

Repair Crew Alpha: Practical Mechanics of Deep-Space Salvage

MixCache.com

Table of Contents

- **Introduction**
 - **Chapter 1** Docking Day: Joining Repair Crew Alpha
 - **Chapter 2** First Cut: Safe Entry into a Dead Hull
 - **Chapter 3** Tethers and Trust: EVA Fundamentals Under Fire
 - **Chapter 4** Power-Down Protocols: Making the Wreck Quiet
 - **Chapter 5** The Map and the Maze: Rapid Recon and Layout Reading
 - **Chapter 6** Seal the Sky: Pressure Control and Patchwork
 - **Chapter 7** Cutting Smart: Saws, Torches, and Structural Ethics
 - **Chapter 8** Crates, Cores, and Claims: Salvage Law in Practice
 - **Chapter 9** Drones in the Dark: Remote Eyes and Hands
 - **Chapter 10** Heat, Radiation, and Things That Bite: Hazard Triage
 - **Chapter 11** Ghosts on the Wire: Data, Black Boxes, and Consent
 - **Chapter 12** Tug Math: Vectors, Mass, and Moving Mountains
 - **Chapter 13** Cargo or Crew: The First Dilemma
 - **Chapter 14** Pirate Etiquette: Negotiation When Guns Arrive
 - **Chapter 15** Improvisation Drill: Turning Junk into Tools
 - **Chapter 16** Biohazard Watch: Quarantine and Decon
 - **Chapter 17** AI Afloat: Talking Down a Derelict Mind
 - **Chapter 18** Chain of Custody: Documentation That Saves Lives
 - **Chapter 19** Fire in Vacuum: Extinguishing the Unthinkable
 - **Chapter 20** The Long Tow: Fatigue, Rotations, and Crew Care
 - **Chapter 21** Insurance and Interference: Corporate Pressure
 - **Chapter 22** The Cut That Matters: Structural Decisions with Consequences
 - **Chapter 23** Storm at L5: Riding a Solar Event
 - **Chapter 24** A Code We Can Live With: Writing the Crew Ethic
 - **Chapter 25** Homeport Reckoning: What We Keep, What We Leave
-

Introduction

Welcome aboard. If you picked up this book for adventure, you'll get it: derelict corridors that swallow light, hulls that groan under invisible stress, and silent cargoes worth more than small moons. If you picked it up for instruction, you'll get that too: practical checklists, the logic of safe cuts, the math behind tows, and why a tether is

more than a line—it's a promise. Repair Crew Alpha is a working outfit. We run lean, argue plenty, and keep one another alive. This book is our record and our offer: stories stitched to procedures, missions cut with how-to interludes, choices weighed against consequences.

You'll read mission logs as they were written in the moment—compressed oxygen hissing in the background, suit mics hot, hearts faster than they should be. Between those logs you'll find the mechanics: how to de-energize a corpse of a ship without waking the wrong systems, how to map a labyrinthine bulkhead by sound and feel when your scanner fogs with radiation, and how to pivot when nothing in the plan survives first contact with the wreck. We've included the small things that textbooks miss: the way an unbalanced crate hums through your glove, the smell of scorched poly in a suit filter, the relief that tastes like tin when the air tastes like anything at all.

You'll also read about law and ethics because salvage without them is theft with better equipment. We'll show you how to post a claim beacon legally and when to stand down even when your stomach growls for a payout. We'll talk about the black boxes that record the last arguments of a crew and the signatures of machines, about chain of custody and consent, about who gets to speak for the lost and how to listen. If every chapter teaches a technique, it also asks a question. Out here, the right thing is rarely clean. Sometimes all you get is the least wrong.

This is fiction, because names are changed and some edges are sanded so you can hold them without bleeding. But the bones are true. The tools are those we carry; the risks are those we take; the calculations are the ones that have kept our badges on our chests instead of our names on a wall. Treat the procedures with respect. If you're learning, pair this book with real instruction, real supervisors, and real checkouts. If you're reading for the story, let the checklists slow you down anyway. Stories move fast; consequences don't.

You'll meet the crew as we go. The skipper who counts to ten when everyone wants to cut on one. The specialist who can make a cutter sing but refuses to sing unless the math pencils. The rookie who asks the question no one else thought to ask—and saves the day because of it. You'll see us at our best, on days when the suit seals first try and the tether feels like a handshake. You'll see us at our worst, when we choose wrong, when fear makes cowards of us, when we lie to ourselves to sleep. Teamwork is not a poster on a bulkhead; it's a ledger we keep with sweat and apology.

Read this book in order or jump to the interludes when you need them. Use the margins in your mind to note what you would have done differently. Argue with us. Salvage is improvisation disciplined by habit. The habits you build—pre-briefs that bite, cross-checks that annoy, logs that catch mistakes—are what free you to improvise when the hull flexes and the plan does too. Survival isn't luck; it's layers.

Finally, understand what hangs in the balance. We work where insurance adjusters send forms and pirates send threats. Some days the payout pays for a year of quiet; other days the only thing we bring back is a truth that can't be sold. We live by a code we'll write in these pages, not because we are saints but because we like to come home. If this book convinces you of anything, let it be this: the universe is indifferent, the wrecks are indifferent, the math is indifferent. Only people are not. And that is why we climb the ladder, clip the tether, and step out anyway.

CHAPTER ONE: Docking Day: Joining Repair Crew Alpha

The clamp engaged with a cough of hydraulics and hung there like a steel handshake we had not asked to make. Docking Day smells of hot copper and antiseptic, of ozone from boots tracking across grids that still hum with stray charge, and of coffee gone bitter in a thermos left too long on a console running warm. I stood with my kit at my feet and listened to the hull settle, a long low note felt in the teeth more than heard, and told myself this was normal. Normal is a word that gets rewritten in blood and rivets the first time a bulkhead decides it prefers a different shape. I had come to join Repair Crew Alpha armed with checklists, a clean bill of health, and the kind of confidence that only ignorance can mint, and already the universe had quietly filed for bankruptcy on my assumptions.

Alpha's skiff was docked off the mid-ring of a station that had seen better centuries, a place where graffiti could survive vacuum if you carved it deep enough and cared enough to bleed for it. Outside, the port lights blinked like patient predators waiting for us to drift far enough to be worth the chase. Inside, the corridor pressed in with institutional politeness, floors grated steel, walls were scarred with patches that told their own ragged history, and arrows painted in yellow enamel pointed toward berths that had names like warnings. I checked my harness again, felt the familiar bite across the hips, and told my boots to grip. Gravity here was a courtesy we collected in small change, and Alpha's domain was a threshold that asked for respect in equal parts muscle and manners.

A hand landed on my shoulder and nearly made me vault a railing. The owner laughed, a sound like gravel tumbling down a chute, and told me to breathe slow unless I wanted to hyperventilate my dignity into the intake filters. Captain Varga wore a scar across one eyebrow that never quite healed right and a jacket with sleeves that had been replaced more times than she cared to admit. She had eyes that missed nothing, hands that had calibrated torque wrenches in the dark, and a habit of punctuating truths with the click of her pressure gauge. She sized me up the way a

cutter sizes a hull: quick, thorough, and ready to cut deeper if the metal lied. Welcome to Repair Crew Alpha, she said. Try not to die before lunch.

Behind her loomed Miko, our systems surgeon, who carried a tablet like a shield and a frown like a default expression. Miko believed in redundancy the way some people believe in luck, and could recite failure modes of gear I had not yet touched while walking through a radiation storm without breaking stride. At Miko's heel was Jax, our rigging lead, all coiled calm and clever fingers who could rig a line that felt like safety and unspoken promises. Jax nodded without speaking, said eyes being expensive in low light, and went back to coiling a tether that smelled faintly of the last planet it kissed. I had read the dossiers, seen the mission rosters, and known the names; meeting the humans behind them felt like meeting a live circuit.

We moved into the common space that passed for Alpha's heart, a chamber where dents in the table mapped years of hard landings and the coffee machine hissed like an angry cat. Charts hung from magnetic rails, edges curling like old letters, and a whiteboard carried schematics half erased and half denied, with one corner labeled in permanent marker: do not touch unless you enjoy regret. On a shelf sat a sealed case containing a cutter that had seen more arguments than most lawyers, and next to it a battered manual with pages dog-eared and stained, margins crammed with notes that read like sermons written by mechanics with dirty hands. The place felt like it had learned how to live with broken things and still expected breakfast on time.

Varga opened the floor with the kind of grin that promises work and maybe a story worth telling later. We're not heroes, she said. We're mechanics with permits and bad decisions we've learned to survive. If you want glory, go chase medals in a pressurized dome. If you want to keep breathing while pulling treasure from tombs, you'll listen more than you speak and measure twice before you cut. We're about to take on a contract for a hull that quit talking mid-transit, a job that pays enough to keep the lights on and the lawyers at bay if we do it clean. She paused, let the hum of the station fill the gap, then added that today was less about what we could do and more about what we wouldn't do without asking first.

I introduced myself with a handshake that felt too soft and a voice that cracked on the second syllable of my name. Miko asked when I last calibrated a suit regulator and did not smile when I hesitated. Jax asked if I could tie a bowline with gloves on and eyes closed, then produced a length of cord and waited. I tied the knot, fumbled the finish, and felt the room shrink to the size of my mistake. Varga watched, letting the silence teach me that Alpha's currency was competence and its interest rate was merciless. Then Jax showed me the trick: twist, tuck, and hold like you mean it, and the knot held like a vow. I practiced until my fingers burned and the line bit like a promise kept.

Our gear sat in lockers that smelled of ozone and the metallic tang of care. Each locker bore a name and a scrawl of dates and cautions, some of them updated in red

after incidents that had taught lessons in blood and frost. I opened mine and found a suit that fit like an old fear, familiar and unwelcoming, with seals that clicked like the teeth of a predator saying hello. The gloves were stiff, the visor fogged with my breath, and the readouts blinked in a language I was still learning to flirt with. Miko walked me through the pre-breathe, checked my levels, and told me that fear is fine as long as it does the paperwork. I nodded, tried to sound like I believed it, and started the checklist.

The intercom crackled with a voice that belonged to a dispatcher who sounded like she had swallowed a library of regulations and liked the taste. Job summary came next: a mid-size hauler had gone dark after a slosh and surge event, hull registered under a holding company that changed names the way some people change socks, and manifest flagged as mixed cargo with possible high-value cores. The client wanted answers and assets, preferably in that order, and wanted us to keep the insurance inspectors happy while we broke things and put them back together. Varga assigned sectors, handed out roles, and drew lines in the air with her hands that turned into boundaries and responsibilities. Mine, it turned out, was to watch, learn, and not touch anything that could bite back.

We filed into the mess for a meal that tasted like compromise and spices that had lost their passports months ago. Conversation bounced between the usual salvage gossip—who stiffed whom, which station had the worst coffee, and which moon was rumored to eat tools—and serious talk about the weather, by which we meant radiation forecasts and solar moods. Someone told a story about a hull that opened up like a flower when they cut the wrong beam, and laughter followed, sharp and sudden, because we all knew that flowers in vacuum make terrible messes. I asked about ghosts in the comms, and Miko said that sometimes the dead leave echoes that sound like warnings, and we all nodded like we understood.

After the meal, we gathered around the table where Varga pinned a schematic of our target, a boxy hauler with too many add-ons and a history of slapdash repairs. Her pen moved like a blade, tracing likely trouble spots and marking them with symbols that made my head spin until she explained them in plain speech. Seals here are tired, she said. Conduits there have been bypassed so many times they look like urban legends. The bridge is probably haunted by bad decisions and worse coffee. Our job is to go in, find the cores that pay for the trip, and leave the rest without starting a fire we can't put out. She looked at me and added that knowing where the danger lives is how we keep it from moving in.

Miko pulled up a simulation on the tablet, ran a model of the hull's likely layout based on last-known telemetry and the scars visible from orbit. The model showed ruptured lines like veins cut open, power nodes that had surrendered, and a cargo bay that looked like it had swallowed a storm. Jax traced a path through the wreck with his fingers, naming handholds and hazards, turning the schematic into a dance floor

where one wrong step could mean a long fall. I asked about pressure differentials, and Jax said they were like grudges: small ones can be ignored, big ones will make you regret your tone. I made a note and resolved not to hold grudges with my environment.

Varga broke the plan into phases, each with its own checklist and kill switch. Phase one was eyes on the target and ears open, phase two was safe entry and pressure discipline, phase three was locate and tag the cores, and phase four was extraction without turning the hull into confetti. She assigned partners, set comms protocols, and warned that silence was not golden when someone's life was on the line. If you don't hear your partner, you go looking, she said, and if you find them in trouble, you fix the problem or you bring them home in pieces, whichever is easier. We all laughed, but our hands went to our tethers.

We moved to the lockers again and suited up in silence, the ritual of zippers and seals and checks as old as salvage itself. I felt the suit stiffen around me, listened to the regulators settle into their song, and waited for the hiss that meant we were ready. Miko double-checked my seals, Jax checked my tether, Varga looked me in the eye and asked if I remembered the two rules. Rule one is come back alive. Rule two is make sure your partner does too. Everything else is just technique. I said I remembered, tried to sound like I believed it, and stepped into the airlock with the rest of Alpha.

The lock cycled with a sound like a giant exhaling, and I watched the station shrink through the viewport, a grid of lights that suddenly felt very far away. My stomach tried to trade places with my lungs, and I focused on the line of my breath, counted it, made it slow. We detached with a nudge that felt like a whisper and drifted toward the hauler like guests arriving late to a funeral. The hull grew in the viewport, scarred and silent, with patches that looked like bandages on a patient who had given up on healing. I told myself this was normal. Normal is a story we tell to make the math easier.

We made contact with a clang that rattled my teeth and sent a shiver through the hull, a sound that said someone was home whether we liked it or not. Jax anchored us with practiced ease, Miko scanned for ghosts, and Varga gave the signal to cut. The cutter sang like a promise and a threat, flame blooming in vacuum without sound but with fury, and I felt the vibration through my gloves. When the hatch fell away, we were looking into a throat that led to rooms that had forgotten how to breathe. I took my first step into the dead ship and wondered if it would remember how to bite.

Inside, the air was gone and the silence was heavy, the kind of quiet that presses against the ears and makes you hear your own blood argue with fear. We moved like ghosts tethered to the living, lights cutting cones through dust that had not been disturbed in longer than it cared to admit. I felt the pull of the tether, the line back to

Alpha, and told myself it was a promise I could trust. Miko scanned, Jax mapped, Varga led, and I learned that salvage is not about what you take but about what you do not break along the way.

We found the first core behind a panel that opened with a complaint, its housing warm like a sleeping animal. Miko checked its tags, Jax rigged a cradle, Varga nodded, and I held the light steady. The core pulsed like a heartbeat that had not yet learned it was alone. We secured it, logged it, and moved on, each step a negotiation with a hull that wanted to keep its secrets. I began to understand that Alpha's skill was not in cutting but in listening, in hearing what the metal said when you asked it nicely and held your breath.

By the time we closed the hatch behind us and remade contact with the skiff, my hands were shaking and my mind was full of questions that had no names. Varga clapped my shoulder and said not bad, which in Alpha language meant you survived and did not set anything on fire. Miko smiled a little, Jax winked, and I realized I had crossed a line from guest to crew without noticing the exact step. We docked, cycled back into station air that tasted stale and wonderful, and took off our suits like skins we had borrowed and were ready to give back.

In the mess, over rehydrated stew that tasted like possibility, Varga handed me a badge with a scratched surface and a number that was now mine. Repair Crew Alpha, it said. You don't earn it by being smart. You earn it by being careful, by watching your partner's back, and by knowing when to cut and when to wait. I pinned it to my chest, felt its weight settle like a promise, and asked what tomorrow brought. Varga grinned and said tomorrow we do it again, only this time you get to hold the cutter. I laughed, realized she was serious, and finished my meal with the kind of hunger that only comes from knowing the universe is big enough to break you and small enough to let you pick up the pieces.

This is a sample preview. Purchase the book to read the full content.

Visit MixCache.com to purchase the complete book.