

A Wonderful Day to Be Alive on Mars

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Description:

This short story touches on what I may be like to live on Mars. And the possibility of making the planet more habitable for humans.

“Your lunch will get cold!” Dee shouted a second time down the hall. I reluctantly put down the flashlight after I pulled my head out of the EVA suit I was examining with it. I walked faster than usual since I knew my crew mates were eating slowly so I wouldn’t be eating alone. It was important to be a cohesive group even when it didn’t seem to matter.

Omar asked, “Almost finished?”

“I wish,” was my tired reply. Their smiles conveyed an optimism that I wasn’t really feeling at the moment. The suit was failing its internal self-test and I was trying my best to figure out why.

We are four humans all living on Mars. Dee is our commander while on the planet. Engineer 1 is Omar. He’s married to Jan, engineer 2. Jan was our commander while in transit from Earth and will be so again when we return. My name is Suzie and I’m at the bottom of the totem pole as engineer 3. Dee and Omar are medical doctors. Jan is a mechanical engineer and I am an electrical engineer.

Dee, short for Demetria, she is Greek and represents the European Space Agency. Omar and I are with NASA. Jan hails from the Pan African Space Agency by way of Nigeria.

Dee and I lived together for several years before we were married. We decided to get married to show we were committed to our relationship enough to meet that part of the stringent criteria for going to Mars. Of course, we can’t take everyone we care about with us, so we spend part of each day reading/sending emails and videos from/to our loved ones.

Dee asked, “Do you need any help?” I pondered what had to be done. She stirred my almost cold tea and patiently waited for a response which I’m sure she knew would be yes.

Who in their right mind would turn down another set of hands and eyes for the task? “Sure, I can always use some help.” I was hoping she would look just as happy after all the wailing and gnashing of teeth that it may take to fix the thing.

And last but not least we have a fifth member of our crew. Harry’s a robot. He’s sort of a mascot. Harry is not referred to as “it”, he is a “he”. Why, we don’t know. That’s just how it is. We brought him to Mars with us. He looks like a larger than usual robotic household floor cleaner. Due to his job, he was already outside roaming the county side looking for the next chosen target.

The original explorers to Mars were confined by stringent planetary protection rules that sort of had them living by clean room standards in addition to just trying to figure out how to survive the unexpected. The constant scrubbing, panic over a small rupture in a piece of equipment, etc. proved to be very stressful and ultimately needless. The first probes and human exploratory expeditions determined there was no active life on the planet. The only signs of life were fossils millions of years old. Martian dirt and dust wasn’t harmful to humans, so there wasn’t too much concern over what was

tracked inside. It was just what got tracked outside that had to be controlled. This led to the space agencies petitioning the United Nations to withdraw their Martian planetary protection mandate. We needed fewer restrictions on a planet that was already a dangerous place to live on.

So concerns about Earthly contamination of Mars unexpectedly went off in another direction. The United Nations wanted us to establish Earth plant life on Mars. They would consume the plentiful carbon dioxide and release much needed oxygen. It may make the planet more habitable. The problem was finding plants that could survive with the decreased sunlight, high ultraviolet levels and cold temperature and that's just the short list. A late night TV comedian proposed planting kudzu. The logic was, if it is such an invasive species here on Earth, it should survive on Mars without much effort. One NASA bigwig was quoted, "Kudzu? We want people to actually want to go to Mars!" Mars' living conditions are so hostile even Kudzu would not survive. It failed all Earthly lab tests. Someone at our going away reception ended their send-off speech with, "And they're going to a place where even kudzu won't live! Let's give them all a big hand!" The applause and laughter were almost deafening.

So all this led to Harry. He may look like a floor sweeper, only he leaves behind a mix of spores, seeds and freeze-dried beneficial bacteria for the plants. He's programmed to go out to local crater bottoms and sow Earth life. The crater bottoms are moister than the rest of the area around our base. The botanists thought we should have at least some algae by now. But like Jan observed, "They're trying to duplicate Martian conditions in their labs, but we're living in the real deal."

We also have other living members of our team. They are crickets, beetle larvae, you get the drift. We farm them for our protein. They are kept in what's called the bug room. It's hard to get attached to something you're going to eat.

Everything we eat and drink has been recycled or fed something that's being recycled. So we try not to look too hard at what we're eating or be too critical about how the tea tastes that day. And you're more likely to do that if you're eating by yourself. Lunch was crispy crickets with a dusting of some nice blend of spices. The one with a little extra coriander. If anyone told me I would be living like this I would have never completed my NASA astronaut application.

Omar got up from the table to tend to the bug room judging from the direction he went.

Jan excused herself to go through Mission Control's latest data dump and prepare our outgoing transmission back to them. I glanced at the latest We Are Here and You Are There chart and we were close to being on the other side of the Sun from Earth. We use communication satellites that keep us in contact with the Earth even when the Sun blocks our direct access to Earth. Both satellites are spaced on each side of the Earth along its orbital path in a stable place called a Lagrangian Point. It's a celestial mechanics thing. Our satellites are called LSAT4 and LSAT5 for Lagrangian Points L4 and L5. The bottom line is we can always communicate with Jack and his Mission Control team. It takes about half an hour for the messages and data to get from one end to the other. I was hoping for a video from my brother's family.

We also have a satellite orbiting Mars. It can warn us if a sand storm is coming our way or help us navigate when we're far from our home base.

Dee and I worked on the suit's sensor. I did not want to have to scrap it and go into the spares. Spares and everything else we have from Earth are worth their weight in gold times a million. And when you need something even if it's trivial there's no corner hardware store to go to. Everything was pulled out of the suit and it all looked like a chaotic mess. I could see Dee trying to look calm. It would be the same look I would give her if I was assisting with one of her heart surgeries. Not that I ever did. Then I found the problem and fixed it. After we carefully got the suit back together and the self-test passed. It was time to celebrate in a geeky sort of way, of course.

I looked up at Dee, "Let's take it for a spin."

"Let's go."

I wore the repaired suit while Dee wore another. There were some high winds last night so I could see Harry's fresh tracks for the day more easily. I pointed to the tracks, "Dee," I got her attention, "Let's follow Harry." She laughed and so we headed up the ridge to a neighboring crater. I was pleased the suit was performing as expected.

After a few years we didn't really pay much attention to where Harry went. We just made sure he came back and he always returned to his charging station. If he needed more mixture we would oblige him. He only released a few tablespoons of his mixture each day and it over about a square yard in a moist location that he hadn't been to before. Theoretically he would get to all promising locations within two miles of our base.

Half way up the incline Dee pointed to the horizon, "Phobos and Deimos, symmetrically arranged one over the other. It must be good luck. It's good luck. Let's get a good luck photo when we get to the top."

"Uh, we are talking Mars here. There's not much luck unless it's the bad kind."

"Stop being a stick in the mud!" OK, I was being a stick in the mud. And we hurried because we both knew Phobos would have already moved a little out of that perfect alignment by the time we got to where we were going.

Once we reached the top of the ridge I took a spectacular photo of the two moons. They were light purple and red. After that I looked around for Harry. That's when I heard Dee excitedly babbling something in Greek I couldn't understand. I just knew it was Greek. I thought she was having a stroke or a touch of vertigo or something. She was steady on her feet and pointing down into the crater. That's when I noticed she was pointing to what looked like from our vantage point to be small patches of green at the bottom of the crater! Harry, you old son of a gun! You did it!

What a wonderful day to be alive on Mars!