

## TRAINING

**IT NEVER FAILED** to give her a thrill when she saw the moonscape rush by underneath her ship, and the blue curve of Earth rise above it. Aisha smiled at its beauty.

Down there, girls her age were wondering about homecoming dances, and what dress they'd wear, or which boy would ask them out. She was much happier *here*, piloting her ship, zipping at breakneck speeds across the Moon, and getting ready to break into deep space.

"I think I see them," said David, her navigator and co-pilot, sitting in one of the wing pods to her right. "Two-seven-zero karem one-nine-eight."

"Confirmed," came the clipped voice of Soo-Kyung, her gunner. Aisha glanced to the pod on her left and her eyes met Soo-Kyung's. The Korean girl smiled and nodded.

Aisha always wanted a visual confirmation. Comm lines could be hacked and voices faked. Soo-Kyung knew this instinctively. That's what made them a great team.

"Okay," said Aisha. "Weapons hot. Let's check them out."

She punched in the coordinates, and the ship turned towards their target.

"Visual range in five seconds," said David.

"I see them," Aisha replied. Her heads up display started to light up with targets. Squares projected on her canopy, wrapping tiny dots that could easily be mistaken for stars to the naked eye.

"That's a lot of ships," she said, awe sneaking into her voice.

"That's a bloody awful lot of ships," said David.

Soo-Kyung was business as always. "Orders?"

"Can you confirm ship type?"

"They are mostly type-three fighters. About eighty of them."

"What else?"

"A single mothership. That's the target."

"No other fighters?"

"A couple of type-ones, but hard to tell with all the movement."

The fighters were moving around the mothership, following what looked like random patterns, making it hard to get a radar lock.

"Are they moving to intercept?"

"No, sir."

"David, probe the edge of their defense shield."

His gentle voice sounded in her earpiece. "Yes, Sir."

David took the ship forward slowly, while Soo-Kyung watched the behavior of the enemy fighters. They knew from experience that these ships could turn from defense to offense in the blink of an eye. If they didn't react, they could find themselves surrounded and destroyed in seconds.

"We are at the edge of previous attack ranges," said Soo-Kyung. "Recommend that we hold at this position."

"Do it."

The ship halted, and they floated in space, watching the enemy.

"Any update on ship types, David?"

"The best I got is maybe two or three type-ones, the rest are definitely type-three."

She wished she had read the spec books more closely, but was glad David was there. "Turning radius of type-threes?"

"Two hundred degrees," he answered, almost in reflex.

"Distance of fighters from the mothership?"

"Average about three hundred clicks."

Soo-Kyung raised an eyebrow. "Are you thinking what I'm thinking?"

"Yes," said Aisha. "Full frontal assault, all shields on front."

"If we leave our back exposed--"

"Hopefully they won't get a chance. Maximum throttle, straight at the mothership, direct all energy to front shields."

"Including lasers?"

"Including lasers. We're on bullets and torpedoes. Can you do it?"

She heard the smile in Soo-Kyung's voice. "Done."

"Good. And fire at will."

"Roger."

"David. Punch course in."

"Course, aye."

"Manual control to me."

"Roger."

"Here goes nothing!"

Aisha punched the program, and she felt the craft lurch as they accelerated forward. She continued its burn, getting faster and faster as they approached the enemy ships.

"Ships turning to intercept."

"Acknowledged."

She saw the enemy ships swarming to intercept. Suddenly their random patterns stopped, and they turned, almost as one, bearing down on her. They opened fire, but the forward shields held.

"Intercept in five seconds," said Soo-Kyung. Aisha marveled at her ability to stay calm, and it seemed the more stressful the situation, the calmer she was.

And just like that they flew through the squadrons of enemy fighters, on a course straight for the mothership.

"They're turning to intercept."

Time seemed to slow down in her mind. The mothership approached weapons range at a painful crawl. The enemy fighters, now behind her, were slowly turning to follow them, with a clear shot at Aisha's tail. She'd turned off their lasers, directing their energy to the shields, so they'd need to be close for ballistic weapons to be effective.

It was going to be tight. Once the enemy fighters had turned around, the back of Aisha's fighter was exposed. The lead ones had almost turned, and were ready to open fire.

But then Soo-Kyung had her target locked and opened up with everything she had on the mothership. Direct hits, but the ship stayed intact.

A hit on their right wing made the ship lurch.

"Now would be a good time, Soo-Kyung."

Aisha looked to her left, seeing her friends' face deep in concentration. Another torpedo launched, hitting a module to the

rear of the mothership's bridge. A small explosion was followed by several large ones, but before the ship was destroyed, Aisha's ship was hit again. This time right in the engines.

Aisha felt her ship lurch. Red lights all over her console. The reactor had taken a direct hit. It was about to go critical. Her heart was beating hard. She reached for the eject buttons, hesitating long enough to see the mothership go up in a ball of flame.

The moment's hesitation was enough. She felt the ship lurch as the reactor gave out. Her mind slowed as the white flash enveloped them. She had enough time to realize, with resignation, that she was dead. Both co-pilots too.

The simulator door opened, and Captain Simms' craggy face looked in at her.

"You're *dead*. All of you. Again," he said. Disapproval in his voice. "I thought you guys were better than that."

**PART ONE:**  
**A Letter From My Father**

# CHAPTER 1

## Departures

*My Dearest Aisha:*

*I don't even know how to begin writing this letter. I look at you now, sleeping in your crib, so small and so helpless, and I wish I could be there with you when you take your first steps. I wish I could see it when you get on the bus for your first day of school. I wish I could hold you when you come home crying for the first time, realizing that the world is a bigger and badder place than you could have ever imagined.*

*But I won't be. The disease that is tearing through my body will take me away from you soon. And I'm so very sorry. But, so that I won't be a distant and mysterious memory, I'm writing you this letter.*

*For you have a destiny. A bright and wonderful destiny...*

**THE TRANSPORT PLANE** was older and more rickety than she would have expected for one headed to the spaceport. Aisha peered out the window of the plane intently, waiting for her first glimpse of the great cable veering skyward from Kiritimati into the depths of space.

It even had the old-school seats facing each other across a small table. A man sat there, and he was watching her closely.

"It's nothing really special," he said. "You don't really see anything. It's only interesting when a launch happens."

"How often?" she asked, knowing the answer already. She always knew the answer already, but she asked anyway.

"It depends," he said, looking at his watch. "We build the shuttle onsite and then launch it. It's not worth bringing it back to Earth, where it would burn up in the atmosphere, so it's designed to be launched once, and then disassembled into various different things to be used up there."

He pointed at the sky.

"I'm going up tomorrow," she said.

He nodded, smiling. "I figured. We get a lot of kids your age coming through here, heading for the Academy."

He smiled and went back to reading the news from his tablet. He hadn't said anything about her color. Mother had insisted on telling everyone within earshot that Aisha was the first African-American to go to the Academy. And not only was she African-American, she was a *girl*.

Aisha groaned inwardly. She wished mother would just *stop*. It had been a couple of hours since they had left Hawaii. The plane flew south to the tiny atoll that Aisha couldn't take her eyes off of. Upon arrival, they would take the short trip out to the bottom of the cable, and the fleet of ships imaginatively called *Terminus*. That would be the last stop before she launched into orbit, leaving Earth behind.

The man lowered his tablet and pointed to a silver dot on the horizon.

"That's a shuttle right there," he said. "And if you look closely you can see the cable that makes up the Space Elevator."

Even the words sounded amazing to her. The *Space Elevator*. Since the invention of materials with the requisite strength in low-enough density to make the concept buildable, many nations had gathered together to build this one. The idea was simple. Tether a cable on the Earth near the equator, and extend it out into space for about 35,000 kilometers. The object on the far end of the cable would then be in geostationary orbit, always above the same position on the Earth, much like communications or TV satellites.

She peered, trying to make out the cable, but it was just too skinny to be seen from this distance -- except the occasional glint as the tropical sun reflected off it.

Because the cable was tethered to the surface of the Earth, the rotation of the planet would send any object attached to the cable