S03E12 - The End of the ISS (and What Comes After)

The Multiverse Employee Handbook - Season 3

The Multiverse Employee Handbook has this to say about the International Space Station, as observed from a dispassionate cosmic perspective:

It is a small structure, as galactic constructions go, but is the heaviest thing humans have ever intentionally kept from falling back to Earth. It was assembled piece by piece over thirteen years by a species that had, until quite recently in cosmic terms, been primarily occupied with hitting each other with progressively more sophisticated sticks.

The occupants wear coloured patches on their clothing, denoting tribal affiliations that apparently matter a great deal on the planetary surface below. These patches represent nation-states — administrative divisions that have historically provided humans with reasons to distrust, compete with, and occasionally launch projectiles at one another. The rivalries are extensive. The grievances stretch back generations. The arguments about whose territory is whose have consumed considerable portions of human history and most of their 24 hour cable news programming.

And yet.

Somehow, improbably, five of these tribal factions agreed to build a shared structure in low Earth orbit and inhabit it together. Continuously. For twenty-five years.

The observation logs note several remarkable features of this arrangement. Humans who could not agree on borders, trade policies, or whose fault various historical conflicts were, successfully agreed on oxygen ratios, waste recycling protocols, and whose turn it was to fix the toilet when it malfunctioned — which was often. Crew members whose governments were engaged in pointed diplomatic disputes on the surface shared meals, celebrated each other's holidays, and learned to sleep in adjacent compartments without incident.

One crew member — from the faction denoted by a red maple leaf, a tribe known primarily for politeness, hockey, and apologising for things that weren't their fault — once performed a musical composition on guitar while floating in the observation cupola. The song was about an astronaut who becomes disconnected from his spacecraft, which would seem a poor choice of subject matter given the circumstances. The other tribal representatives did not object. Several appeared moved.

The Handbook finds this encouraging.

Not because the structure itself is impressive by cosmic standards — it is, frankly, modest. A civilisation capable of genuine interstellar presence would not pause to admire it. But because of what it represents: evidence that this species, despite considerable evidence to the contrary, can occasionally set aside the things that divide them when presented with a sufficiently interesting shared project and the sobering proximity of hard vacuum.

For twenty-five years, humans who disagreed about nearly everything on the ground agreed about nearly everything in orbit. Whether this reflects the clarifying influence of seeing their planet as a single fragile marble, the practical necessities of shared life support, or simply the fact that arguments about historical borders seem less urgent when you're travelling at 28,000 kilometres per hour — the Handbook cannot determine.

What can be determined is this: the experiment worked. Against reasonable expectation, it worked.

The structure is now aging. One tribal faction has only committed to participation through 2028, while the others have committed through 2030. There are leaks. There are cracks. The maintenance costs have exceeded projections. The tenants are preparing to depart, and the structure itself will be guided into a remote ocean, where it will cease to exist in any functional sense.

But for one brief moment in the cosmic timeline, members of a fractious species looked up from their disputes, built something together in the void, and made it work.

The universe has taken note. There may be hope for them yet.

You're tuned into The Multiverse Employee Handbook.

Today, we're exploring the end of humanity's most improbable collaboration — the International Space Station.

For twenty-five years, it has circled Earth every ninety minutes, hosting crews who proved that nations with nuclear weapons pointed at each other could nonetheless share a water recycler and agree on whose turn it was to run on the treadmill.

It is a structure roughly the size of a American football field, continuously

occupied since November 2000 — which means there has been at least one human permanently off-planet since the era when the internet still made dial-up noises and people genuinely believed the millennium bug might end civilisation. The millennium bug did not end civilisation. Humans did, however, spend the next quarter-century demonstrating they could cooperate on something genuinely difficult, which may have surprised even themselves.

And now, with considerable planning and approximately 1.5 billion dollars' worth of controlled descent, the ISS is being retired.

Not because the experiment failed. If anything, because it succeeded so thoroughly that everyone assumed it would simply continue forever — which is not how orbital mechanics, or metal fatigue, or international funding agreements actually work.

We'll examine what this orbital outpost achieved beyond the photographs: four thousand experiments that couldn't happen anywhere else, science that required humans to float. We'll explore why five space agencies are guiding their greatest achievement toward a watery grave in the most remote stretch of Pacific Ocean. And we'll ask what comes next — now that low Earth orbit is transitioning from international commons to commercial real estate.

Because the era of the shared orbital project is ending. What follows involves more corporate logos and considerably more subscription fees.

The universe, one hopes, is still paying attention.

But first, gather 'round the decommissioning committee conference table, my cosmically-observed colleagues, for a tale that would make even Chris Hadfield put down his guitar and question the long-term viability of interspecies optimism about human cooperation.

In the fluorescent-lit realm of Quantum Improbability Solutions, specifically in the Department of Legacy Asset Retirement (which existed in a superposition of "critically important" and "chronically underfunded"), the Square-Haired Boss was having what could charitably be called a contractual euphoria crisis.

It had started, as these things often do, with a press release that arrived with all the subtlety of a controlled atmospheric reentry.

QIS had just been awarded an \$843 million contract to deorbit the International Collaborative Orbital Platform — humanity's grandest achievement in peaceful

cooperation, now scheduled for retirement. Twenty-five years of continuous habitation. Four hundred twenty metric tons of scientific legacy. And QIS was going to crash it into the ocean.

The Square-Haired Boss was beside himself with excitement, though not for reasons related to aerospace engineering.

"Do you know who we're partnering with?" he announced at the all-hands meeting, his geometric hair achieving angles that suggested religious experience. "Dax Rincewind. The Dax Rincewind."

A quiet groan rippled through the senior engineering staff.

Dax Rincewind was the founder of Rincewind Aerospace, Rincewind Tunnels, Rincewind Social, Rincewind Electric Aviation, and briefly, a cryptocurrency for dolphins that had somehow achieved a twelve-billion-dollar valuation before anyone thought to ask what dolphins would buy. He had seven children, each named after Greek letters and minor spacecraft components. He posted cryptic memes at 3 AM that moved markets. He had never, to anyone's knowledge, completed a sentence about orbital mechanics without pivoting to Mars.

He arrived ninety minutes late, wearing sandals.

"First principles," Dax said, by way of greeting. He spoke for eleven minutes about the nature of gravity, mentioned Mars four times, compared the deorbit contract to the invention of fire, and then left before questions.

"Visionary," breathed the Square-Haired Boss.

Senior Engineer Martinez excused herself to the bathroom, where she would remain for some time.

The trouble began three days later, when Dax's actual proposal arrived. It was written on a napkin. Photographed. Posted to social media. Retweeted fourteen thousand times before anyone at QIS had read it.

The plan was elegant in its simplicity: crash the station into Greenland.

"Ice absorbs impact," the napkin read. "Natural refrigeration preserves debris. Charge tourists to visit. \$800 billion opportunity. First principles."

Julia, the intern, was assigned to verify the calculations. She was in her third week. She had a functioning grasp of orbital mechanics and, crucially, a world map.

"There's a problem," she told the Square-Haired Boss, forty-eight hours later.

"Problems are just opportunities in disguise."

"Fifty-seven thousand people live in Greenland."

"I'm sure Dax has accounted for that."

"The napkin says, and I quote, 'Greenland empty, all ice, no people, free real estate.'"

"Perhaps he means spiritually empty."

"It also confuses kilometres with miles. The debris field calculation is off by a factor of—"

"Julia." The Boss deployed his patient smile. "Dax operates beyond conventional analysis. He sees connections we don't. That's why he's a visionary and we're..." he gestured vaguely at the office, "this."

Julia went back to her desk. She stared at the napkin photograph. She thought about the twenty-five years of international cooperation currently orbiting Earth at seventeen thousand miles per hour. She thought about the astronauts who had called it home — from twenty-six countries, speaking different languages, sharing meals and experiments and the peculiar intimacy of watching sixteen sunrises per day together.

She thought about Greenland.

Then she called a journalist.

The story broke the following morning: "TECH BILLIONAIRE'S PLAN TO CRASH SPACE STATION INTO POPULATED TERRITORY." The napkin went viral. Within hours, it had become a meme format. People were photoshopping it onto historical disasters. Someone put it on a t-shirt.

The Square-Haired Boss called an emergency meeting.

"This is unfortunate," he said, not looking at Julia.

Dax, appearing via video link from what appeared to be a submarine, was unperturbed.

"Greenland was Phase One," he said calmly. "Phase One is always controversial. That's how you know it's visionary. Phase Two is the real plan."

He shared his screen. A new napkin appeared.

"ORAC," Dax announced. "Orbital Retrieval Apparatus, Catcher-class. We don't crash the station. We catch it."

The diagram showed what appeared to be an enormous baseball mitt in orbit.

"We catch it," Dax repeated, "and we bring it down gently. Display it somewhere inspiring. I'm thinking my property in Texas. Charge admission. Educational. Ecological. First principles."

"How large would this mitt need to be?" asked Martinez, who had returned from the bathroom with the haunted expression of someone who had seen too much.

"Approximately the size of Luxembourg."

"And the materials?"

"That's what R&D is for."

"The propulsion requirements alone would—"

"First principles, Martinez. First principles."

The Square-Haired Boss was nodding vigorously. "I think we can all agree this represents exactly the kind of innovative thinking that attracted us to this partnership."

Two weeks later, QIS received \$2.3 billion in government grants for ORAC research and development.

Congressional hearings praised the ingenuity of the private sector. The Boss was photographed shaking hands with senators. Dax posted a meme comparing critics to people who doubted the wheel.

Julia's leak was memory-holed as a "miscommunication during iterative design processes." Her internship concluded with a performance review that read "meets expectations" and a letter of recommendation that praised her "enthusiasm for regulatory compliance."

The napkin, meanwhile, was auctioned for charity. It sold for \$4.2 million to an anonymous buyer who turned out to be Dax himself.

And somewhere, four hundred kilometres above the Earth, the International

Collaborative Orbital Platform continued its slow, steady orbit — passing over borders that meant nothing from that altitude, crewed by humans who had figured out how to live together in a metal tube the size of a football field, completely unaware that its retirement was now in the hands of a man who believed Luxembourg was an appropriate unit of measurement for spacecraft.

The universe, as always, declined to comment.

And that brings us to the fascinating science behind humanity's most ambitious flatshare — and its most expensive eviction notice.

Unlike Gravity, where Sandra Bullock watches the ISS get shredded by debris, or Armageddon, where space stations exist primarily to explode photogenically, the International Space Station is ending the way most long-term leases do: with structural concerns, rising costs, and a landlord who's decided not to renew.

Let's talk numbers, because the ISS earned them.

Four hundred twenty metric tons of pressurised modules, solar arrays, and accumulated human ambition, orbiting at roughly 28,000 kilometres per hour. It's the size of an American football field. It's been continuously occupied since November 2nd, 2000 — over twenty-five years of humans living off-planet without interruption. Two hundred ninety individuals from twenty-six countries have floated through its hatches. They've conducted more than four thousand experiments and produced over forty-four hundred research publications — everything from protein crystallisation to how flames behave in microgravity to what happens to the human spine when you remove gravity from the equation. The answer, incidentally, is that you get slightly taller and considerably more concerned about your vertebrae.

So why are we crashing it into the ocean?

The short answer is entropy. The ISS was originally scheduled for decommissioning in 2015. It's now 2025, and certain components are older than some of the astronauts servicing them. The Zvezda module — that's the Russian segment providing life support and propulsion — has been leaking air since 2019. Not dramatically. Not catastrophically. Just persistently, in the way that a very old house settles and creaks and occasionally reveals new and exciting gaps in its structure.

Metal fatigue accumulates. Micrometeorite impacts add up. Seals degrade. The station has been through over a hundred and fifty thousand orbital sunrises, each

one a thermal cycle of heating and cooling that slowly, patiently weakens every joint and weld.

Then there's the cost. NASA spends approximately three to four billion dollars per year just to keep the lights on and the air breathable. That's not science funding. That's maintenance. And when your maintenance bill could finance several uncrewed missions to interesting moons, the accountants eventually start asking difficult questions.

The plan is controlled deorbit around 2030. SpaceX has been awarded an \$843 million contract to build the U.S. Deorbit Vehicle — essentially a very expensive tugboat that will guide four hundred twenty metric tons of international cooperation to its final destination: Point Nemo.

Point Nemo is the oceanic pole of inaccessibility — the point in the Pacific Ocean furthest from any land, roughly 2,500 kilometres from the nearest human settlement. It's where spacecraft go to die. The seafloor there is littered with the remains of Mir, Progress cargo ships, and various other objects that outlived their usefulness but were too large to burn up completely on reentry. It's the universe's filing cabinet for things that served their purpose.

Science fiction prefers its space stations destroyed dramatically — by aliens, by war, by HAL deciding the crew has become inconvenient. The ISS gets the most bureaucratic ending possible: a scheduled retirement, with paperwork, contracts, and international agreements about who's responsible for which piece of falling debris.

When we return from this brief orbital decay, we'll explore how five space agencies managed to build the most complex international project in human history — and actually made it work. We'll examine what "commercial space stations" really means for the future of low Earth orbit. And we'll ask the uncomfortable question: when the ISS comes down in 2030, will there be anything up there to replace it? Or will humanity, for the first time in a quarter century, find itself without a permanent address in space?

Welcome back, my decommissioning-aware colleagues!

I hope you've spent the break updating your own orbital evacuation plans. Remember: if your lease is ending and your landlord has contracted someone to crash your home into the Pacific Ocean, you're entitled to at least thirty days' written notice. Possibly more if your home weighs four hundred twenty metric tons and requires international treaty negotiations to move.

The International Space Station exists because two empires collapsed into cooperation.

In the late 1980s, the United States was developing Space Station Freedom — Reagan's answer to Soviet orbital dominance, a grand American outpost that would demonstrate capitalist engineering superiority. Meanwhile, the Soviet Union was planning Mir-2, the successor to their remarkably successful Mir station, which had been hosting cosmonauts since 1986 and proving that humans could live in space for extended periods without entirely losing their minds.

Then the Soviet Union dissolved, and everything changed.

Russia suddenly had world-class space expertise and absolutely no funding. America had funding and a space station design that kept ballooning in cost and complexity. The solution was elegantly pragmatic: merge the projects. Take Russian experience with long-duration spaceflight, American resources and shuttle capability, and add Europe, Japan, and Canada for good measure. Call it international cooperation. File the paperwork. Launch the modules.

The first piece went up on November 20th, 1998 — Zarya, a Russian-built module funded by the United States, which tells you everything you need to know about how complicated this arrangement was going to be. Two weeks later, the Space Shuttle delivered Unity, the American node that would connect to Zarya. Astronauts literally bolted two former Cold War rivals together in orbit.

Continuous human occupation began November 2nd, 2000, when Expedition 1 arrived: Bill Shepherd, an American Navy captain; Yuri Gidzenko, a Russian Air Force colonel; and Sergei Krikalev, a Russian engineer who had the distinction of launching as a Soviet citizen and returning as a Russian one because the country changed while he was in space. That's the kind of career trajectory the ISS enabled.

What followed was the largest construction project ever attempted off-planet. Forty-plus assembly missions. Multiple launch vehicles — Space Shuttles hauling massive truss segments, Russian Protons and Soyuz rockets delivering modules and crews. Canadarm2, the robotic arm that would become essential for construction, was itself a masterpiece of international engineering. Five space agencies, three major languages, entirely different engineering traditions and safety philosophies — and somehow, over two decades, they built a structure the size of a football field that has kept humans alive continuously for twenty-five years.

Let that sink in. A quarter of the world's current population has never lived in a world without humans in orbit. If you're under twenty-five, there has always been someone up there, looking down, running experiments, fixing toilets, and watching sixteen sunrises every day.

The technical achievement is staggering. Forty-three modules and major elements, depending on how you count. Orbiting at roughly four hundred kilometres altitude, completing one lap around Earth every ninety minutes. Crews of typically seven, drawn from the partner nations, sharing meals and research and the peculiar intimacy of a workspace where "going outside" requires a spacesuit and several hours of preparation.

But here's the thing about building the most complex international project in human history: it ages.

The primary structure — modules, radiators, the massive truss that holds the solar arrays — was never designed to last forever. The oldest components have now been in space for over twenty-six years, enduring thermal cycles, micrometeorite impacts, and the constant low-level radiation of the space environment. Metal fatigues. Seals degrade. Things that were state-of-the-art in 1998 are now older than many of the engineers monitoring them.

The Zvezda module has become the poster child for this problem. Air leaks were first detected in 2019 — small, manageable, the kind of thing you monitor and mitigate. By 2024, the leak rate had doubled. NASA elevated it to the highest level of risk in June of that year. Crews now routinely close hatches between the US and Russian segments during sleep periods, a precaution that would have been unthinkable in the early days of the partnership. Russian cosmonauts have found cracks in the Zarya module — the very first piece launched, the foundation of everything that came after.

The corporate analogy writes itself: it's an office building where the landlords can't agree on renovation budgets.

Russia has committed to the partnership only through 2028. The United States, Europe, Japan, and Canada have extended through 2030. The geopolitical tensions following Russia's invasion of Ukraine have strained the relationship considerably — these are nations that can barely speak to each other on Earth, yet their astronauts and cosmonauts continue sharing meals and life support systems four hundred kilometres up.

That cooperation hasn't broken. Not yet. But no one is planning to extend it further. The ISS is ending not because anyone wants it to, but because the metal is

tired, the money is needed elsewhere, and the political will to maintain a Cold War reconciliation project has quietly evaporated.

The most remarkable international collaboration in human history is winding down the way most collaborations do: not with a bang, but with a maintenance schedule that everyone agrees has run its course.

It is worth noting that while the ISS as a whole is being retired largely because its oldest modules are tired, cracked, and slowly leaking atmosphere, Russia's plan is not to discard those components — but to reuse them. The current architecture for Russia's post-ISS station relies heavily on modules already in orbit, including systems that have spent decades enduring thermal cycling, micrometeorite impacts, and the slow, patient emergence of hairline fractures that no one particularly likes to talk about.

From a purely engineering perspective, this is ambitious. From a budgetary perspective, it is understandable. And from a historical perspective, it is entirely consistent: Russian spaceflight has always favoured extending the useful life of hardware well past the point where others would replace it, provided it can still be monitored, patched, and persuaded to hold pressure. The Handbook observes that this approach has worked before — Mir flew far longer than intended — but also notes that "still operational" and "new beginning" are not, strictly speaking, the same thing.

NASA has a new strategy for low Earth orbit, and it can be summarised in four words: stop owning, start renting.

The Commercial Low Earth Orbit Destinations program — CLD, because everything in aerospace requires an acronym — represents a fundamental shift in how America approaches human spaceflight. Instead of building and operating stations, NASA wants to become a customer. Buy services. Rent laboratory time. Let private companies handle the overhead, the maintenance, the endless headache of keeping humans alive in vacuum.

To stimulate this market, NASA has invested over four hundred million dollars in private station development. The theory is elegant: seed the industry, create demand, then step back and let capitalism do what capitalism does. The practice is considerably messier.

As of late 2025, four major contenders are racing to replace the ISS. Each has a different approach, different timeline, and different probability of actually existing when the ISS comes down.

Axiom Space, based in Houston, is the frontrunner. They're not waiting for the ISS to retire — they're attaching to it first. Their Payload Power Thermal Module is scheduled to launch in 2027 and dock directly to the station, essentially building their commercial outpost while the ISS is still operational. When deorbit happens, Axiom detaches and continues independently. They've already flown private astronaut missions to the ISS, proving they can get paying customers to orbit. Their partner is Thales Alenia Space, the Italian firm that built half the ISS modules, so they're not exactly improvising.

Then there's Vast, the dark horse. Their Haven-1 demonstration mission is planned for May 2026 on a Falcon 9 — a small, single-module station designed to prove the concept before scaling up to Haven-2. What makes Vast interesting is their design philosophy: they've recruited Peter Russell-Clarke, formerly of Apple, to work on the interior. The aesthetic goal appears to be "what if the iPhone were a space station." Whether astronauts need minimalist design sensibilities at four hundred kilometres altitude remains an open question, but it's certainly a different approach than the cable-festooned interiors we're used to.

Starlab represents the most international of the American-led efforts. It's a partnership between Voyager Space, Airbus, and Northrop Grumman — American entrepreneurship backed by European aerospace expertise. Their plan is ambitious: a single large module launched on SpaceX's Starship, targeting 2029. If Starship's development stays on track — a significant "if" — Starlab could be operational just as the ISS retires.

And then there's Orbital Reef, the Blue Origin and Sierra Space collaboration that promised to be the "mixed-use business park in space." Their concept includes inflatable LIFE habitat modules, which would expand after launch to provide more interior volume than rigid structures can offer. It's genuinely innovative technology. Unfortunately, progress has lagged behind competitors. Their stated 2027 goal looks optimistic to observers who define optimism as "believing something will happen despite mounting evidence to the contrary."

Here's the problem: timing.

NASA's own Inspector General has warned that commercial stations likely won't be ready until well into the 2030s. The ISS is scheduled for deorbit in 2030. Do the arithmetic, and you get what aerospace professionals delicately call a "capability gap" — a period when the United States has no space station access at all.

During this gap, China's Tiangong station — operational since 2021, continuously crewed, and notably not inviting American astronauts — would become the only permanently occupied outpost in low Earth orbit. The nation that was excluded

from ISS participation due to congressional restrictions would, by default, become the sole operator of human orbital infrastructure. The irony writes itself.

The deorbit itself is a precisely choreographed operation. SpaceX won the contract in June 2024 — up to \$843 million for the U.S. Deorbit Vehicle, essentially a heavily modified Cargo Dragon with six times the normal propellant capacity and forty-six Draco thrusters. Total program cost, including launch, is estimated at \$1.5 billion. That's the price of a controlled ending versus an uncontrolled one.

The sequence begins in mid-2028, when ground controllers start lowering the station's orbit using a combination of atmospheric drag and thruster burns. The USDV arrives in mid-2029, docking to provide the final push. In 2030, the station makes its last orbit, engines fire, and four hundred twenty metric tons of human achievement begins its terminal descent.

The structure will break apart in three stages during reentry. Most of it will burn — the heat of atmospheric compression vaporising decades of work in minutes. Some debris will survive: dense components, engine bells, structural nodes. These will fall into Point Nemo, the spacecraft cemetery, joining the remains of Mir and hundreds of other objects that served their purpose and had nowhere else to go.

A few items may be saved before the end. NASA has discussed preserving symbolic artefacts: the ship's bells, mission logs, perhaps the panels covered in patches from every expedition. Tokens of what was accomplished before the accountants and the entropy had their say.

But here's what can't be preserved: the model itself.

The ISS represented collective ownership. Five agencies, fifteen countries, shared investment and shared access. It wasn't perfect — the partnership was strained, the politics were complicated, the bathroom situation was apparently a recurring source of international tension — but it was ours. Humanity's outpost. A place where Russian cosmonauts and American astronauts and European, Japanese, and Canadian crew members figured out how to live together because the alternative was not living at all.

What comes next is different. Commercial stations will be privately owned. Access will be purchased. NASA will buy services the way it buys launch services — as a customer, not an owner. The romantic era of the shared orbital homestead gives way to the practical era of the low Earth orbit business park. Please swipe your badge. Mind the subscription terms. Your laboratory module rental is due on the fifteenth.

There's nothing inherently wrong with this. Commerce has driven human expansion before. The Dutch East India Company wasn't a charity. The transcontinental railroad wasn't built for the poetry of it. Private enterprise can maintain infrastructure, drive innovation, reduce costs.

But something is lost when international cooperation becomes commercial competition. When "we all live here" becomes "we rent space from the same landlord." When the symbol of post-Cold War reconciliation is replaced by the symbol of quarterly earnings reports.

The ISS proved that former enemies could share life support systems. That nations who pointed nuclear weapons at each other could build something together that neither could build alone. That was worth more than the science, more than the technological development, more than the national prestige.

Whether the commercial stations can replicate that spirit — or whether they'll even try — remains to be seen.

The business park is coming. The question is what we're leaving behind.

Well, my orbitally displaced colleagues, we've reached the end of another quantum decommissioning notice.

Today we've learned that in the multiverse of human spaceflight, every space station exists in a superposition of "vital international symbol" and "aging infrastructure liability" until someone checks the maintenance budget.

We've discovered that the International Space Station — humanity's greatest collaborative construction project, a football-field-sized testament to what happens when former enemies decide to share a bathroom instead of pointing missiles at each other — is ending not with dramatic destruction but with paperwork, contracts, and a controlled descent into the most remote patch of ocean we could find.

Four hundred twenty metric tons of achievement. Twenty-five years of continuous human presence. Two hundred ninety people from twenty-six countries who looked down at a planet without borders and somehow resisted the urge to comment on the irony. All of it scheduled for retirement because metal fatigues, seals leak, and the accountants eventually win every argument.

Though I suspect somewhere in the quantum foam of reality, there's a universe

where international partnerships don't expire, where space stations get renovated instead of deorbited, and where a corporation like Quantum Improbability Solutions isn't contracted to catch four hundred twenty metric tons of history in a mitt the size of Luxembourg.

We don't live in that universe. We live in this one, where the most successful international collaboration in human history is being replaced by a business park, and where the gap between "ISS comes down" and "commercial stations go up" is being described with phrases like "capability gap" and "acceptable risk" by people who will not personally be affected by either.

The ISS proved something important: that humans can cooperate when the stakes are high enough and the vacuum is close enough. That Russians and Americans and Europeans and Japanese and Canadians can share meals, share research, share the peculiar terror of being separated from death by a few centimetres of aluminium, and emerge from the experience as colleagues rather than rivals.

What comes next may be more efficient. It may be more sustainable. It may be better for quarterly earnings and shareholder value and all the other metrics we've decided matter.

But it won't be the same.

Some things can't be monetised. Some achievements can't be replicated by subscription service. And some symbols, once they fall into the Pacific Ocean, don't come back.

Want to explore more quantum corporate chaos? Visit us at multiverseemployeehandbook.com, where you'll find the latest science news, deep dives into orbital economics, and our newest blog series: "Point Nemo: A Retirement Community for Things That Served Their Purpose."

And if you've enjoyed today's atmospheric reentry into melancholy, why not share it with a fellow gravity-bound observer? Perhaps you know someone who's never lived in a world without humans in orbit and might want to appreciate that fact before it potentially becomes temporary. Spread our signal like debris across the South Pacific — controlled, intentional, and landing exactly where the calculations said it would.

This is your quantum-coherent correspondent, reminding you that in the multiverse of human achievement, we're all just temporary structures orbiting a ball of rock, trying to maintain pressure integrity while the universe patiently waits for our seals to degrade.

And somewhere in low Earth orbit, Dax Rincewind is still sketching space stations on napkins, the Square-Haired Boss is still nodding enthusiastically at concepts that violate physics, and Julia the intern has moved on to a job where her concerns are occasionally acknowledged — though she still flinches whenever someone mentions Luxembourg.

The ISS, meanwhile, continues its slow, steady orbit. One lap every ninety minutes. Sixteen sunrises per day. Astronauts and cosmonauts sharing dinner in a metal tube that their governments can barely discuss on Earth.

For now.