe one child," he said. "What difference could a child make?"

One of her eyebrows arched. "This child could be more useful to the UNSC than a fleet of destroyers, a thousand Junior Grade Lieutenants—or even *me*. In the end, the child may be the only thing that makes *any* difference."

"Approaching Eridanus Two," Toran informed them.

"Plot an atmospheric vector for the Luxor spaceport," Dr. Halsey ordered. "Lieutenant Keyes, make ready to land."

CHAPTER 2

1130 Hours, August 17, 2517 (Military Calendar) Eridanus Star System, Eridanus II, Elysium City

he orange sun cast a fiery glow on the playground of Elysium City Primary Education Facility No. 119. Dr. Halsey and Lieutenant Keyes stood in the semishade of a canvas awning and watched children as they screamed and chased one another and climbed on steel lattices and skimmed grayballs across the repulsor courts.

Lieutenant Keyes looked extremely uncomfortable in civilian clothes. He wore a loose gray suit, a white shirt, and no tie. Dr. Halsey found his sudden awkwardness charming.

When he had complained the clothes were too loose and sloppy, she had almost laughed. He was pure military to the core. Even out of uniform, the Lieutenant stood rigid, as if he were at perpetual attention. "It's nice here," she said. "This colony doesn't know how good they've got it. Rural lifestyle. No pollution. No crowding. Climate-controlled weather."

The Lieutenant grunted an acknowledgment as he tried to smooth the wrinkles out of his silk jacket.

"Relax," she said. "We're supposed to be parents inspecting the school for our little girl." She slipped her arm through his, and although she would have thought such a feat impossible, the Lieutenant stood even straighter.

She sighed and pulled away from him, opened her purse, and retrieved a palm-sized pad. She adjusted the brim of her wide straw hat to shade the pad from the noon glare. With a tap of her finger, she accessed and scanned the file she had assembled of their subject.

Number-117 had all the genetic markers she had flagged in her original study—he was as close to a perfect subject for her purposes as science could determine. But Dr. Halsey knew it would take more than theoretical perfection to make this project work. People were more than the sum of their genes. There were environmental factors, mutations, learned ethics, and a hundred other factors that could make this candidate unacceptable.

The picture in the file showed a typical six-year-old male. He had tousled brown hair and a sly grin that revealed a gap between his front teeth. A few freckles were scattered across his cheeks. Good—she could match the patterns to confirm his identity.

"Our subject." As she angled the pad toward the Lieutenant so he could see the boy, Dr. Halsey noticed that the picture was four months old. Didn't ONI realize how fast these children changed? Sloppy. She made a note to request updated pictures on a regular basis until phase three started.

"Is that him?" the Lieutenant whispered.

Dr. Halsey looked up.

The Lieutenant nodded to a grassy hill at the end of the playground. The crest of that hill was bare dirt, scuffed clean of all

vegetation. A dozen boys pushed and shoved one another—grabbed, tackled, rolled down the slope, and then got up, ran back, and started the process over.

"King of the hill," Dr. Halsey remarked.

One boy stood on the crest. He blocked, pushed, and strongarmed all the other children.

Dr. Halsey pointed her data pad at him and recorded this incident for later study. She zoomed in on the subject to get a better look. This boy smiled and showed the same small gap between his front teeth. A split-second freeze frame and she matched his freckles to the picture on file.

"That's our boy."

He was taller than the other children by a full head, and—if his performance in the game was any indicator—stronger as well. Another boy grabbed him from behind in a headlock. Number-117 peeled the boy off, and—with a laugh—tossed him down the hill-side like a toy.

Dr. Halsey had expected a specimen of perfect physical proportions and stunning intellect. True, the subject was strong and fast, but he was also dirty and rude.

Then again, unrealistic and subjective perceptions had to be confronted in these field studies. What did she really expect? He was a six-year-old boy—full of life and unchecked emotion and as predictable as the wind.

Three boys ganged up on him. Two grabbed his legs and one threw his arms around his chest. They all tumbled down the hill. Number-117 kicked and punched and bit his attackers until they let go and ran away to a safe distance. He rose and tore back up the hill, bumping another boy and shouting that he was king.

"He seems," the Lieutenant started, "um, very animated." "Yes," Dr. Halsey said. "We may be able to use this one."

She glanced up and down the playground. The only adult was helping a girl get to her feet after falling down and scraping her elbow; she marched her towards the nurse's office.

"Stay here and watch me, Lieutenant," she said, and passed him the data pad. "I'm going to have a closer look."

The Lieutenant started to say something, but Dr. Halsey walked away, then half jogged across the painted lines of hop-scotch squares on the playground. A breeze caught her sundress and she had to clutch the hem with one hand, grabbing the brim of her straw hat with the other. She slowed to a trot and halted four meters from the base of the hill.

The children stopped and turned.

"You're in trouble," one boy said, and pushed Number-117.

He shoved the boy back and then looked Dr. Halsey squarely in the eyes. The other children looked away; some wore embarrassed smirks, and a few slowly backed off.

Her subject, however, stood there defiantly. He was either confident she wasn't going to punish him—or he simply wasn't afraid. She saw that he had a bruise on his cheek, the knees of his pants were torn, and his lip was cracked.

Dr. Halsey took three steps closer. Several of the children took three involuntary steps backward.

"Can I speak with you, please?" she asked, and continued to stare at her subject.

He finally broke eye contact, shrugged, and then lumbered down the hill. The other children giggled and made tsking sounds; one tossed a pebble at him. Number-117 ignored them.

Dr. Halsey led him to the edge of the nearby sandpit and stopped.

"What's your name?" she asked.

"I'm John," he said. The boy held out his hand.

Dr. Halsey didn't expect physical contact. The subject's father must have taught him the ritual, or the boy was highly imitative.

She shook his hand and was surprised by the strength in his minuscule grip. "It's very nice to meet you." She knelt so she was at his level. "I wanted to ask you what you were doing."

"Winning," he said.

Dr. Halsey smiled. He was unafraid of her . . . and she doubted that he'd have any trouble pushing her off the hill, either.

"You like games," she said. "So do I."

He sighed. "Yeah, but they made me play chess last week. That got boring. It's too easy to win." He took a quick breath. "Or—can we play gravball? They don't let me play gravball anymore, but maybe if you tell them it's okay?"

"I have a different game I want you to try," she told him. "Look." She reached into her purse and brought out a metal disk. She turned it over and it gleamed in the sun. "People used coins like this for currency a long time ago, when Earth was the only planet we lived on."

His eyes fixed on the object. He reached for it.

Dr. Halsey moved it away, continuing to flip it between her thumb and index finger. "Each side is different. Do you see? One has the face of a man with long hair. The other side has a bird, called an eagle, and it's holding—"

"Arrows," John said.

"Yes. Good." His eyesight must be exceptional to see such detail so far away. "We'll use this coin in our game. If you win, you can keep it."

John tore his gaze from the coin and looked at her again, squinted, then said, "Okay. I always win, though. That's why they won't let me play gravball anymore."

"I'm sure you do."

"What's the game?"

"It's very simple. I toss the coin like this." She flicked her wrist, snapped her thumb, and the coin arced, spinning into the air, and landed in the sand. "Next time, though, before it lands, I want you to tell me if it will fall with the face of the man showing or with the eagle holding the arrows."

"I got it." John tensed, bent his knees, and then his eyes seemed to lose their focus on her and the coin.

Dr. Halsey picked up the quarter. "Ready?"

John gave a slight nod.

She tossed it, making sure there was plenty of spin.

John's eyes watched it with that strange distant gaze. He tracked it as it went up, and then down toward the ground—his hand snapped out and snatched the quarter out of the air.

He held up his closed hand. "Eagle!" he shouted.

She tentatively reached for his hand and peeled open the tiny fist.

The quarter lay in his palm: the eagle shining in the orange sun.

Was it possible that he saw which side was up when he grabbed it . . . or more improbably, could have picked which side he wanted? She hoped the Lieutenant had recorded that. She should have told him to keep the data pad trained on her.

John retracted his hand. "I get to keep it, right? That's what you said."

"Yes, you can keep it, John." She smiled at him—then stopped.

She shouldn't have used his name. That was a bad sign. She couldn't afford the luxury of *liking* her test subjects. She mentally stepped away from her feelings. She had to maintain a professional distance. She had to . . . because in a few months Number-117 might not be alive.

"Can we play again?"

Dr. Halsey stood and took a step back. "That was the only one I had, I'm afraid. I have to leave now," she told him. "Go back and play with your friends."

"Thanks." He ran back, shouting to the other boys, "Look!"

Dr. Halsey strode to the Lieutenant. The sun reflecting off the asphalt felt too hot, and she suddenly didn't want to be outside. She wanted to be back in the ship, where it was cool and dark. She wanted to get off this planet.

She stepped under the canvas awning and said to the Lieutenant, "Tell me you recorded that."

He handed her the data pad and looked puzzled. "Yes. What was it all about?"

Dr. Halsey checked the recording and then sent a copy ahead to Toran on the *Han* for safekeeping.

"We screen these subjects for certain genetic markers," she said. "Strength, agility, even predispositions for aggression and intellect. But we couldn't remote test for everything. We don't test for luck."

"Luck?" Lieutenant Keyes asked. "You believe in luck, Doctor?"

"Of course not," she said with a dismissive wave of her hand. "But we have one hundred and fifty test subjects to consider, and facilities and funding for only half that number. It's a simple mathematical elimination, Lieutenant. That child was one of the lucky ones—either that or he is extraordinarily fast. Either way, he's in."

"I don't understand," Lieutenant Keyes said, and he started fiddling with the pipe he carried in his pocket.

"I hope that continues, Lieutenant," Dr. Halsey replied quietly. "For your sake, I hope you never understand what we're doing."

She looked one last time at Number-117—at John. He was

having so much fun, running and laughing. For a moment she envied the boy's innocence; hers was long dead. Life or death, lucky or not, she was condemning this boy to a great deal of pain and suffering.

But it had to be done.

CHAPTER 3

2300 Hours, September 23, 2517 (Military Calendar) / Epsilon Eridani System, Reach Military Complex, Planet Reach

r. Halsey stood on a platform in the center of the amphitheater. Concentric rings of slate-gray risers surrounded her—empty for now. Overhead spotlights focused and reflected off her white lab coat, but she still was cold.

She should feel safe here. Reach was one of the UNSC's largest industrial bases, ringed with high-orbit gun batteries, space docks, and a fleet of heavily armed capital ships. On the planet's surface were Marine and Navy Special Warfare training grounds, OCS schools, and between her underground facilities and the surface were three hundred meters of hardened steel and concrete. The room where she now stood could withstand a direct hit from an 80-megaton nuke.

So why did she feel so vulnerable?

Dr. Halsey knew what she had to do. Her duty. It was for the

greater good. All humanity would be served... even if a tiny handful of them had to suffer for it. Still, when she turned inward and faced her complicity in this—she was revolted by what she saw.

She wished she still had Lieutenant Keyes. He had proven himself a capable assistant during the last month. But he had begun to understand the nature of the project—at least seen the edges of the truth. Dr. Halsey had him reassigned to the *Magellan* with a commission to full Lieutenant for his troubles.

"Are you ready, Doctor?" a disembodied woman's voice asked. "Almost, Déjà." Dr. Halsey sighed. "Please summon Chief Petty Officer Mendez. I'd like you both present when I address them."

Déjà's hologram flicked on next to Dr. Halsey. The AI had been specifically created for Dr. Halsey's SPARTAN project. She took the appearance of a Greek goddess: barefoot, wrapped in a toga, motes of light dancing about her luminous white hair. She held a clay tablet in her left hand. Binary cuneiform markings scrolled across the tablet. Dr. Halsey couldn't help but marvel at the AI's chosen form; each AI "self-assigned" a holographic appearance, and each was unique.

One of the doors at the top of the amphitheater opened and Chief Petty Officer Mendez strode down the stairs. He wore a black dress uniform, his chest awash with silver and gold stars and a rainbow of campaign ribbons. His close-shorn hair had a touch of gray at the temples. He was neither tall nor muscular; he looked so ordinary for a man who had seen so much combat . . . except for his stride. The man moved with a slow grace as if he were walking in half gravity. He paused before Dr. Halsey, awaiting further instructions.

"Up here, please," she told him, gesturing to the stairs on her right.