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vacuum sandwich

LCTN: 18-ORION-B2 (Orion region) CORD: SAO-94426.202 (136pc from SOL) DATE: 2314ce-JUNE-9-TUESDAY TIME: 03:30zulu

Æther is the generally accepted name for 18-Ori-A. It was never exactly ratified by the International Astronomy Union, a rather obscure K-class star got the name Aether first, but without regulatory authority or legal standing the name has stuck with the Latin æ spelling in spite of the ballot. Hypnos is the set in stone name for the brown dwarf that orbits Æther at around 220au because 18-Ori-B beat everyone else when IAU Open Registration launched back in 2201.

Hypnos has the distinction of hosting the TAG satellite-clocks in Orion proper. That is two satellites stage-right by about 12au with another 208au between them and Æther. This is inert-deep space free of nebula, yes, but in actually it's a Lagrange point between Æther and Hypnos but who's keeping tabs on a lil' technicality?

The tracks for the TAG clocks are in-line perpendicular to the Zone of Avoidance, pointing to behind the Milky Way, yet nobody can pinpoint where? Some believe they run out to the Great Attractor, a mysterious gravity anomaly in the Laniakea Supercluster, but others believe it's from a possibly larger such anomaly out in the Shapely Supercluster, but the one thing they can all agree on that the center of the universe is in that general direction. Maybe one day they'll be able to peg it exactly—that is if someone would sponsor a mission out to about a million light years past Deneb, in Cygnus, there they could triangulate and get a clear fix.

Fat chance to boldly go, right?

Anyway, where these two TAG satellites appear to be flying away from the ZOA they are in fact standing still. The reality is that the Milky Way is heading towards some future parabola around these clusters, or maybe even in a collision with one? Well, with what the future Milky Way will end up becoming after the Andromeda galaxy climbs up its ass and sorting out the smashup that follows.

Jacob and Peña are here to drop off a 'Grigori' ghost droid.

To offset the cost for the new F380 Cerberus, the US Marines and the Pleiades Defense Force are pawning their old F308 Bulldogs to the Annex who is converting them to ghost droids, aka Cwn Dawgs, and to boost F380 sales the Annex is paying premium dollar for these cast offs instead of offering direct subsidies.

The F308g becomes the J-model droid, F308h the K-model, but the high-performance M-model droids are being configured from the F380 airframe. Now, wanting to take on the IR5 Kali, the Annex also went to the F380 as a platform to create the Cerberus-Dip, a super-cheap yet super-fast challenger to the IR5. This is something they cannot use right now however, in a stroke of 'why the fuck not' innovation, the Grigori reconnaissance droid was developed from that instead of the base model—and this they can actually use right now.

The whole idea of the Grigori is to perform recon and not be seen or, barring that, not get caught. In the Dip configuration the F380 is untouchable, but without the aerodynamic drag from a cockpit canopy the unmanned Grigori will beat the Dip in an atmospheric contest. The Grigori is the O-model of the F308 but to hide it on the rolls they rolled those numbers in with the rest of the M-models.

Jacob and Peña pop back into relative space with a Grigori ghost droid in hand. The three fighters jumped together after the droid spent a week in cold soak around their far distant U-Turn locale. Jacob is in his Thunderbolt, but Peña is in one of the new F380 fighters. Peña hangs with the droid and helps calibrate its anchor point between the TAG satellites, separated by a thousand kilometers, while Jacob surveys the area for possible threats.

This is the last of eighteen picket droids being deployed whose job is to bounce between systems performing recon. Unlike the ghost droid in JACC form, these fighter droids are piloted by a pair of ghosts and all eighteen are manned by an instance of Jacob's dead daughter, Sophia, and the early-days copy of Jacob everyone calls, Paleo.

Jacob radios them, "You know, Sophia, Paleo, between these two clocks, there is so much commotion going on, even if there was someone watching, they wouldn't see ya hop in or out."

Paleo radios, ["Yup, this is the best anchor point yet."]

"Peña, you did an excellent job on this project."

Peña responds, ["Thanks. I think we're good here, boss. We'll do a calibration jump and I'll head back. Let's see the scope, Sophie."]

As its huge 32" Ritchey-Chrétien telescope starts to deploy from the missile bay, Jacob observes, "Tryin' to get rid of me."

Sophia speaks up, ["Bye-bye, daddy! We got this."]

Just like the last seventeen pickets they've dropped off, Jacob has to leave while Peña finishes the calibrations, "Okay, I know when I'm not wanted. Vacuum Sandwich One-Eight, you guys are on your own so make me proud. I hope it doesn't get exciting."

Paleo adds, ["I hope it gets interesting, though."]

While drifting away and charging for a jump, Jacob wonders about Sophia and Paleo. There are eighteen instances of them in as many picket missions, as well as two or more of them in the JACC combat ghost droids at any given time of day. All these experiences in the real world are being uploaded to their kernel instance in the Stone Garden world and these two think it's a gas. They say it gives them a reason to live—in a manner of speaking.

*Oh brave new world,* Jacob muses as he jumps for home.

"You wouldn't be standing here if you didn't want something."

At the foot of the Spike, Jessica, with her arms crossed, looks at her father stepping up in his JACC after parking his Thunderbolt, "When do I want something for me, exactly?"

Jacob is about to put his foot in his mouth but thinks better of it and says, "You're right. Who are we talking about? Seth?"

She mockingly puts her finger up to her mouth and, "Hum, good catch! He turns six next week. This one is important."

Jacob thinks real hard and, "The Zoo, right? San Diego?"

"We can't yo-yo back and forth on this one." She gestures, "There are no operations till the twenty-first, so there should be no reason to back out. Is it on...or not?" Jacob nods *yes*, so she smiles, "Outstanding, I'll arrange for Monique to pick us up at the Klick."

"Who's going?"

"Myself, you, Seth, my mon, Angie, Diego, Cap, José and since Josav won't be coming I invited Cloé. Remember, you'll be taking the beer run back and we'll be on the next day's mail run."

"Caps too?" Jacob huffs, "Okay, it's a go."

``It's just one day.'' Jessica reaches up and gives him a kiss, followed by a stern, but smiling, ``Don't fuck this up.''

Jessica hurries away for her coffee meet up with Nikki-8, and as she approaches the clone at the table, her step slows to a grinding stop just a few feet short. She suddenly feels something amiss. Not like an 'oh shit I just remembered' kind of amiss, but an amorphous Mayday projected onto her mind by someone important to her.

Nikki bids to her, "Hey, Jess, coffee's getting cold!"

Jessica puts a finger up and is about to say one thing then, "Eight, you are one of us now, right?"

Nikki thinks for a second, aware that something has got her off balance, "What's got you spooked?"

"A simple yes or no?" Nikki tries to find a convincing way of saying yes when Jessica prods her, "I need an answer."

"Yes!"

"Leave it, we gotta go!"

Jessica marches off and it's when she enters the Spike that Nikki finally catches up, and without looking over Jessica says, "I'm about to bring you into a part of my inner sanctum that you should NOT be allowed to see, so if you fuck this up—you die."

"I take that 'die' as in not a figure of speech."

"Damn you're good! You got yourself a gold star!"

"You're an ass."

Jessica glances at her, "Peas in a pod!"

"You sure you want me in on this? Whatever this is?"

Jessica's voice is strained, "I can't do everything by myself so if you're one of us...I fuckin' need ya on board one-hundred percent." They enter a lift and as the door closes, "Last chance ta chicken out."

Now pulling up to a stop in front of Jessica's condo, Jessica says to Nikki, "Wait here. Tap into my head and watch."

Nikki is shocked, "Are you serious?"

"From here on out, when I give you permission, it's okay."

Jessica steps in and runs into her mother carrying a cup of coffee and a tablet, "Hey, Mom. Forgot something for Eight."

"Okay, sweetie!" Nicole kisses her and steps away.

Jessica turns for the hallway and enters her brother's room while calling his name. Realizing he is not there she hurries out and in her own room where she finds Seth staring out the window. Jessica says his name and he twitches but does not turn back. Jessica closes in and squats behind him, "Seth, talk to me."

He slowly turns around towards his sister with a haunting, deer in the headlights look, so she asks, "Honey, what is it?"

Seth is a beautiful, sweet and very caring child. He's popular with his class mates, and even though he has a speech impediment and avoids eye contact, nobody taunts him about it—which is an oddity because kids tend to be little savages. He's freakishly non-aggressive, so much so the teachers have taken to calling him Gandhi, but weren't they surprised when he punches out a bully who crossed the line last fall. Then what shocked the administration is that, instead of concern, both Jacob and Nicole were relieved—even proud of him.

Seth looks at her with worry, "Cwickit."

Jessica reaches out and draws him in, "What is it, hon?"

He's about to cry, "Don' haf'ta 'ave ma birt'day."

"You see something? Was it bad?"

Seth looks away, wanting to avoid answering but turns back and nods his head *yes*.

"Can you show me?" Seth looks away again so Jessica picks him up and sets him on the edge of the bed saying, "If it is important I need to see. Remember what we practiced, we're safe together."

With tears starting to run down his cheeks he looks up and closes his eyes so that Jessica can kiss them both, followed by touching her forehead to his and asking, "Let me in."

After a few seconds...horror sweeps over Jessica's face, abject opened mouth horror followed by teeth gnashing rage—then suddenly an icy calm envelops her as she gets a grip while pulling back.

Jessica takes a deep breath wondering what to do then, having an idea she asks Seth, "Okay, did it change?"

Seth, with his eyes still closed, shakes his head *no*, so Jessica takes a deeper breath, "Think-think-think!" And she comes up with an alternate, abet riskier solution, "How about now?"

He looks up at her and gives a weak smile, "But'er."

"Back the way it was?"

Seth nods big, so Jessica hugs him and kisses him on top of the head, "I can fix this, okay. I know what to do. Go hang with mom. We need to spend as much time with her as we can."

Jessica leads Seth out to the living room, and as he heads towards Nicole, she steps out into the hallway.

Nikki-8 has been crying soundlessly into her hands, and as she looks up she weeps quietly, "Oh, my god! All those people! How does he do that? How's that possible!"

Jessica is struggling with fighting back the same emotions, "Welcome to my world, Nikki. Now you know." Jessica sniffs hard and looks up with a, "Fuck me!"

Nikki asks, "What are you going to do?"

Jessica starts down the hall, "Keep up and find out."

Maria faces off with Jessica outside of Glados's apartment.

One look at their distraught expressions speaks volumes to Maria, so the riot act she had prepared for them on the way down is now struck from her impromptu agenda, "You know, getting a text saying, verbatim, 'my hand is going into the *fucking* cookie jar' kinda got my attention, so I sort'a meandered my way here to see if I can be of assistance, or...maybe kick your little shit-tard asses for steppin' out into the busy street. Which it will be, I wonder?"

Jessica does not back down, "I'm not asking for permission."

Maria's eyes stab at Jessica, "It had better be good."

"It's FUBAR, and that's why you're here."

Nikki speaks up, matter of fact, "It is FUBAR."

Maria looks at Nikki, wondering why she is here, but knowing that she has to trust Jessica she nods towards the door, "Shall we?"

Jessica knocks and Glados answers, "Hello? Come in!"

As they step in, Jacob sees them and, "Hey, what brings-"

He drops back into the sectional like a rock, unconscious. Jessica steps over and kisses the tips of her fingers and tenderly touches them to his temple, and like that—he sinks into a deep sleep.

"Okay..." Glados is amazed, but takes a poor stab at humor, "It would be polite for me to ask if you want refreshments. Anybody?"

Jessica squares off with Glados, "I need you on board."

"So, Delphi was correct. You are one."

"Funny you should mention, Delphi." Jessica looks over to Maria, "Look, I could convince her to work with me, easy, or we could expedite the process to save time how 'bout?"

Maria nods with understanding and transmits.

Glados, receiving the command sequence through the tacnet, "Authenticated." She looks over at Maria, "We're cooperating?"

Maria points to Jessica, "We're cooperating."

Glados nods, looks at Jacob then up at Jessica and smiles big, "I'll be happy to help."

Jessica is amazed by the surprising little effort it took to get to this point, and says flat out, "A half hour ago...I fucked up."

Maria chirps, "Imagine that."

Jessica glares at Maria and, "Okay, bitch. Here's the red pill."

Her eyes close and instantly both Maria and Glados' eyes start fluttering then snap shut against their will. Jessica gives them an instant replay of what Seth just dished out to her earlier. After a few seconds of being assaulted by these images, Jessica releases them. Maria grimaces tight-lipped with an icy rage but Glados, though shored up by her AI calm, has tears streaming down her face.

Jessica adds, "That's from the perspective of Cricket. Let's review, that's the recon platoon, a battalion, forty plus pilots and what you didn't see is Cricket strolling into an airlock three weeks later."

Glados instantly realizes, "How does...he do that?"

Jessica, snarls with an incendiary gaze and homicidal purpose, "My brother will *not* become a Guinea pig..."

With neuronet technology one can "feel the feels" as they say, but you cannot record them. Only cognitive thoughts and expressions, e.g. words and actions, can be recorded but not emotions. Early on the N2 interface with animals was nerfed because having 'meaningful' encounters with pet cats and dogs was actually disturbing for the human test subjects. Knowing what an animal actually feels or thinks had unexpected negative repercussions because pets loved being pets but humans, once a neuro connection was established, recoiled at it because their endearing critters became overtly aggressive hellions.

One notable study, where they didn't nerf the tech, scientists found that bottlenose dolphins had an intelligence and maturity rating between ten and eighteen, have a sense of humor, and were basically assholes when given the opportunity—and were demanding assholes once an N2 interface was established. Going from infinite patience to unbridled petulance resulted in these animals having to be put down once they started to express themselves violently. Ultimately science mapped dolphin languages and dialects and could communicate via an AI interface, but it was too late for these first test subjects.

From then on all future studies were not N2 interactive.

The Heisenberg Evaluations was an early on and blemished neuronet study on the cognitive abilities of infants and toddlers, which seemed simple enough, but it became a 'conspiracy-theory' staple when suddenly the plug got pulled and the study and data was swept under the rug. What they found out in about 4% of the test subjects, the celebrated Heisenberg Babies, was an empathic connection, and suggested even a telepathic one, between infant and caregiver.

The plug wasn't pulled exactly, it just went dark.

All the anecdotal reports and stories over the centuries about ESP connections between mother and child and twins was instantly verified by the N2 however, one could only link in and experience it directly and, since this was not a "cognizant" form of communication, that is expressions from the emotional centers of the brain, to the frustration of the scientists no actual data-points were to be had.

The Heisenberg study showed that with humans these abilities were buried with age, not lost, but also explains how the Nefer Key not only retained this ability, but evolved or mastered it into a coherent, thought-based skill set. This also revealed how Jessica and the Nikki clones had this switch locked-on in their genetic code, but it could not explain theirs and Jacob's clairvoyant hunches and gut-feelings that tend to borderline on prescience—until now.

"...Do we have an understanding?"

Glados agrees, "You have our assurances, and I believe that Marshal Ramirez will agree, your brother will not be touched in the slightest however, for curiosity's sake, I would like to learn a little more about how this goes from an instinctive premonition in you and your father to...such vivid imagery. I suspect this is being channeled through the cerebral cortex and not the hippocampus."

Jessica nods, "Okay, that would make sense?"

Maria speaks up, "Jessie, not one hair on his head will be touched but, we need to know...what is he capable of? Does he have your powers?"

"No, fifty-two shades of abilities. Not mine." Jessica puts her hand up, "But, he is holding back on me so I'm not sure." She then thumbs back at Nikki, "And that's why she's here. He needs more help and support than I can provide. My little guy should not have to be going through this and I can't do it by my fuck-me self!"

Maria looks at Nikki-8 and then back at Jessica, "I think it's too early to let Fifty-Two in but...you've made the call and there's no going back now." Maria sits in the sofa across from the sleeping Jacob and waves, "Hey, fuck-face, how ya doin' this fine morning?"

Glados opens the freezer and asks them, "Ice cream?"

All nod with Maria wondering, "Glad, if it comes with a bottle of wine I'll take that first."

Nikki speaks up, "About the FUBAR."

Maria looks at Jessica, "Yes, about that FUBAR."

Jessica breaths and sighs, "All I did was ask my father if he was going to the zoo for Seth's birthday next Tuesday. Well, I insisted that he goes if he says he's going to go."

Maria waits for more, "And?"

"That's it."

"That's it?"

Glados has put out bowls and is opening the carton up, "Butterfly effect! Let me guess, the problem is encountered on the sixteenth and the impact is realized on the twenty-first?"

"Yep, you got it!"

Maria asks, 'How do we undo it?"

Jessica shake her head, "We don't. We can't."

Glados is amused, "But you know how to fix it."

"It's all about drop ship configuration. See, the stations and platforms reconfigure their new ships and don't want to uninstall the higher AI just to have their instance reloaded and reconfigured for their operations. It's disruptive. This isn't necessary on the Mbande and Trung class platforms but it's SOP everywhere else."

Maria goes, "Shit serious?"

"Next Monday the Oakley and the West will take delivery of their slicks and warts for the Reaction Force teams, but they'll not be operational on the twenty-first when they are needed."

Glados, scooping away, adds, "They're set to be operational by zero-hundred hours on the nineteenth. That's enough time."

Maria corrects her, "Not in the real world."

Jessica looks to Glados, "Next Tuesday we'll be in Southern California, and Maria will be in Washington, and Trooper Peña will contact you to authorize a temporary transfer of thirty-two Razorbacks from station inventories to their React Teams in lieu of the pending configurations. You will now authorize it when he does."

Glados stops scooping for a sec, "Shouldn't I defer transfers to the Group Marshals of the stations? It's their prerogative."

"Those regiments for the Reaction Forces are no longer part of their Table of Organization. They're under my father."

"We're in a state of war. They have the authority."

Jessica throws her hands out, "You're gonna love this! In the system there is no check box or anything that anyone can click on to indicate that we *are* in a state of war! All those rules in your system, which I might add is a corporate inventory control system adapted for our purpose, are meaningless without that little event flag or button, so their hands are tied. Glados, you have to authorize it."

Maria is rubbing her eyes, "What a cluster-fuck."

With Nikki's help, Glados hands out the ice cream while asking, "That's it? Authorizing Peña's request will fix it?"

Jessica assures her, "Yes!" Maria looks up, "That's it? Seriously?" "Yes..." Jessica looks over, "It's now fixed."

With them starting to dig in, having dodged an asteroid, Jessica monitors the dream she launched in her father's mind. In it Jacob is projecting himself onto Paleo while flying through the nebulas of Orion with Sophia in the tight cockpit of an F380. A passing thought that has now come to life for him—and comically so.

Jessica quietly says to herself, "Vacuum sandwich...perv!"

Maria asks, "Say what, hon?"

"Oh, nothing." And between bites, "The adoption proceedings are Thursday. I'll officially be Michelle's daughter and heir."

Maria smirks quietly, "The Kiel's are gonna freak about that."

Jessica then expresses her pressing concern, "We really can't use what we learn from Seth, you know."

Maria smacks her lips, "Enigma...Ultra protocol."

Glados perks up, "Bletchley Park, yes!" She turns to Jessica, "I'll send you the files. It's a fascinating history."

Maria adds, "Like with Impetus, it's all in your court, hon."

Jessica then realizes that, "He'll need a code name."

Nikki throws out, "How 'bout, Alter of Chians?"

"Chains!" Maria nods, "That'll do!"

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