



*From the MixCache.com library*

SAMPLE COPY

# Orbital Forensics

MixCache.com

SAMPLE COPY

## Table of Contents

- **Introduction**
- **Chapter 1** Spheres of Blood
- **Chapter 2** The Gilded Habitat
- **Chapter 3** Chain of Custody at the Airlock
- **Chapter 4** Trace Without Gravity
- **Chapter 5** Atmospheres That Lie
- **Chapter 6** The Body in the Radial Spoke
- **Chapter 7** Trajectories of Intent
- **Chapter 8** Vacuum Burns
- **Chapter 9** Microfibers, Macro Lies
- **Chapter 10** Spectra and Alibis
- **Chapter 11** Pressure Differential
- **Chapter 12** The Air Is Evidence
- **Chapter 13** Coriolis Confessions
- **Chapter 14** Entanglements
- **Chapter 15** Cold Storage, Colder Truths
- **Chapter 16** Shock Front
- **Chapter 17** Reconstruction in Freefall
- **Chapter 18** Noise in the Sensors
- **Chapter 19** The Habitat Architect
- **Chapter 20** Toxic Mix
- **Chapter 21** Breaches
- **Chapter 22** The Quiet Thruster
- **Chapter 23** Orbital Mechanics of Murder
- **Chapter 24** Apogee
- **Chapter 25** Justice in Orbit

SAMPLE COPY

## Introduction

Orbit is a hard place for the truth to settle, because nothing settles at all. Fluids don't fall; they gather themselves into shining spheres that drift and cling where surface tension tells them to. Dust doesn't lie in wait on a floor—it roams in eddies, climbs filters, vanishes into vents. A crime scene in zero-G defies the instincts Earth taught us. Yet even here, the dead speak. They speak in thin films of residue, in micro-scratches on handholds, in the faint chemical accents carried by a habitat's breath.

Dr. Elara Voss has learned to listen. She works where the wealthy sip champagne from bubbles and watch Earth turn like a living fresco beneath them. Luxury orbital habitats sell the fantasy that physics is tamed and risk is an antique. Elara knows better. She keeps a kit strapped to her thigh and her memories buckled even tighter: the hiss of a decompression that took a partner, the knowledge that a missed variable can become a vacuum no apology will fill. She believes that justice is not a verdict but a reconstruction—the careful reassembly of cause and consequence until the shape of what happened can no longer be denied.

These habitats are cathedrals of engineering: gardens under glass, water lofted into lazy ribbons, art hung on invisible tethers. Behind the curated calm, airlocks cycle, pumps throb, and a thousand sensors taste the atmosphere for the first hint of trouble. Owners call them sanctuaries. Staff call them systems. Elara calls them witnesses. In a place where privacy is the most expensive amenity, evidence insists on being communal; every module shares air, data, and consequences.

Forensics in orbit is less about gravity and more about control. You do not dust; you net. You do not swab; you harvest a droplet without bursting it. Chains of custody have links that pass through hatches and vacuum. Contamination does not come from a careless shoeprint but from a shared air loop fifty meters away. The simplest reconstruction becomes a problem in vectors: where a sphere detached, how a body tumbled, when a thruster's whisper nudged a scrap of fiber into a filter grate. Even the lab is a ship: every instrument anchored, every sample sealed against the world's most insistent solvent—nothingness.

The habitats breathe on purpose. Their atmospheres are engineered for comfort, performance, or branding: oxygen-rich for clarity, helium-laced for light voices at a gala, a forest module tuned to resin and rain. Air becomes both alibi and accomplice. A solvent that flashes off on Earth lingers here; a polymer that behaves like stone becomes slick as oil. Pressure changes write signatures in tissue and bone; vacuum leaves burns that do not blacken but blanch. In this book, the air is a character that lies when it can—and, when pressed hard enough, confesses.

Elara's cases cross not just modules but jurisdictions and motives. Corporate security wants discretion; investors want certainty; guests want to believe that wealth can purchase inevitability's silence. Physics disagrees. Thruster firings skew timelines. Coriolis plays tricks on the eye and the inner ear. Surveillance that sees everything misses the moment a glove leaves a film an atom thick on a handhold. In that gap between spectacle and system, a killer imagines a perfect crime. Elara imagines the equation that will undo it.

This is a procedural story set where procedure itself must be reinvented. It will ask you to notice small things and trust that they matter: the angle of a tether fray, the chirp of a CO2 scrubber cycling early, the way a bead of blood clings—or refuses to. It is also the story of a woman who lives with loss in a place that makes loss feel both immediate and infinitely distant. Elara's pursuit of the truth is not sterile; it is compassionate, stubborn, sometimes furious. She knows that evidence can reveal what happened. She hopes it can say why.

Welcome to the gilded vacuum, where beauty is pressurized and certainty is scarce. The methods here are real to their physics, the puzzles honest about what zero-G gives and takes away. If you listen closely, you will hear what Elara hears: the low hum of machines that keep everyone alive, and beneath it, the quieter rhythm of cause and effect. Follow that rhythm. It leads through gardens and galleries, past airlocks and avatars, and finally to the place where justice, like everything else in orbit, must find its balance.

## Chapter One: Spheres of Blood

The emergency comm pinged, a sharp, insistent note cutting through the artificial dawn of Elara's private module. She didn't need to check the time; the 0400 alert was always a prelude to bad news. Habitats didn't call her for lost tourists or spilled synth-coffee. They called when something organic, and usually arterial, had gone wrong. She thumbed the accept button, the holographic projection of Security Chief Jian Li flickering into focus before her. Jian, with his perpetually furrowed brow and regulation-buzzcut hair, looked even more strained than usual.

"Voss. We have a situation on *Elysium Prime*." Jian's voice was tight, betraying the practiced calm of someone reporting an incident to a specialist who had seen it all before. "It's a fatality. Probable homicide. Captain requests your immediate presence."

Elara's fingers were already moving, checking the seals on her forensic kit. *Elysium Prime*. One of the newer, more extravagant orbital resorts, notorious for its zero-G botanical gardens and "gravity-optional" recreational spheres. A playground for the super-rich, where even death would be inconveniently messy. "Details, Jian. What am I walking into?"

"Body found in one of the main recreational spheres. Guest. Male, mid-fifties. Name is Alistair Finch. Significant trauma, looks like a cutting weapon. And... well, there's a lot of blood. Everywhere." Jian paused, clearly uncomfortable. "More than usual, even for zero-G."

"Right. Blood doesn't pool, it blooms. And then it gathers." Elara secured her utility belt, the familiar weight of her instruments a comfort. "What's the scene like? Any immediate hazards? Atmosphere compromised?"

"Atmosphere stable. No obvious breaches. The sphere itself is isolated. We locked it down as soon as the discovery was made. The staff who found him are quarantined, pending your arrival. Clean room protocol is being initiated for approach." Jian looked away, briefly, then back at Elara. "Voss, this one... it's going to be tricky. The visibility is... impaired."

Impaired. That was Jian's polite way of saying the crime scene was a chaotic abstract painting. Spheres of blood. She sighed. "Understood. Get me a transit tube cleared. I'll be there in twenty."

Twenty minutes later, Elara was docking with *Elysium Prime*, the subtle thrum of the habitat's life support systems a low vibration beneath her feet. The internal transit was

swift, propelling her through a series of polished corridors until she reached the security checkpoint outside the recreational sphere. Two grim-faced guards stood sentinel, their standard issue hazmat suits already hinting at the severity of the contamination. Jian met her there, a fresh hazmat suit hanging loosely on his frame.

"We've got a full containment shell around the entrance," he explained, gesturing to the flexible, transparent membrane sealing off the airlock. "The airlock has been cycled and sterilized multiple times, but we're still taking precautions. We don't want anything getting out, or in, that doesn't belong."

Elara nodded, donning her own suit. Hers was a specialized forensic model, equipped with enhanced filtration, integrated comms, and tactile sensors in the gloves for finer control in zero-G. She went through the meticulous checklist: suit integrity, comms check, oxygen levels. The airlock cycled with a familiar hiss, and then she was in, tethering herself to a handhold as she pushed off towards the inner door of the sphere.

The moment the hatch cycled open, the scene hit her like a punch to the gut. Jian hadn't exaggerated. Alistair Finch was indeed deceased, his body drifting slowly in the approximate center of the sphere, surrounded by an unsettling halo of crimson. But it wasn't just a halo. Thousands of tiny, glistening spheres of blood, ranging in size from pinpricks to marbles, drifted lazily through the air, catching the ambient light and reflecting it in gruesome red twinkles. They clung to the polished walls, beaded on the artificial foliage that lined the sphere's periphery, and orbited Finch like morbid satellites.

"Sweet gravity," Elara muttered, her voice distorted by the comms in her helmet. "This isn't just impaired, Jian, it's a goddamn blizzard."

Jian, tethered just inside the airlock, merely grunted. "Staff who found him said they almost didn't see him at first, just thought it was some kind of bizarre art installation."

Elara pushed off, propelling herself gently into the sphere's volume. Her eyes, magnified by her visor, swept across the grotesque tableau. The sphere was designed for weightless recreation, with a lattice of soft tethers and handholds, and patches of synthetic turf for impact absorption. Now, those tethers were festooned with crimson pearls, and the turf was dappled with viscous smears.

Her first priority was to establish a perimeter and assess the state of the body without disturbing the microscopic evidence that might be clinging to the blood spheres. She activated her suit's internal thrusters, a gentle puff of air propelling her towards the central lattice. "Jian, activate the static field emitters. Low power, wide arc. Let's see if we can get these smaller droplets to settle, or at least coalesce."

A low hum filled her ears as the emitters, integrated into the sphere's structure, activated. The effect was subtle but noticeable. The smallest, most ethereal blood mists began to drift towards the nearest surfaces, while larger spheres held their orbits, occasionally merging with others in slow-motion collisions, creating larger, wobbling ovals.

"Victim identification confirmed as Alistair Finch," Elara reported, dictating into her suit's recorder. "Male, approximately 55 years old. Cause of death appears to be exsanguination and multiple penetrating wounds. Primary weapon likely a blade. Body is in a state of free drift, slightly tumbling. No immediate signs of struggle, but the sheer volume of blood suggests a violent event."

She approached Finch cautiously, a portable scanning unit extending from her wrist. The unit emitted a gentle, multi-spectral light, mapping the body and its immediate surroundings. Finch's hazmat suit, a casual accessory for most habitat guests, was ripped in several places, revealing severe wounds on his torso and neck. One arm was bent at an unnatural angle, and his face, wide-eyed and pale, held a look of utter shock.

"The victim was wearing a standard recreational hazmat suit," Elara observed, her voice measured. "The integrity of the suit is compromised. Multiple puncture wounds. The blood appears to have exited the suit through these breaches, as well as the open neck seal, and possibly through the helmet's comms port, given the saturation around the head."

She scanned the areas of the suit where the rips were, noting the precise edges of the fabric tears. These weren't haphazard. They were sharp, deliberate. This wasn't a random accident. This was an attack.

Her eyes followed the trails of the blood spheres. In zero-G, blood followed the path of least resistance, and then surface tension took over. It could cling to a surface, forming a film, or detach into perfect little orbs. Here, both had happened in abundance. The trajectory of the blood was a critical piece of the puzzle. Each sphere, each smear, was a vector, pointing back to the moment of impact, to the force of the attack, to the movement of both victim and assailant.

"We need to map every significant blood sphere," Elara instructed Jian. "And I mean every single one. Prioritize the ones that appear to have a high velocity trajectory, indicating spatter rather than passive bleed-out. We'll use triangulation from the sphere's own sensor grid, augmented by my portable array."

The portable array, a collapsible, multi-sensor web, unfurled from her utility belt. She anchored it to the central lattice, allowing its delicate filaments to spread outwards,

each filament studded with micro-cameras and chemical sensors. It began to feed a constant stream of data back to her visor display: temperature, atmospheric composition, micro-currents of air, and the precise three-dimensional coordinates of every detectable blood droplet.

"Initial scan of the immediate vicinity of the body suggests multiple impacts," Elara continued her dictation. "Concentration of arterial spray indicates the primary wounds were inflicted when the victim was in this general area. However, the wider distribution of smaller spheres suggests significant post-mortem movement, or possibly a secondary site of struggle."

She used a specialized vacuum wand, its intake carefully calibrated to avoid disturbing the droplets' integrity, to collect a few of the larger, free-floating blood spheres. Each was deposited into a sterile, micro-centrifuge tube, sealed, and labeled. These would be crucial for DNA analysis, toxicology, and most importantly, for determining the precise composition and coagulation state, which could help narrow down the time of death.

"Jian, what's the habitat's internal environmental control logs showing for this module?" Elara asked, her gaze sweeping across the blood-drenched sphere. "Any sudden pressure fluctuations? Air current changes? Anything that could explain this level of dispersion?"

"Nothing abnormal on record, Voss," Jian replied, his voice tinny in her comms. "Atmospheric controls were stable throughout the last twelve hours. No unexpected thruster firings from the station either. It's been a calm cycle."

"A calm cycle," Elara echoed, pushing off again, tracing a delicate path along the outer wall of the sphere. "Which means this isn't natural dispersion. This is a result of forces applied within the sphere. The killer either moved violently, or the victim thrashed, or both. And that weapon... it was efficient."

She spotted a faint, reddish smear on a polished handhold, barely visible amidst the other detritus. Not a sphere, but a thin film, indicating contact. She deployed a micro-swab, its tip engineered for zero-G adhesion, and carefully lifted a sample. "Trace evidence. Possible contact DNA. It's subtle. This handhold is almost clean, meaning the assailant might have worn gloves, or they were extremely careful."

As she continued her methodical sweep, she noticed something peculiar. Amidst the chaos of blood, a small, intricate pattern of micro-scratches adorned the surface of an emergency comm panel, positioned strategically near one of the sphere's auxiliary airlocks. They were faint, almost invisible without direct light.

"Hold that thought, Jian," Elara said, activating her suit's high-resolution macro-lens.

The scratches resolved into clear, deliberate marks. They weren't random. They looked almost like... code. Or a message. Faintly etched into the metallic surface, almost as if someone had tried to scratch them out after they were made.

This wasn't just a bloody mess. This was a statement. And Elara Voss, amidst the glittering, morbid spheres, had just found the first whisper of a killer's intent.

SAMPLE COPY

---

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

Visit [MixCache.com](https://mixcache.com) to purchase the complete book.

SAMPLE COPY