

## Solarcraft

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There is nothing that prepares you for this view.

When training for a spacewalk, you never account for the time you'll be struck still at the blackness pooled around you, incredibly rich and deep compared to pictures. Then you see Earth, and you're above it like an ethereal being, the only blockade being your helmet, and you feel rooted in the universe in a spectacularly new way as if you hadn't always been there.

It's different this way. You're in the thick of it.

Some don't understand the appeal, though. My mother used to beg me not to go to space. Anxieties plagued her sleep about what would go wrong, how I could be hurt, when I would come home. I always did come home. Despite her worries, she came around, because it would be quite hypocritical if she didn't. Afterall, our research sectors intertwined quite deeply. Like mother, like son.

During my seventh spacewalk, I move on quicker, though slowed by the pressure in my spacesuit (every time I hold something it's like squeezing a tennis ball), accompanied by a pressure sinking in my chest. One of deep obligation. Watching the swirls of blue and white around masses of green, millions of lives below me—I feel each one like a bright light, as if they all look towards the sky while I look down in a sharp instant of robust connection.

Peering down, to no avail, I try to scope out where Toronto might be; even where my first apartment was. I can picture it now: a revamped warehouse with a green roof; home to grass, shrubs, trees, flowers, gardens, vines hanging off the sides. It wasn't anything special—most places look like that—but there was a sense of community between the tenants that came from our common areas, the communal kitchens—and I'm shocked no fights were picked over the shared garage, where you'd sign out tools you only use once a year, like snow blowers. I made a lot of friends tending to the community gardens, too. In fact, although I had classes with Sierra Crane in university, we met when I picked premature carrots. She knows more about gardening than me.

I drove my Nissan to my first real job everyday, sometimes stopping to charge it. You'd think I'd be wary of those stations, considering my dad lost his job because gas cars were banned, but he found a new career in solar installation. I mean, I could bike anyway. There's a ton of biking infrastructure, including at my own job, with a slanted, grassy roof in order to ride to any floor.

Mom was the director of a company that provides emerging entrepreneurs/activists with the means to execute their green ideas. Like *Shark Tank* but better. She was involved in co-living, small housing, green roofs, city forests, and renewable energy. She arranged infrastructure to recover from increasing storms in Toronto, including steel buildings—so they can bend, not break—and insulated concrete forms (ICFs), consisting of foam plastic insulating panels filled with concrete. They're quite popular in storm-prone areas, which climate change has, unfortunately, classified Toronto as.

Sierra Crane's place was interesting, too. It was dome shaped, allowing for less air pressure changes to enact a consistent temperature, and the sides were wrapped in thin solar cells.

A lot of that was my mom. No matter where I go, I'll always see parts of her.

She may be the entire reason I'm here. I do know that I have the ability to finish her work, to act as an appendage of her mind and power even after she's gone. That's what I've been attempting for half my life.

"How's it going, Henley? You're quiet," Sierra Crane says from down on the planet. Her voice surrounds me in my helmet.

"Smoothly," I say. "Admiring the view."

"Admire it when you're dead. Don't stall too much."

"Give me a sec. My hands hurt."

"Trust me, I know how hard it can be to hold stuff on a several hour space walk. You'll survive, big boy."

Sierra has always been quite cutthroat (though she's particularly nice to me, believe it or not). She has to be that way to survive. Being the first Black trans woman in space, she had a lot of backlash, but she just says *they're threatened that I'm so smart*. I agree, and wish I could prompt any instigators, "How

do you think we're meant to solve the climate crisis if we stick to one mindset?" I mean, Jesus, who do you think started the industrial revolution? Who are the most corrupt billionaires? The way I see it, millions of people who've never been given the time of day have some brilliant ideas and zeal, and if we want to move forward, we need to accept different worldviews to incorporate unique ideas. At least, that's how Sierra said it in one of her fancy keynote speeches. In fact, she's a prime example, having engineered the equipment that I'm about to inspect. Maybe once she saves everyone by the skin of their teeth, they'll see what I mean.

"Jetpack secured," I say. "Heading to the solarcraft now."

Once I step off the side of the ship, I'm equivalent to a small crumb in an open field. Powering on my jetpack, I fly slowly, then speed up like a hurtling comet. I wonder if anyone down there thinks I'm a shooting star.

Yesterday, Steven Jeong and I detached the ship from the energy converter—large and cylindrical, following the path of the rectenna in solitude—after considering the solar panels to be operative. Energy should be converted to a laser and sent to the rectenna (a rectifying/receiving antenna) to be permuted from electromagnetic energy to electricity, then distributed.

We weren't as efficient as we had perceived, because nothing was transmitted.

Jeong is nauseated and dizzy from the transition; his organs have shifted and slimmed out his waist; fluid traveled to his skull causing a migraine. He'll urinate it out within the next few days, but for now I've offered to be on my own. I have Crane, anyway, always in my ear.

The converter appears in the distance, a tiny spec glinting silver in the great expanse, two solar panels extending. I reduce my speed and skirt towards the main control panel.

"Here, Crane." I open it and shine my headlight onto knobs and wires.

"Good," her voice crackles through the communicator. "Can you see the problem?"

I hook myself to a handle on the exterior of the converter and peer around. "I think so. Oh," I realize, "Jeong worked on this side during the checkup. I should've known in his condition..."

I brought a small number of tools, none tethered since I arrived via jetpack. I extract my digital multimeter with a tight grip, though painful and weak all at once due to the pressure of my suit. Close to attaching it to my sleeve, it slips from my tired grasp and floats upward. I paw at it, pushing it further.

“Oh, Jesus,” I mutter.

Urgently, “What, Hen?”

“Floating multimeter. Hand got tired.”

“Oh, of course.”

“*Sorry.*”

“It’s fine, Jack. Get another one later.”

“I can’t extend this mission any longer.”

“Don’t be stupid. Is there anything else you can do without it?”

“Well, yeah,” I say resignedly. I tweak at the converter, thinking about the lost tool. “Infrared camera looks good,” I mutter at some point.

“Good,” Sierra assures. “Hey—you’re not idling, are you?”

I still. Silently, I power my pack down.

“Jack?”

“Yeah?”

“Are you?”

I swallow past a click of embarrassment. “I was distracted. It’s off now.”

She sighs, but says, “You should have enough fuel. If not, someone will contact Jeong. Trust me; I’m a hard woman to ignore.”

I laugh, slightly wobbly, and shift until I’m facing behind, where the multimeter floats lamely, so tiny I would’ve mistaken it for a faraway star if not for the orange tape.

“I see the multimeter. I’m gonna go and get this over with.”

“Jack. Don’t take too long.”

“Promise.”

I power up and fly out and back, around twenty minutes; a somewhat quiet trip because Sierra is likely annoyed. I power down once I'm tethered to the converter and connect the positive lead to the positive wire, the negative to the negative, checking the open circuit voltage and short circuit current.

"It's looking good now," I say. "I'll start'er up. They're ready, right?"

"Of course. I'm well beyond ready." I hear the grin in her voice.

I activate it and wait, listening to her breathe, listening to my persistent heartbeat.

At Sierra's joyous laugh—the clap of her hands, a resounding "there we go!"—I rest my head against the back of my helmet and my eyes flutter shut. I must've been sweating; the back of my neck is quite slick. The moment is dreamlike, infused with relief, having been anticipated for so long that I am nearly numb.

"Thank God," I sigh. "It's really working."

"You—out." A pause. "Jack? You cut out."

"I'm just happy. Really relieved."

"Relieved? You knew you'd fix it. Anyway, I'm proud of you. I'm s— your mom is, too. You're changing the course of this whole planet. Well, we are. And at the risk o— sounding nice, I'm happy t—here with you, Hen."

Grinning, "Thanks, Sierra. Glad you're here, too. You're cutting out a bit." I wait for a response. "Sierra?"

More wetness on my neck, and I realize it's water, not sweat. Panic rolls through me. I start up my jetpack and untether myself, frustratingly slow, like trying to run in a dream. I repeat Sierra's name. She doesn't answer, and it doesn't sink in for several minutes as I travel away from the converter. Eventually, the silence rings too loud and I'm consumed by a jolt of panic.

My communication system is shot. Probably from my suit's cooling system. It must be malfunctioning; I'm not sure where else this much water could come from. It floats in clear globs; some sticks uncomfortably in my nose.

I have to get to Jeong before sunset.

Before I drown.

I'm so concerned about the water that when my engine stutters to a stop, I'm confused for one blissful moment until I recall the wasted fuel.

First, I think Jeong will come. Then I realize he's probably sleeping. He's too far away, at any rate. Mellowness of shock at my own helplessness pervades me.

Distraction. I think about where the energy will go. The solarcraft persistently generates 2,000 gigawatts of power: 40 times more than an Earth-bound solar panel makes annually. It will light up cold northern places consumed by blackness for months that can't rely on solar power. It can eventually cease fossil fuel production, which I can only pray helplessly will give the Earth a fighting chance to catch its breath.

That only makes me think of home, so I cast my eyes below. The view is sublime and enigmatic, a blaze of brilliant blue, surrounded by darkness nearly too inky for me to perceive. My face numbs as reality ceases to make sense with the profoundness of the moment. Muddled ideas fill my head, gloppy, unintelligible, like the water creeping up my chin. I think mom would be proud, though I screwed up somewhere along this mission. All I've ever wanted to do is finish what she started. Of course I don't do all that I can—I use plastic, I waste electricity and water, I'm not vegan, I binge Netflix—I conform to the majority because that's how you operate in a consumerist world.

But, let's face it: it's not only about what the helpless, albeit empathetic, average Joe does. It's about larger action; something that I've committed to; something that I'm looking down at now, over in the green mass that is Ontario where the CSA keeps the first ever rectenna.

And where—with a final peace of mind—Sierra can take care of things for me.