

ALABASTER



Don Jones

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Achillios

Prologue

This is my story. It's also *our* story, the story of the people of Alabaster, the people of Achillios. It's partly the story of where we came from, but it's mostly the story of what we've forgotten about ourselves, or cities, and our world.

It's difficult, in many ways, for me to look back so far and recall my feelings from those times. I'm sure I'll get some of the facts wrong, as the blurry lens of time dulls memories, and so I apologize for any of the small details that I leave out or get twisted. The big facts, though – the journey, the discoveries, the failures, and the fears – those, I think, are indelibly etched into my mind.

I ask, as you read, that you not judge me too harshly, nor those who took the journey with me. I was still a child, with a child's small-minded view of the world, and the others in my story were... well, they were men and women of habit and, by and large, ignorance. They did the best they could, even when that wasn't very good at all.

One

It was as if my fingers had forgotten how to work. They lay slack on the strings of the lute, while everyone in the tavern stared at me. The room was absolutely quiet, in an impossible, eerie way. I looked at them, unable to understand why I couldn't move my fingers across the strings. I couldn't speak, even though I opened my mouth to try. I could feel my heart beating in my chest... thump... thump... thump... yet it made no noise in my ears.

I snapped awake. The cold white stone of the ceiling loomed above me, gray pre-dawn light starting to slink into the room from the one tiny window. My lute lay leaned against the wall next to that window, resting quietly as if it knew what I'd just dreamed. I was sweating, even in the cool morning air. I just lay there for a few moments, collecting myself. It was quiet outside, a kind of quiet I rarely experienced as I tended to wake much later in the day. It was, I thought, going to be a long day, as I'd still have to help Mama in the tavern until closing tonight. Waking from a dream like that wasn't a good start, but tomorrow I'd start with Master Vasper in his instrument-making shop, and that was probably just making me nervous.

Downstairs, I could hear the faint noises of Mama moving around. Next to me, little Tomas lay snoring lightly. Today was his Test, I remembered as my mind finished coming awake. We would need to leave for the Tower soon.

I reached over and lightly shook his shoulder. His light blue eyes cracked open and looked at me. And then closed. I punched him in the arm. "Get up, Tomas." I hauled myself upright. "It's Test day." He mumbled something and rolled over, so I pulled the covers off of his pallet. "Up! Come on. We need to get going."

It would be a week of change. Tomas would be Tested and, most likely, return to the tavern with Mama. He would have to lose the last of his baby-habits because no matter the outcome of his Test,

I would be gone to my apprenticeship and Mama would need his help. Mama had already discussed hiring someone to help with the more burdensome tasks that I'd always managed, although money was already tight. If Tomas could step up, Mama could perhaps get away with hiring a serving-boy or -girl, who'd only need to be paid in the evenings while the tavern was open.

A few minutes later, we were dressed in the simple gray homespun coveralls we always wore. Test days were a big deal for every eight-year-old in Alabaster, but the Tower prescribed that only simple, everyday clothing be worn. It was tempting, just because you were going to the Tower, to put on your Feast Day finery, if you had any, but the Tower operated on principles of humility and service.

As we descended the narrow stairs, my eyes took in the main room of the tavern. The long wooden benches were still stacked atop the sturdy trestle tables, just as I'd left them last night. The hard-packed dirt floor was swept and as clean as I'd been able to make it. The worn, ale-stained bar top at the back of the room was wiped down. I realized that this was one of my last mornings taking in the smooth walls of white stone, the thick-topped, tables worn with use, and the small hearth that was so rarely used in Alabaster's persistently warm evenings. I'd been helping put the room to rights every evening since I was Tomas' age until it felt like a part of myself. I'd no sooner leave a table dirty than forget to dress in the morning. Everything looked fine – except... “Tomas,” I said, “you forgot to put fresh tapers out last night.”

Mama emerged from the kitchen with a mug of tea in one hand. With my sudden clarity, I took in her smooth, open face, just beginning to show the wear of time with small wrinkles around her friendly blue eyes. Her light-colored hair was bound into its customary bun, lessening its presence. She was a light-haired anomaly in dark-haired Alabaster; both my father and Tomas' had

the predominantly jet-black hair of the region, leaving the two of us with an unremarkable brown mop atop our heads. I'd often found it remarkable that a city most noted for its uniform, smooth white stone construction was populated by people with dark skin and even darker hair, as if the city had been constructed exclusively to highlight the coloring of its people.

Mama smiled, and said, "Good morning, my boys. Almost ready to go?"

"Tomas forgot the tapers," I said.

"Taryn didn't bring fuel for the fireplace," he countered. As if fuel blocks were necessary when, tonight, customers would be far more interested in a refreshing drink to ward off the heat of the day just passed.

"Not this morning, boys," she said. "Please." I could see the conflicted worry in her face. I was already set to leave the tavern and start my apprenticeship with Master Vasper; would Tomas also leave her for the Tower's Service? I nodded, walked over to the sideboard near the kitchen entrance, and pulled a box of tapers out from underneath. "Not now, Taryn," she said. She set her mug on the bar. "We can get them later. Do either of you want something to eat before we go?"

I was a little hungry, but not used to eating so early. We generally ate closer to midday as the small kitchen in the back of the tavern began preparing the rich stews, cool porridges, and smaller snacks for the evening's customers. I looked at Tomas, who shook his head. "We can get something after the Test," I said. He nodded agreement. He was uncharacteristically quiet. He was nervous, I assumed, about what was ahead for the day. Neither of us had ever had the time for play that many other children had. The tavern simply demanded too much of our time since we had no paid help other than Millie, who ran the kitchen. Instead of roughhousing in the street with other boys his age, Tomas would make a game of his tavern chores, running around the main room with a broom like a sword. We'd been closer than most brothers, he and I, even though we were related only through Mama. I supposed some of

this morning's quietness might be my own impending departure, but the Test was all that was on my mind this morning.

The Test had been the main topic of conversation in the tavern last night as well, as several of our regulars had eight-year-old children or neighbors who did.

"Saleil's youngest went last year," old Groff had reminded everyone. "And the Tower's chit was enough to buy the note on her bakery. Set her up for life, that did, and the boy will be able to visit in another year." I had strummed my lute softly, and let the conversation flow. I'd missed my own Test five years back, as I'd caught some terrible fever. Mama had hired a Healer, and she had signed a waiver to defer my appearance at the Tower. The Tower had later sent word that I was excused, as the intake that year had apparently gone well enough without me.

"We took our Jeffers three years back," Nikol, one of three blacksmiths in the city, recalled. "Wasn't such a fuss, I thought. They set the child down in a chair, and then tell them to stay or go. Whatever they were looking for, Jeffers weren't it, and so I've got me a built-in apprentice in a couple of years." At least Tomas' Test would be quick, from the sounds of it. I'd somehow imagined it would require the little boy to... well, I suppose I don't know what I'd imagined in my head. Tomas had always been shy and quiet, though, so I'd fretted. Sitting in a chair for a moment didn't sound too bad. The conversation had gone on all night in that vein, with various customers injecting their own opinions into what the Tower looked for in children, and how many would be taken into their Service this year.

"Taryn," Mama said, pulling me from my thoughts. "Mind you bring the scrap bag, and we can drop it off as we go." I nodded and walked back to the kitchen for the canvas bag full of food scraps. Each household in Alabaster was required to drop off food scraps at specific points in the city. Most got by doing it once a week, but we tended to fill the bag every day or two with bones, fat trimmings, and the like. I hefted it and realized it was probably a day overdue already – it was quite heavy. I followed Mama and Tomas into the

street, and Mama closed the tavern door behind us.

The morning air was still cool, but as we walked down the smooth, packed dirt street, I could feel the humidity already climbing. This time of year, when crops were in the middle of their growing season, the Tower tried to maintain a higher level of moisture, even if that, combined with the higher temperatures typical of the time of year, made things uncomfortable for us humans.

Our family's little tavern was in the Third Ring, on one of the main spoke streets that radiated out from the center of the city. Alabaster was built as a circle. The Tower occupied the smaller, innermost circle. Around it, nestled into the protective Eastern mountains' half-ring, was the original city, now called the Second Ring. A massive defensive wall completed the mountains' half-circle. That wall and everything within was made from the smooth, white, seamless stone that made Alabaster famous. The Third Ring had been added many years ago in response to the growing population. Honestly, it was a half-Ring, jutting out from the Western side of the city. It was also newer construction, using quarried white blocks mortared together and covered over to closely resemble the original structures. Time, however, had worn the covering in some places, and so you could see the individual blocks underneath.

The city's packed-dirt streets radiated out from the Tower as spokes. However, no spoke ran directly inward for very long. Instead, as you walked along, you would find yourself walking straight into a building, forcing you to go left or right on one of the concentric ring streets for a few blocks, before turning onto another spoke to continue your journey inward. I tended to vary my pattern when taking scraps to be dropped off, just to fend off boredom. Today, I let Mama decide, and she opted for a route that took us past fewer shops, and instead past more of the small, white stone homes that most of the city's inhabitants lived in.

As we walked, a few families emerged from their homes to join us. Most consisted of just one parent escorting their eight-year-old child, although a few, like us, also had an older child in tow. Mama

waved to a few parents that she knew, and Tomas smiled shyly at one or two of his year-mates. Everyone was more subdued than usual, the children seeming cowed and the adults pretending they weren't nervous.

We made our zigzag way through the Third Ring to the imposing stone wall that marked the outer boundary of the Second Ring, the original outer perimeter of the city. We followed the wall for a few blocks, passing the larger apartment buildings that had been built against it until we came to one of the few Gates that connected the two Rings. Next to the Gate was the deep stone trough where scraps could be dumped, and so I emptied our bag into it. As I folded up the now-empty bag, one of the tenders came over with his long-handled paddle, to push the scraps into the gaping hole at one end of the trough. The scraps would go on to serve other needs of the city, such as being composted into fertilizer for the farmlands to the North and South. Little did I know at the time that these scraps were a clue to the complex history and secrets of the city itself.

By now, the first rays of light were beginning to peek over the tips of the Eastern mountains, tinting the Eastern mountains a dusty orange and throwing the Tower itself into stark relief. We walked through the Gate, and I marveled again at the thickness of the wall – walking through it required more than a dozen adult strides. It stretched off to the North and South in a seemingly solid piece, taller than eight tall men, forming the Western border of the Second Ring and meeting up with the ancient, sheer cliffs of the Eastern mountains. These mountains protected the city's other half, curving around it in a mirror of the wall itself.

We made our way inward through the Second Ring, but rather than zigzagging, we kept turning Northward on the ring roads, gradually making our way around the city. The buildings here were all made from that seamless white stone, and many were of grand scale and design. Originally the homes of the city's first founders and first businesses, most were now set aside to be used as foreign embassies, ceremonial halls, guild halls, and the like. They were interspersed with the more utilitarian buildings that had initially

been smaller shops or more demure homes, and now housed Alabaster's various branches of government. About halfway into the Second Ring, we passed one of the large public squares where markets and festivals could be held. This morning, the square was empty, as was traditional on a Test day. The whole city seemed to catch its breath today, awaiting the fate of the families now making their way to the Tower.

Eventually, we came to the looming height of the wall that separated the Second Ring from the First Ring, which was where the Tower was centered. I leaned back, trying to see the top of the spire, but it was lost in the morning haze. The only Gate through this wall was at the Eastern-most point, and we'd only made our way to the Northern point by then. So, like many other families, we kept the wall to our right and followed it the rest of the way around. The wall here was one of the few surfaces in Alabaster not left as a smooth white stone. Instead, it was covered in colorful frescoes depicting the founding of the city, the Founders themselves drawn in epic proportions as the heroes who'd carved a safe haven from the largely inhospitable desert around us. As we approached the gate, we saw one of the Tower Servants standing there, ushering families in. He was a younger man, wearing the simple tan-colored robes of his Order, and he smiled gently at the nervous families making their way inside.

Test days were always days of change for the families they touched, although I'd not realized at the time how deeply mine would be marked.

Two

Once we passed through the Gate, we turned to keep the inner side of the wall on our right. The families had lined up alongside the wall, with the Tower itself jutting a few dozen feet upward to my left. Again, I leaned back and tried to see the top, but this close it seemed to keep going until it touched the sky, some unimaginable distance away. The morning sun, however, bathed it in warm, orange light, almost making it glow. The base of the build itself was enormous, and I imagined it taking a mark or more to run around its base. It was easily the most massive structure I'd ever seen, and I marveled at the people who had designed and built it. At ground level, no openings marred its smooth surface, although I could see high enough to where windows opened to allow light and air inside, and presumably to let the Tower's Servants see out. I wondered if, right now, they were peering down at the lot of us lining up as if for judgment.

I shifted my curious gaze toward the front of the line. There were, perhaps, forty families ahead of us, and I could see the simple wooden chair that Nikol had mentioned last night. As I watched, a child was helped out of the chair by a tan-robed Tower Servant, and the child and his mother walked back toward us. As they passed us, I could see the small, quiet smile on her face, as she took her child's hand, made their way through the Gate behind us, and presumably back to their home.

The line moved quickly. Most children were dismissed, but I had already seen two led off by one of the many Tower Servants standing around. The Tower Servant at the head of the line would pass a small item to the parent, who would then walk past us to the Gate with a determined look and a tear or two trickling down their face. That item must have been the chit old Groff had mentioned, apparently entitling the parent to substantial financial compensation for the loss of their child to the Tower's Service.

As we neared the front of the line, I could make out more detail about what was happening. One Servant stood at the front of the line and would gesture when it was time for the next child to go to the chair. Another Servant would help the child in and out. Next to the chair, a small pillar, made of some shiny material, probably metal, stood on the ground. A thick black rope of some kind ran from the pillar to the back of the chair, and a third Tower Servant stood over the pillar, gazing at it and tapping it slightly as each child sat down. The chair itself appeared to be wooden. It was adult-sized, requiring the small children to clamber a bit to get into it. It lacked arms, but its back was tall, straight, and made of closely-spaced horizontal slats. Each slat appeared to have a strip of bronze metal affixed to it.

Our turn came soon enough. “Good morning,” the Servant at the front of the line said. “My name is Father Ambrose. What’s your name?” he asked my brother. Father Ambrose was older, his full beard as much white as black, and his eyes and smile seemed genuine and kind.

“Tomas,” my brother said, all but whispering.

“Good morning, Tomas,” Father Ambrose repeated. “I just need you to sit in that chair right there and lean back firmly against its back. You won’t feel anything at all, I promise. Can you do that?”

Tomas nodded and walked over to the chair. Ignoring the Servant who tried to help him up, he climbed up into the chair, turned around, and pushed himself back into it. His little legs stuck straight out. The Servant at the pillar – up close, it looked to be wrapped in a silvery sheet of metal – tapped it, and his eyebrows raised. “Father Ambrose,” he said. “Would you like to have a look, please?”

Father Ambrose cocked his head to one side for a moment, and then joined his colleague at the pillar. “My,” he said. He looked up. “Madam, Tomas has a very high potential.” He walked back to us at the head of the line. “Your son is called into the Tower’s Service,” he said, smiling. He handed her a leather strip with bits of metal crimped into it. “We thank you and your family so much, and please

accept this as a token of the city's gratitude. You'll find that any moneylender in the city can accept this."

"I – thank you," Mama said. "Can I say goodbye?"

"Oh, of course," Father Ambrose said, stepping aside and gesturing to Tomas, who'd been helped down from the chair. "And you'll be able to see him on most Feast days after his tenth birthday, of course."

She nodded and walked over to Tomas. They embraced and exchanged a few soft words that I couldn't hear. Tomas had tears already trickling down his face, and Mama wiped them away and tried to smile. At the same time, the Servant who'd been behind the pillar had come over and pulled Father Ambrose aside, and was whispering furiously in his ear. Father Ambrose nodded, and the other Servant returned to the pillar. "Madam," Father Ambrose said. "Might I ask a question before you go?"

Mama turned to him, and one of the other Servants took Tomas' hand and led him off in the opposite direction, toward where I assumed the Tower's actual entrance must be. He kept looking back over his shoulder at us, and I gave him a small wave as they rounded out of sight. "Yes?" she asked.

"Is this," Father Ambrose asked, gesturing at me, "also your son?"

"Yes," she said, putting a hand on my shoulder. It was then that I realized how much I'd grown in the past year. Mama had always towered above me in my mind, but she was only an inch or two taller than me, now. "This is Taryn."

"Do the boys share a father?"

"No," she answered, shaking her head. My father had been a Road Trader, plying the highways between cities with trade goods. He had taken ill on the road, and Mama and I had left the caravan when it arrived here at Alabaster. Papa died a few days later. "Taryn's father passed some years ago, and he and I stayed here. A few years later, I met Tomas' father, and we were handfasted."

"Ah, well, my congratulations. And is your husband at home today?"

Mama shook her head. “No,” she said softly. “The attacks of three years ago –”

Father Ambrose raised a hand to stop her. “I understand. I’m so sorry. You have had such a difficult time, and here we are breaking your family up even more.”

“No,” she said, wiping her eyes with the back of her hand, “I’m grateful for Alabaster having taken me in, given me a home, and offered me a way to earn our living. I’m grateful to the Tower for keeping us safe.”

“We have found, over the years,” Father Ambrose said, “that strong potential for Tower Service often runs in families. Was Taryn Tested in his eighth year?”

“No,” she said, “he was sick on the Test day. But we did get a Healer to sign a waiver, and the Tower confirmed it just a week later. I didn’t bring that, I’m sorry, I –”

“No, no,” Father Ambrose said, putting a hand on her forearm. “No, my dear lady, there is no problem. It’s just that we would like to test Taryn now, in case he has potential similar to your son.”

“Now?” she asked, her eyes confused. “But I thought –”

“Age eight is the first time where we can reliably detect the needed potential,” Father Ambrose said. “But honestly, any time up to around fifteen years of age is fine. We just usually get everyone in their eighth year. How old are you, Taryn?” he asked, turning to me.

“Thirteen,” I said.

“Hmm. Have you entered into an apprenticeship, then?”

I nodded. “I’m to start with Master Vasper tomorrow,” I said.

“Ah. No finer instrument maker in the city or I daresay the entire continent. But if you have not actually started, then you are considered unattached by law, and so I am obligated to ask you to take the Test. Would you please sit in the chair, with your back firmly against its back?” he asked.

“But –”

“Taryn,” Mama said, putting her hand on my back and giving me a gentle push. I nodded and sat in the chair. The Servant at the

pillar was just out of my sight, but I heard his quick intake of breath.

"Five," he said so softly I barely heard him.

Father Ambrose's face scrunched, and he again walked to the pillar. "That can't be right," he said. "Still... it's at least a four. That's enough." He walked back to Mama. "Madam," he said, handing her another of the leather chits. "Taryn is called into the Tower's Service. We will send word to Master Vasper, and he'll refund the apprenticeship fee."

She nodded and looked at me. I quickly closed the distance between us and embraced her. "Mama," I said, "I don't -"

"Hush," she said, pulling me closer. "This is what you're called to," she said. She pulled back, her hands on my shoulders. "I will see you again in due time, and until then I want you to make the Tower proud that they have selected you. Do you understand?" I nodded. I felt the tears welling up inside, and was afraid to speak. I had expected a change in my life, but not this, and not so suddenly. "I will always love you both, and I will see you as soon as I can. Watch after Tomas," she added, smiling softly.

"You'll see him the next Feast day," Father Ambrose said, "since he's already past his tenth year."

"The next Feast day," Mama repeated, looking at me. "Not so long." She smiled again, patted my shoulders, and turned and walked away. I imagined her face with the same proud determination, and stubborn tears, as the other parents who'd left children behind this morning. I saw the other adults, still in line, look away in an attempt to give her some privacy. The next Feast day, I remembered, was still quite a ways away.

"Would you come with me, please?" a voice said from behind me. I turned to find another Servant there. He looked to be around Father Ambrose's age, but he lacked that man's beard. Still, his brown eyes were kind and somewhat wrinkled at the corners. His soft smile made me feel more at ease. "I am Brother Evan," he said, "and I work with Father Ambrose, here." He gestured in the direction Tomas had been led. "Would you come this way?" I nodded, and we set off together.

“Can I see Tomas?” I asked as we walked.

“Mmmm, I expect he’ll have already joined the younger children.”

“He’s never been away from us before,” I pointed out.

“None of them have been away from their families, my boy,” he replied, keeping his voice friendly. “And we’ve grown very accustomed to helping children his age handle this transition. You, however, are a different story. I don’t remember a time when we accepted someone your age. So let’s get you squared away first, and then we’ll see to Tomas. Okay?”

I nodded reluctantly.

The entrance to the Tower turned out to be exactly opposite from where the Gate was, and so we had to make our way almost halfway around the base of the enormous building. The entrance itself was a simple, unassuming double stone door, which was right now standing open. I looked back toward the line of families, but they were already out of sight.

As Brother Evan led me in, I felt the heat of the morning sun beginning to penetrate the humid air.

Three

“Have a seat,” Brother Evan told me, gesturing to a worn, comfortable-looking chair.

If I had been expecting something grand for the main entrance to a building as grand as the Tower, I had been disappointed. We had stepped out of the morning sunlight into a small anteroom. The floor was smooth stone, worn by the many, many years of people passing in and out. The only furnishings were a large worn carpet in the middle of the room, and a simple wooden table just inside the doorway. This small anteroom was quiet, and I couldn't hear any of the noises from outside. Even the air seemed to hold itself still, waiting for something to happen. A few wall sconces provided a yellow, unwavering light that couldn't have been candles or tapers, giving a warm, homey cast to the white interior walls. The wall opposite the Tower's entrance contained three doors. We went through the middle one, followed a long corridor lit by more of the strange sconces, and emerged into a large, square room. At the center of the room was a stone spiral staircase, ascending up through the ceiling. Around that were small groupings of mismatched chairs. Small rugs were scattered around the floor, softening the stone a little and dampening the echoes of our footsteps and voices. More of the steadily glowing sconces were placed every few feet on the wall. I noticed that the room was meticulously clean, without a speck of dust in sight.

I sat, and Brother Evan sat opposite me. “Now,” he said, “I should probably explain a bit.” I nodded. “Were you born in Alabaster?” he asked.

“We came here when I was little,” I said. “I've lived here for almost all the time I can remember.”

“Good,” he said, nodding. “So you know more or less what the Tower is for?”

“I know you help keep the weather good so the crops will grow.

I know you're supposed to protect us from being attacked."

"Yes, well, the weather, certainly. Protection... that's a bit harder. The walls and the City Guard are the first lines of defense. The Tower's ability to do anything offensive, or frankly defensive, is... well, limited."

"Why?" I asked.

"The Tower is part of a vast array of ancient, very sophisticated machines. Those machines were placed here by the people who first came to our world, to help make it more livable for them, and for us, their descendants. None of it was ever designed to be used in battle, and in fact, there's some evidence that it was specifically designed to be as useless in battle as possible."

"That doesn't make any sense," I said.

"No, perhaps not," he said, shrugging. "I suspect they were trying to create a world that didn't have very much fighting, which is regrettably a failed notion. But, anyway, our job is to tend to that machinery, keep it running, and mainly tell it what we need it to do. So, we help it understand when we need the humidity to go up or down, for example. We can use it to help clear ground for farming, and to improve the soil for crops."

"How do we tell it that?"

"Ah, well, that's the interesting thing," he said. "It seems that only some of the people who founded our world were allowed to work with the machines, and the machine could somehow tell them apart by something in the brains or their bodies. For some of their descendants, like you and me, the machines will still listen. For other people, the machines simply don't hear them."

"When I sat in the chair outside," I said slowly, "you said 'five.'"

"Yes," he said, nodding. He leaned forward a bit in his chair. "That chair and the Test were cobbled together somewhat more recently. Oh, they're still old," he said, "probably a hundred years or more, but they're much more modern than the Tower and its machines. The chair rates people on a scale of zero to five, with higher numbers indicating people who the machines are more likely to listen to. Different tasks in the Tower take different levels

of sophistication, and so—”

“Sophistication?” I interrupted.

“Um, yes,” he said, leaning back and tapping one finger on a knee. “So, for very basic tasks, the machines don’t need a lot of guidance. And so they don’t need to hear us very well. Think of it like a City Guard Captain yelling out a command like, ‘march!’ His troops don’t need to hear anything more than that one word, and they know what to do. Someone who rates a two on the Test could accomplish those kinds of basic tasks. Other tasks require more detailed instructions and often require us to monitor the machines as they perform those tasks, and adjust what they’re doing as it happens. Only people who rate higher, like a three, can manage those tasks.”

“I was a five, then?”

“Well, yes. But the thing is —” he paused for a moment. “The thing is, five isn’t a thing. The chair is meant to be a rapid and approximate survey of someone’s potential. Nothing in the Tower requires more than a four, so you’re at least that. And you see, even a four is pretty rare. I’m a four, but Father Ambrose, who is in charge of training new Initiates, is only a three.”

“So fives are rare?”

“My boy,” he said, sighing, “we’ve never had a five since we started administering the Test. I’m not even certain why the chair was built to measure a five, because as near as we can tell, a four is the highest possible potential.”

I swallowed. “So what does that mean?”

“Well, it means you’ll be able to do anything the Tower needs you to, is all, and it may mean the chair is breaking down. Look, usually, the new Initiates don’t even start working with the machines until after their tenth or eleventh year. We spend the first few years on basic lessons, teaching them how life in the Tower works, that kind of thing. They do a lot of chores. Around their tenth year or so, we start teaching them to perform fundamental tasks, under stringent supervision. There are some specific stations in the Tower that are designed to have a teacher and a student working

in tandem, for precisely that reason. Initiates don't become full Servants and begin working on their own until their seventeenth or eighteenth year.

"Now, by thirteen, which is where you're at, we've usually gotten through some basic lessons. I expect we'll just talk with you a bit to see how much of those you might still need. You'd normally start having fewer menial chores assigned, and start working with the teams of Servants, to see what they do, and start helping where you can with the tasks that your rating indicates you'll eventually perform."

"What will that be?"

"Mmmm, we'll need to experiment a bit to see what you can do, and where you'll best fit. And that brings us to my point, I suppose. For now, we're not going to put you in the normal classes with the other children your age. Instead, you'll work directly with me, at least for a while, until we understand what you'll be doing. Is that okay?"

I nodded. I hadn't met anyone else, other than – "but you said Father Ambrose was in charge of Initiates," I said.

"He is," Brother Evan agreed. "and I work with him. His hands will be quite full with our new batch of Initiates, and so it won't be unusual for me to work with you directly since you're a bit of an unusual situation anyway."

"Okay," I said. Just then my stomach growled. It hadn't had breakfast, and it was probably coming up near lunchtime.

Brother Evan grinned. "I'll take that as a cue to get some food into you, shall I?"

"Yes, please," I said, smiling for the first time.

Four

“This is the main dining hall,” Brother Evan said as we found seats at one of the long trestle tables that filled the room. “We follow the usual mealtimes – the morning meal is usually pretty substantial, the midday meal a bit less so, and the evening meal often quite light, except during Feasts.” He paused and raised a hand to attract the attention of one of the younger children shuttling trays of food from the kitchen. The boy nodded and darted off. “The kitchen staff are all professionals, but the children are used to run food out.”

“Kind of like our tavern,” I said, smiling. It did indeed remind me a bit of home, with the bright babble of many conversations, the children running to and fro with laden trays, and with everyone seated at long trestle tables.

He smiled back. “I suppose so,” he said, “but on a much larger scale! Adults are permitted ale in the evenings, as well, so it’s probably a lot like your tavern. If you miss a meal time, there’s almost always some leftovers or snacks at pretty much any time of day. There’s also a light midnight meal for those who work overnight.” He paused again as the boy placed plates of food in front of them. I pulled mine closer and was delighted to see a thick slice of poultry, red beans, and a pile of stewed vegetables. This was indeed a substantial meal, much more than we’d usually had midday at the tavern. We dug in. Just then, a group of smaller children was ushered into the dining hall, where they sat together at one of the tables. I spotted Tomas and stood to wave.

Brother Evan grabbed my arm. “Please, Taryn. Sit down.”

“I just want to say–”

“Please,” he said more firmly. I sat, and he released my arm. “Taryn, as I said earlier, none of these children have been away from their families. Now they’re in a strange place, with strange people. They –”

“That’s why I wanted to just say hello,” I said, starting to rise

again.

Brother Evan raised a hand, and I settled back onto the bench. “You did, yes. I understand that. But you can only provide a familiar face to your brother, not to the others. We’ve been doing this for years, Taryn. The boys and girls in that group will be together for almost every minute of the day and night. They’ll perform the same chores together. We’ll make sure there is no bullying, and we’ll make sure they become friends, and start to trust one another and to rely on one another. This is why we don’t let them see their families for a couple more years.

“After a while, we’ll have them start mingling with the older children, and next year when a new batch of children comes in, your brother’s group will be the first ones *they’ll* get to know.

“They’re Initiates now, Taryn. *This* is their family now. It *needs* to be. Pulling your brother away from his group, distracting them for even a moment, right now, will only slow him down.”

I mulled it over for a moment. “So what about me?”

He sighed. “Frankly, I don’t know, yet. The other children in your year have already broken away from their original group, and we’ve begun integrating them into their permanent working groups, based on the tasks they’re able to perform well. So it’ll be a little easier for them to accept you into whatever group you’re put into since they’ve already started thinking of the entire Tower as their family. I think the priority will be figuring out what group we place you into.”

I nodded, pushing the food around on my plate. Suddenly my appetite wasn’t as strong. “What will Tomas have to do?”

“The younger children get basic tasks. They’ll sweep out rooms, carry bundles for the laundresses, that kind of thing. Nothing strenuous, and I’m sure no worse than he did in your tavern. The goal is to get them to spend time together, and to get to know each other, and to learn to help each other out.”

I nodded again. Tomas could undoubtedly work hard when he could stay focused. It just felt difficult to be here, in the Tower, and not be able to see him. Despite our parentage, we’d always been

close, and when he wasn't rambunctious, Tomas was a shy, quiet boy.

"Eat, Taryn," Brother Evan said quietly. "Now," he continued in a brighter voice, talking in between bites, "some of us will often have a meal brought up to our rooms, or more often to an office or wherever we're working. Initiates will sometimes take meals in a classroom, too. So when you do come to the dining hall, it's kind of expected that you'll eat and move on, because I don't think we'd all fit in here at once." I nodded, taking the hint and continuing to eat. Our conversation paused.

"With that said," Brother Evan said after he'd finished, "we've come near the end of meal time so it won't be as urgent for us to move on." I noticed that the hall had indeed started emptying out, the din of conversations beginning to ebb. "So, your mother owns a tavern?"

I nodded. "The Proud Pillar, right at Western Spoke and Sixth."

"So I imagine you and your brother helped run it?"

"Tomas basically ran food from the kitchen and wiped tables," I said. "He helped me sweep the floor when we closed and was *supposed* to bring out tapers for the lamps, but he hated the smell of them and didn't do it half the time."

Brother Evan smiled. "That's probably much of what he'll wind up doing here, for a good bit of the time. At least at first. And excepting the tapers," he added, pointing to one of the ubiquitous wall sconces, "since as you can see, we've got a steadier form of light to work with."

"What are those?" I asked. The lights cast the same steady yellow light as the others I'd seen, although they were perhaps a bit dimmer, making the dining hall seem more intimate than its considerable size belied.

He shrugged. "Lights," he said. "I've honestly no idea how they work, but they run continuously and automatically. They'll be a bit brighter in the mornings, and a bit dimmer as the day wears on. So you think Tomas will be okay with those basic chores?"

"He won't mind," I said, smiling back, and deciding to ask more

about the strange lights later. "I'd help when it got busy, but in the evenings I'd play the lute to keep everyone entertained. I handled clean-up after we closed."

"Ah, I didn't make the musical connection. You did say you'd been apprenticed to Master Vasper, so I should have guessed you played. Just the lute?"

I shook my head. "No, but I'm best at lute. I can play the flute a little, and I can keep rhythm on a drum."

"I'm a fair hand at the lute myself," he said, "although the flute always confounded me. I've dabbled with a dulcimer but always found them a little awkward. Have you ever tried a gittern?"

I nodded. "Just once. It was okay. I think if I had one and some time to practice, I could do better."

"You'll probably get the chance," he said. "It's not all work around here. Many evenings, small groups will get together here or in one of the common rooms, and we've many musicians amongst us. Do you sing?"

"Tavern songs, mostly," I replied, grinning. "Drinking songs when people were in that mood, a few ballads when they wanted to sit and be melancholy."

"Well, hopefully, you can bring a few new ones to us. Since we've no money ourselves, there's not much reason for a bard or minstrel to visit us for long. The Tower will hire a group for Feast days, oft times, but otherwise, it's just what we know ourselves."

"If you have so many musicians," I asked, "do you think being good at music helps you do better on the Test?"

He nodded slowly. "Many of us think there's a correlation. Almost everyone who's rated a three or four has some musical ability, if not an interest in it. People rated a two are about fifty-fifty, as near as we've seen. The problem is that the Test can be pretty accurate from age seven or eight – we err on the side of caution and do it at eight, obviously – but few children have the time to indulge in music at that age, so we can't really select based on it."

"Oh," I said, nodding. "I'd been planning to suggest that they look

more closely at children with musical talent, but he was right – I hadn't picked up a lute until I was nine or ten.

"And you know," he said, leaning forward and lowering his voice, "I'll tell you something that I'd prefer you kept a bit to yourself." I nodded agreement. "When you interface with the machines, there's almost always some sensory effect."

"Interface?" I asked, also lowering my voice.

"When you engage with the machines to instruct or guide them. Many feel something, especially when performing certain tasks. Others say they experience strong smells. But a lot of us hear things, and from the people I've spoken to, it's often musical notes."

"This is a secret, though?"

"Well, no, not a secret," he said, sitting back. "It's just that... well, interfacing can be very personal for some people. Between friends who've developed a close trust for each other, it's perfectly fine to discuss, but it's a bit taboo to discuss openly." I nodded. He looked around at the almost-empty dining hall. "You know, now's probably a good time to move on. Would you like to see one of our main operations stations?"

"I would!" I said.

"Let's head up to the top, then," he said, smiling. We stood, my spirit falling. I'd presumed I'd have to climb what must be hundreds and hundreds of stairs to the top of the Tower at some point, but I hadn't counted on it coming on my first day.

Five

Brother Evan led me to a small chamber. “Mind you stand away from the walls,” he said. He closed the door, and then laid his hand on a small pillar that stood next to one wall. The room... *lurched* a bit. I thrust my hands out for balance, fighting an instinct to hold on to the wall for support. “It’s okay,” he said, chuckling. “The room is actually moving inside of a shaft. It will take us to the top of the Tower much more quickly than the stairs.”

I marveled at the concept. I looked and could see that we were indeed moving upward, the smooth, featureless walls seeming to slide down past us.

“How does it work?” I asked.

“It’s one of the things the Tower is designed to do,” he said. “I touch that pillar and *think* where I want to go. There’s kind of a trick to it. It can stop at a few different floors, all of which contain operating stations of one kind or another.” As he said it, I saw a doorway slide down past us. “You just need to keep yourself away from the walls as it moves,” he reminded me. “I saw someone let their robe get hung on a passing doorknob once. It wasn’t as funny as it sounds.”

“Could I make the room move?” I asked.

“Eventually. We’ll teach you the trick of it in time. Ah, we’re here.”

The floor’s ascent slowed, and another door slid into view. We stopped, and Brother Evan opened the door. As I followed him out, I was immediately struck by the view. The Tower grew thinner as it rose, and we were clearly high up. Piercing the outer wall was a continuous row of openings, past which I could see all of the city laid out before us. I walked to one of the openings, placing my hands on the waist-high ledge. “Careful,” Brother Evan cautioned. I looked down and suddenly felt dizzy. His hands grabbed my waist and pulled me back. “That happens to me, too,” he said as my head

stopped spinning. "I suggest approaching it a bit more slowly until you get used to it. Come, this way," he said.

The floor we were on seemed to consist of a single wide corridor that went all the way around the Tower's outer edge, mimicking the shard-like outer wall and forming a kind of irregular ring. The center of that ring was the shaft where the moving room was, although it also featured other doors that must have led to other rooms. It was *quiet*, so far above the city's bustling. We followed the corridor for a few feet and came across a row of ten people. Each was positioned in front of an opening in the wall, facing outwards over the city, and their hands rested on bronze-colored, circular plates that were embedded into the ledges before them. They were facing roughly West, and I could see the still-rising sun casting shadows on the city below. Several feet of open floor lay behind them, and up against the inner wall there was a raised platform featuring a stone chair. The chair looked much like the one I'd been Tested in: armless, with horizontal bronze metal bands laid into its back. Near the top of the chair's back, the metal bands bent forward a bit at the ends, so that they'd slightly curve around the head of someone sitting there.

"This," Brother Evan announced, gesturing to the ten people, all of whom were staring intently out their openings, "is where most of our weather control happens."

"What are they doing?" I asked.

"The Tower can manipulate the air," he said. "By resting their hands on those interface pads," he said, pointing at the metallic discs, "they're able to instruct the Tower to force the air into various shapes. Have you ever seen someone with spectacles?"

I nodded. "Ebzer, the woman who ran the clothes-mending shop near the tavern, wore them."

"Did she ever let you look through them?"

"Yes, but it just made everything blurry."

"For her eyes, it made everything clear. The pieces of glass are called *lenses*, and they bend light slightly as it passes through them. That's what we do with the air. By creating lenses, we can direct

more sunlight to a particular area, warming it up.”

“Isn’t it already hot enough?” I asked.

“They actually direct the light to water reservoirs near the farms,” he said, pointing off into the distance. “It helps to heat the water, and raise the humidity. They can also instruct the Tower to thicken the air over the farms, which helps that humidity stay in place, rather than evaporating into the air.”

“They do this every day?” I asked.

“During the growing season, yes,” he replied, “During harvest and through planting, there’s no need.”

“So if they do that all over the farms,” I asked slowly, “why does it stay so humid in the city?”

“Well, we can’t perfectly contain all the moisture,” he said. “Air doesn’t like to be forced into shapes, after all. And so especially in the Third Ring, you’ll get some of the extra humidity blown over by the winds. It’s unfortunate, especially in summer, but it’s necessary to keep the crops up.”

I looked around the room. It was utterly featureless, except for the chair on its platform against the corridor’s inner wall. “What’s that for?” I asked, pointing at it.

He shrugged. “It’s just where a supervisor can sit and observe,” he said. “You can see that it doesn’t have interface pads, so it’s not an actual working station.”

“It looks a lot like the Testing chair,” I said.

“Yes, I’ve noticed that,” he agreed. “It’s an old design, and it’s one that appears in most of the major operational stations in the Tower. I expect when they built the Testing chair, they just copied the design.”

“Good morning, Brother Evan,” a voice said from behind us.

“Ah, Sister Mya. Good *afternoon*,” Brother Evan said, smiling.

She grinned. “Afternoon for you early risers. Still morning on this shift! Is this the latest entrant I heard about in the dining hall?” Sister Mya was short, round, and friendly-looking. She seemed a bit younger than Brother Evan, and currently wore a big smile.

“Yes,” he replied, chuckling, “word does travel quickly. This is

Taryn. Taryn, Sister Mya basically runs weather operations, so she's usually skulking around up here."

"Interested in a life in weather manipulation, young man?" she asked, looking at me.

"Um... I'm not sure what I will do?" I replied. "This seems... useful, though."

"Deadly boring, you mean," she said, laughing. "We run shifts of a mark on, a mark off, up here, just to keep from falling asleep and tumbling out the windows. But I'm told you rated a four?"

"Actually—" I began.

"That's correct," Brother Evan interrupted. "So you'll certainly be tested for weather affinity," he told me. "It requires threes and fours."

"Well, I look forward to hearing the results of that, young man," she said. "Ah, here comes the swing shift." A group of ten Servants approached from the other direction. Each walked up to one of the on-duty Servants and tapped them lightly on the shoulder. Those ones blinked their eyes, lifted their hands from the interface discs, and stepped back. A couple shook their heads, while another rubbed his eyes with his fists. The newcomers stepped forward, laid their hands on the discs, and stared on the windows. I noticed their eyes take on a sort of faraway look. The now off-shift Servants wandered off the direction their replacements had come.

"Where do they go, now?" I asked.

Sister Mya replied, "we've a quiet area where they can sit. Some will take a nap, others will read. One of them – the shorter one with the light hair – sits in front of a window around the way and paints scenes of the city. A couple are musicians, so they'll fiddle around on their instruments. They're back on in a mark, so most don't bother going down until they're done for the day." She looked at me and noticed me staring at the empty chair against the wall. "You're welcome to try it out," she said, smiling.

I looked at her. "I can?"

She shrugged. "Sure, why not? Personally, I think it's a teacher's station. Someplace a teacher could observe her students. Brother

Evan and I disagree,” she added, giving him a grin, “but I think it used to be a functional interface station.”

“No pads,” Brother Evan said, returning the grin.

“Observation-only,” she replied, “no pads needed!” I realized this must have been an old debate between them. “But yes,” she said, looking back at me. “You’re welcome to sit down. You do get a lovely view of the city,” she added.

I walked to the chair, stepped up onto the platform, and sat. She was right – the view of the city was lovely.

Brother Evan walked and stood beside the chair. “From here, you can really understand the defensive design of the city,” he said.

“What do you mean?” I asked.

He pointed out the window. “Notice how the spoke streets never run for more than three or four blocks straight?”

I laughed. “I’ve always noticed that. It makes it a lot longer of a walk with the scrap bag in the mornings.”

“That’s a defensive decision. It means an enemy force, should they penetrate the walls, has to zigzag to move inward, instead of just moving in a straight line. It gives the Guard more time to stop them, or at least cut back their numbers, and it forces them to walk no more than five or six abreast. The design runs all the way to the Tower. Remember the Gate you came in?”

I nodded. “And it was a long way around to the door.”

“Halfway around, to be precise,” he said. “That design is also why there are only a few Gates in the walls, and it’s ultimately why the founders selected this location – the Eastern mountains are a practically impenetrable defense for half the city’s perimeter.”

“But not the Third Ring,” I said.

“Well, no. That came afterward, as the population grew too large for the Second Ring. But it’s why we can still shelter the entire population in the Second Ring if needed.”

I nodded. The view of the city *was* remarkable. We were facing West, and so the city stretched out before me, and I could make out the farmlands off to the North and South, just outside the outermost wall. A quiet jangling of music floated through my ears, and I

grinned. The off-shift Servants at rest. Their instruments needed tuning, I noted. Perhaps that would be a way for me to start meeting them.

“Dust and ruin,” Sister Mya swore under her breath. “You need to hold the shape!” she yelled. “Whoever of you has the Southern rim of the lens, you’re letting it slip!”

“How can you tell?” I whispered.

“Experience,” she answered back. “Look,” she said, pointing out the window, “do you see where the air is a bit hazier over the farms?”

I looked and realized I could, indeed, see the lens of thickened air. In fact, I wasn’t immediately sure how I hadn’t seen it before. The outline of it stood out in stark contrast to the still air around it; I’d just not known what I was looking for. The Southern edge was notably thicker than the rest of the lens’ rim, although it was slowly shrinking back into shape.

“That’s it,” Sister Mya said. “Keep it steady, and then lock it down and hold it.”

“We should probably leave you to it,” Brother Evan said quietly.

“Aye,” she answered, almost absentmindedly, never taking her eyes off the giant air-lens floating over the farms.

I stood, and Brother Evan led me back to the up-and-down room. “It’s getting on,” he said as we walked. “Why don’t I take you down to the dining hall? I realize we just ate, but it’ll give me a chance to go arrange sleeping accommodations for you, and my experience is that young men can always use a bite to eat.”

I smiled because that was indeed my experience as well.

Six

“Taryn, I’d like you to meet Misha,” Brother Evan said.

He’d dropped me in the nearly-empty dining hall where, it turned out, dinner service hadn’t yet begun. The kitchen had been happy to provide me with a bowl of thick, hearty stew and a piece of warm bread, so I was quite satisfied. I’d just finished when Brother Evan had returned for me. We took a set of stairs up a few levels, where Misha had met us.

“Nice to meet you, Taryn,” she said. She wasn’t dressed in the Servants’ attire, but instead wore a set of black slacks with a black tabard over a gray tunic.

“Misha is one of the Stewards here in the Tower,” Brother Evan explained. “Stewards help us keep the place tidy, and they’re responsible for rooming assignments.”

“Right this way,” she said, leading the way along a corridor that I supposed must be just inside the Tower’s outer wall. On the other side of the corridor, I saw simple wooden doors, spaced every few feet. “We normally house Initiates in dormitories until they’re fifteen or sixteen, but Brother Evan explained that you’re a bit of an unusual case. I happen to have a room on this level that’s empty,” and here she stopped and gestured to one of the doors, which bore the number 417 on a small plaque. I stepped forward and opened the door. “This would normally be for two, but we’ll leave you in here by yourself for at least a couple of days until we get you sorted. If that’s okay?”

I nodded. I’d never had a room to myself and wondered if I’d be able to sleep without Tomas’ snores, or without hearing Mama pattering around in the small attic room next to ours. The room had two small, but comfortable-looking beds, pushed against opposite walls. Between them was a chest of drawers, and mounted to the wall above it was one of the odd lights that seemed to light the entire interior of the Tower. The room was otherwise bare. Our

tavern had always had simple paintings or tapestries to lend some color and softness to the stark white walls, and I was starting to think that the Tower could use a good number of those here and there.

I stepped into the room, and Misha followed me, the two of us almost filling the available standing room. She walked to the light and pointed to a small knob on the bottom of the sconce. "You can turn this to lower or raise the brightness, although they won't go completely dark." She pulled open the top drawer. "I've already got a couple changes of clothing for you," and I saw that she'd stocked in some small-clothes as well as some of the tan clothing I'd seen other Initiates wearing. "You can drop your laundry down the chute, next to the stairwell, in the morning. Your current clothes won't be returned to you, and always make sure you've emptied the pockets of anything you want to keep."

"Thank you, Misha," Brother Evan said from the hallway. She smiled and walked out, and Brother Evan stepped into the room. "Now, do you think you could find your way back to the dining hall from here?"

I nodded. "Back down the hallway, down the stairs to the bottom, and just around the corner?"

"Correct," he said. "And you're in room 417, which means the fourth level up from the bottom. The rooms here are all odd-numbered, and there's an interior corridor with the even-numbered rooms. A few doors further down, you'll find a lounging area, in case you'd like to relax without feeling stuck in this room." He smiled. "There are some particularly good books, and you're welcome to bring them back here to read if you prefer. Please don't take the books from this floor, though."

"Okay." I wasn't a fantastic reader, but perhaps I'd have some time to improve.

"Now," Brother Evan continued, "you'll find that the light on the wall comes to full brightness at about sunrise, so that will hopefully wake you up. There's also a chime of sorts that will sound when it's about a mark before breakfast. I know it's a little early, but why

don't I leave you now, and plan to meet you over breakfast in the hall?"

"Sure," I said. "But... um, where could I find a—"

"Oh, goodness!" he said, laughing aloud, "the necessary! Yes, you'll want to know where that is." He stepped out into the hallway and pointed. "The closest is just this way, right past the lounge I mentioned. You'll find washbasins, a rinsing room, and toilets. I assume you've used a rinsing room?" I shook my head. "They're more efficient than baths, if not as luxurious. There's a small handle set into the wall. Turn that, and water will come from the ceiling, almost like a rainfall. Get yourself wet, soap up – there are always pots of powder handy – and then rinse off. You'll find towels near the entrance; bring yours back with you and drop it in the same laundry chute in the morning."

"Okay," I said. I'd never imagined something like water coming from the ceiling. In the tavern, we'd just sluiced off in the back alley by pouring buckets of water over each others' heads.

"So, that should hold you for the evening. You're welcome to return to the dining hall if you want to meet some people or have some more food, and I'll see you right as breakfast service begins."

"I'm actually kind of worn out," I said. The day had started many marks earlier than I was used to, and there'd been an awful lot of things to take in. "I think I'll just turn in. Can I ask you a question?"

"Certainly."

"Would it be possible to get my lute from the tavern?"

"Oh," he said, "I think we can arrange that. Remind me tomorrow, and I'll send a runner out."

"Thank you," I said, sighing. Having that piece of home with me would make all this a little less strange. "Is it okay to know where Tomas is sleeping?"

"He'll be in a dormitory, probably a couple of floors up, with his new year-mates, as Misha said," he answered. "The group of them will bunk together for the next few years. As I mentioned," he said, a cautioning look on his face, "I think it would be best if you didn't

intrude on them, at least for a while.”

“I understand,” I nodded.

“All right then,” he said, turning to walk back the way we’d come. “I’ll see you in the morning.”

I closed the door and noticed that it lacked any kind of latch. I suppose Tower manners kept anyone from intruding into a room that wasn’t theirs. I looked around the room. There wasn’t much to see. Other than the sconce over the chest of drawers, the walls were the same smooth stone as everything else in the Tower, as was the floor. The beds had a pillow apiece and were covered with a soft sheet and a light blanket. I turned the knob on the bottom of the light sconce, and it did indeed get very dim. The knob continued to turn even after it had reached its lowest brightness. I undressed, leaving my old clothes on the floor, and climbed under the sheet. I was tired; I remember resting my head on the pillow, but nothing more.

True to Brother Evan’s word, the sconce brightened on its own, waking me from a light sleep. The Tower was *quiet*, and I was surprised I’d slept so soundly. I got out of bed, dressed, and was just starting to arrange the bed coverings when a knock came at the door. I opened it, and Misha was there, smiling and holding a bundle of clothing.

“Good morning!” she said brightly. “Ah, I’m glad those fit,” she said, quickly appraising my pants and tunic. “I’ve brought some extras just in case, but I think that size should do. She glanced past me. “And you’re bright enough to make your own bed,” she said, smiling. “We drill it into the young ones right away, but I wasn’t sure if you’d been accustomed to it.”

“Mama made us every morning,” I said, smiling, “or we’d get a yelling-at.”

“Well,” she said, “your Mama is a smart woman. Here, let me just leave these,” she said, stepping into the room. I stepped back,

and she laid the pile of clothing on the other bed. “Just leave them there, if you like. You’ve got three outfits in the drawer already, and we’ll bring a fresh set the day after tomorrow so you’ll have a full week’s worth. Did you sleep okay?”

I nodded but didn’t look up. As she’d set the clothing down on the bed, the sleeve of her tunic had pulled up a bit, and I’d seen glints of something black on her skin. I was still staring at her wrist. “What?” she asked, crossing her arms. This again pulled the sleeve back a bit, and there were small dots of black right on her wrist.

“What’s on your wrist?” I asked.

“Oh, that,” she said, uncrossing her arms. She held her left arm out and pulled the sleeve halfway back. I stepped closer and saw what looked like chips of shiny black embedded in her skin. “My father was a blacksmith,” she said, “and I was always helping him in the smithy. Well, I say ‘helping,’” she said, chuckling, “I was really underfoot. He was tempering a piece of carbon steel. It must have had a flaw he’d not beaten out because as soon as it hit the water, it fractured. It sprayed up tiny chips, and they embedded themselves in my wrist and in both of his arms. I shouldn’t have been standing that close, but I loved the way the steam burst when hot steel hit it.” She lowered her arm, allowing the sleeve to fall back into place.

“Did it hurt?” I asked.

“Oh, I screamed like the very devil. Papa was so worried for me he didn’t even notice the chips in his own skin, although he was used to being burned now and then. He picked me up and ran straight to a Healer. No damage is done, thank the stars, but these have been with me my whole life.” Just then, a chiming noise emanated from the light sconce. “Ah, that’ll be breakfast in a mark. I’ll leave you to it.” She smiled. “Welcome again to the Tower, Taryn.”

Seven

Breakfast service wasn't due to start for almost a full mark, so finding a seat in the dining hall was easy. I sat near the kitchen and was offered a mug of chilled tea, which I gratefully accepted. As Brother Evan had said, the lights were a bit brighter, although the room, near-empty as it was, was much quieter. I watched as Servants and Initiates straggled in and found seats; several nodded and smiled at me as they did so. Breakfast was an orderly affair, with younger Initiates quickly bringing plates of food out from the kitchen, and running empties back to be washed. The conversations were softer, and this early people spread themselves around the room a bit more, rather than packing in. I'd just finished when I saw Brother Evan walk into the hall, his eyes scanning the room for me. I raised an arm to catch his attention, and he smiled and came over.

"Ah, good, you've eaten!" he said happily. "I'll admit I'm not much of a breakfast person. I usually just have some tea in the morning. Are you ready to get going?"

I nodded. "Where to?" I asked, standing as an Initiate took my empty plate and cutlery.

"The main training stations are actually downstairs," he answered, leading the way out of the hall and to the nearest staircase. I imagined it taking me many, many years before the layout of the Tower stopped being so confusing. "So we'll start there, and try to get a feel for what we're working with."

We descended three flights before turning off the staircase and through a long corridor that cut through the middle of the Tower. The walls here were all squared, not curved, making it all feel less organic and less confusing to me. Doors lined the hallway, and Brother Evan eventually turned into one. We walked into a decent-sized room that was completely bare, except for a glowing light fixture in the exact middle of the ceiling and, directly below it, a

chair like the one I'd sat on yesterday at the top of the Tower. This chair, however, had armrests, and they each ended in one of the metallic interface discs.

Brother Evan took a small red plaque that was hanging on the wall next to the door and hung it on the door's outside. I supposed that indicated that the room was in use. He then shut the door and slid a bolt home to lock it.

"All right," he said. "Have a seat."

I walked to the chair, which faced away from the door, and sat down.

"This is one of the basic training rooms that have existed since the Tower's construction. We can't do anything large-scale in here, of course, but it's a good place to get a feeling for which tasks you may have an affinity for."

"If I tested as a four or five," I said, "then wouldn't I be good at any of them?"

"You'd think so," he said, walking around to stand in front of me. "But no. Some of the simplest tasks a two can perform are all but impossible for some threes or even fours, for some reason. It's all about what you have an affinity for, really. We know you should be able to do some of the more detailed tasks, but some of the more brute-force ones might not work out for you. So we'll try you at each of them."

"Okay," I said agreeably. "What do I do?"

"Lay your hands on the pads," he instructed. I did so, and immediately heard a sort of thrumming, musical note that rose and fell in a quick, seemingly random cadence. I remembered Brother Evan mentioning that some people experienced interfacing as music. "Comfortable?" he asked. I nodded, not sure what I should be feeling.

From a pocket inside his robe, he withdrew a small, gray rock. He walked a step in front of me and laid it on the floor, and then walked around behind me. "One of the simplest tasks the Tower can perform for us is moving natural materials like rock. Water, even, if you've a fine enough touch for it. Place your hands on the interface

pads, and imagine yourself picking up the rock. *Feel* its roughness on your skin, imagine its weight in your hand, and just lift it a foot or so off the floor.”

I tried to do so, but nothing happened.

“Hmm,” he said. “That’s odd.”

“What?”

“These training chairs all have indicators on the back that confirm whether the Tower is receiving anything from you at all. Even for a task that you’ve no affinity for, the indicator should be glowing. It isn’t.”

“What’s that mean?”

“I honestly don’t know. Here, trade places with me.” I stood and moved to the back of the chair as he sat down. I could see the indicator he was speaking of: a piece of translucent rock embedded in a brass ring on the very back of the chair. It suddenly glowed a dull orange. I looked up and saw the rock hovering in mid-air. The rock fell, and my eyes went back to the indicator, which was no longer glowing. “Did the indicator light?” he asked.

“Yes, while you were making the rock hover,” I answered.

“So the chair works,” he said. “Hmm. Let’s try again with you.” We traded places. “Forget about the rock this time. Instead, I want you to just think the word ‘Alarm!’ over and over, as urgently as possible.”

“What will that do?” I asked.

“In here, nothing,” he said, “but it’s one of the few things anyone with potential can do. In the main Tower, doing that at any interface station will set off flashing lights and loud chimes. Go ahead.” I did so. “Ah, good,” he said. “You can stop. The indicator lit. That’s kind of a relief, actually. Go ahead and try the rock again.” I did. “Hmm, no light at all. How very curious. Well, perhaps we’ll move on.”

Over the next few hours, he instructed me to imagine various things happening: a plume of fire appearing in the middle of the air, some of the air condensing into a sphere, and so on. None of it made sense, and while the chair’s indicator lit sporadically, but there didn’t seem to be any pattern. And, regardless of whether it

lit or not, I couldn't seem to accomplish any of the tasks he set for me. I quickly grew discouraged, and then disheartened.

"Hmm," he said at last. I could hear him tapping his foot behind me. "Are you feeling anything? Seeing anything, hearing anything?"

"Yes," I said. "I can hear a low-pitched chiming, almost like a bell that's somehow large yet still very soft-sounding."

"What, right now?" he asked.

"Yes, the whole time I've been sitting here after you did the introduction."

"Put your hands in your lap," he instructed. I did. "Do you still hear something?"

"Yes, it hasn't stopped."

"I'm starting to have some doubts about the meaning of our Test," he said. "This is a little frustrating. I don't understand how you could be hearing—. Well, wait. Stand up for a moment." I did. "Still hearing it?"

"No," I said.

"Sit back down?" I did. "And?"

"It's back," I said.

"More than a little frustrating, then. None of this is working like it is supposed to. I feel like I'm missing something."

"I'm sorry," I offered.

"No, no, it's not you," he said, coming around to stand in front of me again. "These training rooms are incredibly sensitive, and they're fairly specific in what they can do. Basically, anyone with the slightest potential for mass movement can lift the rock, and in here, that's about all they could do. These chairs are meant specifically for this kind of testing. You should be firing off all kinds of reactions, even if you can't make them all work. But we're getting nothing. And yet you're still hearing something, which is one of the common ways interfacing is experienced. But you hear it just by sitting in the chair, without your hands on the discs, and I've never heard of that."

"Can I try something?" I asked.

He shrugged. "I don't see why not," he said, walking to stand behind me again.

I put my hands on the discs and leaned back into the chair. The horizontal metal strips at the top of the chair were bowed forward slightly, enough that I could see their edges out of the corners of my eyes. I closed my eyes and concentrated on the low *thrumming* tone. It sounded almost like the lowest note on my lute, but felt flat, somehow. I imagined strumming that string on my lute and overlaid the sound in my mind. It created a kind of dissonance, but I held it. As I did, the flat note seemed to move up a bit, matching what I'd imagined my lute playing. The two sounds merged in my mind.

"Good stars!" Brother Evan cried out behind me. My eyes snapped open. I lost my imagined lute note, and the persistent *thrumming* in my ears returned to its original flat tone.

"What?" I asked.

"This indicator lights up a dull orangey-red color," he said.

"That's what I saw when you had me look at it," I said.

"It just lit up the brightest possible green you've ever seen," he said. "What did you do?"

"I was just imagining playing my lute," I said, "and the note I hear when I sit in the chair moved to match that sound."

"Curious," he said quietly. "Taryn, I think it's time for a break. What do you think?" My stomach rumbled a reply. He laughed. "Well, there it is. I imagine it's close to lunchtime anyway. Hop up."

I stood, almost relieved to have the constant low note disappear. Brother Evan unbolted the door, removed the red plaque from the outside, and led the way back to the dining hall.

Eight

Brother Evan walked me back to the dining hall. “Do you mind eating on your own again?” he asked. “I want to go research a few things and talk to some of the others who work with Initiates. I can come pick you up in a mark?” I nodded, and he bustled away. The hall was noisier than it had been this morning, with more Servants and Initiates packing themselves in. The light seemed a bit dimmer, and the conversations energized and jovial. The midday meal in the tavern had always been perfunctory, a way to keep our energy up as we prepared for the evening custom, but here it seemed like a genuine break in the day, a social activity. The smells of fresh food drifted through the room, awakening my hunger.

Service had apparently just begun, and so I sat at a near-empty table and waved to one of the young children running food. Within moments, I had an enormous bowl of hearty stew, accompanied by a similarly sized chunk of hot, fresh bread. I’d just tucked in when a group of six or seven others, all about my age, came over to my table.

“I’m Sajay,” one said as she sat. “Mind if we join you?” She had the traditional dark Alabaster coloring and wore the tan trousers and shirt of an Initiate.

“I’m Taryn,” I said, quickly swallowing the bite I’d just taken, “and no, please do.” They all sat and quickly introduced themselves. The names were a whirlwind, and I forgot them all almost as soon as I’d heard them.

“So,” Sajay said as they waved for food, “I understand you’re the new anomaly.” She grinned to take any sting out of the comment.

I smiled back. “Yeah. I was sick on my own Test day, but it was my little brother’s turn, and so I came with him. He got in, and they asked to test me, and here I am.”

“We’re all thirteen as well,” another boy said. “We’ve all been broken off into working teams, but we try to meet for lunch now

and again so we can keep in touch.”

“What teams are you on?” I asked. “If it’s okay for me to know.”

“Oh, it’s fine,” Sajay said. “Jarace and I,” she said, pointing to the boy who’d just spoken, “are on weather. We’re still spending most of the day in small-scale training, but we get to go up to the main floor every five days.”

“I’m on fields,” another girl volunteered.

“Fields?” I asked.

“It’s dirt-moving, really,” she said, shrugging. She sat back as a group of children brought more bowls of stew for everyone. “We’re responsible for cycling the minerals underneath the farmlands to keep the nutrients up. This time of year we mainly move a clay layer around to keep the moisture in the topsoil.”

“You move dirt that’s *underground*?” I asked, incredulous.

“The Tower does,” she said. “It’s kind of boring, but you have to pay close attention all the time, or the machines just start trying to move everything at once, and the farms would be upheaved.”

“She’s being modest,” Sajay said. “She was the only four in our group.” The other girl shrugged again and dug into her stew.

“We’re on food processing,” the last two boys said almost in unison, causing them to laugh. “Boring, boring, boring, but something twos like us can pull off.”

“Food processing?” I said, realizing how little I still knew about all the Tower did.

“You ever dump scraps in the troughs?” one asked.

I nodded. “My family owns a small tavern,” I said, “and I got to lug scraps every other day or so.”

He nodded back. “So, the scraps go down the big hole into a chute. The chute runs a few dozen feet down and empties onto a leather belt that continuously moves underneath the city. The belt carries the food to one of the Tower’s sub-levels. The machines grind it all up. Some of it – well most of it, as it’s the growing season – gets mulched up, stuff gets added to it, and it goes out to help feed the farmlands. The machines do all the work, but we have to keep an eye on them and adjust the nutrient mix based on what

the farmers are asking for.”

“And the rest?” I prompted.

“Ration blocks,” he said. “Outside growing season, almost all the scraps go into ration blocks.”

“Wait,” I said, “those are made from actual *food*?” Ration blocks were a primary form of sustenance for many of Alabaster’s families, and they were universally despised. They came from distribution centers scattered throughout the Second Ring, as thick, dense, black blocks. They could last almost forever if they stayed dry. Soaked overnight in water, they made a thick, barely edible paste that was filling, nutritious, and tasted slightly of stone. Most families used the paste as a base and added old vegetables or other ingredients to try and improve the taste or texture. Mama said the paste could also be fermented and used to produce the black ale that was unique to Alabaster.

“You wouldn’t know it, but yeah,” the boy replied, grinning. “Below the Tower are enough of those to get the entire city through nearly a year on blocks and blocks alone if the city was under siege.”

“I think I’d rather surrender,” Sajay said, laughing.

“It certainly wouldn’t be much fun,” he agreed.

“So they just sit there?” I asked.

“Well, we rotate them, which is the main thing we do since the machines don’t require any oversight to make them. The oldest ones come out and go into city distribution – don’t worry, they’re exactly as nasty no matter how old they are – and we fill in the space with newly made ones. Even the city Managers take them for their families.”

That was a point Mama had made to me several times, that I’d never quite understood. I’d mainly grown up in Alabaster, and everyone was more or less equal. Even the people who ran the city, who were elected to do so on a four-year basis, lived in the Third Ring, ate ration blocks as a staple of their meals, and sent their eight-year-old children to the Tower for testing. Mama assured me that that wasn’t the case in other cities. She said in most other cities, the rulers got the best homes, the best food, and the best of

everything, while the workers or those without jobs got whatever was left over. Alabaster, she'd said, didn't have people without jobs; everyone had a job. If you weren't running your own shop, you cleaned streets, worked the farms, or did other useful work. Everyone got a basic stipend each week, and shopkeepers kept a portion of their profits besides. The rest went to the city.

"So what have you been assigned to?" Sajay asked.

I shrugged and used the last of my bread to sop up the delicious gravy from the bottom of my bowl. "I don't know, yet. Brother Evan did some testing this morning, but it didn't go like he expected. I think we're going to try again this afternoon."

"Sister Trofer runs fields," the other girl said, "and she says if you don't start the Tower young then it just gets more difficult, is all. She says she tried to get them to assign children even younger because they're easier to teach, but the head of the Tower doesn't like to change things that much."

"You think I'll get it eventually, then?"

She shrugged and turned back to her stew. "Probably. It took me forever to move clay layers in small stages rather than just blasting it right out of the ground. If you rated high you probably just have to ease into it more."

"Where *did* you rate in your Test?" Jarace asked.

"Four," I said, adopting Brother Evan's cautious assessment.

"Weather or fields," he said. "Fields is almost all fours," and the girl from fields nodded agreement, "and weather is threes and fours. I think everything else is twos and threes."

"What else is there?" I asked.

"Food processing, obviously," one of those boys said. "Tower maintenance is twos," he added, "and for that, you mainly just get a feel for what the Tower needs to be done, and then you go do it."

"Is that it?" I asked.

"Mostly," Sajay said. "Those are the big ones. There are some smaller specialist jobs that we weren't selected for."

"Wait, so how many people work on weather?" I asked, thinking back to the ten Servants I'd seen the day before.

“There are eighty on main weather,” she said. “Three shifts of ten marks, each shift has ten people on and ten people off at any time. There’s another ten people that rotate on and off in case someone gets sick. There’s another twenty on weather specialty, which handles the stuff that isn’t routine. So about a hundred altogether, plus the Servants who run those teams. They’re the biggest crew in the Tower.”

“There are about a dozen of us in fields,” the girl – I wished I’d tried harder to catch their names in my mind – added. “Maybe twenty including supervisors.”

“About the same in food processing,” that boy added.

“And about that in maintenance,” the other chimed in.

“Plus Initiate training has around two dozen Servants, maybe twenty.”

I quickly added it in my head. “So right around two hundred?”

Sajay nodded. “That seems about right. Plus a dozen or so Initiates in each year. There is nine or ten years’ worth of initiates, so that’s another hundred, hundred and twenty, depending.”

“So three hundred or so,” I said.

“That seems about right,” she said. “And then you’ve got the older Servants who can’t work anymore, but who still live in the Tower. There’s probably fifty or sixty of them, and around ten or twelve die each year, about as many as they tend to take in the Test each year.”

“Three hundred and fifty all told,” I said.

“Plus the support staff,” Jarace added. “The Stewards and kitchen staff aren’t Servants, but they all have quarters here. Probably fifty or so of them.”

“So the Tower can hold four hundred people?” I asked.

“Oh no!” Sajay said, laughing. “The Tower can hold more than double that. It used to be a lot busier, or they were really planning ahead when they built it. That’s why Initiates assigned to a team have a room to themselves or share with one person, instead of sleeping in the dorms. We’ve plenty of space. Oh, hello, Brother Evan,” she added, sitting upright.

I turned to see him walking up behind me. “Good afternoon, all of you. Please, continue. Taryn, are you done?” I nodded. “Excellent. Would you come with me?”

“Thank you for talking,” I said to everyone as I stood. “I hope to see you again.”

“You will!” Jarace said brightly. “Good luck!”

I followed Brother Evan out of the dining hall. As we exited, he said, “I’ve got some good news. Since the regular assessments weren’t doing anything for us, I thought we’d go visit one of the training sessions for weather. Lensing, specifically, the same thing you saw them doing over the farms yesterday. Fortunately, Brother Tomlin is running that today, and he’s more than agreeable. I told him about the assessment this morning, and I think he’s just as curious as I am about what we can do with you.”

“Okay,” I said, “I’ll try anything if it helps.”

“I don’t know that it’ll help,” Brother Evan said, looking at me with a grin, “but I certainly hope it’ll be interesting.”

Nine

Brother Evan led me down another flight of stairs – it would take me years to become comfortable moving around in the Tower, as its architecture seems to have no symmetry or regularity I could discern – and into a round, high-ceilinged training room. A large and unusually bright lighting fixture was mounted in the middle of that ceiling. Around the perimeter of the room were seven widely-spaced interface chairs, six complete with the bronze and discs, and one without. All had the horizontal metal strips on their backrests, with the top strips' ends curving away from the backrest. All seven chairs were occupied: six by other Initiates who were likely a couple of years older than I, and the seventh by a wizened old man who stood as we entered. The room was otherwise empty and unadorned, like nearly every other room I'd been in.

“Brother Tomlin,” Brother Evan said, greeting him. “How goes it?”

“Well enough, well enough,” he said. “Welcome, young man,” he said, addressing me. “Now, my friends,” he said, turning back to his class. “We’re going to do something a little unusual today if you don’t mind. This,” he said, gesturing to me, “is Taryn, the young man brought into the Tower at the most recent Test. Brother Evan has been struggling to find his aptitude, and as he’s tested a four, we believe he might be suitable for us weather-workers. So we’re going to give him a brief demonstration, would that be all right?” The class nodded, a couple of them smiling at me. “Excellent! Well then, let’s just get started.” He resumed his seat in the instructor’s chair.

“Now,” he said, “what we do here is attempt to create a lens out of the air in this room.” As he spoke, his class settled back into their chairs a bit, placing their hands on the interface discs. “We basically just imagine what the lens must look like. You’ll notice the tray of water on the floor?” I had not, but I looked as he mentioned it,

and there was indeed a large, shallow tray of water sitting in the middle of the floor. “Why don’t you come stand next to me,” he said. “Won’t cause a bother and you’ll get a better view.” Brother Evan gave me a nudge, and I went over to stand by his side.

“Class, let’s begin. Our goal, young Taryn, is to form a lens that concentrates the light from the ceiling into a tight, focused beam of light in the tray of water. If we do our jobs properly, it’ll heat the water, and we’ll see just a bit of steam. The trick is that the lens must be properly formed all ‘round, or we won’t be able to focus it evenly and intensely enough.” He paused, staring at the air in the middle of the room. “Just a bit less, I think, Marcyn,” he said quietly. “Janto, a bit thicker, perhaps.”

“How can you tell?” I whispered.

“Well, you get a hang for it,” he said quietly. “Ah, look!” A wisp of steam was beginning to rise from the tray, but then it stopped. “Yes, Marcyn, I think you’ve lost it, there. Okay, everyone, that’s enough.” The class’ postures relaxed, and they moved their hands to their laps. “Now,” he said, “I know this is a bit personal, but as we’re here in class I want you all to tell me how you experience the interface when we do this, all right? I’ll start. I obviously get nothing when I sit here, but for me, it’s a smell. That’s unusual in fours, I’m told, but when I get the lens properly formed it sort of smells sweet. Too thick, and it smells bitter. Too thin, and it’s smokey. Took a good while to get used to that, I can tell you,” he added, chuckling. “Marcyn?”

The boy next to him spoke up. “Sounds,” he said. “Not quite music. More of a buzzing, like the bees in the fields. I have to make the buzzing faster or slower.”

“Mmm,” Brother Tomlin said. “That sounds as tricky as smell, and it might be why you’re having a time keeping it steady. Janto?”

The boy next ‘round the circle spoke. “I can feel it,” he said. “Like its water between my fingers. But it’s thick water, and the more I concentrated, the thicker it gets, and then I can squeeze it into shape. And I can feel –”

“Yes, we’ve spoken of that before,” Brother Tomlin interrupted.

“No need to make it *too* personal,” he said, smiling. The boy smiled back. “And you’ve come a good long way. Talor?” he asked.

The girl in the next seat said, “I can see the shape of the lens as if it’s outlined in light. I just move the edges in my mind.”

“Which is no doubt why you took to this so quickly. Sight’s a rare experience, but it certainly makes this job a lot easier.”

The remaining three all cited musical tones or notes as their interface experience. “I think that’s how I experience it too,” I added after they’d finished. Brother Tomlin nodded.

“Now class,” he said, standing from the chair and moving to stand on the other side of it from me. “We’re going to do a little experiment at Brother Evan’s request. Taryn, have a seat,” he said, gesturing to the chair. I looked back to Brother Evan, who nodded. I sat, leaning back into the backrest. Immediately, I could hear the same low, slightly-flat note that I’d heard in the assessment room that morning. “Comfortable?” Brother Tomlin asked. I nodded. “Okay class, I want you to do it again.”

The class sat upright in their chairs and reached for their interface discs. As soon as they touched, I heard a jangling of music, so loud I almost leaned forward against it. I closed my eyes.

“Taryn?” Brother Evan said. He’d come to stand beside me.

“Fine,” I said, gritting my teeth. “The noises are just all wrong.”

“Indeed,” whispered Brother Tomlin from my other side. “And with no discs to speak of. Fight it, Taryn. Force the music to sound right in your head.”

I kept my eyes closed and focused. The initial low note was gone, but there were two like it that were close, but just out of tune. I imagined them each coming closer, and they did, bending to the true note. Another high note – too high, like a shriek – bent down to a matching note four octaves higher. The three others ranged between them, and I suddenly pictured them like the strings of a six-stringed lute. They bent together, slipping into harmony.

“My word,” Brother Tomlin whispered, but I couldn’t look. Instead, in my mind, I *strummed* the six strings.

Something exploded, and my eyes flew open. The room before

me was full of steam, and through it, I could see the others scrambling off their chairs, or trying to shrink into them.

“Brother Evan, the door, if you please,” and Brother Evan must have already been on his way because I heard the door *click* open a moment later. The steam started clearing, some of it condensing throughout the room and the rest pouring into the relatively cooler hallway.

“I have not,” Brother Tomlin said carefully, “seen a lensing that precise, nor one quite so large managed in this room.”

“I felt the buzzing *pulled*,” Marcyn said from the chair to my left. “It settled into more of a hum for me.”

“It felt *solid*,” Janto said. “I felt it in my core.”

The others all nodded, some of them muttering quiet agreement. All of them looked startled. I heard Brother Evan step back beside me, and turned to look at him. He looked down at me and smiled. “Well, it was indeed interesting,” he said. “Brother Tomlin,” he said, gesturing to the hall, “may I have a brief word?”

“Yes, but let’s stay in here. You’re all dismissed for the day,” he said to the class. “Go get some rest and think about how that *felt* to you. Think about how you could do it again, just like that. I’ll see you tomorrow afternoon.” The class filed out.

“Taryn, would you wait for us in the hallway?” Brother Evan asked. I nodded, and stepped outside, closing the door behind me. The room was well-insulated, and I couldn’t hear anything they were saying. They were only a moment, though, and the door reopened. “Taryn, I’m going to leave you here with Brother Tomlin. He’d like to try a few additional things with you if you don’t mind.”

“Am I in trouble?” I asked quietly.

“*Trouble?*” Brother Tomlin crowed from inside the room. “Great moon and stars, my boy, I should think not. You’re the most exciting thing that’s happened to me in... well, you’re exciting. Get in here and let’s play a bit!”

Brother Evan smiled. “You’re definitely not in trouble,” he said, “but I need to consult a few people about this because we’ve made a significant discovery, I think. I’ll be back in a bit.”

Brother Tomlin sat me back in the instructor's chair and took the student chair to my left. He ran me through a series of exercises in lensing, asking me to tell him about what I was experiencing as he did so.

"Now?" he'd ask.

"It's flat and half an octave low," I'd say. "And it sounds... hollow, not bright."

"I'm making it dimpled in the middle," he'd say, "and not evenly thick all 'round."

This went on for about an hour, with him making different adjustments, asking me how it sounded, and then telling me what he'd done. I wish I'd had something to take notes with. He had an excellent memory, though.

"This," he said. "This sounded flat and thin to you last time."

"It does again," I said. "This was overall too flat and not cohesive?"

"Thin, we'd call it," he said, "but yes. And now when I round it up properly..."

"It sounds fuller but still a bit flat," I said. "Ah, it's true now." And I saw a wisp of steam come from the refilled pan in the middle of the room.

"Don't tug at it," he said. "With just me, it shouldn't be enough to flash-steam again, but no sense tempting fate. I brought the thickness to where it should be, but overall it's not round enough."

"Yes," I said. "I see that."

"Wait," he said. "You *see* it?"

"Oh," I said. "Yes. I just realized it. I've had my eyes closed, mostly, listening to the sounds. I can't see glowing lines like that one girl, but it all looks less see-through, and I can make out the shape."

"This gets better and better," he said, removing his hands from the discs. The lens disappeared.

"It's gone," I confirmed.

“Absolutely fascinating. I’m not sure I’ve run into someone who experiences this in multiple senses. We shall have to tell Brother Evan.”

“Tell Brother Evan what?” Brother Evan’s voice came from behind me. I’d been focusing so intently I hadn’t heard him. Brother Tomlin caught him up on what we’d been doing.

“Interesting,” he said. “And that fits with what I’ve learned. No,” he said, raising a hand to stop Brother Tomlin’s questions, “I can’t discuss it. Father Brolan was most insistent. But you’ve worked almost to the evening meal.”

“I have a plate brought to my office,” Brother Tomlin said, “but I am a bit peckish. Can we do this again tomorrow?”

“I’m afraid not,” Brother Evan said. “But I shall be sure to update you.”

“Well, I’m off then,” the old man said, levering himself out of the chair. “I hope to see you again very soon, Taryn,” he said, smiling at me as he walked out.

“What now?” I asked Brother Evan.

“Well, if you don’t mind,” he said, “I’d like to take you back to the main weather station up top. They’ll have some food up there we can steal, and Father Brolan – he’s the head of the Tower, the man I’ve been speaking with just now – had an idea to try something. He offered to meet us there. If you’re up to it.”

“Sure,” I said. “I’m not tired at all.”

“That in and of itself,” he said, “is reason enough to find you interesting, my boy.”

Ten

“Taryn, this is Father Brolan. He’s in overall charge of the Tower.”

We took the rising room to the top of the Tower again and walked around to the West where the weather-workers sat. Father Brolan stood behind them and seemed to be about Brother Evan’s age. His skin was a bit lighter than the norm for Alabaster, although not nearly as pale as Mama’s. His face was far more careworn than Brother Evan’s, and his shoulders somewhat stooped, as if being in charge of the Tower was a heavy burden he carried alone. That might well have been the case, for all I knew.

“Well met, Taryn,” he said, holding a hand out to me, palm down. That was an old greeting, one only a few of the tavern’s customers ever used between each other.

“And well met, sir,” I replied, holding my hand palm-up under his.

He raised his eyebrows and smiled. “Well, you don’t see that kind of manners in young people much anymore,” he said. We both let our hands drop to our sides.

“Mama was a Road Trader before she had me,” I said, “and she said they keep a lot of the old customs.”

“They do indeed,” he said. “Interesting that both her boys should have such potential. Well. Did Brother Evan tell you what we’d like to try this evening?” I shook my head. “Well, here,” he said, “I’m told you’ll be able to experience something if you sit.” He gestured to the supervisor’s chair, so much like the one I’d just been sitting in below. I sat, and he moved to stand on my right side. “Now that the sun is setting, our weather workers no longer worry about creating lenses to bring more humidity into the farms. Instead, they try to create a kind of cap over the farms, to hold that humidity in and protect the crops from drying out.”

“Yes, I see,” I said. And I could: off in the distance, to the southwest, I could see a hazy kind of partial dome hovering over

a portion of the farms. And, already, I could hear jangling musical tones in my mind.

"I'm sorry, you say you can see?" Father Brolan asked.

"A new development," Brother Evan said. "Taryn apparently experiences this optically as well as aurally. He had his eyes shut in concentration when I observed him in the training room."

"Fascinating," Father Brolan said. "Well. That puts a new light on it. Taryn, why don't you tell me what you see?"

"It's a kind of misshapen dome," I said, "like a sweet cake that's just started melting in the sun. And it's nowhere near big enough to cover the entire farm."

"No, we've never gotten it to," Father Brolan said. "Ah, Sister Mya," he said. I turned and saw the woman walking toward us with a smile. "Is your team ready?" he asked, gesturing to the ten Servants seated before us.

"Ready and fresh on-shift," she said.

"Aren't you a bit past your own shift?" Brother Evan asked.

"Nonsense, I wouldn't miss this and Brother Kemus never minds taking a bit long at dinner."

"Well, then, let's begin," Father Brolan said. "Taryn, we'd like you to see if you can make that dome more regular, and if possible, even a bit bigger. Can you give it a try?"

I nodded. In truth, I was dying to do something because the discordant noises in my head were driving me crazy. As a closed my eyes, I heard Sister Mya advising the other Servants. "Keep your focus," she said, "but if you feel something tugging against you, don't fight it. Keep the force behind it, but let it go where it wants to." I stopped listening and focused. Ten off-key notes rang in my mind, and I started corralling them together. Most of them were lower notes, and I pulled them together into a bass-heavy five-note chord, with just two high notes ringing counterpoint. I opened my eyes and saw that the dome had gotten more regular and even, but a bit smaller. I frowned. In my mind, I guided the top note down a half-octave, only to see the dome shrink a bit more. So high notes meant more size? I let that note drift back up, and pinned it in my

mind. Then I started to guide the lower notes up by half-steps, one at a time. The chords rang through my mind and the dome slowly expanded, covering more and more of the farmlands. The bottom two notes, though, refused to move, hard as I tugged. And I saw that the more I tugged at them, the thinner and wispier the dome became. *High notes for size*, I thought, *low notes for strength*.

I held it all for a moment longer, making sure it felt stable. “That’s it,” I said. “I think that’s as big as I can make it without losing solidity.”

“It’s easily twice the size,” one of the ten working Servants noted. “And far more stable than we were getting on our own.”

“Can I try something?” I asked.

“What’s that?” Father Brolan asked.

“Well, downstairs, I made the water all flash to steam at once when I kind of strummed the notes in my mind.”

“Strumm—” he began but stopped himself. “Never mind, I don’t need to understand your metaphor,” he said. “Go right ahead.”

Not taking my eyes off the distant dome, I felt for the notes in my mind. In moving them, I’d gathered them into four “strings,” and now I pictured them being *strummed*—

“Sacred Founders!” one of the Servants roared. But this time I didn’t let myself be startled; I held the strumming note, letting it resonate in my mind and then *strumming* again.

Over the farm, the dome had stretched somewhat in size but had gone entirely opaque.

Eleven

Brother Evan and Father Brolan left after that, leaving me to retire for the evening. Later, Brother Evan conveyed much of their conversation to me.

After Taryn's "demonstration," Father Brolan asked me to accompany him to his office. It sat just two floors below us (and annoyingly, also two floors above the next-lower floor with access to the lift, a fact Father Brolan bemoaned more and more as he got older). It was one of the more comfortable rooms in the Tower, complete with large, overflowing bookcases, comfortably worn rugs, and a beat-up old desk. It always struck me how *frumpy* the Tower was, once you got inside, in stark contrast with its dramatic exterior.

"Evan, what have we got, here?" Father Brolan asked.

I shook my head. "I honestly don't know."

"You say the boy rated a five?"

I nodded. "Yes, he did. But... well, I question what that means, now."

"How so?"

"We've always thought of the chair's ratings as being an increasing scale. Three is better than two, four is better than three, right?"

"Of course," he said.

"But if that's the case, I've always found it odd that there are things a two can do that a four struggles with, or can't do at all."

"Well," he said, "it's a matter of fine control versus—"

"But what if it *isn't*?" I interrupted. "What if we've been misreading this all along?"

He looked at me for a moment and then turned toward the large shelves that were built into one wall of his office. He walked over to it and, reaching almost as high as he could, pulled an oversized

volume from an upper shelf. He carried it to his desk and laid it down. "Have you seen this before?" he asked.

I walked over. The book was the size of a shift ledger, where the Tower tracked who'd been working on what, and during which shift. Except the cover of this one wasn't stretched hide. Instead, it was... shiny. Smooth, but flexible and almost warm to the touch. I opened it. The pages weren't vellum or parchment. They were much thinner, and also completely smooth. The writing inside was... not writing. The letters were uniform, not made by hand. "What is this?" I asked.

"One of the earliest volumes in the Tower," he said. "The pages are all but indestructible. Even water just beads up and runs off of them. That's why it's lasted so many centuries."

I looked more closely at the... the writing, for lack of a better word. "These words..." I said quietly.

"They are not our words," he confirmed. "The letters are familiar, and some of the words seem shaped like ours, but it's difficult to grasp the meaning without significant effort. Here," he said, flipping to a page about a quarter of the way in. It depicted a series of boxes. At the top of the page was a single box. Centered underneath it were two more boxes, each connected to the upper by a thin line. More boxes were arrayed beneath them, filling the page. Each box had a single line of text inside. He tapped the top box. "Try this one. I find it's easier to sound out the letters."

I squinted at the small lettering – my eyes aren't what they used to be. "Comm... man... der," I said slowly. "Commander?" Brolan nodded. "Hall... no, that's an 'o,' isn't it... Holl-is? Hollis?" I paused. "Wait, I know that. That's a name." I looked up at him. "Wasn't–"

He nodded. "Hollis was one of the Founders, and more specifically was the first head this Tower."

"So was 'Commander' a part of his name?"

Brolan shook his head. "I think these are titles, like 'Brother' or 'Father.' If you look at the row beneath, they both have the same title before their name."

I looked. "Lye... you... tenant Commander. I recognize 'tenant,'

at least.”

“I don’t think it means the same thing in this context,” he said. “But you can see that the titles on each row are mostly the same.” I nodded. “And have you noticed how many rows there are?”

“Five,” I said. I looked up again. “The same number of rows as indicators on the chair?”

Brolan shrugged. “Seems like a distant coincidence. But, I remembered what you told me about Taryn in the assessment room. You said the indicator lit up...” he paused.

“Green,” I reminded him. He tapped the book, and I looked down. The box around Hollis’ name was green, while the others’ were red. “That seems like a bit more of a coincidence,” I said.

“It’s still thin,” he said. “But I was just looking at this page a few days ago. Notice that each row is labeled, off to the side?” I looked again at the even-smaller print near the edge of the page and nodded. “This phrase,” he said, tapping at the label on the second row, “is ‘Force Control,’ and it’s the same phrase this book uses to refer to operations that we classify as weather. This name,” he added, tapping the first box in the second row, “appears on almost every early volume we have on weather manipulation.”

“What’s it mean?” I asked.

He shrugged. “I presume that this was the original hierarchy of the Tower. We know that weather operations has always been one of our most important functions, and this conveys that same sense. We know Hollis was likely the original head of the Tower, and this seems to be saying that. And we now know that Taryn is able to somehow manipulate and refine what our Servants are able to do, making them more effective and that the machines, on some level, recognize that ability in him. Yet he’s not able to directly perform any of the tasks typical of a servant. Almost as if—”

“As if he was meant to be in charge, and assist, rather than performing tasks himself,” I finished softly.

“Well, assisting and guiding, certainly. No reason he should be doing the paperwork behind running this place,” he said, gesturing at the stacks of shift ledgers occupying the side of his desk. “But it

does suggest we've been misreading the Testing chair's indicators."

"They indicate your place in the hierarchy, not your potential?" I asked.

He nodded. "Perhaps. I don't know. We've lost so much. The attacks over the years, unexpected deaths. So much was just known by everyone, in the beginning, so they didn't keep records. Or we lost them. We're guessing. Every time I open one of these older volumes, especially this one, I realize what a miracle it is that we're able to accomplish anything at all these days. And—" he paused.

"What?" I asked.

"We could be completely off-base. We've no evidence. Just a bunch of coincidences."

I nodded. "So, what do we do next?" I asked.

"Well," he said, perching on the front of his desk, "let's talk this through. Let's presume, for the moment, that the chair's readings *do* indicate the rank you should hold within the hierarchy. Let's presume that our threes and fours are doing weather controls not because of an affinity, but because they are somehow categorized to."

"Categorized *how*?" I asked.

He sighed again. "I've no idea. But let's just presume, too, that there *is* a categorization, and that it *does* have something to do with the diagram in this book. *If* that were true, how would we go about proving it?"

I mulled it over for a moment. "I suppose I'd try Taryn at some other tasks. If he's been categorized as a 'Come-and-er' or whatever, then I would presume he'd be able to work with teams apart from weather."

Brolan nodded, slid off his desk, walked around to the back of it, and slumped into the chair behind his desk. "Agreed. I have today's paperwork to catch up on," he said tiredly. "And I need to spend some time trying to read more of this volume to see if it offers any clues. *You*," he said, "need to make sure that boy's mind is at ease and that he can get a night's sleep. Bring him back up in the morning. I'll have breakfast brought up from the kitchens for us."

I nodded. “Good luck. You need to get someone to help you with that paperwork.”

He sighed. “I’m seriously thinking about just not doing it anymore. It seems we need to spend less time filling it ledgers and more time trying to understand what we’re really doing, here.”

I nodded in sympathy and walked out of his office.

Twelve

I made my way down to my room and was pleasantly surprised to find my lute lying on my bed. Brother Evan hadn't forgotten! I suddenly felt more relaxed and settled than I'd been since coming to the Tower as if the last member of my family had finally decided to sit with me. I sat on the bed, strumming quietly for – well, a while. I had certainly lost track when Steward Misha knocked at the door. "Come in!" I called.

"Hello," she said, smiling as she stepped into the room. "I just wanted to see how you got on today."

"It's been..." I paused.

"Exhausting?" she offered.

I smiled. "Exhausting. But also amazing. And... I guess 'tiring' is the same as exhausting."

She grinned. "You should see the younger children when they first go through those assessments. Half of them, I want to bop on the head to get them to settle down, and the other half are in tears from it all. How'd you do?"

I shared some of what had happened, in particular the experiment with Brother Tomlin. Her eyes grew wide. "That's... Taryn, that's amazing. I've never even heard of that! So you're to be on weather operations?"

"Well, no..." I said. I wasn't sure how much of our theory I should be sharing. I decided to err on the side of caution. "I guess fields work is just as difficult, so they'll probably want to try me there as well. I know it sounds just as complicated."

She nodded. "Those poor people come down drenched in sweat anytime they're doing a major move, especially just after Harvest when they're turning the fields. Still, it keeps us all fed, and we're all incredibly grateful. Did they try you on anything else?"

I shrugged. "A few things. Nothing really happened until the lensing, and even then the assessment came back empty. It might

be that I can only work in teams.”

She cocked her head. “Odd. I mean, teams are definitely more effective and more powerful than individuals, but I’m not sure we’ve had someone who could *only* work with teams. Still,” she said, the smile returning to her face, “at least they’re starting to narrow it down! Are you done for the night, then?”

I nodded. “I’m completely wiped out.”

“Did you get some dinner?”

“I had something on the weather level,” I said, “just a snack. I’m too tired to eat anyway.”

“Well, if you wake up in the middle of the night hungry, there’s always something simmering in the kitchen, so feel free to go down. And I usually keep a bowl of fruit in the reading area in the evenings, just in case someone needs a snack.”

I smiled at the offer. “Thank you.”

“You’re welcome,” she said, returning the smile. “Good night.” She stepped out of the room, closing the door behind her.

I strummed my lute for a while longer and laid down. Tired as I was, though, I just couldn’t sleep. I could barely close my eyes – every time I did, I saw that blast of light, and that partial dome turning opaque. I could hear the memory of the Tower’s notes running through my mind. My body was exhausted, but my mind kept rolling through all the possibilities.

I sat up and decided a piece of fruit wouldn’t be a bad idea. Maybe a book could take my mind off things, too.

I opened the door and walked down the hallway. I was passing the last bedroom right before the reading area and heard voices from inside. I slowed a bit, and heard, “...impossible.” It was a man’s voice. “What they’re doing with the shield generators is impressive but–” I stopped.

“It *is* possible,” a woman’s voice interrupted. Misha’s voice. “It wasn’t just him, people have been buzzing about it all day. We always thought the shield could only be full-strength if it was used in the original configuration, but–”

“But clearly not,” the man’s voice acknowledged. “But how? Not

even Hollis—

“We don’t know that,” Misha’s voice said sharply. “We’re still discovering things Hollis snuck in.”

“The boy must be a descendant,” the man’s voice mused.

“Obviously,” Misha said wryly.

“I thought we’d found them all,” he said.

“Rumor is the boy’s mother was a Road Trader,” she said.

“Of course. The genetic wild cards.” He paused. Then, “Do you think it’s a problem?”

“If he’s descended from Hollis? Of course. The potential for damage if they start experimenting?”

“Agreed.” I heard movement toward the door and bolted for the necessary, just past the reading area. I ducked in, closed the door behind me, and held my breath.

“Keep me updated, Misha,” he said.

“I will,” she replied. I heard a door close. I waited several minutes, and then made my way back to my room, snack and book forgotten. If my mind had been turning over before, now it was positively racing.

What had I just heard?

Thirteen

“Taryn,” someone said. “Taryn, wake up.” Someone was also shaking me. I opened my eyes. Impossibly, it seems, I’d fallen asleep. I rolled over and saw Brother Evan standing over me. “Good morning, my friend,” he said. I noticed that the room’s light was still set to its lowest level. “I’m afraid it’s earlier than usual.”

“What’s the matter?” I asked sleepily.

“I need you to come with me,” he said. “Get dressed. I’ll wait in the corridor.” With that, he stepped outside, and I heard the door latch shut. I sat up and shook my head in an attempt to clear the dust from my mind. I dressed and stepped outside.

“What’s the matter?” I asked again. Brother Evan was already on the move, and I scrambled to keep up.

“Father Brolan wants us in his office,” he said, lengthening his stride.

“Is something wrong?”

“I can’t imagine something *not* being wrong,” he said, the worry evident in his voice. “The sun’s not even up, yet.” I followed him to the rising room, and we waited in silence as it ascended. We stepped out and climbed two more flights to Father Brolan’s office.

“Ah, good,” Brolan said as we walked in. “Close the door, please.” I pushed it shut behind me. “Taryn, this is Collin,” he said, gesturing to a tall, dark-haired man standing near his desk. “He’s the head Manager for the city.” I blinked. I’d heard of the Managers, of course, but certainly never expected to meet one. Then again, I was standing in the office of the Head Servant of Alabaster Tower sometime before sunrise. My life had changed a bit. “Collin, bear with me here and repeat what you just told me?”

“Certainly, Father,” Collin said. His voice was profoundly deep and, combined with his height and firmly erect posture, sort of commanded you to step back and listen to him. “I suppose there’s not a great deal to tell. We’ve gotten word that a sizable military

force is marching in from Cupritesh. We expect them in a couple of days at the outside.”

“An attack, then,” Brother Evan said flatly.

“An attack,” Collin confirmed.

“But why?” I asked.

Collin shrugged. “It’s Cupritesh. They operate under a feudal system, you know that, right?” I shook my head. “Basically, they’ve got a king and a royal family in charge of everything. A council of Lords owns various bits of the city and the surrounding land. Everyone else works for them, pays them taxes, and so on. They’ve been in an empire-building mood, lately. Last year they attacked Kyanist, which sits roughly between them and us. Laid siege to the city for almost a week before Kyanist’s king caved in. Now King Solven of Cupritesh is styling himself _Emperor) Solven, thank you very much, and claiming Kyanist as a vassal state.”

“So they want to take over Alabaster as well?” I asked quietly.

“We presume,” Father Brolan said. “It’s not the first time in history they’ve attacked; the Solven family just likes to wage wars, I think.” He sat at his desk. “But it brings us to why I asked you to come up.”

“Surely you’re not thinking–” Brother Evan started.

Father Brolan nodded. “I am.”

“What?” I asked, confused.

Brother Evan heaved a sigh. “After your trick with the weather operators yesterday,” he said, “Father Brolan wants to know if you can create some sort of defensive shield against an attacking army.”

“Indeed,” Father Brolan confirmed. “And that’s not all.”

“Not all?” Brother Evan asked.

“You also told me about the incident in Brother Tomlin’s class...” he prompted.

Brother Evan took a moment, but I didn’t. “You want to know if I can blast them with a lens,” I said.

“No,” Brother Evan breathed.

“It’s a long shot, I admit,” Father Brolan said. “I realize the sun needs to be in the right position, but–”

“We can try it,” I said firmly.

“Taryn,” Brother Evan said firmly, turning toward me.

“We *have* too,” Collin said. “Brother, the Guard barely held off those bandits three years ago, and we know Cupritesh was probably funding them. This time they’re coming at us with their actual *army*. We don’t have a lot of options.”

“We don’t even know if it’s possible,” Brother Evan said quietly. I could tell he was thinking about what Collin had just said.

“We’re going to try,” Father Brolan said gently, “if Taryn is willing.”

I nodded. “I am.”

“Now look,” Collin said walking to Father Brolan’s desk. “This,” he said, pointing to the desktop, “is a rough map of Alabaster’s surroundings.” Brother Evan and I joined them. Alabaster was depicted as a simple circle, mostly nestled within the semicircle of the Eastern mountains. The Farms were marked, as was Gate Town, the small trading down that sat outside the Western Gate outside the outermost city wall. “Later today, we start evacuating the Third Ring into Second. We’ll begin distributing ration blocks and get people settled into the halls.” He tapped the empty space just West of Gate Town. “They’ll approach from here,” he said. “And possibly here,” he added, tapping just outside the farms. “The bandits tried to set fire to the farms, so we’ll have the Guard post lookouts for that. But the Western route is the most likely, as it provides the smoothest terrain for a large force afoot. If we take this,” he said, indicating Gate Town, “as their main goal, then we just need to protect that Gate and deny them access to the Third Ring.”

“What about the Farm Gate?” Brother Evan asked, indicating the opening in the Third Wall that bordered the farms.

“It’s possible but less likely,” Collin said. “The farms are actually rough country for a military force. There are deep irrigation ditches, soft ground, and tall crops – all less than ideal for a strong approach. We’ll guard that Gate, but–”

“It doesn’t really matter,” I said. The adults looked at me. I shrugged. “We can put a dome anywhere without much notice. I

don't think we could maintain two of them, but we can switch from one to the other pretty quickly."

Collin nodded slowly. "Interesting. What about the light lens?"

"Same thing," I said. "Although that depends a lot—"

"On the sun's position. I understand. Okay." He stood upright. "Can you show me what this looks like?"

I looked at Father Brolan. "It would mean letting go of the weather operations," I said.

"Of course it will, my boy," he said, smiling tiredly. "Can't have it all. But yes. I believe Sister Akasa is in charge of the overnight shift. Let's go up and talk to her, and see what we can do."

Fourteen

“This is flat-out crazy, you know that, right?” Sister Akasa was the polar opposite of Sister Mya: tall, almost skeletally thin, and with a complexion almost as light as Mama’s. Her hair was bound in a tan wrap of some kind, and the corners of her mouth tugged downward in a slight frown. In contrast to her sharp features, her voice was soft, containing none of the disapproval her face implied. “I mean, Sister Mya told me—”

“We know,” Brother Evan said. “We’ve few choices, here. Let’s please try.” She shrugged agreement. I was already seated in the chair along the back wall of the weather operations station. The ten operators were seated before me. “Go ahead, Taryn.”

I nodded. “Okay,” I said, “we’re going to try forming a lens, just like you do for weather operations. But we’re going to do it on its side, so it forms a kind of wall, and we’re going to position that right in front of Gate Town.”

“Wouldn’t it be better to cover the Gate itself?” Sister Akasa asked.

“We may have to fall back to that,” Brother Evan said, “but we’d like to protect Gate Town if we can.”

“Everyone ready?” Ten heads nodded in front of me. “Let’s begin.” Immediately, ten sharp tones rang out in my mind, and I saw the shape of the lens – truly, more of a curved wall – start to waver into existence in the distance. I concentrated, hauling the most off-key notes into alignment. “Don’t fight me,” I shouted. “If it feels like I’m pulling you off-center or something, just follow along.” The notes began to slide more easily.

“This feels weird,” one of the Servants muttered.

“Try it from this end,” I said. The last of then ten notes slid into place. I had them spread between three notes, crossing three octaves, forming a simple chord. “Okay,” I said, “by all accounts, this next bit will feel even weirder. Don’t let it go – everyone hold

on.” In my mind, I *strummed*, and an opaque black wall sprang into existence, spanning most of Gate Town’s breadth. “Too much,” I muttered as I heard Sister Akasa gasp. I *strummed* more gently, lowering the volume of the tones in my mind. The wall cleared to near-transparency, although I could still see its edges, clearly highlighted in my vision by whatever machines I was controlling. “Can you see it?” I asked Brother Evan.

“No, not really,” he said. “I know right where to look, and it’s a bit hazier, but that’s it.” So the highlighted edges were just for me.

“It’s a little harder to hold than I thought,” I said, gently *strumming* again to keep the wall in place. “I—”

:Warning: power consumption from primary shield generator is exceeding design specifications.:

The voice in my head was flat and pitched so that it could have been a man or a woman. It shocked me, and I almost jumped out of the chair. The ten notes I’d been holding slid sideways into sharps and flats and the wall in front of Gate Town wavered and thinned.

:Warning: the voice said, :undirected power consumption cannot be sustained. Discontinue operations.:

“Everyone stop!” I said. The tones in my mind abruptly ended, and the wall vanished from my vision.

“What’s the matter?” Brother Evan said, alarmed.

“What happened?” Sister Akasa asked in almost the same breath.

“The machines—” I started. “I think the machines spoke to me.” Everyone was quiet. “I don’t think they were designed to do what we’re trying to do,” I said. “They said something about power consumption and told me to stop.”

“Well certainly,” Sister Akasa said. “They were designed to hold weather lenses over the farms, not build invisible walls across all of Gate Town.”

I shook my head. “I don’t know. It said something about a shield generator, not weather or farms.”

“Shield generator?” Brother Evan asked.

I nodded. “It said primary shield generator.”

“Interesting.” He looked at Sister Akasa for a moment. “Taryn, I’d like to try again. This time, let’s see if you can ask it a question.”

“I’m not eager to damage the machinery we rely on to keep the farms productive,” Sister Akasa objected. “Especially not for an experiment.”

“Fair,” Brother Evan said. “So let’s try this, everyone: we’ll erect a lens in the air, just as we do for the farms. We’ll make it smaller, though, and keep it just outside of Gate Town. That’s no different than what we do with the farms, and it’s not even as far away, correct?”

Sister Akasa nodded slowly. “That should be fine.”

“Okay,” I said, leaning back into the chair. “Let’s begin.” The tones leaped into my mind again. The Servants were getting better: more of them were on-key, this time, and they were all closer to where I’d left them. The lens formed in the air, thinner at the edges and thicker in the middle. The Servants were long-accustomed to this kind of operation, and I didn’t have to pull the tones nearly as hard. “No voices,” I reported.

“Try asking it a question,” Brother Evan suggested.

Machines, I thought loudly in my mind, *is the power consumption within design specifications?* I hoped that using its own words would prompt a response.

:Affirmative:, the voice replied immediately, *:Although this pattern of consumption does not fit the original design specification.:*

What is the original design specification? I thought at it.

:Original design specifications call for uniform deployment of the entire city dome, utilizing all satellite generators. Partial dome deployment in nonstandard positions increases power draw, and satellite generators are not currently activated.:

That was a lot to process. *Is there a satellite generator near Gate Town?* I asked.

:Undefined reference point:, the machine said. It must not have understood “Gate Town.” I tried again: *Is there a satellite generator at the Western-most point of the city?*

:Affirmative.: the voice said.

:Can you activate the satellite generator? I asked.

:Affirmative.: the voice repeated.

I paused for a moment. *Do I need to tell you to activate it?* I asked.

:Affirmative.: the voice said again.

Please activate the satellite generator at the Western-most point of the city.

:Testing power connections. Done. Testing data connections. Done. Bootstrapping generator sub controller. Please wait.: I waited. A moment later: *:Bootstrap complete. Generator online.:*

“Okay, everyone,” I said aloud, “we’re going to try this again. This time, I want you to forget about creating a lens. We’re trying to create a wall, about twice as high as the outermost city wall, and curving the same as that wall. We’re just going to put it right outside Gate Town. Everyone okay?” Ten heads nodded. The lens we’d built out over the empty desert flowed downward, expanding to cover nearly the entire breadth of Gate Town. It was shorter on the edges, but still high enough, I judged, and it curved upward toward the middle. I pulled more of the tones toward the higher end of the chord, and gently *strummed* them in my mind. The wall solidified in my vision but stayed transparent. *How is power consumption?* I asked the machine.

:Consumption nominal.: it replied. *:Partial dome deployment is sustainable.:* I needed to discuss that “partial dome” thing with someone later. “Okay everyone,” I said, “let’s try the tricky bit. We’re going to pick the wall up, reform it into a lens with a very thick center, and angle it down. We want to catch the sun and make a very tight spot of light on the ground.” The tones in my head wavered a bit as the Servants concentrated, and I focused on pulling them back into alignment. As the lens’ outer circle formed, the tones took on a kind of strained, whining quality. *:Caution: this usage pattern does not conform to design specifications.:* the machine said. I ignored it, pulling more tones into the upper register and concentrating on thickening the middle of the lens. “Angle it a bit,” I said, gritting my teeth as I fought to keep everyone on-key.

The lens tilted and caught the sun–

BOOM!

The lens vanished, and the tones dropped out of my mind as a geyser of flame erupted on the desert floor. It disappeared almost immediately, leaving a shining, liquid-looking scar on the ground.

“Well,” Brother Evan breathed.

“Indeed,” Sister Akasa said softly.

:That usage pattern does not conform to design specifications and is not recommended,: the machine said.

Will that pattern cause any damage? I asked.

:Unknown. That usage pattern does not have any modeling data,: it said. *:That usage pattern also closely corresponds to interdicted operations.:* Huh.

“Brother Evan,” I said, “what does ‘interdicted’ mean?”

“Um,” he said, thinking. “Sounds like an old word. I think it means to shut off.”

“No, more like ‘not allowed’ or ‘blocked,’” Sister Akasa said. I relayed what the machine had said. “Well, that’s interesting,” she said. “So it let us do that, but something very similar to that would have been disallowed somehow. I feel,” she said, clasping her hands together in front of her, “as if we’re just starting to understand how little we understand about the Tower.”

Brother Evan nodded. “Taryn is opening up a lot of questions that we’ve never before thought to ask.” He paused. “I need to go report to Father Brolan and Manager Collin on what we’ve discovered. Sister Akasa, I know it represents a further interruption to weather operations, but could Taryn continue to use this station and try to learn more about the machines?”

She shrugged. “We should be able to continue operations while he does that,” she said. “And there are other chairs like that one scattered around, so if not, we can just relocate him.”

“Excellent. Taryn, will you be all right here? I’d like you to try and learn– well, whatever you can, I suppose.” I nodded. “Excellent,” he repeated. “I’ll be back as soon as I can.” He strode out of sight, back toward the stairs that led to Father Brolan’s office.

Fifteen

Can you hear me? I asked. Sister Akasa had been correct: the Servants had returned to weather operations, and once I'd let myself tune out the sounds of their efforts in my mind, communicating with the machine seemed straightforward.

:Affirmative,: it replied.

You mentioned a dome that could cover the city. Can you explain that? I asked.

:Affirmative. Recommend reviewing user training module. Do you wish to proceed?:

Affirmative, I replied, mimicking its language.

My vision dimmed, and I closed my eyes. Superimposed in my vision, as if drawn on the insides of my eyelids, was a diagram of the city. Or at least I assumed it was the city; it generally had building-shaped outlines, which were arranged more or less in a series of circles. A voice spoke, although it was not the flat, sexless voice of the machine. Instead, it was a man's voice, rich and deliberate.

As you know, atmospheric conditions will remain sub-optimal for several decades after landing. For this reason, each central facility has been equipped with a primary shield generator. If properly deployed, secondary generators should form a circular perimeter, creating room for each site to establish living areas. When activated, these secondary generators, directed by the central facility, can form a powered shield dome to protect those living areas. Yellow dots faded into view, outlining the city. These secondary generators will be tied into the main geothermal grid as well as the permanent fusion module, providing power for a virtually limitless period of time. However, the shield-generation system will automatically shut down once the planetary atmosphere reaches optimal conditions. Egress points are automatically provided to permit movement in and out of the shield dome, it continued, and a small orange-colored arrow moved back and forth across the yellow-dotted perimeter.

The shield dome system is designed to work autonomously, but can be manually controlled at need by using standard interfaces. Manual control is initially limited to operators ranked Lieutenant or higher.

:Training concludes,: the machine's flat voice said. I thought about what I'd seen.

Is this shield dome what we use to create lenses over the farms? I asked.

:Affirmative,: the machine replied. *:Manual control of the shield system can provide coverage of limited areas, and can provide shaping directives to the shield system. However, such use deviates from design specifications, and the central facility cannot provide automated assistance.:*

What rank am I? I asked.

:You are recognized as equivalent to Commander John Hollis,: the machine said. *:Central facility is operating on contingency instructions that provide for the continuation of operational duties through family lines,:* it added.

What rank is Brother Evan? I asked.

:There is no personnel designation for anyone by that name,: it said.

I opened my eyes and stared for a moment. How was that possible? Unless— *What is my name?* I asked.

:Unknown. You are recognized as equivalent to Commander John Hollis,: it said. *:Central facility is operating—:*

I get it, I interrupted. So the machines were somehow recognizing us as descendants of the original operators. It didn't know our names, only who our distant grandparents had been. *You mentioned that the lens operation we performed was similar to an... interdicted?* I stumbled over the strange word, *operation?*

:Affirmative, it said. *:Usage corresponding to known offensive patterns is interdicted by core programming.:* Offensive patterns. Well, that's certainly what we'd been aiming for. I wondered where the line was drawn between what we'd done and what wouldn't be allowed and resolved to bring it up with Brother Evan when he

returned.

Offensive patterns floated around in my head for a moment. *What about defensive patterns?* I asked.

There was a pause. Then: *:Commander Hollis initiated a number of defensive measures at installation Alabaster;* it replied. *:These measures were not interdicted by core programming:*

What were those measures? I asked. Maybe there was something here we could use.

:Records indicate a number of unscheduled terraforming operations primarily designed to raise defensive barriers around installation Alabaster; it replied. *:These operations were halted by Central Core mandate when they were approximately halfway completed.:*

Landforming? That sounded interested, but if those operations had been halted by someone... *Are those operations permitted now?* I asked.

:Small-scale terraforming remains in use at installation Alabaster; it replied. Terraforming, I wondered if it could be talking about the dirt movement that the farms teams did. This was starting to feel like a tangent.

Is the entire shield dome still available? I asked. That seemed like a sure-fire defensive measure. *And can it stop people from entering the city?*

:The shield dome system can be set to prevent ingress and egress; it replied. *:But the system is currently nonfunctional. Only one satellite generator is active.:*

Can you activate the remaining generators? I asked.

:Affirmative; it replied.

Activate the remaining generators, I ordered.

:Testing power connections. Done. Testing data connections. Done. Bootstrapping generator sub controllers. Please wait.: I waited, and several minutes passed thistle. A moment later: *:Bootstrap complete. All generators online. Full shield dome capabilities restored. Do you wish to enable automatic control of the shield dome?:*

Yes, I replied. That sounded far easier than having a team of Servants sitting here running the thing.

:Central facility automatic control enabled. Do you wish to raise the dome?:

No, I replied. *Not now. But how do I raise the dome when I need to?*

:Central facility can raise the dome at any time. Simply state your orders, Commander;: it replied.

“How’s it going?” Brother Evan asked. I started – I hadn’t noticed him walk up.

I turned to look at him. “I think I can raise an entire shield dome over the city,” I said. “And I’m not sure if it’ll let us use the lens technique to blast an army or not. It says it has rules against ‘offensive measures.’”

“Hmm. Good to know,” he said, “because the plan right now is to have a negotiator meet the army before they reach Gate Town. We may need that blast trick to provide a deterrent.”

“I really get the impression it won’t let us hurt anyone,” I said.

“Well, it did let us blast the ground,” he mused. “Perhaps we can do that as a show of force. The army won’t know that we can’t turn it on them next. And I’m honestly not eager to escalate the situation by blasting a bunch of Cupritesh soldiers anyway,” he added. “Did you learn anything else?”

I nodded. “The city can raise the dome itself. It won’t take Servants to maintain it. Apparently, the lenses aren’t hardened air like we thought, they’re just a use of the shield system. The city isn’t designed to do those on its own, but it can do the whole dome.”

“Interesting,” he said, stroking his chin. “I wonder if– well, no point right the moment. I suspect there’s a lot more we’ve lost over the years.”

“It said the dome was designed to protect the city before the atmosphere was optimal,” I said. “Does that mean at one point the entire planet wasn’t livable?”

He nodded. “We’ve always known that Achillios was founded by people from another world. We’ve obviously underestimated the amount of work that went into establishing homes here, but we knew that the oldest cities were central to that effort.”

“The machine said that it is operating on a... contingency?” – another strange word – “plan. Servants are all descendants of the original operators, and that’s how it recognizes us. It doesn’t know my name, but it said it recognizes me as Commander John Hollis.”

Brother Evan’s eyes flew open, and his hand dropped to his side. “It said that?” I nodded. “That... that connects a few things for me. After this whole Cupritesh thing is behind us, we need to have some serious discussions with Father Brolan. But look,” he said, “we should get you some food. We’re going to start evacuating the Third Ring and moving everyone into Second. We’ve got plenty to prepare for here in the Tower to help with that,” he added, “so mealtimes may be a bit more grab-as-you-can for a few days. Let’s take advantage of the dining hall before things get crazy.”

Sixteen

It was chaos, indeed. A couple of days later, all but the Guard had abandoned the Third Ring for the greater safety of the Second Ring. All the guild halls and government buildings were repurposed as dormitories, and most of the population gathered in the various open squares to wait and see what would happen. I was in the Tower, at the weather station, with a full team of twenty Servants. Ten were seated in their stations, with ten more on standby. I was sitting in my position along the back wall. Two Guards had joined us, and one had a far-seeing tube: a leather tube with glass lenses at either end that let them see more detail in faraway locations. A Guardsman in Gate Town would use flags to send prearranged signals to us that way.

I twitched nervously in the chair. We could already see the massed army beyond Gate Town, which had marched up in ranks in the early pre-dawn hours. A small delegation from the city had walked out to meet them. The air was still, not yet hot. The sun had just peeked over the Eastern mountains behind us, casting long shadows on the city. The shadow of the Tower itself stretched almost to the edge of Gate Town.

“They’re talking,” the Guardsman with the far-seer said. The hope was that the delegation could beg, threaten, or argue their way into a peaceful resolution. I personally didn’t understand how anyone expected an army of that size – there were easily five hundred soldiers – to come all this way and then turn around after a short conversation.

Minutes passed in an uncomfortable silence. I could see the light haze of the force shield, deployed as a flat disc, ready for us to snap it into a lens shape and focus the beams of the morning sun. I’d argued with Brother Evan and Father Brolan about this tactic, but the Captain of the Guard, a stern-looking, leathery woman named Taryce, had overridden all objections. She said a show of force was

the only deterrent the Cupritesh leaders would understand. I wasn't sure *she* understood that the machines might not be amenable to the trick.

"No good," the Guardsman said, his voice tinged with alarm. "Get ready to— they've killed them! Do it! Do it now!"

I seized the ten tones ringing through my mind more strongly than ever. We'd already practiced this over the past days, and they were all already on-key, but with the Guard's command, the tones became louder and more robust. I hauled them together as the lens in front of us became more visible to my machine-enhanced vision. I *strummed* and the lens—

:This is an interdicted usage pattern,: the machine's voice said in my head. *:Human lives are at risk. Disabling.:*

And like that, the lens vanished. The tones in my mind scattered, and all ten of the Servants in front of me snatched their hands from the interface pads as if they'd been bitten.

"What's happening?" Father Brolan asked.

"It's the machine," I said. "It won't let us do it."

"They're advancing!" the Guard cried. Gate Town itself was a trading town, and while it provided something of an obstacle to one of Alabaster's main Third Ring Gates, the town itself had no wall and was basically undefended. Guards had been deployed to do what they could, with the majority of them taking archers' positions on the outermost wall. Gate Town was, to put it bluntly, something of a sacrificial offering, and its inhabitants had been amongst the first brought into the Second Ring over the past days.

"Raise the entire dome!" I said. Then, *raise the shield dome! Emergency!*

:Acknowledged. Initiating emergency shield protocols.:

The dome sprang into life, covering the entire city, Gate Town, and most of the farms. The advancing army crashed into the dome, the lead soldiers nearly crushed by the weight of their fellows pressing from behind. I could imagine their surprise at running smack into what was, to them, an invisible, impregnable wall.

"Amazing..." the Guard breathed. "It's stopped them completely."

The ones up front are being crushed. They're- I think they've sounded a retreat. They're pulling back."

"How long can that hold?" Brother Evan asked.

How long can the dome hold? I repeated.

:Under current load, the shield is capable of holding for several hours. Provided mass strikes do not occur too frequently, it can hold for several days.: the machine replied.

"It says it can do it for several hours at least," I said.

"They've not started lobbing rocks at us," the Guard noted. "Is there any way we can let the archers fire out, while still blocking them from getting in?"

I relayed the request to the machine. "It says no. The shield has to be equal in both directions to work. But we could probably lower the top portion manually. If we made a ring, it'd still block their soldiers and our archers could fire over it?"

The Guard nodded. "We can try that." He spoke quickly to his companion, who dashed down the hallway. "They'll signal when they're ready. You can raise it again if they start catapulting boulders at us?"

I nodded. "That part is automatic, so it's fast. But I don't know if the shield is meant to hold against boulders or not. It might just collapse."

"Can't you... ask it, or whatever?"

I shook my head. "It doesn't really understand. The shield was originally meant to hold an environment *in*, not keep things *out*." Which wasn't entirely true; the machine had clearly said something about "mass strikes," but I didn't know how to translate that into anything useful.

"It'd be good if you could get that blasting trick to work," he said.

"Taryn, since the shield doesn't require your active attention right now, and it'll be a while before we can relay messages back and forth with the Guards on the wall, perhaps..."

I nodded. "I'll talk to it."

Seventeen

Why is that usage pattern interdicted? I asked. I'd had Brother Evan coach me on the language a bit until it made more sense to me. Even now, he was standing by in case I needed something explained. Ten Servants remained on-duty in case we needed to make a sudden adjustment, but the other ten had retired to their resting room while we awaited word from the Guard. Beyond Gate Town, the Cupritesh army had pulled back some distance and was probably trying to hatch a new plan.

:Terraforming systems are prohibited from being used in aggressive actions against humans.: it replied.

"Terraforming?" I said aloud.

Brother Evan blinked. "I... *forming* I get. The *terra* part, I don't know."

:Alternate phrase, 'landforming,': the machine said at the same time.

"Ground," Father Brolan said, walking up on my other side. "It's an ancient word for *ground*. It appears in a lot of those old documents."

"That's what the machine just said, but we weren't trying to move any ground," I said.

"Is the all it said?" Father Brolan asked.

"It said terraforming systems are prohibited from being used in aggressive actions," I said.

He nodded. "I suspect the machines as a whole regard themselves that way. I've certainly seen similar phrasing when documents refer to the Tower's main purpose. I believe that the machines were originally used to make the Achillios' environment more compatible with our people."

"And we can't use them aggressively," I said.

"Obviously. But I wonder... could we convince it that we weren't planning to hurt anyone? Only prevent greater harm?"

I nodded. *Our actions were not intended to harm other humans. The humans at the city perimeter – I'd already learned that terms like "Gate Town" didn't translate – were planning an aggressive action against the residents of this city. Our actions were intended to dissuade them.*

There was a pause.

:This usage of the force-shield system is not within the original design specifications. This expert system is incapable of validating the precision of this usage and ensuring safeguards are in place. This expert system cannot disable the safety locks.:

Before his father had died, Tomas had routinely known to go to him whenever Mama said no to something.

Are you the expert system? I asked.

:Affirmative.:

If you cannot disable the safety locks, then who could?

:Executive decisions are made in consultation between the Central Processor A.I. and the planetary Commander.:

Am I the planetary Commander? I asked. I knew it was equating me to a Commander Hollis, but–

:You hold the privileges of the planetary Commander.: it confirmed.

How can I contact the Central Processor A.I.? I asked, hoping I got the terms correct.

:Please wait.: There was a long pause. *:Central Processor is responding, but the A.I. does not appear to be running. Do you wish to restart the A.I.?:*

Why not? Yes. I replied. "There's something called an A.I.," I said aloud, "that can let us do what we want to do. And I'm allowed to confer with it, but it isn't running. It's going to restart it."

"A.I.?" Brother Evan said. I just shrugged. "Ask it to define the term."

Please define the term A.I. I thought.

:A.I. is an acronym for Artificial Intelligence.: it replied. *:Restart in progress.:*

“It says artificial intelligence,” I reported. Two sets of eyebrows raised, but neither man said anything more. Several minutes passed.

:There has been a problem restarting the Central Processor A.I.: the machine’s voice said. :Central Processor expert systems report physical damage or disconnections in the primary core. The A.I. cannot be restarted.:

“It didn’t work,” I said. *If the A.I. is not available, can I disable the safety locks on my own?* I asked.

Another pause. Then: *:Affirmative. Successor protocols are in effect. Do you wish to disengage the safety protocols?:*

Yes. I replied. “It’s letting me do it,” I said aloud.

:Caution: aggressive actions against humans may result in cognitive dysfunction in local expert systems and a failure of all local terraforming systems. Please acknowledge.:

Acknowledged, I thought. “If we actually hurt anyone it sounds like it’ll cause some serious damage to the machines here,” I said.

Brother Evan nodded. “Well enough.”

:Caution: Incoming projectile.:

“There’s—” I began.

“Look!” our Guard said, pointing toward Gate Town. A huge boulder had been catapulted toward us. As we watched, it impacted the shield dome, which suddenly glowed with a bright violet light at the impact point. The boulder stopped, and slid down the dome, trailing violet sparks all the way down.

:Projectile strikes of that magnitude will deplete the force shield rapidly.: the machine said.

“It can’t hold those off for long,” I translated. “But it says we can do the lensing trick. So—”

“Signal!” the Guard cried. “Archers are in position!”

I looked at Father Brolan. “Let’s let the archers go at it for a minute. Be prepared to raise the dome, but I’m thinking we drop the wall entirely and focus on a big lens to make a show for them unless you think you can do both at once.”

“We’ve not practiced that,” I reminded him.

“Lens it is.”

“We’re dropping the wall,” I said to the Guard. He nodded and waved a small flag back and forth over his head, presumably signaling the archers. *Deactivate the dome*, I ordered.

:Confirmed.:

“Okay, everyone,” I said to the ten Servants sitting in front of me. “Let’s do it again. Aim for a point just in front of the army, but off to the Northern edge. Once we get that flare, let’s drag the pinpoint in front of them all the way to the Southern edge. Ready?” Ten heads nodded. “Begin!” Ten tones leapt into my mind, and the lens – almost perfectly formed – appeared in precisely the right spot, canted to catch the late-morning sun and angled to the North. They’d gotten good at this, with all ten tones in almost exactly the right spot. I nudged them all into place, and *strummed*.

Almost immediately, a geyser of smoke, dust, and flame erupted from the desert floor, about halfway between the army and the Western edge of Gate Town. I held the strumming chord, and we slowly angled the middle notes, which in my mind controlled the lens’ angle, down through their minor variants and into the next octave. As we did so, the lens angled Southward, blasting a line of dust and fire into the ground.

:Caution: power consumption is not sustainable.:

Five more seconds, I thought. As soon as we hit the Southern end of our intended line, I said, “stop!” The ten tones dropped from my mind as the Servants raised their hands from the interface pads. In front of us was an angry, swirling mass of hot dust. Fortunately, the wind was blowing for best effect, looping around the Eastern mountains and pushing the dust toward the Cupritesh troops.

The Guard, peering through his far-seer, said, “they’re retreating!” As the dust settled, we could see that they were indeed, moving as quickly as they could. The catapult, which they’d erected just today, remained standing as the troops barreled past it in an attempt to get away from our seeming attack.

“Brother Evan,” I said. “That catapult–”

He nodded. “I was thinking the same thing. Everyone, get ready to do it again. Once the troops are well clear, let’s burn that

catapult.”

It took only a few minutes for the troops to move West of the catapult and even less time for us to form another lens and blast the catapult into charred pieces.

We’d reconvened in Father Brolan’s office, along with Captain Taryse, Brother Evan, and Manager Collin. “Excellent work, Taryn,” Collin said. “I can’t thank you enough. We lost two lives today, but it could have been much, much worse.”

“Will you let people move back into the Third Ring now?” I asked.

“No,” Taryse said, shaking her head. “Those troops took at least four days to get here. They’re not going to give up that easily. Their commanders will get them drunk tonight, convince them that what they think they saw wasn’t so bad, and likely march them back here tomorrow. We’ll need to stay on alert.”

“I’m worried about additional siege weapons,” Collin said.

“So long as we can blast them like that catapult, I’m not,” she countered. “And that dome or whatever seemed to stop the ground troops cold.”

“And we can lower that so archers can fire over it,” I added. She nodded and gave a grim smile. “I don’t envy them. They can certainly fire back, but we’re well-protected on the outer wall against that kind of response.”

“I can’t believe it’s just past lunchtime,” Father Brolan said. “Taryn, I recommend you get some food, and then some rest. We may need to rouse you sooner than you’d like. In fact,” he added, looking at Brother Evan, “why don’t the two of you move into one of the unused rooms up here? It’ll be much less of a rush if we do need to wake you in a hurry.”

Brother Evan nodded. “Fancy a bite?” he asked, turning to me. I nodded. I’d been so nervous this morning that I hadn’t the appetite for breakfast, and with the immediate danger behind us, my stomach began asserting its rights quite vigorously.

Eighteen

Brother Evan and I had a light lunch in the dining hall. I'd been hungry, but still so nervous and worked-up that I couldn't eat much. As the food hit my belly and my nerves started to settle, I found my eyes drifting shut.

"Enough," Brother Evan said, smiling. "Let's get you a nap." I smiled back, and he walked me back to my room. I closed the door, undressed, and was just about to lie down in my bed when I heard a whispered conversation in the hallway. It was the same voices I'd heard before, in Misha's room. In all the rush and chaos of the past days, I'd completely forgotten to mention the conversation to Brother Evan or Father Brolan. I leaned into the door to try and hear more clearly.

"You heard?" the female voice, which still sounded like Misha, said.

"I did. Safety locks disengaged and an attempt to revive the central A.I.," the male voice said.

"We should talk to him," Misha said, "I'll see if he's in here." I heard a slight scuff as someone moved toward the door. I stepped back and prepared to leap into bed—

"No," the male voice said. I slowly leaned back toward the door. "We already know what's being done. Cleverly, I might add. Using the shield that way, especially."

"It's impossible for him to have contacted the central A.I.," she said.

"Not if the system is recognizing him as one of the original commanders," he countered.

"What can we do?" she asked. There was a moment of silence.

"Nothing," he said. "Not if— nothing I can think of." More silence. "Come," he said, "we need to consult with the others, and I'll need your help." I heard them moving away.

So much for my nap.

I waited several minutes to be sure they were gone, dressed, and rushed back to Father Brolan's office.

Nineteen

I found Brother Evan in Father Brolan's office and quickly recounted what I'd just heard, along with what I'd heard before.

"This is troubling," Father Brolan said. "You're certain it was Misha?"

"Not completely," I said, "but I'm pretty sure."

"Then the other voice is likely Marten," Brother Evan said. "The two have always been close."

"Who's he?" I asked.

"Our Head Steward," Father Brolan said. "I'd always considered him to be completely loyal to the Tower and to the city," he mused. "He's been here for years. In fact, I believe he and Misha started in the same year. You may have seen him and not realized it," he added to me. He touched the side of his neck. "He's got an injury from his childhood, and there are still dark specks embedded in the skin of his neck. He—"

"Wait," I interrupted. "Like small bits of rock?"

Father Brolan nodded. "Yes, you've probably seen him in the dining—"

"I haven't seen him," I said flatly. "Steward Misha has the same injury on her arm. Her sleeve pulled back when she was settling me in my room."

Both men stared at me quietly. "Evan," Father Brolan said softly. "I'd like you to go retrieve Taryn's belongings from his room, please. Bring them up to one of the unused rooms on this level. Bring your own clothing up here as well. And ask one of those Guards to bring Misha and Marten up here." Brother Evan nodded and left the room.

"What's happening?" I asked.

"I should very much like to know," Father Brolan said. "Excuse me for a moment." He stepped out, leaving me in the office alone.

Some minutes later, the two Stewards were standing in the office. Brother Evan and Father Tomlin had returned. Two Guards stood near the door to the office, and Taryce stood to one side of the room. The two Stewards looked nervous.

“Marten,” Father Brolan said. “Can you explain the nature of your injury, again?” The Steward opened his mouth, but Father Brolan cut him off, adding, “and also explain how Misha has the same injury on her arm?” The man closed his mouth, and the two Stewards looked at each other. “I also have some questions about conversations you’ve been overheard having, and about the special interest you seem to be taking in young Taryn, here.”

They looked at each other again. Marten said, “You already know that I’m not originally from Alabaster,” he said. “Misha and I are related,” he added. “We grew up together, and we were both injured when the—”

“She said she was injured in her father’s smithy when she was very young,” I said.

“And you said you were injured in a kitchen fire,” Father Brolan said. “The truth, please.”

The man stood for a moment, looking into Father Brolan’s eyes. Then he sighed. “We’re from a city called Onyx,” he said quietly.

“Never heard of it,” Taryce said from the side of the room.

“You’re not meant to,” Marten retorted. “We take care to keep its existence quiet, and you’ll not learn its location from us.”

“And your ‘injuries?’” Father Brolan asked.

“They’re implants,” Marten said. “They allow us to communicate with our city through your city’s machines.”

“How?” Brother Evan asked.

“Onyx contains the central processing core for the entire planet,” Marten said. “It can communicate with every other city where machines are present. It was designed to coordinate the planetoid terraforming when the founders first came here.”

“I think,” Father Brolan said, sinking into the chair behind his desk, “that you’d better explain everything.”

Marten sighed. “You’re likely to learn it yourselves now anyway,” he said, gesturing to me. “He was an unexpected development.” Father Brolan gestured for him to continue.

Achillios was colonized by people from another world, *Marten explained*. When they came here, the planet was not suitable for them, and so they deployed great machines designed to raise the planet’s temperature, thicken its atmosphere, and shift the structure of the planet itself to suit them. These machines were deployed more or less evenly across the planet, both on the landmasses and in the oceans. Alabaster was never meant to be a populated city – it was just meant to be one of many machine installations, laid out in a grid-like pattern on this continent.

If you look at a map, *he added*, you can see that the major cities are all in a grid. The only exceptions are where the machine installation location didn’t correspond to the best sites for populations. That’s why Cupritesh’s royal city is some distance away from where most of the population lives. This area, *he said, gesturing around us*, was never meant to be inhabited. It’s always been a natural desert, and living conditions here have never been ideal. One of the original planetary leaders, Commander John Hollis, founded Alabaster after the Commanders of the other cities started implementing feudal systems and setting up monarchies.

The machines use a brain-based interface for operators because it allows a more complex and intuitive form of control over complex terraforming operations. Initially, the hope was that the machines could be discontinued after the initial terraforming operations were complete. Hollis worried that his fellow Commanders would continue using the equipment aggressively, much as you have been attempting to do these past few days. So he disabled the ability for new operators to be added to the system. In doing so,

the system relied on a failsafe mechanism that allowed machine access to continue through family lines. Hollis knew that would permit future generations to access the equipment if needed, but that as they grew more and more distant from their ancestors, the machines would eventually stop recognizing them, making access more limited and challenging, and finally cutting them off completely.

That's why we struggle to control the machines, Brother Evan said.

That is why, *Marten confirmed*. Hollis never expected access to last for this long. In fact, Alabaster is the only city still actively using its equipment. Years of battles, deposed 'royal families,' and other shifts have made the equipment inaccessible to the other cities. However, Alabaster has not only continued access but has been innovative in its use of the equipment. Using the shield dome generators to manipulate humidity and such – extremely clever. The domes were discontinued once the atmosphere was thickened, but using them the way that you do is quite unique. We've been – surprised, at the things you've used the machines for. They've made Alabaster habitable and sustainable for all this time.

Still, everything remained on track for you to lose access to your machines in a few generations, and that's why Onyx has always positioned agents here, to oversee you. Alabaster bloodlines tend to run true, and you don't have as much outside mingling of families as other cities do, but eventually, you will lose your access.

"Incredible," Father Brolan breathed.

"But consistent with what we've discovered just since Taryn arrived," Brother Evan said.

"The machine said that I was recognized as Commander Hollis," I added. The Stewards' eyes opened wider. "And I did ask it to contact the central A.I., but it said the A.I. could not be restarted."

"It's been nonfunctional for centuries," Marten said. "Even Onyx' leaders don't know how to revive it."

“Also—” I started, but Father Brolan stopped me with a gesture.

“I think that’s enough for now,” he said. “Guards, please escort these two,” he directed, waving at the Stewards, “someplace safe and make sure they stay there. Brother Evan, we—”

Just then, the doors to the office flew open as another Guard rushed in. “Captain!” he cried, “We’ve caught a Cupritesh scout!”

Taryce strode to face the messenger. “Where are you holding him?” she demanded.

“In the Guard Hall in Second Ring,” the man said. “And Captain – we believe he’s a member of the royal family.”

Taryce whirled to Father Brolan. “I need to see to this immediately,” she said, “and given what we have learned I would like you to accompany me.” Father Brolan stood, his eyes wide. Brother Evan had already explained that Servants rarely left the Tower, but Father Brolan nodded. Taryce stormed out of the room, Father Brolan close behind her. Brother Evan and I hurried to follow.

Twenty

The four of us took the rising room to the Tower's lower level. As we descended, Brother Evan remarked, "I don't trust them."

Captain Taryce snorted. "Of course not. They've apparently been posting spies in our city for decades, if not longer."

Father Brolan said, "But some of what he said was interesting. And it sheds some light on some of the more obscure passages in the older documents we have."

"I'm concerned about us losing access to the machines," Brother Evan said. "Alabaster can't survive without them."

"I don't think we have to," I chimed in. They all looked at me. I shrugged. "You heard him: Hollis prevented new people from being recognized by the machines. The machines treat me as if I'm Hollis. I can probably undo what he did."

They stared at me for a moment. Then, Brother Evan said, "I think you should try."

"I think you should try immediately," Father Brolan echoed.

"I think you should make sure the spies have no access to these machines," Taryce added.

"Yes, that too," Father Brolan said.

"Taryn," Brother Evan said as the rising room settled to a stop, "why don't you go back up and talk to the machines some more, and find out what you can about this situation? We'll see what this Cupritesh scout has to say, and we can meet back in Father Brolan's office afterward." I nodded.

"And Taryn?" Father Brolan said as they stepped out of the rising room. I looked at him. "Stay up there. We'll make sure a couple more Guards are sent up. You're very valuable to Alabaster right now, my boy." I nodded again. He smiled and placed his hand on the pillar that controlled the rising room, ducking out the door before it began ascending again.

Twenty-One

When the rising room returned me to the upper level, I walked back to the weather station I'd been at all morning. Sister Akasa and Sister Mya were both there, huddled in conversation. Ten Servants sat in their seats, staring Westward. I decided to leave them alone and walked around to the eastern side.

I'd paid little attention to the other views available on this level, but the eastern one was dramatic: the tall, jagged mountains – really, from this angle they looked more like individual spires that had been set so close to one another that not even a ray of light peeped through – loomed high over the city below. Most of the ones directly in front of me stopped below the peak of the Tower itself, and their heights slowly lowered as they marched north and south. From here, I could see the smooth, flat tops of each peak, and make out the sharp lines that formed their angled sides.

There were two operators' seats here, facing due east. As on the western side, a space of open floor sat behind them, with another station on a small platform set against the inner wall. I'd come to think of these as supervisors' stations. I sat down.

Can you hear me? I asked.

:Affirmative,: came the machine's immediate response.

What is this station used for? I asked.

:This station has been used for mass terraforming, including earthmoving,: it replied. *:The barrier range to the east was created from this station.:*

It could only have meant the Eastern mountains. *The Eastern mountains were created?* I asked.

:Affirmative,: it replied. *:Commander Hollis directed the erection of the barrier range as a defensive structure, along with the lower wall that completes the western side of the original barrier circle.:*

Amazing. It had never occurred to me that the original city

walls had not been constructed by hand, but it explained why the newer Third Ring wall was made from bricks, while the older First and Second Ring walls were smooth and seamless. *Can you still make walls like that?*

:Affirmative,: it said. *:Authorization is available to operators ranking Lieutenant or higher:*

Ranks again. *What ranks are there? In what order do they fall?* I asked.

:Operator ranks, in descending order,: it said, *:are Commander, Lieutenant Commander, Lieutenant, Junior Lieutenant, and Ensign.:* I bet those corresponded with the one-through-five ranking system that the Tower used.

And shield operations? I asked. *What rank do those require?*

:Operation of the shield dome was originally designed can be accomplished by any recognized operator,: it said. *:Current off-specification usage is available to ranks Lieutenant and higher.:* That explained the need for threes and fours on weather operations, then.

And my rank is Commander? I asked.

:Affirmative. You are recognized as having the same authority as Commander John Hollis, under failsafe plans granting access through family lines.:

Can I allow new operators to be recognized directly? I asked. This was the key question the Stewards had raised.

:Addition of new operators to the system is currently disabled,: it said.

Can I enable it? I asked.

:Affirmative,: it replied.

If I enable it, who will be able to say which new operators are recognized? I asked.

:Current configuration requires Commander-level access to add new operators,: it said.

Please enable the addition of new operators to the system, with Commander-level access required to add new operators, I instructed.

:Working. Complete,: it said. *:Do you wish to add a new operator at this time?:*

Yes, I said. *Add myself as a new operator with Commander-level access.*

:Please state your full name,: it said.

Taryn, I replied.

:Query: is 'Taryn' your full and complete name? it asked.

Yes, I replied, confused. Then I understood: the machine had referred to Commander *John Hollis*. The founders must have had multiple parts to their names.

:Confirmed. Welcome, Commander Taryn,: it said.

Now for the next question raised by the Stewards. *Does anyone have the ability to use you to communicate with Onyx?* I asked.

:Processing,: it said. It was quiet for several moments. Then, *:Designation unknown.:*

The city named Onyx, I clarified.

:There is no installation recorded for that name,: it said. Dust, I thought. The name has probably been changed in all the years.

Is it possible that people who are not operators cannot use you to communicate with other installations? I asked.

:Affirmative. Intercity communications are enabled. Communication logs exist for the past sixty days. Two identifiers have been used in the past sixty days to communicate with installation Theta.:

Where is installation Theta? I asked.

:Geo-database is not available,: it said. Dead end.

Can you maintain communications with other cities, but not allow anyone who is not a recognized operator to use the communications? I asked.

:Affirmative,: it said. *:Courtesy access can be disabled.:*

Disable courtesy access, I ordered.

:Processing. Complete: it said. *:Note that two unrecognized operators at this installation are now disconnected from the system.:* Perfect.

I'll be right back, I said, standing. I walked back to the western side. "Sisters," I said, interrupting their conversation. "Can I borrow

two of your fours for a short experiment?”

“What are we attempting?” Sister Mya asked.

“I want to try earthmoving on this side,” I said.

She shrugged. “Certainly,” she said. “Weather operations seems pretty secondary today anyway.” She tapped the two Servants sitting closest to her. “Pull off,” she said. “Taryn wants to try a thing.”

“Can everyone else stop weather operations for a moment?” I asked.

She nodded, and the other eight Servants removed their hands from the interface discs. I sat in the supervisor’s station and leaned back. “Okay,” I said. “I want you to look out past Gate Town, to where we scorched that line in the desert. I want you to feel the earth underneath that, and concentrate on raising it up.” In my head, I heard two tones slowly fade to life, slightly off-key, but—

:This station is not authorized for this activity; the machine said.

“Stop,” I said aloud. The tones faded. *Authorize this station for this activity*, I said in my mind.

:Unable to comply. Authorization changes must be made from Terminal Zero.:

I paused. Terminal Zero? *Where is Terminal Zero?* I asked.

:Location information is not included in my database; it replied.

Well. Time to try something else. “Thank you,” I said aloud. “I, ah, I need to try this some other way. Sorry.” I stood and walked along the corridor to the stairway. Two Guards stood there, eyeing me. “You here for me?”

One nodded. “We were instructed to make sure you stayed safe,” he said.

“I need to go down to Fields operations,” I said. “It’s four floors down. Would that be okay?”

They looked at each other and nodded. “I’m sorry we can’t take the rising room,” I said, turning into the stairway. “I don’t know how to operate it.”

“Creeps me out anyway,” the Guard said, smiling.

Twenty-Two

We descended to the Fields level, where a tiny, crusty old woman introduced herself as Sister Trofer. She ruled over a half-dozen interface chairs that seemed to be situated right below Weather operations, although only two of the chairs were occupied at the moment. The one on the end, I saw, was a supervisor's station, lacking the hand-discs in its arms. The space between the interior and exterior walls was thinner here, which is perhaps why the supervisor's chair wasn't positioned behind the operators'.

"So you're the lad what did that stunt with the Weather lenses?" she asked, peering up at me.

"Yes ma'am," I said. "I'm Taryn."

"Well, pleasant to meet you, Taryn," she said. "And what can our humble Fields Servants do for you today?"

"I'd like to try an experiment," I said, "and hopefully create a way to better defend ourselves from that army."

She nodded and gestured to the row of chairs. "Help yourself," she said. "You'll be wanting my lads to help?" she asked.

"Yes, please," I said.

"You're all his, boys," she told the two Servants – both of whom were obviously years older than me. They looked at me and smiled.

"Will we be doing anything half as exciting as what you did up top?" one asked.

"Even more," I said, sitting in the supervisor's chair, "if this works the way I hope it does."

"Well, you can't sit there," he said, smiling and pointing. "No pads in that one!"

"I know," I said, smiling and leaning back. "That's why I need to sit in this one." I turned toward the opening in the wall, looking westward. "Now, can you see out past Gate Town?" I asked. "To where we scorched that line in the desert?"

"Pretty well," he said, and the other man murmured agreement.

“So I want us to reach under the desert. I’m hoping we’ll find solid rock, like what the Eastern Mountains are made of. I want us to pull a pillar of that upward, just a few feet out of the ground.”

“Tricky,” the first Servant warned me. “We two operate mostly by touch, and moving earth always feels like water in our hands. We can churn it up,” he said, wagging his fingers in the air, “but if we try to move it too deliberately, too much, it just heaves up.”

“I should be able to make it feel more solid for you,” I said, “but we’ve got to reach down for solid rock, not just the dirt.”

“Okay,” he said. “Worth a try.” They both lay their hands on their interface pads, and two muddy, flat, wavering tones faded into my mind.

“You’re going to feel me... well, I don’t know what it will feel like,” I said. “But if you feel resistance or anything, just try and go with it instead of pushing back.” I started to reinforce the tones, making them less tenuous and more sure.

“Amazing,” the man whispered. “Yes, yes, I think I can feel what you’re doing. Joba?”

The other Servant, Brother Joba, I supposed, said, “yes, I think so.”

“Try and reinforce what I’m doing,” I said. I then started to guide the two notes together. Both were already in the same octave, but they were each kind of exploring different third- and half-notes. “Focus on being steady and firm,” I suggested. Both notes steadied, and I continued guiding them until they were ringing true in my mind, resonating with, and almost enhancing, each other.

“I can feel it,” Brother Joba said. “I can reach deeper, and it’s... it’s rock. I can *feel* the rock. I can feel the shape of it.”

“It’s not a pillar,” the other one said. “But I can feel the fissures between layers. There’s a good chunk here that can break away.”

“Okay,” I said. “I’m going to count to three, and I want you to *push* that chunk upwards. One of you will need to focus on filling in underneath it, I suppose.”

“Oh, indeed, or it’ll just collapse back down,” Sister Trofer said. “Like we do in the farms, boys. Drag that up from deep, deep down,

and form it up in arches, aye?”

“Yes, Sister,” they both said.

“Ready?” I asked. “One... two... three!” In my mind, I *strummed*.

In the distance, a flat-sided, sharp-edged column of rock groaned out of the earth and reached for the sky. A cloud of fine dust boiled up around it. As I watched, dust rose from the rooftops and streets of Gate Town... and then in the outer section of the Third Ring, with the dust cloud growing toward the Tower. “Stop!” I cried. They both pulled their hands off the interface pads, and I heard the tones vanish in my mind. But the dust cloud kept coming. As it neared the Tower, we all felt a gentle rumbling, as if a hundred men were running on the stone floor behind us.

:Caution,: the machine’s voice rang in my mind. *:You are manipulating near the water table and may risk significant damage.:*

“That’ll have been a lot louder on the ground,” Sister Trofer muttered. And she was right: I could see citizens spilling into the streets of the Second Ring.

“There’s a possible problem,” I said. “Give me a moment.” They looked at me with concern, but nodded. *Can you tell me about the water table?* I asked.

:A visualization would be more effective,: it said. *:Permission to proceed?:*

Okay, I said. Immediately, my vision was filled with bright, glowing lines, overlaid on the scene before me. I blinked several times, but the lines stayed. They seemed to be outlining something under the ground – if I held my head still, they stayed, but if I turned my head, they shifted based on what I was looking at – but they were blurry. Blurry, curved red lines flickered in and out, while fuzzy blue dots flowed here and there between them.

:Sensory mismatch detected,: the machine said, and the vision vanished. *:Recommend recalibration.:*

Can you do that?

:Not at this station. A calibration and assessment room must be used.:

An assessment room. I’d speak to Brother Evan about it. In

the meantime, I looked back out to the desert, where the dust was settling back to the ground. It was clearly visible now: a pillar easily the height of two men, like a miniature of one of the spikes in the Eastern Mountains.

“I don’t believe it,” one of the Servants said softly.

“Oh, aye,” Sister Trofer said. “A defense, indeed, my boys. We shall have to have the Guard help us design it, but my lads we shall be raising *walls*, not just churning dirt.” I could hear the excitement and pride in her voice. “When shall we begin, young Taryn?”

“I think I need to talk to Father Brolan first,” I said, “but I’m sure he’ll let you know.” I stood. “I need to get back,” I said. “Thank you.”

“Thank *you*, youngling,” she said, smiling. I returned the smile, and with my Guards in tow, headed back up.

Twenty-Three

Father Brolan had some food brought into his office, and I shared everything I'd learned that afternoon and explained more about what 'recalibration' seemed to entail.

"We'll head down this evening," Brother Evan said. "I'm also intrigued by the idea of us being individually authorized by the machines. I wonder if doing so will make it easier for us to control them."

Father Brolan nodded. "I would imagine so. The implication is that the 'visualization' Taryn saw would be clearer after he is 'calibrated,' which suggests the rest of us might benefit from that as well."

"And it squares with what your Steward told us about you eventually losing the ability to control the machines," Taryce pointed out.

"Something that's been getting harder and harder over the years," Father Brolan agreed, "but the Onyx people don't seem to realize that our Hollis successor can now avoid that."

"But we still need to find Terminal Zero," I pointed out. "It said that all authorization changes happen there."

"It's likely in the lower levels," Brother Evan mused. "I wonder if that means the difference between threes and fours will go away?"

"Would ones be able to operate the Tower?" Father Brolan wondered.

"Those don't represent abilities," I reminded them. "They correspond to ranks. I think we can add anyone we want, now, at any rank we want, and the rank says what they can actually do."

The two men nodded. "This is a big change to how we think about the Tower," Brother Evan said. "I wonder if the other cities will be able to activate their machines again?"

"That might actually solve the Cupritesh problem," Taryce pointed out. "Do you have a map of the continent?" she asked

Father Brolan. He nodded, and went to one of his bookshelves and started rummaging around.

“How will the machines help Cupritesh?” I asked.

“Our turn to catch you up,” Brother Evan said. “The scout they caught turned out to be Kamil, a junior member of the Cupritesh royal family.

“He’s King Solven’s cousin on his mother’s side,” Taryce clarified. I nodded as if I understood.

“Cupritesh is indeed attempting to annex cities in their empire-building,” Brother Evan continued, “but it’s partially because they’re running out of water. They get water from underground wells, just like we do, but they recently had a minor land quake, and after that, the water slowed to a trickle. There’s a solid chance they may have to abandon the royal city entirely.”

“They told you all that?” I asked. It seemed strangely honest for a city that had sent a sizable army to attack us.

“It took some convincing,” Taryce said. “And they regard the Tower and its Servants as magical. I think they think we might be able to fix the problem in their city.”

My eyes widened. “And we might,” I said. “If we can do the same thing there as I think we can do here.”

“We pointed out that our own ‘magic’ had been fading over the generations, though, and that Alabaster itself might not be inhabitable for long,” Brother Evan said.

“Which is part of what I suspect made Kamil open up a bit,” Taryce said. “We aren’t likely to be a sustainable new royal city for them.”

“Ah,” said Father Brolan, pulling a thick sheaf from his bookshelf, “this should be it.”

“Captain!” The office door flew open, and we all turned to look. Two Guards entered, with Marten, the Head Steward, in between them.

“What in the name of the founders are you playing at?” Marten bellowed. “That rumbling? The dust? Are you trying to bring the city down around our ears? Do you even know what you’re

tampering with?"

"Settle down, Marten," Father Brolan said, dropping the sheaf on his desk and taking his seat behind it. "We've been examining some of the details of your story from earlier, and young Taryn here has been exploring some ideas."

"And I'm cut off from Onyx," the Steward fumed. "Is that young Taryn's doing as well?" he asked, glaring at me.

I nodded. "Taryn was acting under our instructions," Brother Evan lied.

The Steward turned his glare to Father Brolan. "We cannot help you, cannot prevent you from destroying everything, if we cannot contact Onyx. Our city has the central—"

"—processing unit, yes, I remember you saying so," Father Brolan interrupted smoothly. "Yet I remain uncomfortable with you having access to the Tower's machines, given your lack of openness with us up to this point. We will let you know if we need you," he added. He waved to the Guards. "Return him to wherever you're keeping him, and make sure he stays there this time."

"Yessir," one Guard said, as they escorted Marten out of the office.

"I'm sorry about the rumbling," I said quietly.

Father Brolan waved a hand. "No matter," he said brightly. "I expect there'll be a good deal more of it to come. In the meantime," he said, spreading open the sheaf into a map that more than covered his desk, "here's that map, Captain."

We all walked over. "This," Taryce said, pointing to Alabaster on the map, "is us. Hmm. He's right," she muttered. "It *is* a kind of grid. Look," she added, tracing a finger back and forth across the map. "Every city is very close to being aligned with at least two others."

"There are gaps," Brother Evan pointed out.

"I expect those were installations like Alabaster was meant to be," she said. "There are probably still machines in all of them, but nobody bothered to build a city around them."

"And what about Olivine?" Brother Evan said. "It's nowhere

near where it should be.”

“But that would be here,” she said, placing a finger on an empty spot in the map, “which makes no sense, given that it’d be a two-day march to the coast. They built the city near the river instead. But there are old ruins right where the machines probably are.”

“The old box-buildings!” Father Brolan exclaimed. “Yes, I visited them when I was just made a Servant,” he said. “And that’s a terrible area to build a city, all hills and rocks with barely a flat place in sight.”

“So Onyx must be in one of these empty areas,” Brother Evan said.

Taryce shrugged. “It seems likely. But there are several. We’d have to search them all, and it would take months, if not years.”

“Maybe we don’t need to,” I said. “The machines don’t know all of the city names, but we could probably go through them by process of elimination.”

“Do you think we could remotely do some of that land-moving in Cupritesh, Taryn? To fix their water situation?” Taryce asked.

I shrugged. “I don’t know.”

“Why don’t you ask our friend, the Head Steward?” Brother Evan suggested.

She grinned. “I believe I will.” She left the office. We continued to pore over the map, marking the places where we’d expect machines to be, based on the rough grid layout. When Taryce returned, she said, “he says no, it’s impossible to control a city’s machines remotely. All you can do is send communications. It’s why, he says, there was no point in cutting him and Misha off from Onyx. He also refuses to say where Onyx is located,” she finished.

We looked at each other for a moment. “I’m not entirely sure I believe that,” Father Brolan said.

“We should ask,” I said. “Ask the machine.”

“And so we shall,” Brother Evan said, gesturing to the door. “I know it’s getting late, Taryn, but do you fancy an exploration of the lower levels?”

“After we go to an assessment room?” I said hopefully.

“My thinking exactly,” he said, and led the way out.

Twenty-Four

Brother Evan and I returned to the assessment room on our own; Taryce said she wanted to check in with her Guards, and Father Brolan said he needed to review some of his old documents. We promised to return to his office as soon as we had new information.

I sat in the lone chair in the assessment room, placed my hands on the interface discs, and leaned back. *Can you hear me?*

:Affirmative,: the machine's voice said.

I'm ready for recalibration, I said to it.

:Preparing to recalibrate neural interface for Commander Taryn,: it said. *:It is recommended that you close your eyes for the procedure. Please remain absolutely still and do not remove your hands from the interface discs.:* I closed my eyes.

A moment later, several tones filled my mind. It was a veritable chorus, each note perfectly tuned and in perfect relation to the others. It sounded for several moments, a single glorious crescendo of sound, and then cut off so abruptly I almost stood up. Immediately, I felt water moving through my hands. The water grew warm and then cold, and then felt solid, almost like rock. Then the feelings vanished entirely. Next, a series of colored lines appeared in my vision: red, orange, yellow, green, blue, and purple, all stacked one above the other. They twisted together, and then somehow connected to each other to make a cube, almost like a fuel block. The sides of the cube expanded outward, and then the entire thing vanished. Then I smelled flowers... then dust... then water... then a sourness... and then nothing. Finally, I tasted something sweet in my mouth, which quickly turned sour, and then just as promptly turned salty before vanishing.

:Calibration complete,: it said.

I paused for a moment after the sudden sensory chaos. *Can I use this station to authorize a new operator?* I asked.

:Affirmative. Please state the operator's name and rank.:

I thought for a moment. “Brother” was a title, not a name, and it wasn’t exactly a rank. *Commander Evan*, I said.

:Confirmed. Do you wish to authorize the operator at this time?:

Yes.

:Do you wish to calibrate a sensory profile for this operator?:

Yes.

:Please confirm that the new operator will have full Commander privileges systemwide.:

Confirmed.

:Please ask the operator Commander Evan to take your place in the interface chair.:

I rose and gestured to the chair. “Have a seat,” I said. “Close your eyes and hold very, very still. This will feel strange.”

He raised one eyebrow, but traded places with me in silence, sitting in the chair and closing his eyes. I saw his face twitch a bit as the calibration process started, and watches his mouth twist and what I imagined must be that sour flavor I’d tasted. After a few moments, he opened his eyes.

“I *heard* it,” he said. After it was finished. I heard the machine.”

I nodded. “That’s what I’ve always heard.”

“And the music! It was so much more—” he paused.

“Precise?” I asked.

“Precise!” he said, smiling.

“I think that’s because it’s no longer interfacing based on some distant ancestor’s brain,” I said. “It’s somehow figured out how to talk to *you*, personally. It should be easier to control the machines, now, and I told it you were a Commander like me.”

He looked at me for a moment. “Well,” he said. “I appreciate that. I suppose we should get Father Brolan down here eventually to do the same thing.”

“We should get *everyone* down here eventually,” I said. “But we need to find Terminal Zero.”

“Right,” he said, rising from the interface chair and shaking his hands slightly. “Let’s head downstairs.”

Twenty-Five

Brother Evan and I descended a long, switchbacked set of stairs at least six or several levels down – I admit that I lost track after the first few. As we went down, the air felt perceptibly heavier, as if we were wading through the weight of a Tower’s worth of air above us. We emerged into an enormous, round, high-ceilinged open space. Next to the door we had walked through were a couple of small desks, covered with boxes of tools and odd-shaped components. A man stood behind the desk, wearing loose-fitting pants and a tunic in the ubiquitous tan cloth of the Tower. He was fiddling with a component, sticking a tool into it and manipulating something inside. “Ah,” Brother Evan said, addressing him, “Brother...?”

“Maston,” the man said without looking up from his work.

“I’m Brother Evan, on business from Father Brolan.” That got the man’s attention. He looked up at us, and set the component and his tool down on the desk. “This,” Brother Evan added, gesturing to me, “is Taryn, my Initiate. I assume you’ve heard about the recent standoff with Cupritesh.”

The man nodded. “Aye,” he said, “we’ve been helping release ration blocks to feed those in the Second Ring. How can I help you now?”

“We believe we’ve found a way to have the Tower’s machinery help us mount a better defense,” Brother Evan said. “But we need to find an operations station called Terminal Zero. The machines are telling us that it’s the key to unlocking certain capabilities.”

The man stared at us for a moment. “The machines *tell* you this?”

Brother Evan nodded. “They do. Taryn here has developed an unprecedented... relationship with them. We’re learning a lot that we’ve lost over the decades. I myself have heard the machines speak in my mind.”

“Well,” the man said. “Well.” He paused. “Well. Any idea what

this special terminal looks like?”

Brother Evan looked at me. I shook my head. “No, but I expect it looks like most of the other interface chairs. Maybe older-looking? Do you have anything like that here?”

Brother Maston looked away as he thought about it. “We don’t have any interface chairs down here at all, really. Not much need for them.” He nodded his head toward the wall, and added, “we tend to rely on those pads for maintenance.” I looked and saw one of the bronze-colored interface pads embedded into the wall at about the height of an adult’s head.

“What do you use them for?” I asked.

He shrugged. “Whatever. We don’t run lights in all the spaces down here all the time, so most rooms will have one of those and we can turn lights on or off as we need. We can disable machinery that needs working-in, not that we need to do that often. We also get a... a *sense*, I guess you would call it, or when something needs doing. Every Servant in maintenance makes sure to touch in a couple of times a day to see what’s needed.” I remembered my year-mates telling me as much in the dining hall.

“But no interface chairs?” I asked.

“Well, I didn’t say *none*,” he said. “Hmm. Follow me.” He led us through the open space to the opposite wall and opened a door. “This is mostly storage,” he said, stepping into the dark space and reaching, I presumed, to touch an interface pad just inside the door. A soft amber glow filled the room. I stepped inside.

It was indeed used for storage, with wooden crates neatly stacked everywhere. On one wall, however, through a gap in the crates, I saw something. “Brother Evan,” I said, pointing.

“Ah,” he said, stepping over more crates to peer between the gap. “This might be something useful. Appears to be a map.” He glanced to his left, and then to his right. “And,” he said, pointing, “I believe those crates are indeed covering a chair. Brother Maston,” he asked, “can we get some help in clearing these crates out of here?”

“Aye,” the man said, nodding, “I’ll be right back.” We followed

him out of the room as he bellowed for assistance. Within moments, a half-dozen Servants and older Initiates had emerged from doors around the open space, and run over to us. Brother Maston organized them quickly, and within half a mark or so, the room had been cleared.

The wall did indeed contain a map – one more complete than Father Brolan’s, showing every single machine installation on the planet. “Look,” Brother Evan said, examining it, “this one’s in a different color.” He pointed. “And I believe that corresponds with Olivine, although the geographic features are a bit faded. We’ll have to bring Brolan’s map down here and compare.”

As he spoke, I inspected the interface chair we’d uncovered. It was similar in design to the others I’d seen, including both interface pads and the outward-curving strips on the headrest. But it was bulkier, with a larger, thicker base and more substantial armrests. The seat and back were padded with a slick, yielding material that felt smoother and more pliable than leather. The chair faced the map, which was in the center of the wall and filled that wall almost entirely. To the right of the chair was a cylindrical pedestal, standing about as high as the chair’s armrests. Atop the pedestal was what appeared to be a thin slab of a cool, slick material. It was translucent, almost gray tinted, and it was tilted slightly so that someone sitting in the chair would be able to look directly at it. I tapped it.

“I don’t know what that is,” Brother Evan said, “but I expect you could attach papers to it and have them handy as you operated the chair.” I nodded. “Might as well try it,” he said, gesturing to the chair.

I sat and leaned back. *Can you hear me?*

:Affirmative, Commander Taryn,: the machine’s familiar, flat-voice answered.

Is this Terminal Zero?

:Affirmative.:

I breathed a sigh of relief. “This is it,” I told Brother Evan. *Can I modify station assignments from here?*

:Affirmative.:

I decided to take things step by step. *Please enable shield dome control from all stations*, I ordered.

:Confirmed.:

I paused. I didn't actually know what other operations were available. The machine had used 'terraforming,' but I didn't actually know what that entailed. *What other operations can be assigned to a station?*

:Current online capabilities include core terraforming functions, including earthmoving and geothermal control,: it said.

What about ration blocks? I asked.

:Food processing systems are autonomous and are not connected to this expert system. A link to the food processing expert systems has not been available for seventy-two solar revolutions.:

I'd figure out what that meant later. *Please enable earthmoving from all stations*, I asked.

:Confirmed,: it said.

Please restrict earthmoving to operators ranked Lieutenant Commander or higher, I added.

:Processing. Confirmed,: it replied.

"I've set up the stations," I told Brother Evan.

"We should see what the Stewards have been up to if we can," he said. I nodded.

Until recently, two non-operators used you to communicate with another city, I said. *Can you provide more details about their activity?*

:Intercity communications are disabled. Communication logs exist for the past sixty days. Two identifiers have been used in the past sixty days to communicate with installation Theta. Same as before.

Where is installation Theta? I asked, fearing the reply.

:Geo-database is not available,: it said. Another dead— *:Do you wish to enable supplementary databases?:* it asked. That was new.

Yes, I said.

The slab to my right lit up, showing a grid of six glowing, red-colored blocks. Each block had words written in it, and I leaned forward to try and make it out.

“My word,” Brother Evan said softly, walking around to my right side to lean over the slab as well. “I don’t recognize most of these words.”

How do I enable the geo-database? I asked.

:Manual input is required. Please touch the databases that you wish to enable.:

“I’m supposed to touch one,” I said. What the heck. I reached out and tapped each one in turn. As I did so, each one turned green. I leaned back again, returning my right hand to the interface pad.

:Supplementary databases enabled.: the machine said. *:Unpacking. Integrating. Indexing. Please wait.:* I waited a moment. *:Complete. Installation Theta is highlighted.:*

High-? “Brother Evan!” I said excitedly. “Look!” A glowing light had appeared on the wall map, indicating a machine installation. “It says that’s Onyx!”

Brother Evan peered at the map. “I don’t think there’s a city there on Father Brolan’s map,” he said. “We need to bring that down here. It says that’s where this central processing unit is?”

Is the central processing unit in installation Theta? I asked.

:Negative. Central Processor is located in installation Olivine. Highlighted.:

“They lied, Brother Evan,” I said. “Look. That different-colored one *is* what it calls central processor. And it says that’s installation Olivine.” This would be the installation where the A.I. lived but wasn’t working.

“I thought so,” he said, nodding. “There would be a river running right by it, but the ink on this map is faded.”

Is it possible to do earthmoving at a distant installation? I asked.

:Affirmative. Central Processor coordinates planetary activity. Multiple installations are often required for major projects.:

Have any projects been started from installation Theta? I asked.

:Unknown. Local logs do not include that information. Do you wish to initiate a connection to Central Processor?:

Yes, I said.

:Processing: it replied. Then, after a few moments, *:Connected. Central Processor logs one major action initiated at installation Theta. Earthmoving systems at installation Cupritesh were active for six-point-two hours.:*

I wasn't sure what 'hours' meant, but that was the clue we had been looking for. "Onyx did it," I said.

"Did what?" Brother Evan asked.

"They used the machines in Cupritesh to break their water table," I said, cobbling together the terms I'd been learning for the machine. "They started all of this."

Twenty-Six

The next days were a whirlwind. After my experience with Terminal Zero, Brother Evan and I had a quick meal and returned to our new rooms in the Tower's upper level. He woke me early the next morning with news: Kamil, the captured Cupritesh scout, would be returning to his city with a representative from Alabaster, offering the services of the Tower to correct their water problem. The hope was that they'd meet the Cupritesh army on the way, and at least delay and further attacks.

We joined Father Brolan for breakfast in his office, where he explained that he'd decided to prioritize locking down access to the Tower's machinery over creating a defensive wall west of Gate Town.

"But the army—" I protested.

"Will hopefully be delayed by Kamil and our representative," he said, waving a hand in the air. "But we need to secure access to the Tower or who knows what could happen. And we only have one of you, Taryn," he said kindly.

I took a bite of fruit, and then looked at him. "That's not true," I said through the food in my mouth. I quickly chewed and swallowed. "You don't have only one of me!"

"What do you mean?" he said.

"I tested as a five, right?"

"Of course," he said.

"But that isn't a measure of capability. It was just the Tower recognizing me as a descendant of John Hollis."

"Of course," Brother Evan said, "but we still only have the one descendant of John Hollis."

I shook my head fiercely. "*Commander* John Hollis," I said. "Hollis – and I – can only do what I do because the Tower recognized my *rank*."

“I’m not sure I grasp the difference,” Father Brolan said, just as Brother Evan’s mouth made an “O” of understanding.

“I made Brother Evan a Commander, too,” I said smugly, leaning back in my chair and biting into the fruit again.

We agreed that it would be easier for me to work with the Fields team – we’d have to start calling them earth-movers from now on – since I’d already mastered the technique of gathering and enhancing their forces in my mind. Brother Evan would take on the unenviable task of creating individual profiles for every Servant in the Tower. Father Brolan wanted to simply cut off Initiates for the time being, feeling that we could address them after the present crisis was over. Brother Evan headed down to an assessment room, while Father Brolan dispatched a group of young Initiates to carry the directive throughout the Tower.

“How’s it going?” A tired-sounding Brother Evan asked, strolling into the Weather operations station.

“Good,” I said, just as tiredly. My head was buzzing with all the musical tones I’d been orchestrating all day. “We just stopped. It’s too dark out to see.”

He nodded and gestured toward the stairs. “Father Brolan’s had dinner brought up for us. Did you get anything for lunch?”

“Enough,” I said. “They brought some sandwiches.”

“Remember to eat,” he said. “You’re young, but you still need food. How far did you get? I felt the rumbling all day.”

Guards had been dispatched to warn the citizenry before I’d started in the morning, and they’d already begun to let people return to their homes and businesses in the Third Ring. “About a third,” I said. “Sister Trofer is amazing. She has an intuition about moving rocks.”

“She’s been at that job for decades,” he said, smiling.

“I was able to get the machines to show me a visualization, too. I was able to look and see how the Eastern Mountains are supported underneath, and we’re mainly copying that.”

“So we’ll have the Western Mountains as well?” he asked.

I shook my head as we arrived at Father Brolan’s office. “No, nothing nearly that high,” I said. “But the Guard had a really good idea that we’re using.”

“What idea is that?” Father Brolan asked as we walked in and sat at a side table. They’d brought a thick, hearty stew, and my stomach growled ferociously as the rich, savory smell hit my nose.

“The difficulty with the new wall is that the bedrock out there isn’t as solid or deep as it is under the Mountains,” I said. “So we have to pull earth from somewhere to under-fill the new pillars we’re raising. The Guard suggested we form a deep ditch on the outer side of the wall and push that earth down underneath the new wall’s rock.”

“Ingenious,” Brother Evan said, digging into his stew. “Attackers will have to go down into the ditch, and then the wall will be that much higher. And it’ll be harder to traverse.”

“We’re leaving a section open as a gate,” I said. “And the Guard is coming up with a design to help protect the farms, too.”

“How high will the final wall be?” Father Brolan asked.

“About as high as three men from the inside, and about five from the outside,” I said.

“The ditch will be that deep?” he asked, raising his eyebrows.

“And about three wide,” I added. “It should slow down an army. And it’s far enough away from Gate Town that they said even catapults will be challenged to hit the Second Ring, now.”

Both men shook their heads in amazement. “And you, Evan? How did you fare?”

“I authorized all of the Servants who currently serve in an active position,” he said. “And then instructed the machines to no longer recognize operators based on family lines. We’ll need to decide what to do about our inactive Servants, and then work through the Initiates.”

“Time enough for that,” Father Brolan said. “We’ll have to be careful with the Initiates,” he added.

Brother Evan nodded. “The machine tells me they have a specific situation for training,” he said. “It’s apparently why there’s a supervisor’s station at every major working area. Initiates can be set so that they’re only recognized when they’re working with an authorized Servant, and even then restrictions can be put on how much they can do. The machine calls them cadets.”

“Cadets,” Father Brolan said, rolling the new word around on his tongue. “Well enough. And what should we rename our Servants to, in the machine’s language?”

“Operators,” I said. “That’s what it’s always called them to me.”

“Actually,” Brother Evan said, “Cadets are operators, too. We would be *officers*.”

“Perhaps we’ll switch to the machine’s language,” Father Brolan said, “since we’ll all be able to talk to it now. Is that still true?” he asked.

Brother Evan nodded. “I tested it with the first few, and they were all pretty amazed. I gave up after them, though, and just focused on getting everyone done.”

“Well enough,” Father Brolan said. “Well enough.”

We finished the rest of our meal in companionable silence. Afterward, I slept more deeply than I had on any night since coming to the Tower.

Twenty-Seven

The next morning, Brother Evan and I agreed to take turns working with the earth-moving teams. It would give him an opportunity to develop his supervisory technique, he said, and he didn't want to see me doing all the work. But first, Father Brolan called us back into his office. We found Steward Misha and Head Steward Marten there, along with Captain Taryce and a handful of Guards.

"We continue to be cut off from our city," Marten complained.

"And that will not change," Father Brolan said smoothly. "We have been speaking with the machines here in Alabaster—"

"Speaking?" Misha interrupted. "What do you mean, 'speaking?'"

Father Brolan smiled. "We've learned quite a bit in the past few days. We know, for example, that your so-called city of Onyx does not, in fact, contain the Central Processor for the terraforming machinery." Marten's jaw clenched. "And we have been able to eliminate our reliance on family lines for Tower operators. We're all able to work with the machines much more efficiently and fully."

"Impossible," Marten spat out. "Hollis designed—"

"What Hollis designed, Hollis' descendant has been able to refine," Father Brolan said, smiling and gesturing to me. "In fact, we now have more than one Commander in Alabaster, and our machines now know each of our Servants by name."

The two looked at each other and were silent for a moment. "Why are you telling us this?" Marten finally asked.

"Because you're going with the Captain, here," Father Brolan said, "and you're going to be locked up for crimes against Alabaster."

"For how long?" Misha said, paling.

"Only until we're able to turn you over to Cupritesh for your crimes against their city," Captain Taryce said.

“Oh yes,” Father Brolan said as he saw the former Stewards’ faces. “We know about your manipulation there as well.”

“Our brothers and sisters in Onyx will—”

“They will do nothing,” Brother Evan interjected. “It seems the Central Processing machine was more than happy to take my orders to suspend any and all instructions going to it from any location other than Alabaster.”

The two fell silent again. “Solven will execute us,” Misha said quietly.

Father Brolan nodded solemnly. “I expect so,” he said quietly. “But you tried to destroy his city, and we will not protect you from his wrath.” He gestured, and the Guards took the two former Stewards by the arm and followed Captain Taryce out of the office.

Father Brolan sank into his chair. “Our messenger is expected to meet the Cupritesh army today, based on what Kamil told us,” he said. “We may hear from them as early as tomorrow morning.”

“Did you really cut off access to the Central Processor?” I asked Brother Evan.

He shook his head. “No,” he said. “But it occurred to me late last night and I tried. It seems you’re the only one with *Planetary* Commander authorization. So you’ll need to do that this morning before word gets back to their comrades.”

I nodded. “I can do it right now.” I turned to leave.

“Taryn,” Father Brolan’s voice stopped me. I turned back to him. “Do that, and then go downstairs and have a nice breakfast. Find Tomas – have someone hunt down Father Ambrose for you and tell him I said so – and spend some time together. In fact,” he added, “have Father Ambrose write you a pass to go visit your mother for the day.”

My eyes teared up a bit. “But, I thought—”

The older man smiled. “We are not in usual times, my boy. We’ve much work ahead of us, and you’ve earned some time with your family. Now,” he said, pointing to the door, “off you go.”

Twenty-Eight

“I don’t have to tell you how delicate this is,” Father Brolan said to me. I was sitting in the supervisor’s station on the western side of the Tower’s upper level, along with a handful of the Tower’s most experienced earthmovers. We’d been practicing all morning. “Cupritesh’s royal family is obviously nervous.”

“They’ve evacuated the royal city?” I asked. He nodded. “Everything should be fine,” I said. “Everyone ready?” I asked my team. In response, they all leaned back and laid their hands on their interface pads. *Can you hear me?* I asked. I needed to come up with a different greeting for the machine.

:Affirmative,: it replied.

Initiate connection to Central Processor, I ordered. At the same time, the bright, clean tones of the earthmovers sprung to life in my mind. Creating profiles for them each, and more importantly having the machine calibrate itself to them, made everyone’s job vastly easier.

:Connection established.:

Show us the water table for installation Cupritesh, I ordered. Just as we’d seen in practice, a schematic of Cupritesh’s bedrock and water table appeared before our eyes. We could see where Onyx’ operators had moved rock to cut off most of the water flow, forcing the water to spread out through other, smaller natural fissures. In time, it would cause the city to sink into the ground, but we’d be able to fix it before that happened. “Let’s begin,” I said aloud.

Once we’d finished, we waited on word from Cupritesh that their central well was flowing freely once again. They’d positioned relay messengers all along the route between us, so we expected to hear from them within a few marks, instead of having to wait

several days. Sitting in Father Brolan's office, I watched the dust in a mark-glass slowly pour down, counting off the time. "You know," I said to him, "we should probably authorize a couple of people in the other cities to at least send messages back and forth. It would save a lot of time."

"Indeed," he said. "That's a thought I'd had myself. Can we do so safely?"

I nodded. "The machines will let us create new ranks," I said, "and we can assign whatever capabilities we want to those. We just need to find assessment rooms in each city, or bring them here."

"Ranks, yes. You know, I've decided to change our own language to match the machines'. The whole 'Father' and 'Sister' thing seems antiquated in light of all we've learned these past days."

"You've explained to the city managers about the Test, too?" Brother – *Commander* – Evan asked.

Father Bro– "Hey," I interrupted. "We never created a profile for you!" I laughed at our oversight.

He smiled. "And I'm not sure we will," he said. "I haven't done anything with the machines directly in a decade at least. I'm leaning toward 'Tower Manager' as a title. You youngsters can talk to the voices in your head, but I'll stick with keeping you all in line." He smiled. "And yes," he added to Commander Evan, "I've explained that the Test will no longer be necessary now that anyone can be added as an operator. We'll start running the Tower more like one of the guilds, and accept apprentices."

"Cadets," Commander Evan corrected him, smiling.

"Of course," he said, returning the smile. "And how goes the new wall?"

"Almost finished," Commander Evan said. "After calibrating them, most of the senior earthmovers are able to work on their own. They really only need a Commander when they're working on the lower strata of rock. We actually have a second team working on our own water table, to resupply some of the older wells in the farms."

"And protections for those?" Brolan asked.

“Underway,” Evan said. “The Guard feels it’ll be sufficient for now to just roughen the approaches with low-lying rock. The actual farmers are afraid that higher walls will disrupt the airflow and impact crop yields, as I understand it.”

“Fair enough, I suppose,” Brolan said. “And you, Taryn, you’ve spoken with... I suppose he’ll be Cadet Manager Ambrose?”

I nodded. “He quizzed me. Mama was always tight with us on reading and sums, and so he doesn’t think any of the classes will help. He said I can learn as I go for everything else.”

Brolan smiled. “Our youngest Commander,” he said.

I looked at him, and then at Evan, who was also smiling. “Wait, you mean—”

The older man shrugged. “I don’t see any reason to call you a Cadet when you demonstrably aren’t, O descendant of Hollis. You’ll need to defer to Broth- *Commander* Evan’s greater experience, of course, but I’m planning to announce both of you tomorrow. Besides, you’re already in sleeping rooms up here. Seems a waste to make you move again.”

I returned their smiles. I’d never really *been* a proper Initiate, and it had seemed strange to imagine myself helping to carry trays in the dining hall or whatever.

“Come,” Evan said, standing. “Let’s go down and wait for word from Cupritesh, and start talking about setting up communications between the cities.”

I stood and followed him out of the office. My head was still in a whirl with all that had happened, but already I couldn’t imagine a life outside the Tower.

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Preview

Read on for this exciting preview from *Onyx*, the sequel to *Alabaster!*

“Toras!” Randal cried, running into the main control room. “It’s Alabaster!” he said, panting. Toras looked up quickly. “Misha and Marten – they’ve been arrested!”

“How–” he started, but then stopped himself. He ran to the main interface chair and sat. *Initiate connection to Central Processor*, he thought.

:Access denied:, the machine’s flat voice said.

He looked up at Randal. “They’ve cut us off,” he said quietly. Randal paled. *Onyx* – installation Theta, to the machines – had been damaged in an earthquake many, many years ago. Its expert system no longer controlled the local machines, although most of them could still be manipulated through their Central Processor connection. A connection which was now gone.

“There’s more,” Randal said. “Orvald made it back from Gate Town and says they’ve begun raising a new defensive wall.”

“They’ve unlocked the machines,” Toras said quietly.

Randal nodded. “And the Cupritesh army pulled back. Rumor is that Alabaster undid our work in the royal city.”

Toras cursed. That operation had been months in planning, and manipulating the greedy Cupritesh king had been their best bet for subjugating Alabaster and gaining access to their still-functioning machines. “We have to assume Misha and Marten told them everything,” he said. “Round everyone up. We need to leave.”

Randal stared. “But– but where will we go?” he said softly.

“We’ve backup plans,” Toras said, standing. “We’ll need to scatter, find refuge in whatever cities we can. This,” he said, waving around the control room, “is useless to us now. All of it.”

“But–” Randal started to object.

“No arguments,” Toras said firmly. “Tell everyone to pack and

start heading for their backup cities. Sharin has the list. You and I, old friend, have a long journey ahead of us.”

“Where are we going?”

“Olivine,” Toras said, leading the way out of the room.