

The Trinidad Aerospace Institute Logs

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Chapter One: The Garage Tower

[T.A.I. Personnel File #2847 – Recruitment Log]

Subject: [REDACTED]

Date: August 17, 2043

Location: East Port of Spain, Level 7 Parking Structure

The thing about drifting in Trinidad is that you need to know where the cameras aren't.

I'd been documenting blind spots in the city's surveillance grid for three years on my blog, *Kinetic Vector*. Started as a physics project—calculating drift angles, posting breakdowns of weight transfer and momentum—but it evolved into something else. A map of freedom, basically. Places where you could push a car to its limits without some algorithm flagging you for reckless driving.

The parking tower on Ariapita Avenue was one of the good ones. Built in the '30s when parking was still an afterthought in urban planning, before every structure got wired with sensors and smart concrete. Twelve floors of open-air levels, the outer walls just waist-high barriers giving way to the Port of Spain skyline. During the day, it was half-empty. At night, it belonged to us.

I pulled my '39 Subaru—heavily modified, naturally—onto Level 7 around 2 AM. The engine's hum echoed off the

concrete pillars, mixing with the distant sound of soca drifting up from a bar somewhere in the Woodbrook maze below. Through the open sides of the structure, the city sprawled out in layers: streetlights cutting through patches of darkness, and beyond that, the darker mass of the Northern Range, where jungle still claimed the steep hillsides.

Marcus was already there, leaning against his Honda, vaping something that smelled like mango and waiting with that particular kind of patience that meant he'd been scrolling through his phone for at least twenty minutes.

"Took your time," he said, not looking up.

"Traffic." There was no traffic at 2 AM, but it was the kind of lie that didn't need correcting.

"Keisha coming?"

"Said she might. Depends if she can sneak out." Keisha had the fastest car among us and the strictest parents, which felt deeply unfair on both counts.

Marcus pocketed his phone and walked a slow circle around my Subaru, the way he always did, like he was a mechanic doing an inspection rather than a friend who'd seen the same car a hundred times. "You finally install that new ECU?"

"Last week. Remapped the whole fuel system." I'd written about it on *Kinetic Vector*, included the full diagnostics and a video of the dyno results. Got about two thousand views, which for a niche blog about car modifications and underground street racing spots was pretty decent. Most of my readers were in Japan and California, places where car

culture still had some teeth. Trinidad's scene was smaller, tighter. Everyone knew everyone.

"Let me see the post," Marcus said, already pulling his phone back out.

I waved him off. "Later. Let's make some noise first."

The plan was simple: a few runs around Level 7's perimeter, testing the limits of adhesion on turns we'd memorized. Nothing too wild—we weren't trying to end up on the evening news or in the harbor. Just enough to feel that perfect moment when physics and control intersect, when you're steering with the throttle more than the wheel.

I fired up the engine, let it growl, felt the vibration through the seat. Marcus got into position at the opposite end of the level. We'd start from different corners, cross paths in the middle, see who could hold their line better. Stupid, maybe, but that was part of the point.

I was halfway through my second lap, tires screaming as I swung wide around a pillar, when I noticed the third car.

Parked near the elevator bay. Dark sedan, European make, too clean for a place like this. No one just *parked* on Level 7 at 2 AM unless they knew what happened here. And if they knew what happened here, they either wanted to join in or stop us.

I eased off the accelerator, letting the Subaru coast to a stop near Marcus, who'd also noticed.

"Security?" he asked, voice tight.

"Wrong car for security." I killed the engine. The sudden silence felt heavy, broken only by the tick of cooling metal and the distant city sounds. "Besides, no lights flashing."

We sat there for a moment, watching the sedan. Its windows were tinted dark enough that I couldn't see inside, but I had the distinct feeling we were being watched. Evaluated.

Then the driver's side door opened.

She stepped out like she was arriving at a corporate board meeting, not a semi-legal drift spot in a concrete tower. Mid-thirties, maybe, wearing a charcoal suit that probably cost more than my engine modifications. Hair pulled back, briefcase in hand. She closed the car door with a precise click and walked toward us with the kind of confidence that comes from knowing exactly where you are and why.

Marcus swore under his breath. "Cop?"

"In a suit like that? And no backup?" I shook my head.
"Something else."

She stopped about ten feet from my car, close enough to talk but far enough to respect the unspoken rules of street culture. When she spoke, her voice was clear, professional, with a Trini accent that had been smoothed by time abroad but never fully erased.

"You write *Kinetic Vector*," she said. Not a question.

I glanced at Marcus, who looked as confused as I felt.
"Yeah. That's me."

"I've read all sixty-three posts. The analysis of weight distribution in modified drivetrains was particularly impressive. The post about using machine learning to predict tire degradation—that showed real insight."

"Thanks?" It came out like a question because I genuinely didn't know what else to say. People didn't usually track me down in person to discuss my blog.

She adjusted her grip on the briefcase. "My name is Dr. Anika Ramcharan. I'm the Director of the Trinidad Aerospace Institute." She paused, let that sink in. "And I'd like to offer you a position."

The words hung in the air between us, absurd and impossible. Aerospace? I wrote about cars. Street racing. Physics as a hobby, not a profession.

"I don't—" I started, but she held up a hand.

"I know what you're thinking. You're self-taught, no formal degree, just a blog and a modified Subaru. But that's exactly why I'm here." She took a step closer, and in the dim light of the parking tower, I could see she was completely serious. "The Trinidad Aerospace Institute doesn't need more academics. We need people who understand systems, who can solve problems in real-time, who think about physics not as theory but as something you *do*. You've been doing it your whole life."

Marcus leaned out his car window. "What exactly does the Trinidad Aerospace Institute do?"

Dr. Ramcharan's expression didn't change, but something in her posture shifted. A slight tightening, like she was

deciding how much to reveal. “We develop next-generation propulsion systems. Rockets. Engines. The technology that will define the next era of space exploration.” She looked back at me. “And we’re doing it here, in Trinidad and Tobago, because certain types of innovation require... discretion.”

“Discretion,” I repeated. The word felt loaded.

“An apprenticeship,” she continued, ignoring the implicit question. “Full training, full access to our facilities. You’ll work with our engineering team, learn from people who’ve spent decades in the field. In exchange, we get your perspective. Your problem-solving. Your instinct.” She pulled a card from her pocket, held it out. “Think about it. But not for too long. We’re on a schedule.”

I took the card. Heavy stock, minimal design. Just her name, a phone number, and a small logo I didn’t recognize.

“How did you find me?” I asked.

For the first time, she smiled slightly. “You post from this location frequently. And you’re not as invisible as you think.” She turned back toward her sedan, then paused. “One more thing. If you accept, you can’t write about it. No blog posts about T.A.I. Some things need to stay off the grid.”

Then she got in her car and drove away, taillights disappearing down the spiral ramp, leaving Marcus and me alone on Level 7 with more questions than answers.

“Well,” Marcus said finally. “That was weird.”

I looked down at the card in my hand, then out at the city sprawling below. Somewhere out there, hidden in the jungle and the coastline, was a facility building rockets. And they wanted me.

My phone buzzed. A text from Keisha: *Sorry, couldn't make it. Parents locked the door. Next time?*

I typed back: *No worries. You didn't miss much.*

But that was a lie. I'd just been offered a door into something I didn't fully understand, something that existed in the gaps between the city I knew and the city I thought I knew.

I fired up the Subaru's engine again, but the sound felt different now. Smaller somehow. Like I'd been playing in a parking garage when somewhere else, people were reaching for the sky.

"You gonna do it?" Marcus asked.

I didn't answer. Didn't know yet. But I also knew I'd already started thinking about it, and once you start thinking about a thing like that, you're already halfway gone.

Above us, through the open walls of the tower, stars were beginning to fade as dawn crept up on the horizon. First light touching the jungle edges of the Northern Range.

And somewhere out there, in a facility I'd never seen, rockets were waiting.

Chapter Two: The Choice

[T.A.I. Personnel File #2847 – Recruitment Log, Continued]

Decision Period: August 17–20, 2043

Status: Pending

The card sat on my workbench for three days, propped against a carburetor I was rebuilding. Every time I walked past it, Dr. Anika Ramcharan's name seemed to catch the light differently.

Trinidad Aerospace Institute.

I'd typed it into every search engine I could think of. Found almost nothing. A few vague mentions in archived news articles from seven years ago about "private investment in Caribbean STEM initiatives." One blurry photo from a trade conference showing Dr. Ramcharan shaking hands with someone whose face was turned away. A defunct website with a placeholder page that said "Under Construction" and nothing else.

For an aerospace company supposedly building next-generation rockets, T.A.I. had less online presence than my blog.

Which either meant they were incredibly serious about secrecy, or I'd been approached by the most elaborate scam in Trinidad's history.

"You're overthinking it," Marcus said, not for the first time. We were in his uncle's garage—the one where I actually

worked for money—and he was watching me stare at the card instead of finishing the brake job I'd been paid to do.

"Am I?" I held up my phone, showing him the search results. "Look at this. Nothing. No employee reviews, no project announcements, no government contracts listed anywhere. It's like they don't exist."

"Maybe that's the point." Marcus grabbed a wrench and started working on the brake calipers himself, since I clearly wasn't going to. "You heard what she said. Discretion. Secret facility. They're not exactly gonna have a Instagram page."

"Or it's a front for something else entirely."

"Like what? A drug cartel that recruits through blog comments?" He laughed, but it died when he saw my face. "Come on, man. You saw her. That lady was legit."

"Legitimately what, though?"

Marcus wiped his hands on a rag, leaving new grease stains on top of old ones. "Look, you want my honest opinion? I think you're scared."

"Of course I'm scared. She's asking me to disappear into some underground facility I can't tell anyone about, working on projects I can't blog about, for reasons that aren't entirely clear—"

"You're scared it's real," Marcus interrupted. "You're scared you'll say yes and actually be good at it. Or worse, you'll say yes and realize you're in over your head, and

then you can't come back to this." He gestured around the garage. "To us."

I opened my mouth to argue, then closed it. He might have been right.

My phone buzzed. Keisha, finally responding to the group chat where I'd told them about the encounter.

Sorry, was at lecture. WAIT WHAT. Rockets??? In Trinidad??? Are you SURE she was real?

I typed back: *Pretty sure. Unless I hallucinated a very specific woman in a very expensive suit.*

Did you Google her name?

Of course. Found one photo, couple mentions. Nothing substantial.

Send me everything you found. I'll dig deeper.

That was Keisha. Give her a computer and a challenge, and she'd find things that weren't meant to be found. I forwarded her all my pathetic search results and went back to staring at the brake rotors like they held answers.

"You gonna call her?" Marcus asked.

"I don't know."

"Yeah, you do. You've already decided. You're just making yourself miserable pretending you haven't."

Keisha showed up at my apartment that night with her laptop and a rum punch she'd made herself. She sat cross-legged on

my couch and proceeded to tear through digital archives like someone who'd done this professionally.

"Okay, so Dr. Anika Ramcharan," she said, pulling up multiple windows. "Born in San Fernando, 1989. Full scholarship to MIT for aerospace engineering. Graduated top of her class. PhD by 26. Worked at NASA's Jet Propulsion Laboratory for five years on ion propulsion systems—that's legit, by the way. Left to join SpaceX, worked there for three years on Raptor engine development."

"How did you find all that?" I asked, leaning over her shoulder. "I couldn't find anything."

"You were looking in the wrong places. Academic databases, conference proceedings, patent filings—she's all over those. She co-authored a paper on hybrid rocket propulsion that got cited like 200 times." Keisha scrolled through dense technical documents. "Then, seven years ago, she just... vanishes. No more papers. No more conferences. No social media presence. Nothing."

"That's when she came back to Trinidad."

"Must be." Keisha pulled up a grainy photo from a university event in 2036. Dr. Ramcharan looked younger but had the same intense expression. "The question is, why? She had a career trajectory that was going straight to the top of aerospace. Why leave that to build a secret facility in Trinidad?"

"She said certain types of innovation require discretion."

Keisha gave me a look. "That could mean a lot of things. Good things, questionable things, potentially illegal things..."

“You think it’s shady?”

“I think it’s interesting.” She closed her laptop. “I think someone that smart, with that resume, doesn’t just disappear for fun. She’s building something. The question is whether you want to be part of it.”

“The blog—”

“The blog is great,” Keisha cut me off. “You’ve built something cool. But be honest with yourself. Is writing about car modifications what you want to do forever? Or do you want to actually build something that matters?”

“Cars matter.”

“You know what I mean.” She took a sip of her drink. “Marcus is worried you’re going to leave us behind. I’m worried you’re going to let this pass because you’re too comfortable where you are.”

“What would you do?” I asked. “If she’d approached you instead?”

Keisha didn’t hesitate. “I’d be terrified. And I’d say yes anyway.”

That night, I couldn’t sleep. I pulled up *Kinetic Vector* on my laptop and scrolled through three years of posts. Physics breakdowns. Drift tutorials. Reviews of modifications. Maps of the city’s blind spots. Almost two hundred articles.

Sixty-three thousand words about momentum and friction and the precise angle needed to maintain control while losing it.

In the comments, people from around the world thanked me. Said my explanations made sense when textbooks didn't. Said I'd helped them understand not just cars, but physics itself. A few said I'd inspired them to study engineering.

But inspiration wasn't the same as actually doing it.

I thought about Dr. Ramcharan in her tailored suit, waiting in a parking garage at 2 AM because she'd read every single post and seen something worth recruiting. I thought about Marcus's comment: *You're scared it's real.*

I thought about rockets lifting off from somewhere in Tobago, pushing against gravity with controlled fire and precise mathematics. About the engineering required to make something that heavy fly that high. About being the person who solved the problems that made it possible instead of the person who wrote about someone else solving them.

The card was still on my workbench in the garage. I'd memorized the number days ago.

I called at 11 PM on the third day, figuring if she gave me her direct line, she expected calls at odd hours.

She answered on the second ring. "This is Ramcharan."

"It's, uh, the blogger. From the parking tower." Great start. Very professional.

"I know who you are." I could hear a smile in her voice. "I've been waiting for your call. Though I expected it yesterday."

"I wanted to be sure."

“And are you? Sure?”

I looked around my small apartment. Bare walls except for a poster of a Subaru WRX and a whiteboard covered in force diagrams. My life fit into maybe six boxes if I packed efficiently. Nothing keeping me here except comfort and fear.

“I have questions,” I said.

“That’s why I’m hiring you. People who don’t ask questions are useless in R&D.”

“The blog. You said I can’t write about T.A.I. But can I keep the blog itself? Post about other things?”

There was a pause. “That would be... difficult. The kind of work we do changes how you think. You’d have to be constantly self-censoring, watching what you reveal. Most people find it easier to step away entirely during their time with us.”

“During my time? This isn’t permanent?”

“The apprenticeship is two years. After that, we reevaluate. Some people stay. Some move on to other opportunities. A few decide aerospace isn’t for them after all.” Another pause. “But no one who leaves talks about what they saw here. That’s non-negotiable.”

“Why the secrecy? If you’re building something revolutionary, wouldn’t you want people to know?”

“When it’s ready, people will know. But innovation in the public eye means innovation under scrutiny. Every setback

becomes a scandal. Every experiment needs justification. Every dollar questioned." Her voice took on an edge. "I spent years watching brilliant ideas die in committee meetings. Watching lawyers kill projects that could change everything because the risk assessment looked bad. T.A.I. exists because some work needs to happen away from that noise."

It made sense. It also made me nervous.

"My friends—"

"Can know you're working for an aerospace company. They can know it's classified work. They cannot know where, or on what, or with whom. If you can't lie to the people you care about, this won't work."

I thought about Marcus and Keisha. About drift sessions in the parking tower. About the casual freedom of having nothing to hide.

"What if I'm not good enough?" The question slipped out before I could stop it.

"Then you'll learn." Dr. Ramcharan's voice softened slightly. "I'm not hiring you for what you know. I'm hiring you for how you think. The rest is teachable."

Through my window, I could see Port of Spain spread out below, lights mixing with darkness. Somewhere out there, Marcus was probably working on his car. Keisha was coding something. Life was continuing exactly as it had been.

And somewhere else, hidden beneath this city and across the water in Tobago, people were building machines that reached

for orbit.

"When do I start?" I asked.

"Monday. I'll text you the address for the entry point. Arrive at 6 AM. Bring work clothes and an open mind. Leave your phone in your car."

"That's it? No contracts, no background check, no—"

"Oh, the background check started the moment you answered this call. You'll sign approximately forty pages of NDAs on your first day." She sounded amused. "But yes, that's it. Welcome to the Trinidad Aerospace Institute."

She hung up before I could respond.

I sat there with my phone in my hand, staring at the blank screen. My heart was racing like I'd just finished a drift run at full throttle.

I'd done it. I'd actually said yes.

Now I just had to tell Marcus and Keisha that I was disappearing into a world I couldn't explain, working on projects I couldn't discuss, for reasons I didn't fully understand.

I opened our group chat.

So... I made a call.

Marcus replied first: Yeah?

Starting Monday. I'm in.

There was a long pause. Then Keisha: *Holy shit. You're actually doing it.*

I think I'm actually doing it.

Marcus: *This is either the smartest or dumbest thing you've ever done and we won't know which for like two years.*

That about sums it up.

Keisha: *I'm proud of you. Also terrified for you. But mostly proud.*

Marcus: *We're drifting on Sunday night. One last run before you disappear into your secret rocket lair.*

It's not a lair.

You don't actually know that.

He had a point.

Sunday night came faster than I expected. The three of us met at the parking tower, same as always, except everything felt different now. The weight of what I'd agreed to hung in the humid night air.

Keisha had pushed her curfew to the limit to be there. Marcus had brought beer, which we drank sitting on the hood of his Honda, looking out over the city.

“You’re gonna forget about us,” Marcus said. Not angry, just sad.

“No way. You’re stuck with me.”

"You say that now. But you're gonna be working with actual scientists, building actual rockets. What are you gonna want to talk about? Our weekend drift times?"

"Yes," I said firmly. "Because that's still who I am. This doesn't change that."

"Everything changes things," Keisha said quietly. She was scrolling through *Kinetic Vector* on her phone, reading old posts. "You're not going to be the same person after this. None of us are the same as we were three years ago."

"Okay, but I'm still going to be me. Just... a version of me that knows about rockets."

Marcus crushed his empty beer can. "Promise me something. If it gets weird, if they're doing something shady, if you feel like you made a mistake—you call us. We'll come get you."

"From a secret facility you don't know the location of?"

"We'll figure it out. I'm serious. You're not alone in this."

I looked at my two best friends, sitting on a car in a parking tower at midnight, making promises we might not be able to keep. This was my world. This was real.

Tomorrow, I'd step into something else entirely.

"One more run?" I asked, sliding off the hood.

Keisha grinned. "Let's make it count."

We fired up our engines and the sound echoed through the concrete structure, bouncing off pillars and disappearing

into the Port of Spain night. For the next twenty minutes, we were just three people who loved cars and physics and the perfect application of both.

The last drift I made before everything changed was a good one. Smooth arc, maintained speed, came out of it with my heart racing and my friends cheering.

I'd remember that feeling. Hold onto it for whatever came next.

As we packed up to leave, I took one last look at the view from Level 7. The city, the mountains, the darkness where jungle reclaimed the land. Trinidad spread out below me, familiar and mysterious all at once.

Tomorrow, I'd see what was hidden underneath.

Marcus pulled me into a hug before we left. "Don't be a stranger, rocket scientist."

"Not a scientist yet. Just an apprentice."

"Same difference." He grinned, but his eyes were serious. "We'll be here when you surface."

If I surface, I thought but didn't say.

I drove home through empty streets, my Subaru's engine humming its familiar song. When I parked outside my apartment, I sat there for a moment, feeling the vibration fade.

Tomorrow was Monday. 6 AM. An address I didn't recognize. A world I couldn't imagine.

I went inside, set three alarms, and tried to sleep.

Didn't work. Ended up staring at my ceiling until 4 AM, running through every possible version of what the next day might bring.

At 5:15 AM, I gave up on sleep, showered, dressed in my usual work clothes—jeans, boots, a plain t-shirt. Left my phone on the charger like Dr. Ramcharan instructed.

At 5:45 AM, I was in my car, driving toward an address in East Port of Spain that Google Maps said was an abandoned commercial building.

At 5:58 AM, I found the rusted metal door of the hidden garage, exactly where her text said it would be.

At 6:00 AM, I took a deep breath and knocked.

The door rolled up silently, revealing darkness and a woman in a security uniform who checked my ID against a tablet.

"Welcome to T.A.I.," she said. "Dr. Ramcharan is expecting you."

I stepped through the doorway and heard the metal door roll shut behind me with a finality that made my stomach flip.

No turning back now.

Somewhere ahead, in the darkness I was walking toward, was everything I'd said yes to.

I hoped I was ready.

I hoped I'd made the right choice.

I hoped Marcus and Keisha would forgive me if I hadn't.

But mostly, I hoped that whatever I found at the end of those tunnels would be worth the price of the secret.

Chapter Three: First Descent

[T.A.I. Personnel File #2847 – First Day Log]

Date: August 23, 2043

Entry Time: 06:02 AM

Security Clearance: Level 1 (Provisional)

The hidden garage looked exactly like what it was pretending to be: forgotten.

Water stains traced abstract patterns down concrete walls that had probably been poured in the 1980s. Fluorescent tubes hummed overhead, half of them flickering with the irregular rhythm of fixtures that should have been replaced years ago. The floor was cracked, with weeds pushing through in corners where no one bothered to spray anymore. A few other vehicles sat in the shadows—sedans, SUVs, nothing remarkable—covered in the fine dust that accumulates when tropical humidity meets abandonment.

It felt wrong. Deliberately wrong. Like a movie set dressed to look like a place nobody cared about.

The woman who'd let me in had already disappeared somewhere into the shadows. I stood next to my Subaru, suddenly very aware that I'd just driven into an unmarked building based on a text message and blind faith.

“First time?”

I spun around. A man had materialized from behind a concrete pillar—or maybe he'd been there the whole time and I just hadn't noticed. He was maybe mid-forties, compact build, wearing dark tactical clothing that managed to look both casual and intimidating. His face was unremarkable in that specific way that made you immediately forget what he looked like. Except for the scar above his left eyebrow.

"Yeah," I managed. "First time."

He studied me with eyes that cataloged details: my posture, my clothes, where my hands were, whether I looked like someone who'd bolt. "Colonel Michael Thompson. Security Chief. You're the blogger."

Not a question.

"That's me."

"Phone stay in the car?"

I nodded.

"Good. Smart watch, fitness tracker, any other connected device?"

"Just the phone."

He pulled out a tablet and tapped something. "Biometric scan. Look here." He held up the device and a soft light flashed across my face. "Now thumb on the pad." I pressed my thumb against the screen. It tingled slightly—probably reading more than just my fingerprint.

"You'll do that every time you enter or exit," he said, returning the tablet to wherever he'd produced it from.

"Miss it once, you're locked out until Dr. Ramcharan personally vouches for you. Which she won't appreciate."

"Understood."

"No weapons, no recording devices, no cameras. If you bring any of that in here, even accidentally, you're done. Not suspended. Not written up. Done. Gone. Charges filed. Clear?"

"Crystal."

"Good." He gestured toward a corner of the garage I hadn't really noticed before. There was a door there, industrial gray, with a small sign reading "MAINTENANCE ONLY" in faded letters. "That's your way in. Follow the tunnel. Don't take any side passages—they all dead-end anyway, and you'll just get lost. Takes about fifteen minutes to walk. Elevator's at the far end. Dr. Ramcharan will meet you there."

"That's it?"

"That's it." He paused, and something almost like sympathy crossed his face. "The tunnels are... unsettling. First time especially. If you need to turn back, do it now. Once you're past the halfway point, there's no good place to change your mind."

"I'm not changing my mind."

"Everyone says that." He stepped back into the shadows. "See you on the other side. Maybe."

I wanted to ask what he meant by "maybe," but he was already gone. Just like that. One second there, next second not.

I took a breath, walked to the maintenance door, and pulled it open.

Cool air rushed out, smelling of stone and earth and something metallic. The kind of air that had been circulating underground for a long time. Beyond the threshold was a concrete stairway leading down, lit by a single LED strip along the ceiling. The stairs dropped about twenty feet before leveling out into what looked like a tunnel.

I stepped through and let the door close behind me.

The sound of it sealing—a heavy, pneumatic hiss—felt like punctuation. A sentence ending. The normal world on one side, whatever came next on the other.

The stairs were easy. Concrete, well-maintained despite the aesthetic of abandonment upstairs. My boots echoed in the enclosed space. At the bottom, the tunnel opened up.

Hand-carved bedrock lined the walls in some places, poured concrete in others, creating a patchwork of surfaces that suggested the tunnel had been expanded over time. About eight feet wide, maybe nine feet tall. Cables and pipes ran along the ceiling, some bundled neatly, others looking more improvised. LED strips provided light every ten meters or so, but the stretches between them were dim enough that my eyes had to adjust constantly.

The floor was smooth concrete, slightly damp in places where water seeped through cracks. Small puddles reflected the scattered lights, turning the tunnel into a series of small mirrors.

I started walking.

The first few minutes were fine. Uncomfortable, sure—I'd never been great with enclosed spaces—but manageable. The tunnel ran straight, sloping gently downward. The air was cool and slightly moving, pushed by ventilation systems I couldn't see. My footsteps echoed strangely, the sound bouncing back in ways that made it hard to judge distance.

Then I hit the first turn.

The tunnel curved right, and suddenly I couldn't see the entrance door behind me anymore. Just tunnel stretching in both directions, lit by the same sparse LEDs, looking identical in both directions. If someone asked me right now which way was out, I'd have to guess.

Colonel Thompson's words came back: *The tunnels are unsettling.*

Yeah. That was an understatement.

I kept walking. The slope continued downward, which felt wrong. We were in Trinidad—*island*, sea level, tropical. How deep underground was this facility? And why would you build down when you could build out?

Unless you were hiding something.

Another curve, this time to the left. The light from the last LED faded before the next one came into view, leaving me in near-darkness for about three seconds. My brain immediately supplied horror movie logic: something could be in that darkness, something could be following, what if the lights go out completely—

I forced myself to breathe normally and keep walking at the same pace. Not running. Not panicking. Just moving forward like this was normal, like walking through underground tunnels carved beneath a city was something people did every day.

Which, I supposed, at T.A.I. they did.

The walls were close enough that I could touch both sides if I stretched out my arms. I didn't. Something about the texture of the stone, the slight dampness, made me want to keep my hands to myself.

Water dripped somewhere ahead. The steady plip-plip-plip of it echoed, making it impossible to tell how far away it actually was. Could be ten feet. Could be a hundred.

I passed the first side tunnel. Colonel Thompson had said they all dead-ended, but I couldn't help glancing down it as I walked by. Darkness. Complete and total. The kind of dark that exists when you're underground with no natural light source for miles. The kind of dark that feels solid.

Don't think about it. Keep walking.

The temperature dropped slightly. Not much, but enough to notice. My breath didn't quite fog, but it was close. How far down was I now? Fifty feet? A hundred? More?

Another turn. Then another. The tunnel system felt deliberate, like it was designed to disorient. You couldn't walk straight for more than thirty seconds before the path curved again, always gently, never sharp enough to call a corner but enough that you lost all sense of direction.

Colonel Thompson had said fifteen minutes. I checked my watch—already seven minutes in. Halfway point coming up.

Once you're past the halfway point, there's no good place to change your mind.

I understood now. If I turned back at this point, I'd have to navigate all those curves again, in reverse, hoping I remembered which branches to ignore. And every second I'd be thinking about how I'd given up, how I'd let the tunnel beat me, how I'd have to call Dr. Ramcharan and explain that I couldn't handle a walk in the dark.

No. Forward was the only option now.

The tunnel widened slightly. Here, the walls were definitely hand-carved—rough stone, dark gray, with tool marks still visible. This section felt older, like it had been excavated first and everything else built around it. Natural cave system, maybe, that T.A.I. had found and expanded.

I passed another side tunnel. This one had a chain across it and a sign: “UNSTABLE – NO ENTRY.” What the hell was down there? And why keep an unstable tunnel instead of sealing it?

Questions I'd probably never get answered.

Eight minutes. Nine. The sound of dripping water was closer now. I could see it ahead—a steady stream trickling down from a crack in the ceiling, forming a small puddle in a depression in the floor. I stepped around it, careful not to slip on the wet concrete.

The air smelled different here. Still that underground smell, but with a hint of something else. Machinery oil, maybe. Ozone. The smell of a place where work happened.

Ten minutes.

The tunnel began sloping upward. Subtle at first, then more pronounced. My calves started to feel it. How far down had I gone if it was taking this long to come back up?

Eleven minutes.

A sound ahead. Not dripping water. Something mechanical. A low hum, like generators or air circulation. The ambient noise that means civilization, systems, power.

Twelve minutes.

The LED strips were brighter here, closer together. The walls transitioned from rough stone to smooth poured concrete. Cleaner. More finished. The puddles disappeared. The air warmed slightly.

Thirteen minutes.

Around one more curve, and suddenly the tunnel opened into a small chamber. About twenty feet square, with a proper ceiling, proper lights, proper everything. It looked like someone had carved out a reception area in the middle of the earth.

And in the center of it stood an elevator.

Industrial. Reinforced steel doors. A control panel with biometric scanner. No floor numbers visible. Just a simple UP/DOWN indicator currently showing neither.

Dr. Anika Ramcharan stood next to it, holding her ever-present briefcase, looking exactly as composed as she had in the parking tower. Like underground chambers accessed through disorienting tunnels were her natural habitat.

"Fourteen minutes," she said, checking her watch. "Good time. Most people take seventeen on their first trip."

"It's not a race."

"Everything's a race." She pressed her hand to the biometric scanner. The elevator dinged softly and the doors slid open. "Ready to see what you signed up for?"

I stepped into the elevator. It was bigger than I expected—freight-sized, easily able to hold a dozen people or large equipment. The interior was brushed steel, clean and well-lit. Rubber floor for traction. Single control panel with cryptic labels: SUB-2, SUB-1, MAIN, LAB-1, LAB-2, ADMIN.

Dr. Ramcharan pressed her thumb to the scanner again and selected "MAIN."

The doors closed. For a moment, nothing happened.

Then we started moving up.

Smooth. Quiet. Nothing like the creaky industrial elevators I was used to. This was precision engineering, designed to move between levels without anyone noticing the transition.

My ears popped. We were ascending fast. Faster than seemed reasonable for an elevator.

"How far down was that?" I asked.

"The tunnel entry is at sub-level two. Approximately sixty feet below the garage. We're going to main level, which is about forty feet above sea level."

"So a hundred-foot climb."

"Roughly." She was watching me, evaluating. "The tunnel bothered you."

Not a question.

"It's designed to," I said. "Isn't it?"

A slight smile. "Very good. Yes. It serves multiple purposes. Security, obviously-difficult to force entry through a winding tunnel with no clear sightlines. But also psychological. If you can't handle fifteen minutes of discomfort, you won't last fifteen hours in a pressure situation."

"So it's a test."

"Everything's a test." The elevator hummed. "Those who turn back do so in the first three minutes or not at all. You didn't hesitate."

"I hesitated. I just didn't stop."

"That's the same thing."

The elevator chimed softly. The UP indicator went dark.

"Welcome," Dr. Ramcharan said, "to the Trinidad Aerospace Institute."

The doors opened.

I don't know what I expected. More concrete, maybe. More industrial darkness. More of the aesthetic of secrecy and underground operations.

What I got was light.

Natural light, pouring through skylights I shouldn't have been able to see from underground. Except we weren't underground anymore—Dr. Ramcharan had said forty feet above sea level. Which meant...

The main level was above ground. Hidden in plain sight.

The space beyond the elevator looked like a modern tech campus. Open floor plan, high ceilings, glass-walled offices and conference rooms along the perimeter. In the center, an atrium stretched up through multiple floors, with catwalks connecting different levels. Plants—actual living plants—hung from the walls and sat in planters between workstations.

And the workstations. Dozens of them, arranged in clusters. Large monitors, keyboards, prototyping equipment, 3D printers humming in the corner. Whiteboards covered in equations. People—actual people—moving between stations, talking, working, living their lives like this was normal.

The air smelled like coffee and electronics and possibility.

"You hid a research campus," I said slowly, "by making people think it was underground."

"We hid it," Dr. Ramcharan corrected, "by making the approach underground. Most of the facility is above ground, hidden behind various legitimate fronts. Light industry,

warehouses, things that look boring from the street. But the only way in is through the tunnel. Forces commitment. Ensures discretion."

A woman approached us. Late twenties, athletic build, hair in a ponytail, wearing cargo pants and a t-shirt that said "ROCKETS ARE COOL" in block letters.

"You must be the new recruit," she said, extending a hand. "Gabriela Torres. People call me Gabi. I'm the systems integration specialist, which means when things break, I figure out why and fix them before Dr. Ramcharan finds out."

"I always find out," Dr. Ramcharan said mildly.

"Yeah, but sometimes not for a few hours, and that's basically the same as never." Gabi grinned at me. "Welcome to the chaos. You survived the tunnel, which means you're either brave or stubborn. We'll figure out which soon enough."

An older man joined us, gray beard, lab coat over a faded band t-shirt, holding a coffee mug that said "ROCKET SCIENTIST" with a small rocket diagram underneath.

"Dr. James Lal," he introduced himself. "Chief propulsion engineer. You're the blogger, yes? The one who wrote about calculating drift angles using real-time accelerometer data?"

"Uh, yeah. That's me."

"Brilliant piece. Absolutely brilliant. The way you explained phase space trajectories to an amateur audience—I've been teaching undergraduates for twenty years and never

found a clearer way to convey that concept." He shook my hand enthusiastically. "I have so many questions about your methodology. Are you familiar with Lyapunov stability theory? Because what you were doing, whether you knew it or not, was—"

"James," Dr. Ramcharan interrupted gently. "Perhaps save the technical interrogation until after orientation."

"Right, right. Of course." He didn't look embarrassed, just excited. "We'll talk later. Oh, this is going to be fun."

A younger guy, probably my age, wandered over from a nearby workstation. He had multiple festival wristbands on both wrists and was wearing a soca band t-shirt under his open lab coat.

"Raj Patel," he said. "Materials specialist. Dr. Lal's assistant, theoretically, though mostly I just try to keep him fed and caffeinated while he does the actual genius work." He gestured around the facility. "Welcome to the best kept secret in the Caribbean. It's weird at first, but you get used to it."

"Do you?" I asked.

"No," he admitted cheerfully. "But you get better at pretending."

Dr. Ramcharan checked her watch. "I'm giving you to Raj and Gabi for the morning tour. They'll show you the accessible areas, get you set up with a workstation, start the NDA paperwork. This afternoon, you're with Dr. Lal in the lab for technical orientation. Tomorrow, we'll discuss your actual assignment."

"What is my actual assignment?"

She smiled. "That depends on what you notice today. Observation test. Pay attention."

Then she walked away, heels clicking on the polished floor, briefcase in hand, leaving me standing in the middle of a secret aerospace facility I'd only learned existed four days ago.

Gabi clapped me on the shoulder. "Don't look so terrified. It gets weird before it gets normal."

"How much weird?"

"Oh, you haven't even seen the restricted areas yet." She exchanged a glance with Raj. "Those are special."

Raj pulled a tablet from somewhere and tapped the screen. "Okay, so, official tour time. Questions as we go are encouraged. Getting lost is discouraged but happens to everyone at least once. Cafeteria is on level two. The coffee is good. The food is... adequate. Don't touch anything with a red warning label unless Dr. Lal explicitly says you can. Actually, don't touch anything with any warning label. Actually, maybe just don't touch anything for the first week."

"Helpful," I said dryly.

"I try." He grinned. "Come on. Let's show you where the magic happens."

We started walking through the main floor, weaving between workstations and equipment. People glanced up as we passed—

curiosity, evaluation, a few welcoming nods. Everyone looked busy. Actually busy, not corporate-busy. The kind of busy that comes from working on problems that matter.

Somewhere in this building, they were building rockets.

And somehow, impossibly, I was part of it now.

I looked back at the elevator we'd emerged from. It stood there innocently, doors closed, giving no indication of the disorienting tunnel system that lay below.

Colonel Thompson had been right. The tunnel was unsettling.

But I'd made it through.

Now I just had to figure out if what waited on this side was worth it.

Gabi was talking about air handling systems and redundant power supplies. Raj was pointing out safety features and emergency exits. Dr. Lal was visible through a glass wall, already deep in conversation with someone about something that required aggressive gesturing at a whiteboard.

And through the skylights above, Trinidad's morning sun poured down like a spotlight on everything I'd chosen.

No turning back now.

Forward was the only direction left.

Chapter Four: Behind Matted Glass

[T.A.I. Personnel File #2847 – Facility Orientation Log]

Date: August 23, 2043

Time: 06:47 AM – 12:30 PM

Supervisor: G. Torres, R. Patel

"So the main floor is basically our open workspace," Gabi explained as we walked. "Most of the day-to-day engineering happens here. You've got individual workstations clustered by specialty—propulsion over there, avionics in that corner, structures and materials by the windows, systems integration where I usually camp out."

The space reminded me less of a traditional aerospace facility and more of a high-end tech startup, if tech startups built rockets instead of apps. Everything was clean but lived-in. Whiteboards covered in equations that had been erased and rewritten so many times the markers had stained the surface. Coffee cups at nearly every desk. A surprising number of plants.

"Dr. Ramcharan believes in biophilic design," Raj said, noticing my attention to the greenery. "Says it improves cognitive function and reduces stress. Also, it's nice. Not everything needs a peer-reviewed justification."

A woman in her mid-thirties looked up from a workstation as we passed. She resembled Dr. Ramcharan—same facial structure, same intense focus—but with softer edges. She was wearing jeans and a sweater despite the climate-controlled environment.

“That’s Maya Chen,” Gabi said quietly. “Computational dynamics lead. Runs all our trajectory simulations and orbital mechanics calculations. Basically, if you want to know where something will be in space, she can tell you down to the centimeter.”

“Chen?” I asked. “But she looks like—”

“Dr. Ramcharan’s younger sister,” Raj confirmed. “Different last name because Maya got married. Small family operation in some ways. Though Maya earned her position—PhD in computational physics, worked at ESA before coming here.”

Maya noticed us looking and waved, offering a warmer smile than her sister typically displayed. Then she went back to her screens, which were showing what looked like complex orbital trajectories.

We continued through the main floor. I tried to absorb everything at once—the layout, the people, the equipment, the general vibe of organized chaos that suggested serious work happening under casual surface.

“Conference rooms along the perimeter,” Gabi pointed out. “Glass walls so Dr. Ramcharan can always see if people are actually working or just having meetings about meetings. She has opinions about meeting efficiency.”

"She has opinions about everything," Raj added. "Most of them correct, which is annoying."

"Break room and cafeteria are up one level," Gabi continued. "We'll hit those later. Down one level is admin-HR, finance, legal, all the boring stuff that keeps us operating. Dr. Ramcharan's office is also down there, though she's rarely in it."

"Where is she usually?" I asked.

"Everywhere. Nowhere. It's unnerving." Raj shrugged. "She has this ability to materialize exactly when something interesting or problematic is happening. We suspect cameras everywhere, but honestly, I think she's just that good at reading the facility's energy."

We passed through a set of double doors into another section. The atmosphere changed immediately—less open workspace, more specialized lab environment. The lighting was different here, more focused. The air smelled like metal and chemicals and the particular ozone scent of electrical equipment running hot.

"The development lab," Gabi announced. "Dr. Lal's kingdom. This is where we test subsystems, validate designs, break things in controlled ways so they don't break in uncontrolled ways later."

The space was maybe five thousand square feet, filled with equipment I recognized and plenty I didn't. Test stands holding what looked like engine components. Chambers with thick glass windows. Rows of sensors and data acquisition

systems. A small wind tunnel in one corner. Multiple workbenches covered in partially disassembled hardware.

Dr. Lal was there, naturally, examining something with a pair of calipers while talking to himself. Or possibly to the component. Hard to tell.

"He does that," Raj said. "Talks to the hardware. Says it helps him think through problems."

"Does it work?"

"He's solved three supposedly impossible propulsion challenges in the last four years, so we don't question his methods."

We moved through the lab, Gabi pointing out different testing stations and explaining their purposes. I recognized some of the principles from my blog work—thrust measurement, heat management, flow dynamics—but scaled up to industrial levels with equipment I'd never dreamed of using.

"You'll spend a lot of time here," Gabi said. "Everyone does, eventually. This is where theory meets reality and usually loses the fight."

At the far end of the development lab, I noticed something different. A section of wall that didn't match the rest. Where everything else was glass or painted drywall, this was reinforced steel. Heavy. Industrial. And set into it was a door.

Not a normal door.

This door was maybe eight inches thick, solid steel, with rubber seals around the frame and what looked like pressure indicators built into the surface. A biometric lock. Multiple warning signs: AUTHORIZED PERSONNEL ONLY. HAZARDOUS MATERIALS. PRESSURE TESTING IN PROGRESS.

And next to the door, a small window. Maybe twelve inches square. But the glass—if it was glass—was matted, frosted, impossible to see through clearly.

I stopped walking.

“That’s one of the restricted areas,” Raj said, following my gaze. “There are four of them scattered through the facility. Different security levels, different access requirements.”

“What’s in there?”

“Depends on the room. That one’s a high-pressure testing chamber. They run propellant flow tests in there, combustion stability experiments, things that could be... energetic... if they went wrong.”

“Hence the explosion-proof door,” Gabi added. “Eight-inch steel, rated for overpressure events up to about three atmospheres. The whole chamber is reinforced. If something goes boom, it stays contained.”

I moved closer to the window. The matted glass scattered light in a way that made it impossible to see details, but I could make out shapes. Movement. Shadows of large equipment. Something that might have been a person in a protective suit.

"Can I go in?" I asked.

"Eventually, maybe. Depends on your assignment and clearance level. Some people work here for months without accessing the restricted areas. Others practically live in them." Raj pulled me away from the door. "But definitely not today. Come on, more to see."

We continued the tour. Up to the second level, where the cafeteria turned out to be a decent-sized space with actual windows showing—carefully curated—views of what looked like industrial Trinidad. The food stations were simple but well-stocked. The coffee, as promised, smelled excellent.

"We run 24/7 operations sometimes," Gabi explained. "So there's always food available. Midnight snacks are a legitimate line item in our budget. Dr. Ramcharan believes in feeding people properly. Hungry engineers make stupid mistakes."

A few people were scattered around tables despite the early hour. Some eating breakfast, others clearly finishing night shifts. The atmosphere was relaxed, conversational. Not the corporate cafeteria vibe where everyone stares at their phones. People were actually talking to each other.

"The team's pretty tight," Raj said, grabbing a cup of coffee. "Small enough that everyone knows everyone. We do monthly potlucks, Carnival crew goes to fetes together, that sort of thing. It's not just a job. Can't be, really, given the secrecy. We're kind of all we've got."

Back down to the main level, through another section I hadn't seen before. This area was more industrial—the

factory floor Gabi had mentioned. The ceiling was higher here, maybe thirty feet, with overhead cranes and heavy equipment.

"Manufacturing and assembly," Gabi said. "Where we actually build the hardware. Wrench—sorry, Leonard Joseph—runs this section. He's old-school machinist, learned his trade before computer-controlled anything. But he can make parts to tolerances most modern machines can't match."

The space reminded me of the SpaceX videos I'd watched—similar layout, similar equipment, just scaled down. Large 3D printers for metal printing. CNC machines. Welding stations with proper ventilation. Composite layup tables. An autoclave for curing advanced materials.

And another restricted door.

This one was even more dramatic. Reinforced steel frame, pressure seals, multiple biometric locks. But the real tell was the airgap system—I could see the double-door setup, the kind used when contamination control matters. Or when what's inside needs to stay very, very separate from what's outside.

The matted glass window here was larger, maybe two feet square. I could see more through it—the vague outline of what might have been a clean room setup. Figures in white suits. Something large and cylindrical that could have been a fuel tank or pressure vessel or something else entirely.

"That's the materials processing lab," Raj said before I could ask. "Where we do specialized composite work and handle certain... sensitive... materials that require isolation.

Temperature control, humidity control, positive pressure environment. Very expensive to maintain, very necessary for what we do.”

“Which is?”

“Make rockets that don’t explode.” Raj grinned. “Usually.”

“Usually?”

“I mean, sometimes we *want* them to explode. Controlled failures teach us things. But ideally not in the factory.”

Gabi checked her tablet. “Okay, we’re making decent time. One more area to show you before we throw you at the paperwork.”

We took a different corridor, this one leading to what Gabi called the “nerve center”—the computer core and simulation lab. Maya’s domain, apparently, though the space looked like it served multiple purposes.

Server racks hummed along one wall, generating enough heat that the air conditioning was noticeably stronger here. Multiple workstations faced large displays showing various data visualizations—trajectories, weather patterns, orbital mechanics, things I didn’t have context to understand yet.

The lighting here had a slight blue tint, easier on the eyes for long screen sessions. The furniture was all ergonomic, designed for people who spent twelve-hour shifts doing calculations.

And at the far end of this room—because of course—another restricted door.

This one was different. Less industrial, more... clean. Almost clinical. White walls around it instead of gray. The door itself was still reinforced steel, but the aesthetic was laboratory rather than factory. The matted glass window showed hints of blue light inside. Computer equipment, maybe. Or something else that glowed.

"Server room?" I guessed.

"Among other things," Gabi said, in a tone that meant she wasn't going to elaborate. "That area requires the highest security clearance. Even Dr. Lal doesn't have full access. Whatever's in there, it's above most of our pay grades."

"But you know what it is."

"I know some of what it is. Knowing everything would require need-to-know, and apparently, I don't need to know." She didn't sound bitter about it, just matter-of-fact. "That's how it works here. Compartmentalization. Everyone knows their piece. Very few people know all the pieces."

"Does Dr. Ramcharan?"

"Obviously. It's her facility." Raj started walking back toward the main floor. "Along with maybe two or three others. Colonel Thompson, definitely. Maya, probably. Everyone else gets read into what they need for their specific work."

We returned to the atrium, the bright central space where I'd first entered. The morning sun was higher now, pouring through the skylights, making the whole facility feel less like a secret installation and more like a place where normal work happened.

Except for those doors.

Four of them, scattered through the facility. Four matted glass windows offering glimpses of something I wasn't allowed to see yet. Four mystery boxes with biometric locks and warning signs.

And Dr. Ramcharan had said today was an observation test.

Pay attention.

"Paperwork time," Gabi announced, leading me to a small office off the main floor. "I know, I know, boring. But NDAs are serious business here. You're about to sign away your right to discuss anything you've seen, will see, or accidentally overhear in the bathroom."

The next two hours were exactly as tedious as promised. Reading dense legal language that basically boiled down to "don't tell anyone anything, ever, or we'll sue you into oblivion and possibly have you arrested." Page after page of non-disclosure agreements, security protocols, acceptable use policies, emergency procedures.

I signed everything. What else was I going to do at this point?

Raj set me up with a workstation in the main floor area, between the structures team and the systems integration cluster. My own desk, my own computer, login credentials, access to T.A.I.'s internal network.

"You're on the guest network for now," he explained. "Limited access. Can't see any classified project files, can't access the simulation systems, definitely can't open

any doors that require biometric authentication. As you get read into specific projects, your access expands. Standard security practice."

"How long until I get full access?"

"Depends on the person. Some folks are here a year before they're fully cleared. Others, like Dr. Lal's previous assistant, got fast-tracked in three months because he was brilliant and trustworthy." Raj paused. "He left, though. Decided aerospace wasn't for him. Happens sometimes."

"Why'd he leave?"

"Couldn't handle the secrecy. Felt like he was lying to everyone in his life. That eats at some people more than others." Raj's expression was serious for once. "It's worth thinking about. What you're willing to trade for being part of this."

Before I could respond, Dr. Lal appeared with his characteristic enthusiasm.

"Ah! Perfect! You're set up. Good, good. Come with me. We have much to discuss." He was already walking back toward the development lab, assuming I'd follow.

I glanced at Raj, who just grinned. "Good luck. Remember, if he starts explaining something using tensor calculus, it's okay to ask him to back up. He forgets not everyone has three physics degrees."

Dr. Lal's version of "technical orientation" turned out to be a four-hour deep dive into T.A.I.'s propulsion research. He showed me engine components in various states of

assembly, explained the theoretical basis for their current work, walked me through test data from recent experiments, and generally treated me like a graduate student he was personally mentoring.

It was overwhelming and exhilarating in equal measure.

"The fundamental challenge," he explained at one point, gesturing at a partially disassembled injector assembly, "is achieving stable combustion at the pressures and flow rates we need. Conventional wisdom says it's impossible with our mass constraints. But conventional wisdom is frequently wrong when you approach the problem from first principles."

"What's the mass constraint?" I asked.

"Ah! Good question. See, most rocket engines prioritize thrust-to-weight ratio. Bigger engines, more thrust, acceptable if they're heavy. But we're optimizing for a different variable. Can't tell you which one yet—that's classified—but it changes everything about the design space."

He showed me thermal management systems, exotic materials testing, computational fluid dynamics simulations running on Maya's computers. Every piece was fascinating. Every explanation opened up three new questions.

And through it all, I kept thinking about those doors.

Four restricted areas. Four pieces of the puzzle I couldn't see yet.

Dr. Lal had showed me the development lab, but certain experiments were clearly happening behind that pressure

door. Gabi had shown me the factory floor, but the materials processing lab was off-limits. Maya's simulation center had that mysterious clean room with the blue light.

And I hadn't even seen the fourth restricted area yet. Somewhere in the facility, there was another sealed door, another window of matted glass, another piece of whatever T.A.I. was really building.

"You're distracted," Dr. Lal observed, not unkindly. "First day overwhelm, yes?"

"Just trying to understand what we're actually doing here. You've shown me engine components and test data, but I still don't know what we're building. What's the end goal?"

"The end goal," Dr. Lal said carefully, "is to make space access dramatically more efficient and economical. Beyond that, I can't say much until you're read into specific projects. But I can tell you this: what we're doing here, if it works, will change everything. Not incrementally. Fundamentally."

"And if it doesn't work?"

"Then we've still learned things no one else knows, and we try again." He smiled. "That's the beauty of research. Failure is data."

The cafeteria at lunch was busier. I sat with Raj and Gabi, who introduced me to several other team members. Everyone was friendly but clearly evaluating me. The new person. The outsider. The one who needed to prove they belonged.

Isaiah "Zay" Williams turned out to be at the Trinidad facility for the week, up from his usual Tobago posting. Former helicopter pilot, now operating drones and test vehicles. He had that particular confidence of someone who'd looked death in the face professionally and decided it was interesting rather than terrifying.

"First day, yeah?" he said, sitting down with a loaded plate. "How you finding it?"

"Overwhelming. Exciting. Confusing."

"That's accurate for the first six months, honestly." He grinned. "Wait till you see the Tobago facility. That's when it gets real. Watching something you worked on actually launch—nothing else like it."

"When's the next test?" I asked.

"Couple weeks, maybe. Depends on weather and whether the current engine prototype passes validation." He lowered his voice slightly. "Between you and me, there's been some interesting developments in the restricted areas. Stuff that might move up the timeline."

Gabi kicked him under the table.

"Right, right. Need-to-know and you don't need to know yet. I forget." Zay didn't look apologetic. "You'll find out soon enough if you stick around."

After lunch, I was turned loose to explore on my own within the accessible areas. "Get familiar with the space," Gabi had said. "Tomorrow, the real work starts."

I wandered, trying to build a mental map. The facility was larger than it initially seemed, with the multiple floors and branching corridors creating a complex three-dimensional layout. Easy to see how people got lost.

I found the fourth restricted door almost by accident.

It was in a section of the facility I hadn't been shown on the official tour, down a corridor that connected the development lab to the factory floor. Not hidden, exactly, but not prominently displayed either. You'd only notice it if you were really exploring.

This door was different from the others.

No warning signs. No pressure indicators. Just clean reinforced steel with a single biometric lock and that now-familiar matted glass window.

I stepped closer, knowing I shouldn't but unable to resist. The glass scattered light in strange patterns, making it impossible to see details. But there was something in there. Movement. The suggestion of open space, maybe. And lights—bright lights, not the dim blue of computer screens or the harsh fluorescents of testing chambers. These looked almost like... daylight?

How could there be daylight this deep in the facility's interior?

"Curious?"

I spun around. Dr. Ramcharan stood there, having materialized from nowhere as promised. She didn't look angry, just mildly amused.

"Just exploring. Like Gabi suggested."

"And you found the fourth door. Interesting." She moved to stand beside me, looking at the matted glass. "What do you think is in there?"

"I have no idea. The other three make sense—pressure testing, materials processing, secure computing. But this one..." I gestured at the door. "No warnings. Different locks. And that light looks natural, which shouldn't be possible."

"Very good observation." She was pleased. "You're right. This room is different from the others. But I can't tell you why yet. Not until you're read into the project that requires it."

"When will that be?"

"Depends on how quickly you learn and how well you perform. Could be weeks. Could be months." She turned to face me fully. "Today was your observation test. What did you learn?"

I thought about it. Not just the physical facility, but the patterns, the implications, the things not said.

"You're compartmentalizing work deliberately," I said slowly. "Four restricted areas, probably corresponding to four different projects or four different aspects of the same project. Most people only access one or two. That way, if there's a security breach, the damage is limited."

"Continue."

"The facility is designed to look smaller than it is. The tunnel makes you think you're going deep underground, but we're actually mostly above ground. The approach is disorienting on purpose—makes it harder to know where you actually are relative to the city. And the legal fronts Gabi mentioned, the warehouses and light industry... you're hiding in plain sight. Nobody looks twice at boring buildings."

"What else?"

"The team is small. Maybe thirty people total? Forty? Small enough that everyone knows everyone, large enough to have specialists in every needed discipline. You're not trying to scale up production—this is a research and development operation. You're proving concepts, not building commercial vehicles."

Dr. Ramcharan smiled, the first genuine smile I'd seen from her. "Excellent. One more question. Why Trinidad and Tobago?"

I'd been thinking about that all day.

"Location is good for launches—close to equator, ocean to the east for safety. But that's not unique. Plenty of places have that." I considered. "The real reason is political, isn't it? Trinidad and Tobago is small enough that you can operate without excessive scrutiny, developed enough that you have infrastructure and skilled workers, but not so prominent on the world stage that foreign governments pay close attention to what happens here. You're below the radar."

"And?"

"And Dr. Ramcharan is from here. This is personal. You could have done this anywhere, but you chose home."

She nodded slowly. "You passed the observation test. Most people notice the equipment and the cool technology. You noticed the strategy. That's valuable." She started walking back toward the main floor, and I fell into step beside her. "Starting tomorrow, you'll begin actual project work with Dr. Lal's team. He'll assign you specific tasks, bring you into design reviews, let you get your hands dirty. Learn quickly. Prove yourself useful. Access follows performance."

"And the restricted areas?"

"One step at a time." We reached the main floor atrium. "You'll get home around six tonight, assuming no emergencies. The tunnel is less unsettling going back—you know what to expect. Same route, fifteen minutes. Colonel Thompson will scan you out."

"Do I come back tomorrow the same way?"

"Every day. Same route. It becomes routine eventually." She paused. "One more thing. You'll want to tell Marcus and Keisha about your first day. You can't. You can tell them you started work at an aerospace company, that it's interesting, that the people seem good. Nothing more specific. No location details, no names, no project descriptions. Can you do that?"

I thought about my best friends, waiting to hear how my first day went. Thought about editing my experiences down to meaningless generalities. Thought about the lies of omission I'd be telling for two years.

"I can do that," I said.

"Good." She turned to leave, then stopped. "You did well today. The tunnel, the observation test, the way you handled being thrown into everything—you're adapting faster than most. Keep that up."

It was the closest thing to praise I'd heard from her. I'd take it.

The rest of the afternoon passed in a blur of technical documents and onboarding materials. By 5:45 PM, my brain was full and I was ready to leave. Raj showed me the exit procedure—biometric scan, confirmation from security, then the long walk back through those tunnels.

This time, as Colonel Thompson had predicted, they were less unsettling. I knew what to expect. The curves didn't disorient. The darkness between lights was just darkness. The whole thing took thirteen minutes instead of fourteen.

Still didn't like it, though. Don't think I ever would.

My Subaru sat exactly where I'd left it that morning, covered in slightly more dust but otherwise untouched. I got in, started the engine—that familiar sound, that familiar vibration—and pulled out of the hidden garage.

The evening city sprawled around me. Normal Port of Spain. People heading home from work, vendors closing up shops, traffic building toward the dinner hour chaos. The regular world, where rockets weren't built in secret and everyone could talk about their day.

My phone, charging on the passenger seat, buzzed with accumulated messages.

Marcus: *How was day one??? You survive???*

Keisha: *Tell me EVERYTHING. What's it like? What are you working on? Are there actual rockets?*

Marcus: *We're at the usual spot if you want to meet up. No pressure though, you're probably exhausted.*

I sat at a red light, watching the city flow around me, and typed out responses that felt like lies even though they technically weren't.

Day one was good. Facility is impressive. People seem smart and dedicated.

Can't really talk about specifics—serious NDAs. But yeah, it's actual aerospace work.

Definitely exhausted. Rain check on meeting up? Tomorrow maybe?

The responses came quickly.

Keisha: *NDAs make sense for aerospace. Glad it went well!*

Marcus: *No worries man. Get some rest. But also, you still have to show up to drift sometimes. Don't become too fancy for us.*

Never. I'm still me.

But was I? I'd spent one day at T.A.I. and already felt the distance growing. The secrets I was keeping, the things I

couldn't share, the simple fact that a huge part of my life was now off-limits to the people I cared about most.

This was what I'd signed up for. This was the price.

I drove home through streets I'd known my whole life, but everything looked slightly different now. Like I was seeing it from the outside, from the perspective of someone who no longer quite belonged to the surface world.

Somewhere beneath Port of Spain, tunnels wound through bedrock, leading to a facility where people built impossible things. And tomorrow, I'd walk through those tunnels again, and the day after that, and the day after that.

Until either the secrets became comfortable or they broke me.

I hoped for the former. Suspected it might be the latter.

But either way, I was committed now.

Behind those matted glass windows, something waited to be discovered.

And I was going to find out what.

Chapter Five: The Lab

[T.A.I. Personnel File #2847 – Technical Orientation, Day 2]

Date: August 24, 2043

Time: 07:15 AM

Clearance Upgrade: Level 2 (Provisional) – Project PROMETHEUS

The second morning, the tunnel felt almost routine. Almost.

I made the walk in twelve minutes this time, my body already learning the rhythm of the curves, the spacing of the lights, the echo patterns of my footsteps. Colonel Thompson barely looked up when I biometrically signed in at the hidden garage. Just a grunt of acknowledgment and a wave toward the maintenance door.

Progress, I suppose.

Dr. Lal was waiting for me when the elevator doors opened onto the main floor. He had two cups of coffee and the manic energy of someone who'd probably been awake since 4 AM working on equations.

“Good morning, good morning! Excellent timing. We have much to do today.” He thrust one of the coffee cups at me. “Drink. You’ll need the caffeine. We’re starting your technical read-in, and it’s... well, it’s quite a lot.”

“Read-in?”

"Classification briefing. Project orientation. The part where we actually tell you what we're building." He was already walking toward the development lab, and I hurried to keep up. "Dr. Ramcharan approved your upgrade last night based on your observation test performance. You're being read into Project PROMETHEUS."

The name meant nothing to me, but the way Dr. Lal said it—with reverence and barely contained excitement—suggested it should.

We entered the development lab. It was quieter this morning, with only a few other people working at various stations. Dr. Lal led me to a glass-walled conference room in the corner that I hadn't noticed during yesterday's tour. Inside, Maya was already seated with a laptop, and Gabi was pulling up presentations on a large display screen.

"Close the door," Dr. Lal said. "Soundproofing activates automatically."

I did. The door sealed with a soft hiss, and suddenly the ambient noise from the lab disappeared completely. The silence was unsettling.

"Sit," Maya said, gesturing to a chair. Her manner was warmer than her sister's but still carried that same intensity. "What we're about to tell you is classified at the highest level within T.A.I. Only seventeen people have full access to this information. You're about to become the eighteenth."

I sat. My coffee suddenly felt very necessary.

Dr. Lal pulled up the first slide on the display. It showed a simple molecular diagram—just hydrogen atoms, but arranged in a lattice structure I didn't recognize.

"What do you know about metallic hydrogen?" he asked.

I searched my memory. "Theoretical form of hydrogen that exists under extreme pressure? Jupiter's core, maybe? Acts like a metal instead of a gas?"

"Correct! Excellent baseline." Dr. Lal's enthusiasm kicked into higher gear. "Under sufficient pressure—around 500 gigapascals, roughly five million times atmospheric pressure—hydrogen atoms are compressed so tightly that they form a crystalline metallic structure. The electrons delocalize, allowing electrical conductivity. It was first theoretically predicted in 1935, briefly created in laboratory conditions in 2017, and has been the subject of intense research ever since."

"Because it would make an incredible rocket propellant," I said, the pieces clicking together.

"The greatest rocket propellant theoretically possible using chemical reactions," Maya corrected. "The specific impulse—efficiency, basically—would be roughly 1700 seconds. Current best chemical rockets achieve maybe 450 seconds. We're talking about a propellant nearly four times more efficient than anything currently in use."

Gabi pulled up the next slide, showing energy density comparisons. The metallic hydrogen bar dwarfed everything else.

"The problem," she continued, "has always been stability. Create it under extreme pressure, and it instantly reverts to normal hydrogen gas when that pressure is removed. Decades of research, millions of dollars spent, and nobody could make it last more than microseconds at normal pressures and temperatures."

Dr. Lal was practically vibrating with excitement now. "Until eighteen months ago. When Dr. Ramcharan, using a novel approach combining carbon nanotube scaffolding with precisely calibrated electromagnetic field containment, successfully stabilized metallic hydrogen at room temperature and atmospheric pressure for seventy-two hours."

The room went silent, letting that sink in.

"That's impossible," I said finally.

"That's what everyone said about heavier-than-air flight," Dr. Lal countered. "What everyone said about breaking the sound barrier. What everyone said about reaching orbit. Impossible just means nobody's figured out how yet."

Maya pulled up a video. It showed a small chamber—maybe the size of a water bottle—with something inside that gleamed like mercury but seemed to pulse with internal light. "This is a 50-gram sample of room-temperature stable metallic hydrogen. The first in human history. Created here, in Trinidad, in a facility the world doesn't know exists."

I stared at the screen. If this was real—if they'd actually achieved this—

"This changes everything," I breathed.

"Everything," Gabi agreed. "Access to space becomes orders of magnitude cheaper. Mars missions become feasible with current technology. Asteroid mining becomes economically viable. The entire calculus of space exploration shifts."

"So why the secrecy?" I asked. "If you've solved this, why not announce it? You'd win Nobel Prizes. Dr. Ramcharan would be famous."

The three of them exchanged glances. Maya spoke first.

"Because the same properties that make metallic hydrogen the perfect propellant also make it an incredibly dangerous weapon. The energy density we're talking about—a kilogram of this contains more explosive potential than a kilogram of TNT. Much more. And unlike nuclear materials, it's not radioactive. Wouldn't trigger any existing treaty protocols or detection systems."

"If the major powers knew we'd achieved this," Dr. Lal continued, "they'd do everything possible to control it. Classified it under national security. Seize the research. Or worse, simply take it by force and claim they'd developed it independently."

"So Dr. Ramcharan came back to Trinidad," I said slowly, "to develop this outside the control of any major power."

"Precisely." Maya pulled up another slide—a map showing Trinidad and Tobago's location. "Small nation, not strategically important enough to draw major attention. Politically stable. Good infrastructure. English-speaking, highly educated workforce. But most importantly: neutral ground. Not aligned with any major power bloc. Perfect place

to develop something that belongs to humanity, not to any specific government.”

“Project PROMETHEUS,” Dr. Lal said. “Named for the Titan who gave fire to humanity. We’re giving humanity access to the stars.”

Gabi activated the next section of the presentation. Technical diagrams, test data, photographs of equipment I now recognized from yesterday’s tour. “The four restricted areas you noticed? Each one is part of the metallic hydrogen production and testing pipeline.”

She walked me through them:

“Area One—the pressure chamber you saw in the development lab. That’s where we generate the initial high-pressure conditions to create the metallic hydrogen. Extreme pressure, extreme temperature, very dangerous if something fails. Hence the explosion-proof doors.”

“Area Two—the materials processing lab in the factory. That’s where we create the carbon nanotube scaffolding and prepare the containment systems. Clean room environment because even microscopic contamination can destabilize the structures.”

“Area Three—the secure computing area. Maya’s specialty. We’re running constant simulations of the electromagnetic field configurations needed to maintain stability. The computational requirements are massive, and the algorithms are proprietary. That room contains our most valuable intellectual property.”

“And Area Four?” I asked.

They all smiled.

"That's the storage facility," Dr. Lal said. "Where we keep the stable samples. It requires constant electromagnetic monitoring and environmental control. The 'daylight' you noticed through the window? Full-spectrum lighting for the monitoring equipment. We need perfect visibility to catch any instability before it becomes critical."

"How much have you produced?" I asked.

"Total accumulated stable metallic hydrogen?" Maya checked her laptop. "Approximately 2.3 kilograms. Which doesn't sound like much until you remember that even 100 grams would provide enough propellant for a significant orbital maneuver."

Dr. Lal pulled up engine schematics. "Which brings us to what we're actually building. A rocket engine designed specifically to utilize metallic hydrogen propellant. Conventional engine designs don't work—the combustion characteristics are completely different. We're working from first principles, designing everything custom."

The designs were elegant. Compact, compared to traditional rocket engines, because the propellant was so much more efficient. Multiple redundant systems for safety. Exotic materials to handle the thermal loads.

"This is what I'll be working on?" I asked.

"Part of it," Gabi said. "Your background in real-time dynamic systems makes you valuable for the control algorithms. The engine has to respond incredibly precisely—millisecond-level adjustments to maintain stable combustion.

Dr. Lal thinks your work on drift control theory translates well to propulsion system stabilization."

"It's the same mathematics," Dr. Lal added enthusiastically. "Keeping a car in a controlled slide versus keeping a rocket engine in controlled combustion—both are problems of managing instability at the edge of chaos. Your intuition for one applies to the other."

"When do we test it?" I asked. "The engine, I mean."

"Two weeks," Maya said. "That's the timeline. We have a prototype nearly complete. If the final validation tests go well this week, we'll transport it to the Tobago facility for a live fire test. Full duration burn, real metallic hydrogen propellant, actual flight conditions."

"And I'll be there?"

"If you prove yourself this week, yes." Dr. Lal stood, opening the conference room door. The sounds of the lab flooded back in. "But first, you have to understand the system you'll be helping to control. Come. Let me show you what we're actually building."

He led me out of the conference room to a workstation in the corner of the lab. The monitors showed complex simulation data—pressure curves, temperature gradients, combustion stability metrics.

"This is your station," he said. "For the next week, you'll be running simulations of the engine control system. Learning how the engine responds to different input conditions. Building intuition for the dynamic behavior. By

the time we get to Tobago, you'll know this engine as well as you know your Subaru."

I sat down, looking at the screens full of data. A week ago, I'd been writing blog posts about car modifications. Now I was working on the control systems for an engine that used a propellant that technically shouldn't exist.

"Dr. Lal," I said. "What happens when you announce this? When PROMETHEUS becomes public?"

He smiled, but it was tinged with something like sadness. "The world changes. Space becomes accessible. But also, we lose control of it. Other nations will replicate our work—the theoretical basis is sound, they just need to know it's possible. They'll develop their own metallic hydrogen programs. Military applications will emerge. Someone will weaponize it, despite our best efforts to prevent that."

"So why do it at all?"

"Because keeping humanity on one planet is ultimately more dangerous than giving them the stars. Climate change, asteroid impacts, pandemics—civilization is fragile when it exists in only one place. This gives us redundancy. A chance to spread out, to survive." He put a hand on my shoulder. "The fire that warms can also burn. That's the Promethean bargain. But humanity has always chosen to take the fire anyway."

The rest of that day was a deep dive into propulsion theory unlike anything I'd experienced. Dr. Lal was a patient but demanding teacher, walking me through the mathematics of combustion stability, the materials science of engine

design, the control theory that kept everything from exploding.

By lunch, my brain hurt.

By mid-afternoon, I was starting to see the patterns. The way pressure and temperature and flow rate all interacted. How the control system had to predict instabilities before they cascaded. How the entire engine was a carefully balanced system where every component affected every other component.

It was like drifting, actually. Reading the road, feeling the car's responses, making minute adjustments to maintain the perfect edge between control and chaos.

"You're getting it," Gabi observed, looking over my shoulder at one of my simulation runs. "Took Dr. Lal's last assistant three weeks to reach this level of intuition. You're doing it in six hours."

"I've been thinking about dynamic systems for years. Just in a different context."

"Context is overrated. The math is the math." She pulled up a chair. "Want to see something cool?"

She navigated to a different file, pulling up video footage. It showed the interior of one of the restricted areas—the pressure chamber, I guessed. In the center of frame was a compact engine, maybe three feet tall, mounted on a test stand.

"This is footage from three weeks ago. Our first successful full-duration burn with metallic hydrogen propellant. Ten

seconds at 75% throttle.”

She hit play.

The engine ignited with a sound that the microphone couldn’t properly capture—too loud, too complex. But the visible result was unmistakable. A column of exhaust that glowed like captured sunlight, impossibly bright, impossibly hot. The thrust plume was shorter than a conventional rocket engine, more focused. More efficient.

And powerful. The test stand shook despite being bolted to the floor. The entire chamber vibrated.

Ten seconds later, it shut down smoothly.

“Four thousand pounds of thrust from an engine that weighs sixty pounds,” Gabi said. “Thrust-to-weight ratio of over 65:1. Current best chemical rockets are maybe 150:1, but they’re much larger engines. This is compact, efficient, and uses a propellant we can manufacture on-site.”

“How much did that burn cost? In terms of propellant?”

“Eight grams of metallic hydrogen. Which took about forty hours to produce. We’re still working on scaling up the production rate. It’s the bottleneck right now—making it faster than we can use it.”

I watched the video loop, that impossible bright plume. This was real. This was actually happening. In a secret facility in Trinidad, they’d solved one of aerospace’s holy grail problems and built an engine to prove it.

“When this goes public,” I said, “everything changes.”

"Everything," Gabi agreed. "But first, we have to prove it works in real conditions. Hence Tobago. Hence the test in two weeks." She stood. "Keep running those simulations. Get familiar with every possible failure mode. When we're at the test site, there won't be time for questions."

That evening, as I drove home through Port of Spain traffic, my head was spinning with equations and possibilities. Metallic hydrogen. Room temperature stable. The key to affordable space access. Being developed in secret in the Caribbean.

My phone buzzed. Marcus.

You alive? Haven't heard from you since Monday.

I felt the familiar guilt. Two days at T.A.I., and already the distance was growing.

Sorry man. New job is intense. Lots to learn.

That's cool. We're drifting Friday night if you want to join. Been too long.

Friday. Could I even do that? Show up at the parking tower, pretend everything was normal, not mention that I'd spent the day working on propulsion systems for the most advanced rocket engine in human history?

I'll try. Might be tired but I'll try.

That's all we ask. Don't become a stranger.

Too late, I thought. I was already becoming a stranger. To them. To my old life. Maybe even to myself.

But I'd seen the video. The engine burning bright and clean and powerful. The future made visible in that ten-second test.

Some things were worth becoming a stranger for.

The rest of the week blurred together. Days spent running simulations, learning the engine's behaviors, absorbing everything Dr. Lal could teach me about propulsion theory. Nights spent trying to decompress, trying to maintain some connection to normal life, failing at both.

By Thursday, I could predict engine instabilities before they cascaded in the simulations. Could suggest control algorithm modifications that Dr. Lal actually implemented. Was starting to think in terms of thrust coefficients and combustion chamber pressures instead of horsepower and torque curves.

"You're ready," Dr. Lal announced Thursday afternoon, reviewing my latest simulation results. "Or as ready as anyone can be before their first real test. Tomorrow, we start physical preparations for the Tobago run."

"What does that involve?"

"Careful disassembly of the engine components. Secure transport preparation. Coordination with the Tobago facility team. And..." he smiled, "you'll finally get access to Area Four. We need to load the metallic hydrogen samples for transport. It's time you saw what you've been working with."

Friday morning, Dr. Ramcharan herself was waiting by Area Four's door when I arrived. Colonel Thompson was there too,

along with Maya and Gabi. This was clearly an event.

"Before we open this door," Dr. Ramcharan said, "understand what you're about to see. That material inside represents two years of research, millions of dollars of investment, and quite possibly the future of space exploration. It's also incredibly dangerous if mishandled. You observe only. Touch nothing. Questions after we exit. Clear?"

"Clear."

She pressed her hand to the biometric scanner. Multiple locks disengaged in sequence. The door swung open silently.

The room beyond was flooded with light.

Full-spectrum LED arrays illuminated every surface. The space was maybe thirty feet square, with white walls, white floor, white ceiling. Clinical. Perfect. And in the center, on a specialized containment rack, were twelve transparent cylinders, each holding approximately 100 grams of material that looked like liquid mercury but gleamed with an inner luminescence.

Metallic hydrogen. Room temperature stable. Impossible made real.

"Beautiful, isn't it?" Maya whispered.

It was. Not just the material itself, but what it represented. Every cylinder was a door opening to the stars. Every gram was a ticket to somewhere new.

The monitoring equipment lined one wall—electromagnetic field generators, temperature sensors, pressure monitors,

automated safety systems. Everything needed to keep this miracle stable.

"We'll transport three cylinders to Tobago," Dr. Ramcharan explained. "300 grams total. More than enough for a full-duration test burn plus redundancy. The rest stays here, secured."

Colonel Thompson was already beginning the careful process of preparing the transport containers. Special cases, lined with field generators, monitored constantly. Nothing about this was casual.

"Monday morning," Dr. Ramcharan said, "we leave for Tobago. The team, the engine components, and three containers of the most valuable material on Earth. If everything goes according to plan, by Monday evening we'll have demonstrated a working metallic hydrogen rocket engine in actual flight conditions."

"And if something goes wrong?" I asked.

"Then we learn from it and try again." She looked at the gleaming cylinders. "That's how progress works. Calculated risks, careful planning, and the willingness to fail in pursuit of something that matters."

We stood there in the bright light of Area Four, surrounded by the impossible, preparing to make history in two days.

I thought about Marcus's text. The drift session I'd promised to attend. My old life that already felt distant and small.

I'd try to make it. But I knew, standing there, that something had fundamentally shifted. I wasn't the person who'd knocked on that garage door on Monday morning.

I was becoming someone else. Someone who worked with impossible materials to build impossible engines. Someone who kept world-changing secrets.

Someone who was part of Project PROMETHEUS.

The fire-bringer.

Ready or not, we were about to give humanity the stars.

Character Reference Guide

[META – Personnel Database]

Note: This document exists outside the narrative timeline. Consider it a personnel file, a character roster for those following the logs. Some information may contain spoilers for events yet to unfold.

PRIMARY CHARACTERS

[PROTAGONIST] – “The Blogger”

Age: 22

Role: Apprentice Engineer, T.A.I. Development Team

Origin: Port of Spain, Trinidad

Physical Description: Lean build from years of working on cars. Usually wearing worn jeans, band t-shirts, and work boots. Hands perpetually stained with grease or machine oil. Hair kept short and practical.

Personality Traits: – **Analytical** – Sees the world through physics and systems – **Self-taught** – Never had formal engineering education but learned through necessity and curiosity – **Observant** – Notices details others miss, which makes them good at finding patterns – **Cautious** – Street

racing taught them risk management – **Loyal** – Values their small circle of friends deeply – **Humble** – Doesn't fully recognize their own intelligence – **Curious** – Can't resist a good mystery or puzzle

Skills: Vehicle modification, physics application, technical writing, problem-solving under pressure, understanding of aerodynamics and propulsion

Background: Grew up in East Port of Spain. Started modifying cars at 16. Created *Kinetic Vector* blog at 19. No formal degree, rejected from university due to financial constraints. Works part-time at an auto shop while blogging and racing.

Conflict: Torn between the freedom of street culture and the structure of institutional science. Struggles with imposter syndrome in academic/professional settings.

Dr. Anika Ramcharan – “The Director”

Age: 37

Role: Founder and Director, Trinidad Aerospace Institute

Origin: San Fernando, Trinidad (educated abroad)

Physical Description: Tall, commanding presence. Always in tailored suits (charcoal, navy, or black). Hair pulled back in a precise bun. Minimal jewelry – just a watch. Carries a leather briefcase everywhere. Reading glasses on a chain around her neck.

Personality Traits: – **Visionary** – Sees potential where others see impossibility – **Calculated** – Every move is

deliberate – **Patient** – Willing to wait for the right moment – **Protective** – Guards T.A.I. and its people fiercely – **Mysterious** – Reveals information on a need-to-know basis – **Principled** – Has strong ethics about what science should be used for – **Persuasive** – Can make you believe in things you didn't think possible

Skills: Aerospace engineering (PhD from MIT), business management, political navigation, talent recognition, crisis management

Background: Left Trinidad at 18 for university abroad. Worked at NASA for five years, then SpaceX for three. Returned to Trinidad with a vision and enough funding to make it happen. Founded T.A.I. seven years ago. Keeps her personal life completely private.

Conflict: Balancing secrecy with innovation. Protecting something that could change the world while keeping it hidden from those who might misuse it.

Notable Quote: “*Certain types of innovation require discretion.*”

Marcus Chen

Age: 23

Role: The Protagonist's Best Friend, Street Racer

Origin: Woodbrook, Port of Spain

Physical Description: Stocky build, always in streetwear and sneakers. Baseball cap worn backwards. Vapes constantly (mango flavored). Has a tattoo of a piston on his forearm.

Personality Traits: – **Loyal** – Would back up his friends in any situation – **Skeptical** – Questions everything, especially authority – **Practical** – Grounded in reality, less dreamy than the protagonist – **Witty** – Uses humor to defuse tension – **Protective** – Worries about his friends getting in over their heads – **Streetwise** – Knows the city's underground better than anyone

Skills: Mechanical repair, street navigation, social connections in racing community, reading people

Background: Grew up helping his uncle run a mechanic shop. Learned everything about cars before he could legally drive. Dropped out of community college to work full-time. Has a complicated relationship with authority.

Conflict: Feels left behind as the protagonist moves into T.A.I.'s world. Struggles with whether to be supportive or protective.

Keisha Mohammed

Age: 21

Role: Street Racer, Computer Science Student

Origin: Chaguanas, Trinidad

Physical Description: Petite but fierce. Keeps her hair in braids. Prefers athletic wear. Drives a highly modified Nissan Skyline that's faster than anyone else's car in the scene.

Personality Traits: – **Competitive** – Hates losing at anything – **Intelligent** – Top of her CS program, scholarship student –

Rebellious – Racing is her escape from strict family expectations – **Bold** – Takes risks others won't – **Tech-savvy** – Can hack or code almost anything – **Ambitious** – Has big plans for her future

Skills: Driving (exceptional), programming, computer security, data analysis, quick thinking

Background: From a traditional family that expects her to become a doctor or lawyer. Secretly races to feel free. Maintains a perfect GPA while living a double life. Youngest in the racing crew.

Conflict: Family expectations vs. personal desires. The racing world knows her as fearless, but she's terrified of disappointing her parents.

Connection to Plot: [To be revealed – her computer skills may become relevant]

T.A.I. TEAM MEMBERS

Dr. James Lal

Age: 52

Role: Chief Propulsion Engineer

Origin: Arima, Trinidad

Physical Description: Gray beard, reading glasses, perpetually rumpled lab coat over casual clothes. Coffee mug always in hand.

Personality Traits: – **Brilliant but scattered** – Genius who forgets to eat – **Enthusiastic** – Lights up when discussing rocket science – **Patient teacher** – Loves explaining concepts – **Absent-minded** – Loses track of time and belongings – **Optimistic** – Believes every problem has a solution

Skills: Propulsion systems design, thermodynamics, materials science, teaching

Background: Studied in England, worked on satellite programs in Europe. Returned to Trinidad when Dr. Ramcharan recruited him. Has three cats named after famous physicists.

Gabriela “Gabi” Torres

Age: 29

Role: Systems Integration Specialist

Origin: Tobago (family originally from Venezuela)

Physical Description: Athletic build, curly hair often in a ponytail. Wears practical cargo pants with many pockets. Steel-toed boots. Safety goggles pushed up on forehead.

Personality Traits: – **No-nonsense** – Direct and efficient – **Detail-oriented** – Catches errors others miss – **Tough** – Doesn’t suffer fools – **Fair** – Hard on everyone equally – **Secretly kind** – Shows she cares through actions, not words – **Perfectionist** – If it’s not done right, it’s not done

Skills: Systems engineering, quality control, testing protocols, crisis management

Background: Former military (Trinidad and Tobago Defence Force, engineering corps). Transitioned to aerospace. Lives on Tobago near the testing site. Knows every inch of the facility.

Rajesh “Raj” Patel

Age: 26

Role: Junior Engineer, Materials Specialist

Origin: Chaguanas, Trinidad

Physical Description: Tall, thin, always in band t-shirts under his lab coat. Wears multiple festival wristbands that he never removes.

Personality Traits: – **Laid-back** – Calm under pressure – **Creative** – Thinks outside conventional solutions – **Social** – Connects people, organizes team events – **Curious** – Asks “what if” constantly – **Music obsessed** – Always has earbuds in

Skills: Composite materials, 3D printing, rapid prototyping, CAD design

Background: Studied materials engineering at UWI. Loves soca music and goes to every Carnival. Sees no contradiction between partying and rocket science.

Role in Story: Likely to befriend the protagonist first, helps them integrate into the team.

Colonel Michael Thompson

Age: 45

Role: Security Chief, T.A.I.

Origin: Sangre Grande, Trinidad

Physical Description: Military bearing, short-cropped hair, always in dark tactical clothing. Scar above left eyebrow. Moves with quiet precision.

Personality Traits: – **Vigilant** – Always assessing threats – **Disciplined** – Follows and enforces protocols strictly – **Suspicious** – Trusts slowly – **Professional** – Personal feelings never show – **Protective** – Takes his job of keeping T.A.I. safe seriously – **Intimidating** – Presence alone makes people nervous

Skills: Security systems, tactical operations, risk assessment, surveillance

Background: 20 years in military intelligence. Recruited by Dr. Ramcharan specifically to keep T.A.I. hidden. Lives on-site in the facility.

Conflict: Has to balance security with allowing innovation to happen. Will clash with the protagonist's free-spirited nature.

Maya Chen (née Ramcharan)

Age: 34

Role: Computational Dynamics Lead

Origin: Diego Martin, Trinidad

Physical Description: Resembles her older sister (Dr. Ramcharan) but softer edges. Casual dress – jeans and sweaters. Always has a tablet in hand.

Personality Traits: – **Methodical** – Everything by the numbers – **Warm** – More approachable than her sister – **Brilliant** – Mathematical genius – **Supportive** – Encourages team members – **Anxious** – Worries about every calculation – **Family-oriented** – Loyal to her sister's vision

Skills: Computational fluid dynamics, simulation software, trajectory calculations, data analysis

Background: Followed her sister into aerospace but via pure mathematics. PhD in computational physics. Married to Marcus's cousin (small world). Joined T.A.I. from the beginning.

Role in Story: Bridge between Dr. Ramcharan's intensity and the team's needs. Possible mentor figure.

SUPPORTING CHARACTERS

Leonard “Wrench” Joseph

Age: 58

Role: Master Machinist, Factory Floor Supervisor

Origin: Laventille, Trinidad

Description: Gray-haired, muscular despite his age. Speaks in thick Trini dialect. Runs the manufacturing side of

T.A.I. Knows every machine intimately. Treats the equipment like children.

Traits: Old-school craftsman, perfectionist, tough love teacher, respects skill over credentials

Sonia Rampersad

Age: 41

Role: Administrator / Dr. Ramcharan's Right Hand

Origin: Princes Town, Trinidad

Description: Efficient, organized, knows everything happening in T.A.I. Manages schedules, logistics, and keeps everyone on track. The person who actually makes everything run smoothly.

Traits: Ultra-organized, diplomatic, unflappable, knows everyone's secrets

Isaiah "Zay" Williams

Age: 24

Role: Test Pilot / Systems Operator

Origin: Scarborough, Tobago

Description: Former helicopter pilot. Now operates drones and will eventually pilot test vehicles. Lives for adrenaline. Based at the Tobago facility.

Traits: Fearless, confident bordering on cocky, skilled, lives in the moment

CHARACTER DYNAMICS

Mentor Relationships: – Dr. Ramcharan → The Protagonist (distant but intentional) – Dr. Lal → The Protagonist (enthusiastic teaching) – Gabi → The Protagonist (tough love, respect earned)

Friendships: – The Protagonist ↔ Marcus ↔ Keisha (the original crew) – Raj → The Protagonist (workplace friendship developing) – Maya → The Protagonist (supportive presence)

Tensions: – Colonel Thompson ↔ The Protagonist (security vs. freedom) – Gabi ↔ Raj (perfectionist vs. creative chaos) – Dr. Ramcharan ↔ Outside pressures (to be revealed)

Hidden Connections: – Maya is Dr. Ramcharan's sister – Maya married to Marcus's cousin – Keisha's computer skills may be needed – [More to be revealed as story develops]

NOTES ON CHARACTER DEVELOPMENT

Throughout the story, watch for: – **The Protagonist's** growth from self-doubt to confidence – **Dr. Ramcharan's** walls slowly coming down – **Marcus's** struggle with being left behind – **The team's** acceptance of an outsider – **Secrets** each character is keeping – **Relationships** forming under pressure

The diversity of backgrounds (street racing, military, academia, traditional craftsmanship) creates friction but

also innovative solutions. T.A.I. succeeds because it brings together people who think differently.

End Character Reference Guide

Return to narrative in Chapter 2

Set & Setting Reference Guide

[META – Location Database]

Note: This document exists outside the narrative timeline. Consider it a location reference for understanding the geography and atmosphere of the story. Some details may contain spoilers for events yet to unfold.

TEMPORAL SETTING

Year: 2043

Season: Late dry season transitioning to rainy season (August–September)

Time Period: Most scenes occur at dawn (4–6 AM) or night (10 PM–3 AM)

Technology Level: Near-future. Electric vehicles are common but modified combustion engines still exist in street racing culture. Surveillance networks blanket cities but have exploitable gaps. Space exploration is active but still expensive and exclusive. AI assists with design work but human engineers are essential.

TRINIDAD: PORT OF SPAIN & ENVIRONS

The Garage Tower (Ariapita Avenue)

Type: Multi-level parking structure

Location: East Port of Spain, near Woodbrook

Height: 12 floors

Era: Built in 2030s

Physical Description: - Open-air design with no exterior walls, just waist-high concrete barriers - Each level is approximately 200 feet by 150 feet - Exposed to elements—rain, wind, heat - Concrete pillars every 30 feet supporting the structure - Spiral ramp system connecting floors - Level 7 is the preferred drift spot (highest level with good sightlines, lowest camera coverage) - Yellow painted parking lines long since faded - Graffiti tags on support pillars (mostly street racing crews marking territory) - Oil stains and tire marks everywhere on the upper levels

Atmosphere & Lighting: - **Dawn:** Golden light filtering through, long shadows from pillars, the city waking up below - **Night:** Sodium vapor lights (dim, orange-yellow glow), gaps of pure darkness between pools of light - **Sound:** City noise echoes up—distant soca music, traffic, conversations from streets below. Wind whistles through the open structure. Engine sounds reverberate dramatically off concrete.

View from Level 7: - West: Downtown Port of Spain, Queen's Park Savannah, scattered high-rises - North: Northern Range mountains, dark jungle masses against sky - South: Gulf of

Paria in the distance – East: Residential sprawl mixing with commercial zones – Patches of jungle visible between buildings where vegetation reclaims abandoned lots

Function in Story: – Opening scene location – Represents freedom, street culture, the protagonist's old life – Public space being used for semi-legal purposes – The “surface world” before descending into T.A.I.’s hidden realm

Sensory Details: – *Smell:* Exhaust fumes, ocean salt on the breeze, sometimes food from nearby roti shops – *Feel:* Concrete vibrations from cars, humid night air, occasional rain mist – *Temperature:* Hot and sticky at night (28°C), slightly cooler at dawn

Port of Spain – Street Level

General Atmosphere: – Dense urban environment mixing colonial architecture with modern buildings – Streets narrow and winding in older sections – Constant sound of traffic, horns, music – Street vendors, late-night food spots – Mix of languages (English, Trinidadian Creole, Hindi phrases, Spanish) – Colorful buildings–blues, yellows, pinks–many needing paint – Humidity always present, rain comes sudden and heavy

Key Areas: – **Woodbrook:** Mixed residential/commercial, active nightlife, where the racing scene connects – **East Port of Spain:** More industrial, working-class neighborhoods, auto shops – **Downtown:** Government buildings, business district, more surveillance – **Laventille Hills:** Overlooks city, residential, poorer areas mixed with middle-class

Flora Integration: – Jungle encroaches everywhere—vacant lots become small forests within months – Trees break through sidewalks – Vines climb buildings – Flash floods during rainy season turn streets to rivers – The city feels temporary compared to nature's permanence

The Northern Range

Physical Description: – Mountains running east–west along Trinidad's north coast – Peaks reach 900+ meters – Dense rainforest covering slopes – Waterfalls, hidden valleys, cave systems – Difficult terrain—steep, slippery, impenetrable in places

Atmosphere: – Primordial, ancient feeling – Morning mist rolling down slopes – Howler monkeys calling at dawn – Bird sounds—parrots, toucans, hundreds of species – Temperature drops noticeably in the forest – Light filters green through canopy

Significance: – Represents wild Trinidad, untamable nature – Possible location for hidden facilities – Visual backdrop throughout Port of Spain scenes – Metaphor for the unknown

T.A.I. TRINIDAD FACILITIES

The Hidden Garage – Entry Point

Location: Beneath East Port of Spain, exact address classified

Access: Requires specific route through city streets, easy to miss

Physical Description: – Looks like abandoned commercial parking garage from street level – Rusted metal roll-up door that actually functions – Entrance disguised among similar industrial buildings – Interior: 30 cars can park, mostly T.A.I. staff vehicles – Lighting: Minimal—a few LED strips, lots of shadows – Concrete walls showing age, water stains – Small security booth (Colonel Thompson's domain) – Camera systems disguised as old fixtures – Elevator bay in corner marked “Maintenance Only”

Atmosphere: – Deliberately unwelcoming – Feels forgotten, abandoned – Cold despite tropical heat – Echo of water dripping – Smell of concrete, motor oil, dampness – First moment of “what have I gotten into?”

Security Features: – Biometric scanner (hidden) – License plate recognition – Pressure plates detecting weight – Multiple cameras with night vision – Remote-controlled door locks – Emergency lockdown capability

The Tunnels

Physical Structure: - Hand-carved through bedrock with modern excavation - Roughly 8 feet wide, 9 feet tall - Stretches approximately 2 kilometers - Multiple branches (some dead ends, some leading to other exits) - Slight downward grade then upward to facility

Lighting: - Dim LED strips along ceiling, spaced every 10 meters - Emergency lights (red) at intervals - Long stretches of near-darkness between lights - Shadows move strangely as you walk - Some bulbs deliberately left out to maintain atmosphere

Walls & Surfaces: - Exposed rock in some sections - Poured concrete in others - Water seepage in places—puddles, damp patches - Cables and pipes running along ceiling - Occasional access panels - No graffiti, no signs of public use - Absolutely no cell signal

Atmosphere: - Claustrophobic - Sound of footsteps echoes strangely - Breathing feels louder - Temperature cool and constant (22°C) - Slight breeze from ventilation system - Smell: earth, stone, electrical equipment, metal - Psychological effect: isolation, commitment (point of no return)

Journey Duration: - 15-minute walk at normal pace - Feels longer due to sameness and anxiety - No windows, no sense of outside world

Purpose: - Security through obscurity - Psychological vetting (those who can't handle tunnels don't belong) -

Physically separates T.A.I. from surface world – Emergency evacuation route

The Elevator

Physical Description: – Industrial freight elevator, reinforced – 10 feet x 8 feet interior – Brushed steel walls, rubber floor – Single control panel with biometric scanner – No floor numbers visible, just cryptic codes – Rises approximately 20 floors (though this isn't apparent) – Smooth, quiet operation despite industrial look – Takes 90 seconds to complete journey

Interior Atmosphere: – Clinical, modern (contrast to tunnels) – LED lighting, bright but not harsh – Climate controlled – Slight hum of machinery – Your ears pop from pressure change

Psychological Shift: – Transition from dark/rough (tunnels) to clean/professional (facility) – Moment of anticipation before reveal – Last chance to turn back feeling

T.A.I. Main Facility – Trinidad

Overall Layout: – Built into excavated space underground with some above-ground sections – Total area: approximately 50,000 square feet across multiple floors – Designed like high-end research facility mixed with industrial workshop – Some areas have windows/skylights (disguised from outside) – Central atrium with multiple floors visible

Accessible Areas:

The Lab – Development Space

- Open floor plan, 5,000 sq ft
- Modular workstations with adjustable desks
- Multiple large monitors at each station
- 3D printers, CNC machines, testing equipment
- Whiteboard walls covered in equations and diagrams
- Smell of solder, coffee, ozone from electronics
- Lighting: Bright LED overhead, adjustable task lights
- Temperature controlled (23°C constant)
- Sound: Hum of computers, occasional machine noises, conversation
- Windows showing... something outside (what can you see from underground?)
- Mix of organized chaos—cables everywhere but purposefully placed

The Common Areas

- Break room: Kitchen, comfortable seating, large windows with outside view
- Conference rooms: Glass walled, modern furniture, projection systems
- Hallways: Wide, well-lit, art on walls (abstract, space-themed)
- Bathrooms: Modern, clean
- Small gym/fitness area
- Sleeping quarters for overnight staff (small but comfortable)

Computer Core / Simulation Lab

- Maya's domain
- Server racks humming
- Multiple large displays showing trajectory simulations
- Cooler than rest of facility
- Blue-tinted lighting
- Ergonomic chairs for long analysis sessions
- Constant data visualization on screens

Restricted Areas:

Behind the Explosion-Proof Doors

- Heavy steel doors, 8 inches thick
- Matted/frosted glass windows (12" x 12") set at eye level
- Rubber seals, pressure indicators
- Biometric locks, multiple authentication required
- Warning signs: "Authorized Personnel Only", "Hazardous Materials", "Pressure Testing in Progress"

What You Can See Through the Glass: – Shapes, movements, shadows – Bright flashes occasionally (testing?) – Vague outlines of large equipment – People in protective suits sometimes – Impossible to make out details – Tantalizing glimpses that raise more questions

Speculation on What's Inside: – Propulsion testing chambers – Fuel synthesis labs – High-pressure testing facilities – Classified prototype development – Materials that require isolation – [Will be revealed later in story]

General Facility Atmosphere: – Professional but not corporate – Everyone in casual work clothes or lab coats – Sense of purpose and passion – Long hours normalized – Mix of intense focus and casual collaboration – Music playing from various workstations – Smell of coffee always present – Feeling of being separated from normal world – Pride in secrecy—we're doing something important

Technology Level: – Cutting-edge computers and software – Advanced manufacturing equipment – Some equipment clearly custom-built – Mix of commercial and proprietary tools – Everything well-maintained – Nothing flashy-functional over aesthetic

The Factory Floor – Trinidad

Location: Separate wing, accessible through secure corridor
Size: 15,000 square feet, high ceilings (30 feet)

Layout: – Similar to SpaceX-style facility but scaled down – Central assembly area – Machining section with CNC equipment – Welding and fabrication stations – Materials storage (organized, labeled) – Quality control/testing section – Shipping/receiving bay (connects to hidden loading dock)

Equipment: – Large industrial 3D printers (metal sintering) – Multi-axis CNC machines – Welding robots and manual stations – Composite layup tables – Autoclaves for curing materials – Testing rigs for component validation – Overhead cranes for moving large assemblies

Atmosphere: – Industrial but clean – Smell: Metal, cutting fluid, welding smoke (when active), composite resins –

Sound: Machines running, ventilation systems, occasional impacts – Temperature varies by section (hot near welding, cool near computers) – Bright work lights, shadows under equipment – Safety yellow and black markings on floors – Organized chaos of ongoing manufacturing

What's Being Built: – Rocket engine components – Structural elements – Fuel tanks (smaller test articles) – Avionics housings – Test stands – Components at various stages of completion

Personnel: – Machinists, welders, composite technicians – Quality inspectors – Led by “Wrench” Joseph – Small team (15–20 people) but highly skilled – Pride in craftsmanship – Traditional manufacturing culture

Security: – Cameras everywhere – No phones allowed – Parts tracking system – Limited access even within T.A.I.

TOBAGO FACILITIES

The Testing Ground / Launch Site

Location: Northeast coast of Tobago, isolated area

Access: Private road through jungle, 45-minute drive from Scarborough

Geographical Setting: – Natural cleared area (possibly former plantation or development) – Backs onto dense jungle – Opens to Atlantic coast – Beach access for water recovery

operations - Natural amphitheater formed by hills -
Approximately 100 acres total

Main Launch Pad: - Concrete pad 50m x 50m - Flame trench/deflector system - Fuel storage tanks (protected bunkers) - Cryogenic systems for propellants - Power supply (diesel generators + solar array) - Water deluge system for sound/heat suppression

Control Bunker: - Reinforced concrete structure - 200 meters from pad - Windows facing launch area (thick glass) - Computer systems for monitoring - Communication equipment - Can seal completely if necessary - Sleeping quarters for launch crews

Support Buildings: - Assembly/integration building - Equipment storage - Generator facility - Small living quarters for permanent staff - Workshop for field repairs - Medical station

The View: - **East:** Atlantic Ocean, waves crashing on rocky shore - **West/South:** Jungle-covered hills - **North:** Coastline curving away - **Sky:** Completely open, minimal light pollution - Breadfruit and coconut trees at clearing edges - Seabirds constant presence

Atmosphere - Daytime: - Bright Caribbean sun, intense heat (32°C+) - Ocean breeze moderating temperature - Sound of waves and jungle birds - Brilliant blue sky against green jungle - Salt smell from ocean - Sense of isolation-no other structures visible - Both beautiful and lonely

Atmosphere - Launch Time: - Controlled tension - Checklists being called out - Computer countdowns - Everyone in

positions – Mix of excitement and anxiety – Nature silent before ignition – Then: thunder, light, heat, smoke – Ground shakes – Smell of rocket fuel and exhaust – Watching something you built reach for the sky

Security: – Perimeter fencing (appears agricultural) – Remote location provides security through isolation – Camera systems – Staff live on-site during operations – Cover story: “agricultural research station” – No public roads nearby – Radar and tracking systems

Why Tobago: – Less populated than Trinidad – Closer to equator (better for launches) – Ocean to east (safety for debris) – Jungle conceals activity – Historical precedent (former testing ranges) – Can claim tourism/environmental research as cover

THE JOURNEY: TRINIDAD TO TOBAGO

By Air (T.A.I. Transport)

- Small charter plane or helicopter
- 20-minute flight
- View of Gulf of Paria, coastlines
- Landing at small private airstrip near facility
- Brings sense of scale–T.A.I. operates across both islands

By Sea (Occasional)

- Longer but more discreet
 - Cargo ferry for equipment
 - 3-hour journey
 - Used for large components
-

CONTRAST & THEMES IN SETTING

Public vs. Hidden: – Open parking tower → Underground tunnels – City streets → Secret facility – Legal racing events → Classified testing

Light vs. Dark: – Bright dawn launches → Dim tunnel passages – Neon street lights → Shadowy restricted areas – Open Caribbean sky → Enclosed underground spaces

Natural vs. Built: – Jungle encroaching everywhere → Clean facility interiors – Ocean and mountains → Concrete and steel – Organic Trinidad → Controlled T.A.I. environment

Freedom vs. Control: – Open-air garage → Secured access points – Street culture → Institutional structure – Spontaneous drifting → Scheduled launches

Old vs. New: – Crumbling city infrastructure → Cutting-edge technology – Colonial architecture → Modern aerospace facility – Traditional machining → Advanced 3D printing

SENSORY PALETTE

Trinidad (General): – *Smell:* Exhaust, food (roti, doubles, stew), salt air, rain on hot pavement, vegetation – *Sound:* Soca music, traffic, vendors calling, construction, tropical birds, rain on tin roofs – *Taste:* Spicy food, sweet drinks, dust in the air – *Touch:* Humid air on skin, sweat, hot car interiors, cool AC shock – *Sight:* Vibrant colors, chaotic signage, mix of wealth and poverty, nature vs. urban

T.A.I. Facilities: – *Smell:* Coffee, electronics (ozone), metal, solder, rocket fuel (chemical/sharp), cleaning products – *Sound:* Computer fans, machine tools, ventilation hum, occasional alarms, radio chatter – *Taste:* Recycled air, instant noodles, energy drinks – *Touch:* Cool air conditioning, smooth machined metal, safety equipment texture – *Sight:* LED screens, blueprints, precision equipment, clean lines, warning signs

Tobago Testing Site: – *Smell:* Ocean salt, jungle flowers, rocket exhaust (acrid, overwhelming), fuel vapors – *Sound:* Waves, birds, wind in trees, then: ROAR of engines, thunder of launch – *Taste:* Salt air, adrenaline, exhaust chemicals in the air – *Touch:* Sea breeze, heat from sun and rocket exhaust, vibration in ground and chest – *Sight:* Endless sky, jungle green, ocean blue, then: fire, smoke, ascending light

WEATHER & CLIMATE

Dry Season (January–May): – Hot, 30–34°C – Lower humidity – Clear skies – Better for launches – Dusty conditions

Rainy Season (June–December): – 26–32°C – High humidity (80–90%) – Afternoon thunderstorms – Flash flooding – Launch delays common – Everything slightly damp

Hurricane Season (June–November): – Rarely direct hits but anxiety present – Facility has contingency plans – Operations suspended during threats

TIME PERIODS & LIGHTING

Dawn (4–6 AM): – Golden hour – Soft light, long shadows – City quiet – Best time for drift scene – Symbolizes new beginnings

Morning (6 AM–12 PM): – Harsh tropical sun – Heat building – Normal operations begin – Launch windows

Afternoon (12–6 PM): – Hottest time – Thunderstorms possible – Facility busy – Testing often scheduled

Evening (6–10 PM): – Cooling off – Shift changes – City comes alive – Street racing prep

Night (10 PM–4 AM): – Neon and sodium lights – Underground facility feels isolated – Skeleton crew – When major work happens (quieter, cooler) – Drift scene time

End Set & Setting Reference Guide

Return to narrative in Chapter 2

Chapter Outline

Chapter 1: The Garage Tower

The drift scene at dawn. Dr. Ramcharan appears and makes the offer.

Chapter 2: The Choice

Three days of deliberation. Conversations with Marcus and Keisha. The protagonist researches T.A.I. online (finding almost nothing). The decision to accept. Making the call.

Chapter 3: First Descent

Following Dr. Ramcharan's instructions to the hidden garage beneath the city. The unsettling journey through dimly lit tunnels. The elevator ride up. First arrival at the facility—the surprise that it's mostly above ground.

Chapter 4: Behind Matted Glass

Tour of the accessible areas of the facility. Meeting the full team. The protagonist discovers the four restricted zones with explosion-proof doors—glimpses of something through the matted glass windows. The observation test.

Questions they're not allowed to ask yet. First experience keeping secrets from Marcus and Keisha.

Chapter 5: The Lab

Second day. Real work begins in the development lab with Dr. Lal's team. Introduction to the actual project they're working on. The protagonist's skills are put to the test. Hands-on engineering work.

Chapter 6: The Factory Floor

Access granted to the manufacturing facility. The SpaceX-style layout. Seeing the hardware being built. The scale of the operation begins to reveal itself. Working with Wrench and the machining team.

Chapter 7: Night Shift

Working late at the facility. Bonding with team members. The strange rhythms of life in a secret installation. Neon lights and exhaustion. Something goes wrong - or right - during testing.

Chapter 8: Cleared for Tobago

The announcement: there's going to be a test. The protagonist is invited to witness it. Preparations and the journey from Trinidad to Tobago.

Chapter 9: The Testing Ground

Arrival at the launch site. The beauty of the location – jungle, beach, open sky. The contrast with the claustrophobic facility. Final preparations for the test.

Chapter 10: Ignition

The test/launch itself. Everything the protagonist has learned comes together. The payoff. Success, failure, or something in between.

Chapter 11: After the Fire

Consequences and revelations. What the test revealed. What happens next. The protagonist's place in T.A.I. is cemented – or called into question. Setup for Part Two.

Total: 11 Chapters

Narrative Arc: – **Act 1** (Ch 1-4): Recruitment, Entry, and Discovery – Mystery and disorientation, revealing the facility – **Act 2** (Ch 5-7): Integration and Learning – Understanding the world of T.A.I., hands-on work – **Act 3** (Ch 8-11): The Test – Journey to Tobago, the launch, and transformation

Key Themes: – Surface vs. Hidden (the open garage vs. secret tunnels) – Light vs. Dark (dawn drift scenes, dim tunnels, bright launches, neon nights) – Freedom vs. Secrecy (giving up the blog, entering classified work) – Street Culture vs. Institutional Science (drifting cars to building rockets)