

# S02E28 - NASA and the Cosmic Tragedy of Apollo 18–20

## The Multiverse Employee Handbook - Season 2

### Welcome & Cold Open (2 minutes)

HOST: Welcome back, my gravitationally-abandoned lunar enthusiasts! I'm your quantum-cancelled mission coordinator, simultaneously launching and scrubbing missions across infinite bureaucratic timelines. You're tuned into "The Multiverse Employee Handbook" - the only podcast that treats your space exploration dreams like a corporate quarterly budget review: full of ambition, starved of funding, and cancelled just when things get interesting!

Speaking of launches, I'm delighted to report that Quantum Improbability Solutions has just announced our new "Cosmic Heritage Preservation Initiative" - a partnership with space museums across the United States to help maintain their collections of horizontally-displayed rockets and astronaut memorabilia. All QIS employees now receive discounted family tickets to visit these magnificent monuments to cancelled ambition, because nothing says "team building" like staring at Saturn V rockets that were built to reach the Moon but ended up reaching the gift shop instead.

Our automated response system has been particularly enthusiastic about this development, having calculated that viewing cancelled spacecraft increases employee productivity by 23% while simultaneously reducing their expectations of project completion by 47%. It's currently organizing field trips to see the very rockets that should have launched Apollo 18 through 20, though HR has requested we stop referring to these outings as "Pilgrimage to the Graveyard of Dreams."

Meanwhile, our executives have implemented "Project Momentum Conservation" - their revolutionary new policy where all cancelled initiatives now exist in quantum superposition until the budget committee observes them. The theory being that if no one looks directly at the cancellation notice, the project continues existing in a parallel conference room somewhere, possibly with better catering.

But today, dear listeners, we're diving into the ultimate bureaucratic tragedy: when trained professionals, assembled hardware, and detailed plans all fall victim to the most destructive force in the known universe - spreadsheet entropy. That's right, we're exploring Apollo missions 18 through 20, where astronauts trained for three years to walk on specific lunar craters, only to discover that bureaucracy travels faster than rocket ships and hits harder than lunar impacts.

—

HOST: Gather 'round the quantum mission control, my cosmically-cancelled colleagues, for a tale that would make even Wernher von Braun question his career in rocket science. I present to you: "The Phantom Launch Window" - a story about why some missions should remain theoretical, especially when they've been simultaneously approved and cancelled by the same budget committee.

In the fluorescent-lit realm of Quantum Improbability Solutions, specifically in the Lunar Development Division (which existed in a superposition of "fully funded" and "emergency budget review"), Mission Planner Jenkins was having what could charitably be called an Apollo-sized monumental crisis.

It had started, as these things often do, with what seemed like a routine memo from the Interplanetary Projects Department:

SUBJECT: MISSION STATUS UPDATE - APOLLO 18-20 INITIATIVE!!!

FROM: SpaceOperations@QuantumImprobabilitySolutions.com

TO: All.MissionPlanners@QuantumImprobabilitySolutions.com

Team!

Exciting news! Our Apollo 18 through 20 program is proceeding exactly as planned:

- Crew training: 98% complete
- Landing site surveys: Finalized
- Hardware assembly: Advanced stages
- Launch window: Optimally calculated
- Budget approval: [ERROR: FILE NOT FOUND]

Please proceed with full mission readiness while we resolve this minor administrative quantum fluctuation!

#MoonBound #LunarSuccess **#BudgetSuperposition**

Jenkins stared at his mission timeline, which showed three fully-trained astronaut crews, detailed geological surveys of Copernicus Crater, and a Saturn V rocket that existed somewhere between "ready for launch" and "lying sideways in a museum."

That's when the Square-Haired Boss materialized beside his desk, his hair

maintaining perfect cubic geometry despite violating several NASA safety protocols.

"Jenkins!" he announced with the enthusiasm of someone who'd never had to explain mission cancellations to trained astronauts. "I need a status update on our lunar initiatives. The board is very excited about our progress!"

"Well, sir," Jenkins began carefully, "we have Commander Gordon and his crew completing their final geological training. They've memorized every crater on their landing approach, practiced sample collection protocols, and can navigate lunar terrain better than most people can find the office coffee machine."

"Excellent! What about hardware?"

"The Saturn V is fully assembled and ready for transport to the launch pad. The lunar module has passed all systems checks. The rovers are calibrated for extended 20-kilometer exploration ranges."

"Perfect! And the mission timeline?"

Jenkins hesitated. "That's where things get... quantum, sir. According to our latest budget projections, the mission was cancelled last Tuesday. But according to our crew training schedule, we're launching next month. The paperwork exists in both states simultaneously."

The Boss nodded sagely, as if this made perfect sense. "Ah, the old Schrödinger's Mission scenario. Have you tried not observing the budget reports?"

Before Jenkins could explain that willful ignorance wasn't actually a valid mission planning strategy, the office's quantum communication system crackled to life.

"Mission Control, this is Commander Gordon. We're completing our final EVA simulation and... wait, are we still going to the Moon?"

Jenkins looked at his supervisor, who was already pulling up what appeared to be a multidimensional budget spreadsheet that folded reality into origami patterns of fiscal responsibility.

"Tell him we're experiencing a temporary launch window fluctuation," the Boss suggested. "Very common in quantum space exploration."

"Sir," Jenkins said, watching his screen display three years of intensive astronaut training dissolving into bureaucratic entropy, "we have crews who've dedicated their lives to walking on Copernicus Crater. We have scientific instruments

designed to unlock the Moon's geological history. We have technology that could establish permanent lunar bases by the 1980s."

"And?"

"And it's all being cancelled by... what appears to be a memo from Accounting about 'fiscal thermodynamics' and 'budgetary conservation of energy.'"

The Boss studied his quantum spreadsheet, which was now displaying budget projections across seventeen parallel timelines. "Well, there's good news and bad news. The good news is that in at least three universes, the missions are proceeding as planned. The bad news is that we're not in any of those universes."

Jenkins watched as his carefully orchestrated mission timeline collapsed into a superposition of "what could have been" and "what the budget committee observed into nonexistence."

"Sir, what do I tell Commander Gordon?"

"Tell him," the Boss said, closing his laptop with the finality of a launch scrub, "that in the multiverse of human ambition, every cancelled mission continues somewhere."

And somewhere in the quantum foam of possibility, he's still walking on the Moon, Tang is still the beverage of champions, and '24-hour Moon TV' is broadcasting live from Copernicus Base."

Jenkins looked out his office window, where he could swear he saw a Saturn V rocket existing in the superposition between "ready for greatness" and "museum exhibit."

And somewhere in the parallel conference rooms of bureaucracy, three missions that should have rewritten history were filing their final reports in the cosmic equivalent of Storage Room B, right next to humanity's dreams of lunar colonization and a sign that read: "Budget Permitting."

--

HOST: And that brings us to the fascinating science behind humanity's greatest case of premature celebration. Unlike most bureaucratic projects, the Apollo program actually worked - spectacularly, repeatedly, and with the kind of precision that would make our quarterly forecasting team weep with envy.

Apollo 11 was the global sensation that proved we could land humans on another

world and bring them back alive, which honestly set the bar pretty high for subsequent achievements. But the real scientific revolution came with Apollo 12 through 17 - the missions everyone forgot about because, apparently, walking on the Moon becomes routine after you've done it once.

Apollo 12 landed with pinpoint accuracy next to an old Surveyor probe, proving that lunar navigation was more reliable than finding your car in a mall parking garage.

Apollo 14 brought us the first lunar geology field trip, complete with sample collection that would make any corporate team-building exercise look pathetic. Apollo 15 introduced the lunar rover - essentially turning Moon exploration into the universe's most expensive road trip, complete with 18 miles of off-roading and no cell phone coverage.

Apollo 16 tackled the lunar highlands, Apollo 17 discovered orange soil that wasn't actually orange, and by then NASA had turned lunar exploration into something resembling actual science rather than just really impressive tourism.

But Apollo 18 through 20? These were supposed to be the graduate courses in cosmic geology. Apollo 18 was assigned to Copernicus Crater - a 58-kilometer impact site that promised to reveal secrets of lunar formation like the world's most expensive archaeological dig. Apollo 19 would have explored the lunar highlands in unprecedented detail, while Apollo 20 was headed to the mysterious Marius Hills to investigate what appeared to be lunar volcanism.

These missions weren't just moon walks with better equipment - they were planning extended stays, nuclear-powered observatories, and reconnaissance for future lunar bases. Essentially, NASA was about to transform from a space tourism agency into a lunar real estate development company.

When we return from this brief orbital mechanics coffee break, we'll dive deeper into the specific science projects that died with these missions, meet the astronauts who trained for landings that never happened, and explore how budget cuts can cancel dreams faster than gravity can pull objects toward planetary surfaces.

Because sometimes the most important scientific discoveries are the ones that never get to happen, especially when they're cancelled by committees who think Tang is still cutting-edge space technology.

---

HOST: Welcome back, my gravitationally-grounded groundlings! While you were

away, our automated response system has been calculating alternate timelines where cancelled projects actually happened. Spoiler alert: in universe #47,291, we never stopped going to the Moon, and by now lunar real estate would be more expensive than Manhattan penthouses. Though apparently in that timeline, they're still arguing about office temperature control in the Copernicus Base break room.

Meanwhile, executives at Quantum Improbability Solutions have been fermenting some new ideas about what they're now calling "Project Completion Probability Matrices." They've discovered that by never officially cancelling anything, projects exist in a productive superposition of "ongoing" and "abandoned" until someone from Finance observes the quarterly reports. Though I should note this has led to some confusion in the parking garage, where three different lunar rover prototypes are currently competing for the same space.

HOST: Now let's dive into the magnificent tragedy of what we lost when bureaucracy met the cosmos. Apollo 18 through 20 weren't just lines on a budget spreadsheet - they were fully-realized missions with trained crews, assigned destinations, and hardware so real you could literally trip over it in NASA warehouses.

Take Richard Gordon, Apollo 18's commander. While most of us were learning to operate the office electric typewriter, Gordon was mastering lunar geology, practicing sample collection techniques, and memorizing the topography of Copernicus Crater with the dedication of someone who actually expected to walk there. He spent three years training for a mission that would be cancelled before he ever left Earth's atmosphere - which is rather like meticulously learning to play the kazoo for an intergalactic orchestra that turned out never to have existed, except the kazoo cost billions and the orchestra was supposed to be on the Moon.

Copernicus Crater itself was the geological equivalent of winning the cosmic lottery. A 58-kilometer-wide impact site formed by an asteroid that hit the Moon with enough force to make our budget meetings look like polite disagreements. Scientists hoped Gordon's crew would uncover secrets of the Moon's impact history and crust formation - essentially turning astronauts into cosmic archaeologists with really expensive shovels.

But here's where it gets beautifully absurd: the hardware was real. Saturn V AS-515, destined for Apollo 20, was fully assembled and ready for transport. It currently lies horizontally in the Kennedy Space Center like a 363-foot metaphor for human ambition meeting fiscal reality. Imagine spending three years building the perfect presentation slide deck, only to have it cancelled and turned into office decoration.

The lunar modules weren't theoretical either. LM-13 through LM-15 were built,

tested, and ready to land on alien soil. These weren't prototypes or concepts - they were functional spacecraft capable of delivering humans to specific coordinates on another world. It's like having a fleet of company cars parked in the garage, fully fueled and ready to drive to important meetings that will never happen because someone in Accounting decided transportation was "too expensive."

And the crews! These weren't backup dancers waiting in the wings - they were fully-trained lunar explorers. Conrad, Gordon, Bean, and their colleagues had mastered everything from geological sample collection to EVA procedures. They could navigate lunar terrain better than most people can navigate our office building after the quantum renovation. They were ready to extend human presence on the Moon from brief visits to extended scientific expeditions.

It's the corporate equivalent of assembling a crack team of experts, outfitting them with cutting-edge gadgets, and tasking them to save the company - only to realize the entire building was accidentally sold to a cat sanctuary three months ago.

--

HOST: But the real tragedy isn't just what we lost - it's what we could have gained. Apollo 18-20 weren't just repeat performances of earlier missions; they were the advanced graduate courses in lunar exploration, complete with technology that sounds like science fiction even by today's standards.

These missions would have featured extended lunar rovers capable of 10-20 kilometer expeditions - essentially turning the Moon into humanity's largest field laboratory. Instead of the 27 hours total that Apollo 17 spent on the surface, these missions were planned for extended stays with multiple sample sites. It's like the difference between a quick coffee break and a comprehensive quarterly planning retreat, except the conference room is on another celestial body.

The planned lunar nuclear stations represent perhaps the most audacious energy expansion in human history. RTG-powered long-term surface observatories that would have monitored lunar seismic activity, mapped the Moon's internal structure, and possibly established deep-space communication relays. Imagine setting up branch offices that run on nuclear power and serve as cosmic customer service centers for the entire solar system.

And then there's the helium-3 mining reconnaissance - which in 1970 was like planning to harvest unicorn tears for energy production. Helium-3, deposited on the lunar surface by billions of years of solar wind, could theoretically power fusion reactors with minimal radioactive waste. Apollo 20 was going to scout for these

deposits, essentially conducting the universe's most expensive geological survey for an energy source we still can't properly use fifty years later. It's like our IT department planning server infrastructure for quantum computers before anyone figured out how to build quantum computers.

But perhaps the most prescient concept was the far-side radio telescope proposals. Scientists realized that the Moon's far side, naturally shielded from Earth's radio noise, would be perfect for deep-space astronomy. They envisioned deploying radio telescopes that could observe the universe without interference from our planet's electromagnetic chatter - creating the cosmic equivalent of a noise-cancelling headphone for the entire universe.

This isn't just historical speculation. NASA's current Artemis program is essentially a greatest hits album of Apollo 18-20 concepts: modular lunar bases, extended surface mobility, far-side astronomy, and resource utilization. As of this broadcast, due to the recent budget restraints at NASA, Artemis is delayed but isn't fully cut. We are finally catching up to plans that were shelved when Nixon was president and our office's automated coffee machine was still purely theoretical.

It's like discovering that your company's current "innovative" strategic plan is actually just a slightly updated version of proposals from the 1970s, except instead of revolutionizing quarterly reports, we're talking about establishing permanent human presence on another world.

So what killed these missions? The official answer is fiscal constraint - Vietnam War costs, domestic spending priorities, and the classic corporate excuse of "budget reallocation to more immediate concerns." NASA's budget peaked at 4.5% of federal spending in 1966, then plummeted to less than 1% by 1975. It's the organizational equivalent of cutting the R&D department the moment your product starts working.

But the deeper truth is more unsettling: we lost interest. By Apollo 14, television networks were cutting away from lunar landings to show regular programming. The American public had achieved the impossible dream of walking on another world, then collectively changed the channel like it was just another rerun. It's perhaps the most human response imaginable - turning humanity's greatest achievement into background noise faster than our automated response system processes help desk tickets.

The real tragedy wasn't just budgetary mathematics or public apathy - it was the loss of momentum itself. Apollo 18-20 represented the difference between visiting the Moon and inhabiting it, between tourism and colonization, between proving we could get there and proving we could stay there. We cancelled not just three missions, but an entire future timeline where lunar bases would have been routine



by 1980, where helium-3 mining might have solved Earth's energy crisis, and where the far side of the Moon would already be humanity's premier cosmic observatory.

In some ways, the cancellation of Apollo 18-20 created a fifty-year delay in human space exploration - a cosmic coffee break that lasted longer than most people's entire careers. We're just now developing the technology and techniques that should have been routine by the Reagan administration, in a timeline where "Live from Copernicus Base" would have been as normal as your morning weather report.

And before you think we've learned our lesson about bureaucratic entropy versus cosmic ambition, consider NASA's current budget reality. The agency's 2025 budget request of \$25 billion represents less than 0.5% of federal spending - a far cry from Apollo's peak funding levels. Recent congressional proposals have targeted cuts to Earth science missions, delayed the Europa Clipper launch, and scaled back Mars sample return operations.

The Artemis program, originally promised to return humans to the Moon by 2024, has been pushed to the late 2020s while facing the same budgetary quantum mechanics that killed Apollo 18-20.

We're watching history repeat itself in real-time: just as we're developing the technology for permanent lunar habitation, sustainable Mars exploration, and revolutionary space telescopes, the same fiscal forces that turned Saturn V rockets into museum displays are threatening to transform our current space renaissance into another fifty-year intermission.

It's like having learned nothing from the cosmic tragedy of the 1970s, except this time the cancelled missions won't just delay lunar bases - they could postpone humanity's expansion into the solar system until our office coffee machine achieves consciousness and files its own budget proposal.

---

HOST: Well, my gravitationally-grounded dreamers, we've reached the end of another quantum exploration into the space between ambition and reality. Today we've learned that in the multiverse of human space exploration, every cancelled mission exists in a superposition of "what could have been" and "what the budget committee observed into nonexistence" until someone opens the filing cabinet marked "Strategic Priorities."

We've discovered that Richard Gordon trained for three years to become the commander of a mission that exists only in parallel timelines, though I suspect

somewhere in the quantum foam of possibility, he's still collecting samples from Copernicus Crater while Tang remains the official beverage of lunar colonization.

We've explored how Saturn V rockets can simultaneously represent humanity's greatest technological achievement and the world's most expensive horizontal museum displays, depending on your perspective and proximity to congressional appropriations hearings.

Most importantly, we've learned that the most destructive force in the universe isn't black holes, gamma ray bursts, or even our automated response system during quarterly performance reviews - it's the tendency to cancel ambitious projects just when they transition from impossible dreams to inevitable realities.

Want to explore more cosmic bureaucracy and the intersection of rocket science with spreadsheet mathematics? Visit us at [multiverseemployeehandbook.com](http://multiverseemployeehandbook.com) where you'll find fascinating space policy analysis, deep dives into cancelled missions across multiple timelines, and our latest blog series: "From Apollo to MSR: A Field Guide to Missions That Never Were."

And if you've enjoyed today's journey through the graveyard of cosmic ambition, why not share it with a fellow space enthusiast? Perhaps you know someone who's experienced the peculiar sting of preparing for greatness that never comes, or who's wondered what would have happened if we'd kept going to the Moon instead of treating it like a one-time corporate team-building exercise.

Spread our signal like helium-3 deposits across the lunar regolith! After all, our marketing department (recently rebranded as the "Interplanetary Outreach Division") has calculated that without new listeners, we're at serious risk of being cancelled faster than Apollo 18-20, and frankly, the universe has enough horizontal monuments to human ambition.

This is your quantum-superposed mission coordinator, reminding you that in the multiverse of space exploration, we're all just trying to find the perfect launch window before bureaucratic entropy transforms our rockets into tourist attractions.

Remember: somewhere in the cosmic conference rooms of possibility, Apollo 18 is still landing at Copernicus Crater, lunar bases are celebrating their 45th anniversary, and the far side of the Moon is broadcasting the universe's most popular radio astronomy show. Though I should note that in at least three of those timelines, they're still arguing about the office temperature control in the Copernicus Base break room.

