# Battlestar Erratica

The Drake Equation estimates that there could be a million civilizations in the Milky Way.
This is one of them:
In our galaxy, there is a lush blue-green world similar to our own. As we pause in its orbit, we see the lights of cities and superhighways. A railgun flings a supply cart into orbit, en route to one of several offshoot bases in the asteroid belt.

At first glance, this world seems more advanced and prosperous than ours.

For reasons that are not clear, the scientists of this world (they are beings similar to us) were slow to define and understand the periodic table of elements, the atoms, the protons and neutrons and electrons. Perhaps there was a fear of religious heresy, or the dangers of the atomic bomb kept these matters secret from the average researcher, or without dense metals like lead it was difficult to safely and accurately study radiation. Whatever the cause, their understanding of the electron suffered. When it seemed vacuum tubes and relays could not be made fast enough, it took an international Manhattan Project to finally discover the transistor.

Within a few years, one of these inventors described what we know as Moore's Law - every 18 months, the performance of computer chips would double. The international partnership, now known as the Computerists, poured their efforts into meeting and exceeding expectations.

Softly, in conference hallways and late-night diners, the Computerists began to contemplate the future. There was the exponentially and endlessly growing economy for every kind of mobile, wearable, and embeddable computer, for social networks for every soul, their kids and their pets, for data centers storing livestreams of their newly prosperous lives…. but what could follow the transistor... what functional thing could come after building with single atoms?
On our own planet, we have a few ideas, but the Computerists had none.

And then, three-hundred-and-two years ago today, they reached the end of the line.

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The sun shines faintly on a potato-shaped asteroid the size of a shopping mall. It tumbles too quickly for comfort of its occupants, so there are no windows. Its crew tends to an index of nearby unmanned asteroids' contents. Recent census results and tax returns. Sleep records of billions of humans, via a corporate partnership. An archive of mathematical proofs written by the Compression Committee (who had once promised that they could store and process the world's data, and backups). The machines are constantly running and cataloguing these datasets, and others, and responding to requests from their home planet and other stations scattered across the solar system. A child aboard longs for a blue sky and green grass that her parents could never afford.

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It hadn't taken long for the Computerists to set up a satellite network, and then to explore more exotic locations for lesser datasets. In space they could safely mine higher-quality fission and solar power; they could vent heat into space without warming the atmosphere. Meanwhile they did their best to destroy and strip the old data, such as dead people's social media profiles. But the health ministries needed their data records to predict healthy lifestyles and medical treatments. The literati rediscovered old works which needed a turn in the spotlight. Each bit became politically unfeasible to delete and physically impossible to keep.

It was one of the early media networks that taught the Computerists about control. The project chairman was sitting down to dinner when an aide apologized that none of his favorite shows were available. The crew of a satellite, the "Tin Kettle Band", demanded a fair wage and crew rotation; they had suffered to provide the world with streaming media. And they would provide the paywall code to their neighbors if their demands were not met.

For months, the Computerists agonized over resolutions and compromises. The old guard of scientists had never considered independent profitability or collective bargaining before. As more satellites toyed with their managers, a new regime swept in. With surgical application of pay raises, telephone surcharges, and extreme violence, the militia calmed this rebellion. Secretly they began working on the next phase.

During a crew change, the Militia overwrote data on each of their satellites. There was nothing wrong, they explained. Each dataset contains a small amount of corrupted bytes and necessary errors, and was therefore worthless in isolation. Going forward, the Erratica Centers in each country would be the gatekeepers for all authoritative data, as only they would know which numbers were right and wrong.

Secretly though, the Militia knew an Erratica Center was too valuable a target. They could be robbed of their data, and some were. The Militia feared their satellites could drop disks from space and destroy them by kinetic bombardment, delegitimizing their datasets but ultimately shifting power. Before that could happen, the Militia built a new impenetrable spaceship and sent it into a solar orbit perpendicular to their own. It is called the *Battlestar Erratica*.

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On the bridge of the aging *Erratica*, the top officers are celebrating the completion of a full-text search. Each remote station has had a deputy assigned to the *Erratica,* dismissing and verifying potential matches in their distorted version of the text. Given the limitations of communication at planetary distances, the depth of each archive, and cold storage on more distant moons, this search has taken eight years.

The ship's commander is pleased. He does not mention to the crew one of the ongoing searches, whose classified criteria complicate each step. The actuaries estimate it will take a full generation to return results.

The commander stops to shake hands with a new crew member. Joining the crew of the *Erratica* is the highest honor a bureaucrat can receive. As he walks down the corridor someone is decoding distress calls from a deep space scout and deciding where to allocate memory for it. In another room, a jammed printer is being nurtured back to health by a team of technicians in surgical masks. He reassures a despondent secretary that she will not be penalized for a late timesheet.

A private videochat channel has been set up in the commander's office. The militia leaders have staged a ceremony with eight-year-olds at a model elementary school. The commander delivers the executive summary of the search, something about the geological security of each asteroid and moon to host more data.  Some do not have adequate solar power, or have chemicals and acidic atmospheres which would dissolve their computer chips. The next colonization missions are ranked, and the dark side of the moon is a viable option.

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On the unnamed potato-asteroid that we saw earlier, the child sees the news and asks how a question and answer can be older than her.
One of her parents is trained as a therapist for nearby colonists. Each time he asks a question, he smiles as he waits for the videocall signal to bounce three asteroids over. Later when he tucks in the girl for the artificial night, he whispers, "my friend had the same question as you."

Her parents wait for her to go to sleep before opening their new supply crate. Inside are more frozen dinners, more water-recycling plants. Tucked into a panel, they find it, a mem-disk with a scrawl reading "flipped bits: tape 6/8". It goes directly in a high-up kitchen cabinet. There is no one visiting, but it seems prudent to hide. They clamber up to an airlock where there is just enough room to watch together the miniature sun streak across their horizon.

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The End

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