Chapter 1

Jack Scatter balanced at the edge of the two-story roof, practicing magic.

An ordinary, yellow tennis ball—one he'd used on his school's courts many times—hovered just beyond his reach. He flicked his wand to set the ball spinning, feeling the connection between them: an invisible cord that embodied both freedom and control.

As his confidence grew, so did his movements. He swept his arm, making the ball fly joyous loops and spirals over the gravel parking lot below. He'd discovered his talent during a time of uncertainty and danger, and these weeks of practice had been not only a way of improving his skill, but a celebration of triumph and optimism.

A sparrow flew near and Jack swung the ball to race alongside the startled bird. Laughing, he spun to track their flight over the roof, not noticing how close he'd come to the edge. He shuffled onto a crumbling corner, stumbled, and fell.

"JACK," his father warned, too late.

Jack flung his arms back. The tennis ball shot into the sky and he froze at an impossible angle, leaning over open air with his feet glued to the wide, weathered parapet.

"Hold on." Victor scrambled onto the roof through the hatchway.

Jack hung motionless, as if gravity didn't apply to him. I must have redirected the field instinctively—a surprising and fortunate discovery. "I'm okay."

With his heart pounding, he concentrated on tilting himself upright. He imagined the energy field as a rising wind, pushing at his back from below. The movement was disorienting but the world slowly rotated back to normal.

Victor grasped his shoulder and pulled him down onto the flat roof. "Your mother would've had a heart attack if she'd seen that." His grip, hardened by decades of labor, was firm but not painful.

Jack met his father's eyes and saw concern, not anger. "Sorry, I slipped."

"I saw." Victor's expression softened. "And you shouldn't be playing with that where someone can see you."

Jack tucked the wand into his jacket pocket and gestured at the two dozen neighboring structures. "There's no one here anymore. There hasn't been for weeks."

Victor considered the abandoned warehouses and garages a mile from town and didn't argue. "Can you see the drone?"

"Not yet." Jack picked up the binoculars. "It's really late this time."

"They may not have sent it if they saw the storm coming."

"Maybe. I've never seen one like it, either."

Towering clouds lined the entire eastern horizon, but the sun was setting behind them in a clear sky. Against that backdrop, the missing drone should have been easy to spot.

Two months ago he could have located the drone with a few taps on his phone. But then Pieter Reynard—well, actually, Jack himself—had partially fulfilled a centuries-old prophecy by Sir Isaac Newton to bring about the apocalypse. The world didn't end as Newton predicted, but Jack had wiped out the portal network and most of the services people took for granted.

Portals—tiny wormholes through which power and data flowed—had been part of modern life for decades. There was no longer an internet, no phones or text messaging, and limited electricity. He'd destroyed billions of portal crystals to save Cirrus, the world-sized space station he lived on, and unintentionally isolated it from Earth. Likewise, his hometown of Fairview felt more cut-off than ever.

The roof they stood on covered the family's workshop. *Before Newton*—the time before the loss of the portal network—their business had been drone-maintenance and repair. The warehouse below once held hundreds of the self-guided aircraft, which were essential to the small farming community. The few it contained now were lifeless.

Jack was about to give up for the night when the fading sunlight reflected off a shiny surface traversing an angry black cloud. "Wait, there it is. Finally. Uh ... that's not right."

"What do you see?"

Jack passed the binoculars to his father. "Look how fast it's coming." Ahead of the drone, which was still miles away, the treetops lashed chaotically.

Victor glanced at the collection of objects Jack had been practicing with: more balls, a folding chair, books, assorted tools. "We have to clean this up. *Now.*"

The windstorm approached with a roar as they scurried around the roof, gathering and throwing items through the open hatch without looking. Like a vast, invisible river, a wave of frenzied motion churned the yellow-green fields of canola. When the cold front hit the workshop, it pushed Jack backwards, causing him to lose his footing again.

Victor, Jack's height but thirty pounds heavier, helped him stand. "That blasted drone is trying to land."

Jack shielded his eyes from flying debris and looked up. The six-foot wide aircraft had slowed and tilted sharply into the howling wind. Before Newton, a drone would have linked to sensors on the ground and compensated for the gusts, or just waited until the storm passed. But this one was following its limited programming and struggled to stay upright as it descended.

He drew the wand. "It's going to need help."

Victor retreated to the warehouse to give the drone a clear landing zone. "Can you reach it from here?"

Rain fell as Jack sheltered in the hatchway. "It's about sixty feet up. That's near my limit." He concentrated, sensing the drone's mass and inertia through the wand.

Ethan Marke, Jack's cousin, had dubbed the device a magic wand, although it was really a cylindrical portal crystal encased in a metal tube. The name stuck because—well, what else could it be? Jack had learned to use the energy field present in all wormholes to move objects, produce water, fire, light, even unlock doors. To an observer, it would look like magic, and Ethan had been pestering him for details about it for weeks.

Jack started with a gentle downward pressure, then gripped the sinking drone more firmly. The machine fought, spun, and nearly flipped over once. But as it dipped near the landing pad, the action of its rotors became irrelevant—Jack's control was absolute and he could move it wherever he wanted.

"I got it." The drone's motors shut off as soon as its landing struts touched the rain-slicked surface.

When it was safe, he and Victor dashed onto the roof to tie the aircraft to three anchor bolts. Jack retrieved a handful of papers from the small cargo hold and tucked them into his jacket pocket to keep them dry. Even though there'd been no real trouble in Fairview since the breakdown, Victor removed the drone's power cell.

By the time they finished, the sun had set and the shower had become a downpour. Victor closed the roof hatch and joined Jack in the nearly empty warehouse. He shook water from his thinning hair. "We're already soaked. There's no point waiting for it to stop."

Lightning flashed as they ran, revealing Fairview's squat, pyramid-like profile. Their home was a two-story townhouse on the outskirts, but most of the town's five thousand residents lived in increasingly taller towers clustered within a single square mile.

The sudden storm was unlike any Jack had experienced—Cirrus' weather-control systems must have failed. An unseasonably cold wind pelted them with falling branches as they fought their way up the tree-lined street. It was raining even harder when they jogged up the steps to their front door.

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Jack's mother, Emily, sat at the kitchen table and read the letter from her father, Holden. "Dad wants us to come tomorrow." She passed the page to Victor.

"Why?" Jack asked as he toweled off his wet hair. "Didn't he originally say next week?"

"Niels thinks his fusion generator is failing and wants your father's help to complete the solar farm."

"Is that something he remembers or something he knows?"

Victor scratched his stubbly beard—a recent acquisition that had more to do with rolling blackouts than fashion. "With Niels, it's best to assume there's no difference. If he says something is going to happen, it will."

Niels, an accomplished engineer, was also a *Traveller*: someone who could *remember* things that hadn't happened yet. He'd warned of turmoil across Cirrus in the months ahead and invited Jack's family to join him and a dozen others in Icarus to ride out the worst of it. Jack's parents had been preparing for the trip for weeks.

"And speaking of Travellers," Emily asked, "did you get another letter from Sarah?"

Jack rolled his eyes. "Yes, Mom."

"And?"

"And I'll read it later."

She rested her chin heavily on her palm. "Are you okay with leaving your friends behind?"

"Yeah," Jack said, "it's fine. Ethan will be there. And I'm bored without school, anyway." Saying this, he realized why his mother looked so tired—his parents must feel the same without their jobs. He'd kept himself busy searching the fields and forests for crashed drones, but they didn't have even that distraction. And he was running out of drones to recover. Last month, he'd celebrated his seventeenth birthday trolling the bottom of the lake for salvage. "But Icarus is hardly more than a wilderness camp. We'll be roughing it. When do we leave?"

"First thing in the morning," Victor said. "So no one sees that we've still got a working vehicle."

"There's something else in the envelope." Jack removed another slip of paper and recognized Niels' shaky handwriting. "It's a map." He flipped the page around to position north at the top. "Niels sent directions for getting to Icarus."

"Good. I wasn't looking forward to finding it by memory."

"If we take the pass over the Vault, it's due north. Ethan and I found it in the dark."

"We are *not* going over the Spine," Emily said. "With this weather, it's probably buried in snow. We'll follow the highway."

"What's this mean?" Jack pointed to a caption on the map: Here be dragons.

Victor chuckled. "It's an old expression. It was used on ancient maps to mean the area beyond was unexplored. That's got to be Niels' way of saying not to go off-road or we'll get lost."

Jack took the letter from Sarah Rogers up to his tiny second-floor bedroom and flopped onto his bed under the sloped ceiling.

He was surprised by how much he missed her. Although they'd known each other most of their lives, they'd spent only a few days together in August. Before that, they'd only ever met online. Now, limited to sending letters, he was frustrated by how difficult it was to communicate.

Sarah was a natural letter writer. While Jack struggled to create even the briefest note, hers were long and detailed. Their correspondence ran on a six-day cycle, the time the drone took to fly a circuit between Caerton, Port Isaac, Fairview and Icarus. Her two-page letter described events in Caerton and how life there was becoming depressingly boring. With no computers, the schools were closed, and the only jobs were those in the greenhouses.

Her closing line: *See you soon*, made him smile. She'd been dropping hints about meeting for several weeks, which was both maddening and intriguing. *Is that something she remembers?* Or was she making a subtle suggestion so he'd find a way to make it happen?

Sarah, like Pieter Reynard, was also a Traveller, although neither was as talented as Niels. Before Newton, conventional wisdom said that Travellers must pass through a large wormhole to connect to their future memories. Now, *After Newton*, that wasn't so clear.

Niels, possibly the most gifted Traveller ever, had made accurate predictions leading up to Newton, but hadn't left his private island for decades. Many things Sarah wrote about in her letters had come true, but even she wasn't sure she hadn't just worked them out logically. The world had changed so much it was unlikely she'd ever *travel* again.

Jack faced the window as lightning illuminated the cluster of workshops a mile away, across the canola field. The storm was worsening as it settled in, but his mood was lifting; Icarus was on the other side of the Spine, hundreds of miles closer to Caerton.

Chapter 2

Fifty-two hadn't sounded so bad when Sarah started, but each level in the Magnolia occupied two floors. She'd had to rest several times during the grueling climb. Even so, after nearly two thousand steps, she entered the fifty-second level atrium with time to spare.

She hadn't encountered anyone in the lobby or stairwell. To conserve power, the elevators only ran every second hour. Soon, the tower's residents would emerge to take advantage of another brief window of easy access.

Pre-Newton, the interior garden was a pleasant spot for visitors to rest: verdant, fragrant, and brightly lit by floor-to-ceiling windows at each end of the building, with park benches scattered throughout. Now, the second-floor windows on the inner apartments—once hidden behind branches—opened onto a thinning canopy of brown and curling leaves.

She hurried past a dozen closed doors to the short corridor that connected the atrium to a parallel hallway and an outer strip of apartments. The address she wanted was straight ahead, at the intersection. Like the atrium, windows flanking each end of the long passage allowed sunlight to make up for the lack of interior lighting.

Six weeks ago, Holden had sent a key in the mail drone—not for her use—for his Caerton apartment. She was meant to hold on to it until Detective Priya Singh came to collect it, but Priya had found a spare in Holden's house in Washington.

Following the same schedule as the elevators, Holden's apartment was without power and gloomy when Sarah entered. She slipped off her shoes and crept into the living room.

Two bedrooms overlooked the main level. Their doors were open. Below the balcony, the door to Holden's workshop was ajar. The kitchen and living room were clean, as if the elderly man was still living there, but most of the books had been removed from the tall shelves that flanked the electric fireplace.

A flash of lightning illuminated the painting above the hearth. Still slightly out of breath, she gasped at the sight. *There it is.* Although she didn't appreciate the abstract landscape, it was easily the most valuable artwork in the city.

Hidden in plain view, Holden's portal could create a passage to Earth with the press of a button. More importantly, the device could connect her consciousness across time. She'd *travelled* through it several times already and received future memories that had come true.

What's the harm in a quick trip to Earth? She leaned closer to the frame, searching for the five inconspicuous squares. Disguised as wood inlays in a geometric border, a gentle tap would trigger a color change to show how much charge the portal's crystal matrix held. I should at least check that it's still working. She reached out to touch the frame and heard a soft footfall.

Without hesitation, Sarah twisted and struck out with her heel, but the person sneaking up behind her ducked it easily.

"I'm regretting teaching you that move."

"Priya." Sarah's defensive posture vanished and she rushed in for a hug. "You scared me."

"You should be scared. What if I'd been a looter?" Priya, a third-level black belt, leaned past Sarah to check that the hallway was empty. She'd arrived by portal and hidden in the workshop when she heard Sarah enter. "What are you doing here?"

"I came to see you."

"Who told you I ... never mind." There was no point questioning a Traveller.

"You're moving the portal today, aren't you?"

"The storage lockers in my building have power outlets. It'll be a secure place to keep it charged."

"We could store it at my place. It'd be easier for me to pass messages."

"This is still an active police investigation. Any messages I need to pass are not for your ears. Besides, I don't think you could resist the temptation of using it."

"But wouldn't that be a good thing? You could tell me where you're looking for Pieter Reynard, and I could *remember* if that's the place you'll eventually find him."

"We both know it doesn't work that way. Travellers can't fixate on something without their imagination taking over. But now that you're here, I can use your help."

"With the investigation?"

"No, Miss Amazon." Priya handed Sarah a socket driver and pointed at Holden's portal frame. "I can't reach the upper bolts."

It took most of the hour to swap the Art Deco frame. Thirty inches on a side, the square, metal-backed wooden frame weighed twenty pounds. The portal crystal itself was only twenty-four inches wide—a tight fit for some Travellers, but large enough to diagonally pass the replacement frame from Earth.

While Sarah hung the new frame, Priya lay the original on the kitchen counter and followed Holden's detailed instructions to remove the landscape print from behind the crystal. What had appeared to be an oil painting on canvas was really a printed plastic film, thinner than paper. Once removed, the polished metal surface under the diamond sheet reflected her image as an ordinary mirror.

Priya handed the print to Sarah to install in the second frame while she adjusted the gap between the square crystal and its rigid backing.

"A quarter turn each," Priya recited as she slowly rotated the screwdriver. Holden had stressed that each of the thirty-six screws was to be turned *exactly* that amount, then repeated sixteen times in a pattern that spread the pressure evenly across the crystal.

After turning the final screw, Priya checked on Sarah's progress. "That's upside-down."

Sarah stood back for a better view and tilted her head. "Are you sure?"

Priya rolled her eyes. "It doesn't matter."

"Your apartment is five miles from here. How will you carry the frame?"

Priya tapped the hidden switch, vanishing the sheet of diamond and creating a wormhole to her rented accommodations in Olympia. She reached through and lifted a set of foam-padded aluminum tubes. "Davis uses these to carry a surfboard on his motorbike."

Just then, the lights came back on. "It must be noon," Sarah said.

"Perfect timing. Help me clean up. The elevators will be busy soon."

As expected, the building's residents became more active while electricity flowed. Priya and Sarah crowded into a full elevator and rode to the basement. The mirror they carried earned them some unusual looks, but no one questioned them when they recognized the UN Police logo on Priya's jacket.

In Caerton, bicycles had always been the preferred means of transportation. Pre-Newton, the city's underground freeway thronged with thousands of commuters. But that was when people had jobs and somewhere to go, and bikes had power for their electric motors. Now, with only skylights to illuminate the tunnels, Priya and Sarah had their pick of hundreds of abandoned bicycles in the Magnolia's garage.

Priya mounted the surfboard rack on a free bike, strapped the mirror to it with elastic cords, then rolled out of the garage towards the on-ramp.

Sarah knew the way to Priya's apartment and pedaled beside her, keeping the mirrored surface between them. With only a few hundred riders on each block, the freeway was far from crowded. But with the storm raging above, the tunnels were gloomy and they couldn't risk a collision—a four-square-foot diamond sheet was not indestructible.

At the underground entrance to her building, Priya dismounted and unlocked the door at the end of a short, yellow corridor. Sarah held it open so she could push her bike into the garage, but Priya scuttled backwards, saying, "Quick, close the door."

Sarah let it swing shut. "What's wrong?"

"It's Davis." Priya crouched and activated the portal. "He can't know I'm here." She dove headfirst through the wormhole, twanging the elastic cords.

"Why not?" Sarah leaned over, listening to the clamor as Priya struggled to right herself. "You work together."

"Later. Move the frame against the wall."

Sarah swerved the bike and tipped it against the wall seconds before a stocky man wearing the same blue jacket as Priya burst through the doorway.

Davis, not expecting a bike in the hall, stumbled around it and hurried to the end of the corridor. He scanned the crowd but there were far too many people moving to spot an individual. After only a few seconds he gave up and confronted Sarah.

"Did you see a woman come out this door wearing a blue jacket?" He pulled his fabric straight to display the UN logo. "Like mine?"

"Sorry." Sarah peered over Davis' shoulder, as if she might have missed someone. "I wasn't paying attention."

Davis stood for a moment, looking puzzled. He glanced at the square frame mounted on the bike and seemed about to question it, then shook his head and returned to the garage.

Sarah stooped towards the mirror after the door closed. "He's gone. Why can't he know you're here?"

"If he knew there was a way to get back to Earth, he'd insist on using it. Then everyone would find out, and that would lead Pieter to Holden's—"

Sarah coughed loudly as Davis pushed the door open.

"Hi." She smiled and shuffled to place herself between Davis and the mirror, but the man leaned over for a better look.

"I have a set of racks just like that. I didn't know you could get them here."

Sarah glanced down. A faint rectangle of light shone against the yellow wall; Priya's room was brighter than the corridor.

"Uh, my mother brought them from Earth."

"Huh." Davis nodded, perhaps wondering why an immigrant had used so much of their limited cargo space for such an unusual item. He shook his head again and closed the door.

"Are all UN officers so ... uh ... not tall?" Sarah asked when she and Priya were alone. At five-seven, she'd been looking down into Davis' eyes.

"I'm five-three. I'm not short."

Sarah decided that silence was the best response.

"Davis is on the short side, but our other partner, Katherine, is taller than you. Anyway, we can't move the frame inside now. I'll try another day. Just take it back to Holden's building and open the portal when you get to the garage. I'll help you carry it upstairs."

The light against the wall disappeared.

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Priya scanned the room. "This isn't Holden's apartment."

Sarah, sitting cross-legged on her bedroom floor in front of the open portal, gestured defensively. "No, it's my place, but just hear me out. This will be a lot easier. We ... I mean, you, won't have to climb all those steps at the Magnolia. My mother works four days a week, and this is actually closer to—"

Priya, also sitting cross-legged on her own carpeted floor, hung her head with an exasperated sigh and raised a hand for Sarah to stop. "Okay, okay. It's fine. Just give me your mother's work schedule and keep the frame out of sight until I have time to try again. And no *travelling*."

"I won't." Sarah began writing her mother's timetable on a scrap of paper.

"I've moved the Earth-side frame to my place in Olympia." She leaned forward and met Sarah's eyes. "I'll know if you've been there."

Sarah handed the slip to Priya. "I won't use it. Honest."

"Good, because I'm serious. I know you want to see if you can make more predictions, but if Pieter Reynard survived Newton, he's looking for this portal. He must suspect that I have it. If he finds *it*, he finds *you*."