

0027: Confirmation

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November third, 2148.

That was the morning, barely past four am, that the first signals from the probes returned to Earth. They had reached Pluto, and after six long months, the first data was being relayed back to us.

I was at the ESA observation room in Noordwijk, one of perhaps fifty scientists and officials crammed into a space designed for half that number. Everyone either had coffee in hand or their cup resting on a surface in front of them. The air was thick with tension and stale breath. Six months after launch, after the longest wait of my life, the probes had finally reached Pluto orbit. Or close enough that they could begin sending data back to us that we could use.

Everyone was waiting with bated breath as the first signals came in, the first scans of Pluto and Charon with hastily crafted technology designed to locate Element Zero. The signals coming into us now were taken by the lead probe hours ago.

The holographic links to NASA, CNSA, and the other space agencies were all active. Even though for some it was late at night, none were silent. No one was prepared to be anywhere else but at one of the centres that would gain access to the probe's data. No one wanted to miss the opportunity to be there when history was made.

Yet only I knew exactly what was about to be revealed.

Real-time communication was impossible at this distance. Four to six hours for signals to travel each way. We weren't watching events unfold; we were watching echoes of events that had already happened, hoping the probes had survived long enough to tell us something.

The first images that came in were low resolution. Even with the signal being bounced through the handful of deep-space satellites and stations, it was the best we could hope for. Even so, everyone could make out the twin dwarf planets.

As the data from the sensors came in, the image of Charon shifted. Everyone held their breath, waiting for confirmation. Everyone but me.

“Spectral analysis coming through,” Dr Larsson announced. Her voice was tight with barely contained excitement. “Element Zero signatures confirmed. Massive concentrations in Charon. Hard to tell how large. Too much ice has accumulated over it. Early estimates are its kilometres long.”

The room erupted in whispered conversations. Element Zero. Not trace amounts, not the refined samples we'd found on Mars. A massive core of the substance, shaped and structured by design.

Already, I could hear the whispers of excitement and disbelief. For hundreds of years, Earth had believed Charon was the twin of Pluto. Two dwarf planets marked the outer reaches of the Solar System. Today, that idea was shattered. It wasn't a planet. It was the technology the Protheans had used to travel the galaxy.

A Mass Relay.

I allowed myself to smile, to enjoy the moment. Inside, I marked off another step on the path that led into the Reaper's trap. Another movement forward that brought us into their view.

If we could have avoided finding it for a few hundred years, we might have avoided this cycle. We might not have stepped into a galaxy on the verge of being harvested. Of being converted into Reapers. Of the cycle beginning over again.

We weren't that lucky.

Slowly, more detailed data streamed in from the probes. The second and third ones now adding their readings to the first, adding layers to the picture that was taking shape before our very eyes.

"It matches," Dr Vetter said, his voice hushed. "The patterns in the Prothean data. The star charts. This is what they were pointing us toward."

"A transportation device," Dr Yamamoto added. "The architecture suggests it's designed to facilitate faster-than-light travel. The Element Zero core, the structural configuration... It's consistent with what we've theorised about relay technology."

"A relay," I said, my voice cutting through much of the noise. "Designed to allow us to somehow shift our mass to another star system."

The name would be found soon enough. No reason not to borrow the honour of naming it first.

"Indeed," Dr Chen agreed through the holographic image of NASA control in Houston. "A Mass Relay."

The exacts of how it worked were still missing. Two theories existed based on what had been translated from the Prothean ruins on Mars. Mass Effect propulsion or a low-mass tunnel. Even I wasn't sure. The games never focused on that. Simply that it worked.

Until it didn't.

Even as more data filtered in, even with it being days before the second three probes reached a range to begin scanning, questions flew across the room. How do we activate it? What's on the other side? How old is it? Who built it? Why was it hidden as a moon? The excitement was palpable, infectious. Humanity stood on the brink of something unprecedented.

As they all moved around, analysing the data, congratulating each other, discussing what the future held, I slipped back. I stood apart from it, watching.

Unlike them, I knew exactly what this meant.

Eight years, ten at the outside. That was what this meant. Eight years until First Contact with the Turians became more than a date in my memory. Eight years until humanity stumbled into a galaxy that had been waiting for us. Eight years until the war that would shape our species' place in the cosmos.

Eight years until humanity understood for certain that the galaxy was not a safe place. That danger was lurking out there, waiting to attack us, weaken us, devour us.

And they'd only think that meant the Batarians, the renegades and outlaws in the Attican Traverse, or the Geth.

There was nothing I could do to stop the broad strokes of the next decade from playing out as they had in the games.

The relay would be activated. Humanity would go through. Would expand. Would stumble into Turian territory during the activation of a dormant relay, an act forbidden by Citadel law we didn't yet know existed.

And then the shooting would start.

I needed to influence defence development starting now. Every day counted. Every insight I could provide, every framework I could develop, every seed I could plant. All of it would matter when humanity faced its first interstellar war.

"You don't seem surprised."

I turned to find Dr Wilhelm Hartmann, director of the operation centre, had moved closer while everyone spoke.

"Should I be?" I kept my voice level. "The Prothean data was clear. A transportation network. Routes between stars. We knew something was out here."

“Knowing and confirming are different things.” He studied my face. “Most of us are still processing the implications. You look like you've already moved on to the next problem.”

“There are always next problems,” I said. “This discovery changes everything. We need to start planning for what comes after.”

“After the relay,” he said. “You're already thinking about what's on the other side.”

“Someone has to.”

More data would come through over the following days. With the ice over the Relay, it was going to take time to examine the structure. Longer due to the large quantities of Element Zero at its core. By my calculations, though, it would interfere with all current sensors and scanners we had. That we had enough to at least confirm its presence was impressive. A fact unlikely to have occurred without the Prothean guidance.

It would take weeks, if not a month or two, before the decision was made to try to activate the relay. Getting it to do so would, I suspected, cause the ice built up around it over tens of thousands of years of inactivity to break away.

Activation wouldn't be a challenge. Enough had been translated and decoded from the ruins to make clear how it should work. The issue, beyond whether we should activate it, was when and how.

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Two weeks. That was all it took. Half a month before the decision to send the first probe close enough to activate the Relay was taken.

There had been debate, of course. Caution urged by some, boldness by others. But in the end, the scientific imperative won. We had six probes in orbit around Pluto, designed for exactly this purpose. We had activation sequences derived from Prothean data. We had the opportunity to learn what lay beyond.

It approached the surface of Charon on the seventeenth of November. Along with others, I watched the time-delayed feed as it came in. Waiting, watching, hoping that the Relay would activate. That it would send the probe somewhere in the galaxy.

The Arcturus system. I knew that. No one else did.

When the probes had moved near Pluto, there'd been an air of expectancy in the observation centre. Today, the tension was different. We knew the Relay was there; we knew how to activate it. The question was whether we could use it, and what would happen when we did.

"Probe One is entering the relay's effective range," Dr Larsson reported. "Initiating approach protocol."

The relay responded. Energy signatures spiked on our displays, the massive Element Zero core awakening after fifty thousand years of dormancy. Ancient machinery stirred to life, recognising the approach patterns we'd derived from Prothean records.

"Relay has activated. Energy buildup consistent with theoretical models." Larsson's voice was steady, professional. "Probes Two through Six are reporting massive shattering of Charon's surface."

I chuckled. It wasn't a surface. It was an accumulation of ice over tens of millennia. Still, it was hard for even the best and brightest not to slip into familiar patterns at times.

Time dragged on. The ice cracking slowly. Faint, blurred, unfocused images of the Relay coming through.

People gasped at seeing it emerge. Watching it wake like it was emerging from a cocoon. They knew what it was. Had seen the images and data in the Prothean files. This was different. This wasn't ancient history. This was the gateway to the future.

"Probe One is... It's accelerating. The relay has engaged." Dr Larsson reported after nearly thirty minutes of waiting.

A flash on the display. A spike of energy.

And then silence.

"Signal lost," Dr Yamamoto announced. "Probe One's telemetry has terminated."

The room held its breath. Lost could mean many things. Destroyed by the relay. Transported beyond communication range. Equipment failure. We wouldn't know which until we sent more probes.

I knew the truth. As usual, I remained silent. Humanity had to learn why for itself.

"Proceeding with Probe Two," Dr Vetter ordered after a long moment.

Time ticked away as the second probe moved closer to the Relay. The giant ball of blue was glowing brightly now; it was active once more.

The same sequence. Approach. Activation. Energy spike. Flash.

Silence.

Probe Three. Same result. Probe Four. Probe Five. Each one approached the relay, triggered the activation sequence, and vanished without a trace. No signals returned. No data transmitted back through the relay.

The room went quiet. Not the excited silence of anticipation, but the heavy silence of uncertainty. We had sent five probes through an alien device and received nothing in return. Only one probe remained.

I looked around at my colleagues. Faces that had been bright with excitement now showed worry. Fear. The universe had suddenly become larger and more unknowable. The relay worked, presumably, but whatever lay beyond it was cut off from us. Unreachable by conventional communication.

“Either the probes were destroyed,” Dr Larsson said slowly, “or they’re beyond communication range. Either way...”

“Either way, we don’t know what’s on the other side,” Dr Vetter finished. “We need to send people. It’s the only way to know.”

I said nothing. This was exactly what I’d expected. What I’d warned about. The relay worked—I knew that from my memories. The probes hadn’t been destroyed; they’d been transported to wherever the relay connected. But without quantum entanglement communication or relay-based transmission, their signals couldn’t reach us through normal space.

Even for me, with what I knew and could access, that wasn’t possible. Not yet.

Soon enough, people would go through. Jon Grissom would lead them. They would travel to another star system. Once they figured out how, they’ll return as heroes, proof that humanity could reach the stars.

But right now, there was only uncertainty. Fear. Exactly the mood I’d warned about, exactly the reason I’d pushed for defensive preparations.

The galaxy was dangerous. Today, everyone in this room was beginning to understand that.

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Even after losing five probes, I knew exactly what was coming. And I was right.

The planning meetings began immediately, focused on the manned mission that everyone now agreed was necessary.

I attended as a consultant, offering technical insights when asked, but my mind was elsewhere. On a different kind of preparation. On a different set of questions.

For two days, the discussions took place. Politicians, scientists, and prominent public figures. All argued over who should be on the mission. Which nation should lead, and what others should join them. The **Zheng He** could carry eight to Mars. To Pluto, so they could return, that would be lowered to six. Perhaps four.

That made the discussions louder, the arguments more vocal. All I offered were opinions on the scientists to go, making sure not to see my name pushed forward.

On the third day, I decided to change the subject.

"We're spending considerable effort planning what happens when we go through," I said during a joint agency session. "We should also be planning for what happens if something comes through from the other direction."

The room went quiet. Representatives from ESA, NASA, CNSA, JAXA, and a dozen other agencies turned to look at me. I could see it in their eyes. The realisation that I had suggested something that, in their excitement, they had missed. Or chosen to wilfully ignore.

Dr Vetter spoke first. "What are you suggesting, Dr Sinclair?"

"The probes lost contact. Either they were destroyed, or they're beyond communication range. Either scenario suggests we're dealing with technology we don't fully understand." I kept my voice calm, reasonable. "If the relay is active, truly active, then it's potentially a two-way door. We should have protocols for dealing with unknown vessels appearing near Charon."

"The relay hasn't been active in fifty thousand years," Dr Walters from NASA pointed out. "Nothing's been waiting on the other side all this time."

"We just activated it," I replied. "That changes things. If someone can monitor relay activations, they now know we're here."

I didn't know if the Reapers could do that or not. It was better to assume they could. The Relays were their trap, after all.

Uncomfortable murmurs around the room. I was playing Cassandra Reborn again, warning about dangers no one wanted to consider. But this time, I had leverage. The probe losses had shaken confidence.

"What exactly are you proposing?" Dr Larsson asked.

I leaned forward, ensured everyone was focused on me, then spoke.

"Evacuation protocols for outer system stations. Communication procedures if unknown vessels are detected near Charon. Monitoring systems to track relay activity." I paused, letting the words sink in. "Contingency plans for different scenarios. Peaceful contact. Hostile contact. Something in between."

"Earth doesn't have warships," Dr Walters interjected. "We have research vessels and cargo ships. What exactly do you expect us to do if something hostile comes through?"

"Right now? Hope that they don't come. If they do, pray for divine intervention." I kept my voice level. "But we should establish defence-in-depth thinking now, before we need it. Build the frameworks. Develop the capabilities. So that when we do have warships, we know how to use them."

Most of the room seemed sceptical. Some rolled their eyes. But a few were nodding slowly, considering the implications. That was fine. I never expected the idea to catch on today. Nor

for a few more years to come. I simply needed it to exist in their minds, for the potential that we weren't alone to take root in the gestalt of humanity.

The Turians would take care of the rest.

The meeting moved on, my comment noted, recorded, and debated. Not seriously, but some precautions were implemented. Monitoring protocols. Communication procedures. Nothing substantial, but a foundation to build on.

I was establishing the pattern. Dr Marcus Sinclair, the Element Zero Theorist, Cassandra Reborn. The man who warned of danger before it arrived.

And, no matter how some dismissed me, it would arrive.

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By late November, the mission was confirmed. The crew was selected. The **Zheng He** was undergoing refits to prepare for long-distance travel. To take a crew far beyond the limit of anywhere humanity had gone before.

My engine designs were refined. Increased power-to-weight ratios. Projected top speed, before deceleration was initiated, of point-one-two-c. Not a massive increase, but enough to shave some time off the journey.

Once eezo cores were crafted, that would change dramatically. First, I had to make sure knowledge about discharging the cores was implemented before lives were lost.

As I was working on the paper to back up the theory for discharging, my datapad vibrated. Seeing it was Dr Okonkwo, I accepted without thought.

Her face appeared on my apartment's holographic display, the familiar backdrop of her Edinburgh office behind her. She looked tired, but her eyes were sharp as ever. Missing nothing.

"I've been following your work," she said without preamble. "The defensive focus. The warnings. The protocols you've been pushing for."

"I assume you have concerns."

Everyone had concerns. Or comments. Most less than polite. Few said directly to my face.

"I have observations." She paused. "Some of your colleagues have been... commenting. About your consistent pessimism. Your focus on threats."

"They're calling me Cassandra Reborn," I said flatly, making clear I was fine with the title. It suited my goals, though none realised it yet. "I'm aware."

"You've embraced the title publicly. That was bold." She studied me through the screen. "But I've known you longer than most of them, Marcus. What you've been saying, the certainty you speak with... this is more than extrapolation. More than educated guesses."

I said nothing.

"You speak with certainty about things no one should be certain about," she continued. "About threats we haven't encountered. About dangers beyond the relay. About the need for defence when we haven't even confirmed contact with other species."

"The Protheans left warnings for a reason," I said carefully. "They were destroyed by something. Ignoring that seems unwise."

She was silent for a moment. Considering my words. Playing it against other data. Considering the possibilities. As any true scientist would.

"I've read the same data you have. I don't see the same certainty." She leaned forward. "How much do you really understand, Marcus? What are you seeing that the rest of us aren't?"

Another long pause stretched between us. I wanted to tell her. Wanted to share the burden with someone who had shaped me, who had believed in me from the beginning. But I couldn't. The risk was too great. The implications too vast.

"As I've said before, I see patterns," I said finally. "Patterns others don't. The Protheans observed us for thousands of years, then vanished. We know they were destroyed. The records from the ruins confirm this. Whatever they were, they were powerful enough to erase an interstellar civilisation. That suggests the galaxy is dangerous. That suggests we should be prepared."

Dr Okonkwo studied me for a long moment. I couldn't tell if she believed me. Couldn't tell if she suspected there was more I wasn't saying.

"Being right doesn't matter if no one listens," she said quietly. "Pace yourself, Marcus. Don't burn out before your warnings can matter. Don't become so focused on future threats that you miss the present."

"I'll try," I said.

"That's not a promise."

"It's the best I can offer." I paused. "You taught me to look ahead, Dr Okonkwo. To see problems before they arrive. I'm doing what you trained me to do."

Her expression softened slightly. "I trained you to be a scientist. Not a prophet of doom."

"Sometimes being a scientist means warning people about what the data shows. Even when they don't want to hear it."

She nodded and then ended the call. I leaned back, considering her words.

She was right. Being right didn't matter if no one listened. Cassandra had been right about Troy, and the city had burned anyway.

But I wasn't just warning. I was building. Preparing. Planting seeds that might bloom when the time came.

The kinetic barrier research was progressing. The defence protocols were implemented; however, basic. David was working on AI foundations. Every piece mattered. Every preparation counted.

The relay was confirmed. The probes had gone through. Humanity would follow soon. Jon Grissom and his crew would step into the unknown, and when they returned, everything would change.

And I would be ready for what came next.

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