

78

deus ex machina

LCTN: BETELGEUSE (alpha-Orion)
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Long ago, the five Battle Stations of the Annex were created for a previous world. A simpler time where the old displacement drive systems dragged incrementally to get up to speed, and to spool for a jump took hours. Everything then ran in slow-mo and a huge station, bristling with particle, plasma and rotary cannons, with a shaker full of missiles, would have been a frightening thing to square off with.

The Annex was going to create a new Battle Platform series, double up the complement, and cut the number back to maybe ten at most. The idea was to rely on the stations to taxi the platforms to the fight, but in their wildest-n-wackiest of dreams nobody could anticipate how crazy-fast things were going to get a half-century later.

Pepperidge Farm remembers, as they say, and when people look up where that idiomatic phraseology came from—the mocking irony is not lost to them. What seemed logical and necessary then is now a quaint strategic fantasia relegated to retro scifi.

Or specifically, the alternate history genre.

As with the platforms the stations have also been upgraded, and even though they move pretty damned quick nowadays, they are not quick enough. They can take on two or three cruisers alone but past that it'd be death by a thousand cuts.

They were never to see their full potential, as envisioned back when they were first designed and built, but the truly invaluable benefit to the Annex is the mobility they offer and allowing them to refrain from relying on immobile planet-side bases. That is, nothing static that could be bombed from above. These five stations can sneak around from secret place to dark recess or hidey-hole unseen, and have become priceless to the Annex for both their stealth and the

mysteries surrounding them.

Everybody in the military intelligence community knows those things are out there, but nobody outside the Annex has seen one. Mention that there is an SA Battle Station somewhere and the Co-op mission planners will kind of avoid that region like the plague.

In contrast to 52, the best-kept secret everyone knows about, nobody in key military circles speaks of the stations except to call them an old wives tail or urban legend, and this is to keep the public and their political leadership in the dark. None of them want some budget crushing capital asset that would be strategically debilitating if it were lost. The Co-op finally has control of the Pleiades and even now, try as they might, they have failed to find the five *known* operational bases of the Steel Annex—which means one of two things. Either those bases are far outside of the Pleiades or those stations do exist. Then again, the question comes to mind as to why the Annex hasn't "used" the stations but, then again yet again, not using them may be the whole point. To actually use them in combat would reveal their existence as well as their shortcomings.

Finding Cocytus has only confused the intel community more.

Just recently, the SA quietly ran a new series of sims with updated modeling, and the results were shocking. They learned that if you are going to take a station on and fight at arms-distance you'll get your ass handed back to you because that works to its strengths. That being the Carrie Nation and the Mata Hari because those two are a tad smaller and nimble enough to put up a decent defense. It's the freakishly huge Lizzie Bordon, Annie Oakley and May West who now have standing orders to run like the wind and not look back because, for them, the new WECG cruisers are just too damned fast.

Last June, anticipating the Co-op zeroing in on Cocytus, the Carrie Nation moved from circling the planet, at a 93au orbit around Betelgeuse, further out to a 125au orbit—just close enough to keep an eye on things even though what they see takes 4:47 hours to see it. When the BDF recon and survey teams went charging past, bouncing from system to system looking for them, the station moved to the trailing orbital quadrant putting 158au and 22:45 hours between them and Cocytus. The added delay, now by almost a day, to see what's happening with one's eyes is challenging because with the nebula the best you can see outside of the infrared scale is just a fuzzy blob.

Here is where the wormtrac array, something that the SA has been sitting on for over ten years, comes to excite the senses because anything that dashes or jumps in or out of the area they can see inside a picosecond. Actually, it only takes an attosecond for the information to get to the wormtrac array but that added time is for processing it.

With the wormtrac the Carrie Nation can tell which direction a ship is coming from or going to by more than fifty lightyears, so for the CN's crew here to shout *woo-fuckin-hoo* is about right on!

Last week, anticipating today's business, the Carrie Nation moved to the other side of Betelgeuse, opposite Cocytus, and putting 226au, 31:57 hours, the star, it's corona, and the bulk of the nebula between them for obvious reasons. Totally blind from this vantage point with every sensor but the wormtrac—and with it they can see the star, what's going on in the star, and everything behind it in real time.

Last October there were daily jumps in and out of the system, but now the jumps are one ship that comes in every Monday that leaves the following day, indicating that these are weekly supply runs for their troops surveying the base. The most recent jump to Cocytus was two hours ago, so they'll leave in about 22 hours.

Clueless that they will never return.

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Deep in the dome side of the Carrie Nation, we have Maria, Mooch, Snoopy, the station commander Nancy Yoon, and the station's SYLN-b who is an enchantingly beautiful and shockingly young looking brunette named Carrie, whose biological body was hatched alongside Artyom's body just over ten months ago. They are all sitting beside a control console manned by Mooch, and below them is a transparent floor that looks into the station's Axial Gun sump tank—a cylindrical cavity that's all of 400 meters wide by 400 meters deep with a 60 meter wide cylinder core that holds the "gun" component of the gun.

The gun has a vacuum receiver with two feeding ports that are mounted up near the transparent floor of the control room. This is followed by a long rail-accelerator called originally enough the barrel. The barrel leads up to a massive magnetic variable aperture called the choke. From the choke you have a muzzle that's all of 45 meters across on the outside of the station smack dab in the middle of the dome side. The weapon has absolutely no moving parts except for two tumbler-locks and a big red button used to initiate the fire sequence. Everything else is electronic and automated, and run by Carrie herself.

The weapon here was originally a plasma pulse gun. In that configuration, when the sump was full of plasma and ready to fire, the light coming through the floor would have been excruciatingly bright so the floor would darken to save the eyes of the operators as well as the paint on the walls and not trip the fire suppression system.

Where plasma was very visible in the sump, much like the interior of a fusion reactor, here there is absolutely nothing to see.

Inside the cylindrical sump the lights are on, but to the observer it looks like shadowy empty space with absolutely no activity.

Looking at the control monitor and you'll see a different story.

They turned the keys and launched the spooling sequence a half-hour ago and they are just over a thousand grams of quantum particles spiraling around in the sump, and all controlled by magnetic fields. By the time they reach the firing part of the sequence, fifteen minutes from now, they will have 1,441 grams ready to go.

The SYLN-b, Carrie, is sitting quietly with them as her larger mainframe-self announces to the ship's crew over the public address system, "The targeting calibration is complete. We are on schedule. Please continue to remain stationary throughout the firing sequence that will begin in fifteen minutes. Thank you."

Maria is looking through the floor into what appears to be an empty sump and starts chuckling to herself, so Nancy asks, "What?"

Maria shakes her head while pointing at the floor, "It just hit me, if this were a movie—below us the sump would be a spinning light show of God-damned fireworks goin' off! In the industry, it's what they call giving a root-canal."

Nancy goes, "Root-canal?"

Everybody looks at Maria strangely, so she says, "I know Carlos Sanchez, okay? The movie guy? It's what he describes giving an audience something that's visually painfully-intense."

Snoopy asks, "Cool enough, but what does it mean?"

Nancy adds, "Yea, where did that come from?"

Maria points to Carrie who says, "It's a dental procedure from way back that called for the excavation of nerves and blood supply of a tooth followed by capping. The last known instance of this technique being performed was over a-hundred and ninety years ago."

Maria nods towards Carrie, saying, "What she said!"

Nancy shudders at the thought, so Snoopy's feathers ruffle as he laughs at her saying, "Sounds like fun, hu?"

Nancy says, "I actually had a filling one time, 'till I could get my tooth fixed. That was intense enough for me."

"Hey!" Mooch turns and asks Maria, "I was wondering, why the extra two and a quarter tons of cargo this morning?"

Maria gets up and walks to the door while saying, "About that, let me ask you, does that little extra weight matter?"

"Calibrating here! It depends on where it's goin'?"

Maria has pulled a chest up on the counter and cracks it open, "I'm surprised you two didn't smell this."

Mooch thumbs towards the airlocks to the sump, "Everything in here smells like burnt metal, like the airlocks."

Inside the chest are two trays of KCMoe's brisket and tri-tips, along with three, one-pound single serving containers. One with pulled pork Maria hands to Nancy, and one with shredded chicken she hands to Carrie while saying, "I sprung for the crew walkin' on the flight deck a little snack while they waited. I hope that didn't fuck things up?"

Mooch sort of cringes as he thinks about it, "Sorta, not really but, because we are doing an actual burn, this walking thingy is the only really precise way of torqueing the station."

Carrie gives a little chirp of a laugh as she takes a bite of chicken, "As inelegant as this procedure is, you are correct." She looks at Mooch and says, "Doing nothing is okay, but we are trying to be precise here. On a first run through I can calculate six stupid-simple solution's to this so give it a whirl, Mooch."

With Maria handing tri-tips to Mooch, and mouthing the word *sorry* to him, then Snoopy the brisket, Mooch thinks about it and, "Okay, stupid simple, after the first fifty-second leg into the walk I'd hold back a mix of twenty-eight men and women. I want their mass in there to initiate the rotation but, on the last leg, I wanna walk 'em back to help retard the English we were worried about at the end."

With pursed lips Carrie hangs on her response, then says to him, "Make that seven stupid-simple solutions. Go with that."

Snoopy high-fives Mooch, laughing, "You got her again!"

With everyone trying not to laugh, and failing, Carrie looks at him and says with a smile, "Stupid-simple wins again!"

Mooch looks at her and laughs, "Asshole!"

Carrie laughs then says, "Ten minutes to the window."

After everyone takes a couple of bites of their food, Maria poking around in her single serving container of brisket, asks Carrie, "How are you with the new bod?"

After a few chews, Carrie says, "It's challenging. It's a blast being alive and all, but Glados was right! The demands this body puts on me makes it difficult but I have a small cadre of...well, helpers to get me over the hump."

Snoopy rolls his eyes, "Helpers? You mean a harem."

Carrie smiles, "You make it seem so...carnal."

Snoopy huffs big, then says, "D'ur, and it's not like we haven't offered a helping hand!"

Carrie blinks, "Helping hand?"

Nancy speaks up, "You guys are pervs!"

Mooch throws out, "No, wee'z guy'z are popular!"

Nancy looks to Maria and starts laughing, "Please, when this is over, please get 'em off my station!"

Maria rolls her eyes saying, "Maybe I don't want to hear this?"

Nancy points out, "These two are always at the free-for-all!"

Snoopy says, "Yea, it's free—for all!"

Mooch laughs, "Isn't that the idea?"

Maria shakes her head in disbelief, "So, let me guess, it's true. All that dino-fetish shit I heard about *is* a thang."

Snoopy says with a big laugh, "Like, double-d'ur! We got 'em lined up! We can go, an' go, an' go like the Timex Bunny!"

Mooch adds, "We got perma-wood and our Xhemal babes don't put out like you human babes do!"

Maria's shoulders drop, shaking her head, then says to Nancy, "Tell ya what, Nance, I'll do ya one better. How about you come to planning and I get someone else to deal with their shit?"

"Yes, thank you!" Nancy pumps her fist in the air, then asks, "Who's the poor dumb slob you're gonna throw in here?"

"Someone who wouldn't be bored like I was, and you are?"

Nancy blinks, realizing, "She's gonna hate your guts!"

"I need Sandoval to focus on her second job."

Carrie, accusingly says to Maria, "So, you're gonna leave me to fend for myself with these two rabid sex-crazed pigeons?"

Snoopy smiles, "You make it sound so...unnatural."

Carrie looks at him while pointing to her tight lips, shaking her head and not saying anything, but Nancy says, "Do I get to comment?"

Mooch says to her, "Since you are on your way out, no!"

Snoopy asks Carrie, "That one guy you are with a lot, Justin? Isn't he kinda short and shit?"

Carrie gestures to her body saying, "Tiny here! Everything is tiny! That guy is the right size and takes his sweet time so, trust me, I'm good with what I got! I'll stick with what I got, 'kay?"

Mooch laughs, "An' what's with all the chicks?"

Carrie smiles, "The boys are for kicks and those are for cuddling." She then gestures to Maria, "But, just so you know, all of us SYLN's are jealous of Glados because we can't replicate what she has and, also of you, for what you had."

Maria looks to Nancy, "Do I really wanna hear this?"

"I have a pressing question that has to be framed properly. You know that we SYLN have access to everything so, from all the files we have ran we see that, like you, her encounters with him are fun and physically rewarding however, yours were also at the extremes of hilarity and, surprisingly enough, visceral animosity—especially when there was no causative behavior or preceding event to induce it."

Nancy interjects with a laugh, "He was breathing."

Maria thumbs towards Nancy, "What she said."

Carrie shrugs, "I'm sorry, I do not understand."

Maria sighs with a smile, "Self-preservation, Carrie."

Carrie blinks, "Elaborate please."

"Sometimes it's better to walk away than to lose something." Maria leans in, "I hope to God you never know what that feels like."

Nancy adds, "Girl, given enough time you'll understand."

Carrie raises her eyebrows, "Accepting loss is part of life."

"And sometimes you can't live with that so, as an object lesson for you guys, Glados is your canary in the coalmine! She is in love with him so if he wonders off or dies...it will crush her."

"We'll be there for her, but what if he doesn't?"

"Then lucky her!" They are all quiet for a minute while eating, then Maria thinks about it and asks, "Snoopy, if you and Mooch are up to what you're doin' then...what is Caesar up too? I'm curious."

Nancy shakes her head in disbelief, "What, I know this and you don't? What's the world coming too?"

Snoopy huffs a laugh and says, "His personal assistant."

Maria says, "The photographer?"

"Her, yea, and that chef that comes over all the time."

Mooch points out, "She's cute!"

Maria nods, "Okay, I'll give ya that."

Nancy says, "I'd throw down on both of 'em!"

Maria asks Nancy, "You know them?"

She points to the Xhemal, "Yea, they took me there twice."

Snoopy then finishes with, "Then we have Jimmy, Shiela's assistant, his husband and his husband's brother." He then points up into the air, "And the doorman, Bill!"

Mooch throws out, "Don't forget the concierge, Gabriella!"

"Boys too?" Maria wonders.

Mooch adds, "He says they can be fun."

Maria looks out, not focusing on anything, then shakes her head while saying, "If Shiela finds out she'll have a shit-hemorrhage."

Mooch goes, "If she finds out."

Nancy laughs, "Yea, right. She'll find out alright."

Snoopy grunts to himself, "I wouldn't want to be him."

Carrie announces, "FYI guys, ninety second window in thirty."

Watching the clock, Mooch and Nancy take their time putting down their containers of food and reach for their keys, and when they do, Carrie says, "Ninety seconds at...three, two, one, mark."

With them turning their keys from the three o'clock to the six o'clock firing position, Nancy says, "For what it's worth."

After a few seconds, Carrie points to the big-red button and, "Let's close the circuit and launch the sequence, please? Anybody?"

Nancy nudges Maria, "You're the Big Kahuna so, go for it!"

"M'kay." Maria says while reaching out—pushes the button, and then quietly adds, "Deus ex machina, baby. On so many levels."

With that, Carrie activates the tactical hologram overhead. It shows the star, Betelgeuse, with a 3.95au radius from the core to the surface. Also showing is the proposed impact point at 0.5au from the core. From the surface of the star there is a scale that reaches out 125au to where the Carrie Nation is in orbit. On that scale, at the 10au mark is where they are indicating the start of the corona.

Now, this scale is actually the 'return of results' because along the same radii is the primary shot scale showing the 128.45au from their current position to the impact point 0.5au from the core.

Then again, the Carrie Nation is no longer actually in orbit! It stopped its lateral movement in space along the star's equator three hours ago so it could hover and calculate the shot based upon that static position in relation to the star. Right before the shot is initiated they have to decouple from the hover to fire the weapon.

The ship will go into immediate freefall—from a thousandth of a millimeter per second at the point of decoupling to eight kilometers per second at the 16 minute and 40 second mark when they start the excavation sequence of the shot, but at 125au distance who cares?

Anyway, mainframe Carrie announces, "Initiate freefall."

Mooch looks at the data-points and, "Freefall confirmed."

Carrie in the control room says, "Thirty-five seconds."

The mainframe announces, "Axial Gun, Fire Point Procedures to cords zero-three-six-zero at ten-thirty hours. Nebula cut sequence part one, codename, Muffin. Q-P zipper line of four-point-eight-five grams at zero-point-zero-one g-p-s, for four-eight-five seconds."

Carrie, poking around in her chicken says, "Confirm, please."

Mooch says, "Muffin, confirmed, Zipper line in eight seconds."

Watching the clock on the monitor count down, there is a slightly different low-level hum from the walls as some of the quantum particles are redirected into the feeding ports of the receiver. This is followed by an imperceptible *tick* as the firing sequence initiates at 10:30zulu sharp, with a spider web thin string of particles spooling out of the muzzle at the speed of light—slamming into the nebula.

On the main monitor there are pairs of clocks for each stage of the shot with a graphic pointing to where they are in the shot. In the holographic display above them they have a conical chine racing away from the Carrie Nation at slower-than-a-snail geological velocity.

And this is actually representing light speed.

Mooch picks up his box of tri-tips saying, "And we're off!"

After a few seconds and a few bites of food, Maria looks from the main monitor to the overhead then back over to a third one which shows Betelgeuse in the distance. That one is heavily filtered to block out the extreme glare of the star, but what she notices is an itty-bitty slight whitish glow near the center of the image.

Maria asks, "What's going on there?"

Mooch says, "The chine, and right now it's about one-hundred and fifteen thousand petajoules of fuck me a-runnin'!"

Maria almost chokes on her food, "No shit!"

"Yup, it's doin' it's job as planned. Blowin' the nebula out of the way for the rest of the shit to come chargin' through."

Carrie adds, "This stage will cut through the nebula and the next zipper line stage will cut through the last ten-au of the corona, getting us to the surface."

Maria asks, "Here we spooled fourteen-hundred and forty-one grams, but what's the failure point for this thing to cascade out?"

Mooch says, "Fifty-six-fifteen. With the modeling we hit that every time so, to be safe, we're setting the max to forty-eight-hundred grams. We calculated it will take only six-hundred and forty grams to blow this star, but we went with nine-sixty just for giggles."

Carrie nods in agreement, "If you wanted a nova, this'll do it."

Maria asks, "All the stations are now set up like this, right?"

Snoopy says, "Yup, an' it was easy!"

Maria thinks about it, "I remember the spooling time you said was going to be ninety-eight minutes but you did it here in forty-five? How'd you pull that off?"

Mooch goes, "Oh, that! We used the barrel. Magnetic fields are magnetic fields so we used it as a generator! Doubled the output."

Maria shakes her head in disbelief, then asks, "What'll it take to set up the engines on the Trung and Mbande platforms?"

Carrie answers, "It's already done. It was a simple software update that bypasses the blades, spools and throws the particles out the back. The dump is laser straight but, like a laser, there is some dispersion. For the Q-particles it is tighter than a laser giving you a six klick spread at five-hundred-thousand kilometers distance."

Maria nods, "Okay, what's it throwing out?"

"A smidge over twelve grams. The spool is eighty minutes."

"That's better than the Fly Swatter by a long shot!"

"No, that's per engine. It's forty-eight grams per quad-pod."

Again with a look of disbelief, so Mooch says to Maria, "Yea, ain't that a head fuck. A hundred times better than the Fly Swatter!"

Carrie nods, "We know the Nefer Key's weapon will top out at point-four-eight grams. Maybe point-five if they push it? Oh, and before we forget, we have also designed new engines to replace the current quad-pods that will boost output by eight times *and* give choke capability to provide the platform a variable convergence."

Snoopy adds, "You can extend the range dramatically."

Mooch also adds, "They also cook *H-e*, way more versatility."

Carrie asks, "Would you like us to build a testbed?"

Maria thinks about it and, "Yea, let's puke one out and see what it can do. Can you put one in the queue without anyone the wiser or do we hide it?"

Mooch says, "We'll just call it a Helium testbed configuration."

Carrie adds, "Then nobody would give a shit enough to ask."

After another minute of sitting in silence, mainframe-Carrie again announces to the ship, "Coronal cut sequence part two, codename, Sausage. Q-P zipper line of twenty-five-point-seven-five grams at zero-point-zero-five g-p-s, for five-one-five seconds."

Carrie, taking a bite of chicken says, "Confirm, please."

Mooch says, "Sausage, confirmed, Zipper line in ten seconds."

Shortly they hear a slightly different pitch to the hum coming from the walls as the mass of the string coming out of the muzzle increases by a factor of five. Maria looks at the monitor to the outside and notices that the glow hasn't changed at all.

After three minutes of them watching the monitors and the hologram above them, the chine is still barely pulling away from the Carrie Nation, Maria says, "Nancy you are probably right."

"About what?"

"Muffin, and now the Sausage? You're right, they are pervs! Since what comes next is a pulse string I venture to guess that they codenamed it something stupid like the string-of-pearls."

Snoopy goes, "How'd ya guess?"

Mooch laughs, "Great minds think alike!"

Maria recoils, "Are you shitting me?"

Nancy just shakes her head, "I told you."

Maria then takes a stab at, "Let me guess, the final pulse is the butt plug, or is that just too damned obvious?"

Mooch looks to Snoopy, "Gotta hand it to her, she is good!"

Snoopy says to Maria, "At first, yea. If anybody overheard us they wouldn't have a clue what we were talking about, but we changed it from the Plug to the Billet. Then when we heard you were calling it the brick we thought, why the fuck not, and changed it to the Brick!"

Maria puts a finger up and is about to say something, then backs down—she then says, "Did anybody overhear you guys?"

Snoopy says, "Don't think so? We were careful."

Mooch puts his clawed hands out, "So, you got about a dozen different ways of shootin' this thing off. What we're doin' here today is uniquely different than our original vision."

Maria asks, "Which was what?"

"You know, like the Death Star!"

"Which is what exactly?"

"You know, run up and give it one big BLAMMO of a shot!"

Snoopy adds, "Which would have made a mess of things."

"Oh, yea, I remember now." Maria nods, thinking, then at the two of them she laughs, "Butt plug? Seriously?"

Mooch shrugs, "We were just being silly."

Mainframe-Carrie then announces to the ship, "Excavation sequence part three, codename, String of Pearls. This sequence consists of five, fifty-second stages of Q-P pulse strings. At six-pulses per second that parses four-five-zero grams starting at zero-point-one g-p-p progressing to a final stage finishing off at zero-point-five g-p-p. Sequence fire time is for two-five-zero seconds.

Carrie, taking the last bite from her package of chicken says to Mooch, "Confirm, please."

Mooch says, "String of Pearls, confirmed, Pulse string cycles for excavation to commence in eight seconds."

Mainframe-Carrie announces, "We have ullage. Burn initiates in six seconds."

At the point where the pulse sequence starts, the hum coming from the walls increases in intensity and is accompanied by a staccato of electrical pulses at six per second. At the same time there is a slight disorientation as the ship starts to imperceptibly move sideways. For the first time in the Carrie Nation's existence, the aerospike style blade engines, mounted in a slit along the edge on the aft part of the flight decks, are being fired—not as a test but as an actual maneuver.

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In the top flight deck on the dome side of the Carrie Nation, right below the hub, there are 4,000 of her crew and troops standing in formation 200 across by 20 deep. Having already policed the trash from the welcomed snack provided by Maria, they wait in formation for their queue to start the walk or, more specifically, a route step march.

The formation has 400 meters they have to walk in 4 minutes and 10 seconds. The route is broken up into five 80-meter segments, with markers, and the front line of the formation has to hit each one in their allotted 50-second interval. They have practiced this a dozen times and nailed it with the help from Oscar Peña of all people.

Peña was a Marine so he was temporarily attached to the

Carrie Nation for just this event. Oscar hated being yelled at by DIs when he was a rancid little maggot at nineteen, but here he enjoyed putting on his old campaign hat and dishing it out for the fun of it.

Noticing the clock ticking down, Peña snaps too and barks out over the public address, "On de line! Flight, atteen-HU!"

Mainframe-Carrie announces to the crew on the flight deck, "Pulse sequence to begin in five-four-three..."

"Flight, forward HUW!" Peña shouts, then calls out time over the PA, "Left-ayeee-leoo-loooo...loooo-ri-leeef-heee-loooo! Ke'p in time!" What follows in four-beats is an old Marine standard reprise-cadence, *Chuck Norris*, with Peña calling out, "I see the bearded ninja!"

...and so it goes.

Nobody here knew who Chuck Norris was before three days ago when they started drilling for this maneuver, but now they are all fans of the long-dead star after taking time to sift through the old videos, movies and memes that survived in the public domain. Yea, it is all comically terrible, but that doesn't matter. After 300-years the lyrics have changed, like *You don't fuck with the Chuck* in the refrain, but it remained pretty much intact as compared to the original.

When they hit the first 50-second mark, 28 of the troopers in the back-center fall out with half of them men and half women. They wait 150 seconds and start to march back.

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Back in the control room on the last fifty-second segment, at half-a-gram per pulse, the sound coming from the walls is five-times more pronounced than when the pulse sequence first started. All five of them are watching the monitor count down to the last stage.

Mainframe-Carrie announces, "Nova-impact sequence part four, codename, Brick. Single Q-Particle pulse of nine-hundred and sixty grams in a point-zero-zero-one-five second burst."

Carrie, sitting there with her fork in Snoopy's tray of brisket, pulls a chunk of meat out asking, "Confirm, please."

Mooch says, "Brick, confirmed. Nova-pulse in six seconds."

Watching the clock tick down, six pulses to each second, when the count hits zero there is a slight delay of a half-second, followed by a loud, low-pitched electrical screech—accompanied by what feels like the bump of a pile-driver slamming into the floor.

And suddenly it's over...

With mainframe-Carrie thanking everyone over the PA, giving special thanks to the crew on the flight deck, the five of them here look at each other in dead silence—not really knowing what to say.

Maria looks to Nancy, then to Mooch saying, “wow.”

Mooch asks, “Was it good for you too?”

Snoopy laughs while throwing his clawed hands in the air, “THAT was the money-shot of the year, baby!”

Nancy laughs, “Can you not?”

Snoopy gut laughs as he and Mooch start chirping and clicking in Xhemal, with Mooch then asking Carrie, “So, waddya thinkin’?”

Mentally calculating, Carrie reaches into Mooch’s tri-tips and takes a huge bite, and with them all hanging on her response she finally says, “Telemetry is on the money. Mooch...you did good.”

Nancy and Maria both quietly agree, “You did good.”

Mooch is suddenly swept over by emotions, so he swallows big and, not knowing what to say he nods and says, “Thank you.”

Through the transparent floor, huge gushers of liquid Helium blow into the sump below them and swirls around while Maria speaks up, “All of you understand how big this is?”

Snoopy huffs, “D’urrr!”

With the Helium vaporizing into a gas from the heat, finally creating a huge *whoosh*, followed by crackling metal sounds, Carrie informs them, “The sump flush and heat purge is in progress.”

Maria asks her, “So, what are we looking at, time wise?”

Carrie frowns and, “From Brick release to impact it will take seventeen hours, forty-nine minutes, plus between forty and fifty seconds? I am guesstimating time of impact tomorrow morning at four-forty and thirty-five seconds, zulu.”

Maria points out, “Give or take five seconds.”

Carrie nods, “Correct.”

“How about from Impact to the nova event?”

Carrie shrugs, “This is an asymmetrical detonation so it will depend on the cavitation collapse behind the Brick at the point and time of impact. Mooch estimates that it will be less than point-five au and I am calculating that, based upon the pressures inside the star, the cavity will be between point-three and three-five au. The smaller that number the more uniform the nova will appear. Then, considering the pressure of the collapse after excavation, it may retard the nova

long enough to make it appear more uniform? This is virginal territory so there is no way for us to model it and know for sure.”

Maria presses her, “How ‘bout your best estimate.”

“A guess is the best I can do.”

“Then guess.”

Carrie shrugs again, “Since the detonation expansion is at twenty percent of ‘C’ then I believe the nova will first appear at the earliest on the excavation side of the star two hours and fifteen minutes after impact. The star will shred completely between eight and twenty minutes after that. There are too many variables to give you a more accurate sequence of events. My apologies.”

Maria asks, “But it’s all gonna go explody, right?”

Mooch laughs, “Very explody!”

Carrie smiles, “Fear not, you got your supernova.”

Maria breaths deep and, “Okay, you guys did good.”

Carrie adds, “At a-hundred and twenty-five au, the proposed distance to the rendezvous and observation point, I’m guessing it will be at least seventeen minutes after zulu midnight. I can give you exact numbers tomorrow, by eight-hundred hours.”

Maria looks up at the hologram display and, noticing that the chine has still barely moved a smidge away from the Carrie Nation, nods big saying, “Okay, we’ll go with those numbers for now. We can adjust the orbit further out if it comes to that.”

Carrie points up in the air, “If I can make one last minute recommendation, to mitigate potential damage to the station?”

“Sure! I’m open to anything.”

“I recommend that we move our observation point in orbit to the other side of the star, somewhere behind Cue Ball. This nova event will be asymmetrical so, on the other side it will be just as spectacular, visually speaking, but there we will be exposed to a fraction of the gamma, U-V and x-ray as opposed to this side.”

Maria asks, “We’re only going to be here for a few minutes.”

“Yes, the station can handle it, but considering what we are watching I believe it’s better to error on the side of caution.”

Maria looks at Mooch who says, “She’s makin’ a good point.”

Carrie adds, “Visually, the cool factor will be higher over there because the edge of the star will shred towards the middle instead blowing out. It’ll have a more dramatic effect.”

"Okay, let's do that." Maria nods, then, "Anything else?"

Carrie shakes her head, "No, that pretty much covers it all until we get solid numbers tomorrow morning."

With Nancy and Mooch now having taken the keys from the consoles, Nancy looks up at the hologram display above them and says, "It's mind numbing to think we actually did it."

Maria nods in agreement, then asks Carrie, "The wormtrac can see what's happening in the star and we can tap into it, right?"

Carrie, points above them, "The data for this is coming from the wormtrac in real time."

"Really?"

Snoopy adds, "I busted my butt coding this thing! You can zoom in-an-out, spin it like a top and view from any direction, and the latency is only a half-a-second at worst. You can also pull the data points and bounce them against multiple systems in the display."

Carrie gestures to the hologram above them, "This totally blows the gravtrac away because...are you sitting down?"

Maria shrugs, "Spit it out."

"It's now tacnet integration ready. Thinking ahead, I already have it set up for a direct link up to any JACC or PBDi if needed."

Maria shakes her head, "I can't get used to that interface."

Mooch asks, "Which one? The seeing or knowing mode?"

"Both. I have a hard time with the interface itself."

Snoopy smiles, "Suit yourself, but it's there if you need it!"

"Ya did good, Snoop!" Maria looks over at Carrie and smiles, "You too, Carrie. Let's roll this module out after the third."

Nancy, standing beside Maria, looks down from the display and says quietly to her, "Can't believe the third is almost here."

"Yea, it's hard to believe." Maria then turns towards Nancy, "Everything we got going on is revolving around Taiji being settled. Can you wait for your transfer until after that?"

"Oh yea, no problem!" Nancy shrugs, "I've gotten used to putting up with these two feathered freaks, so what's a few more months? I actually love the shit out of them but if they ever catch wind of that—their heads will explode."

Right on que, Mooch and Snoopy put their clawed hands to their temples and act like their heads are exploding in slow motion, while saying, "BOOOOOM!"

As the Xhemal laugh at themselves, Maria rolls her eyes and asks, "Anybody you need transferred over with you?"

Nancy shakes her head, "No, I kept everything casual, so no."

Maria pats Nancy on the shoulder and turns to leave, "Okay, guys, I'll see you tomorrow night."

And as Maria starts for the door, Mooch calls out to her, "Marshal Ramirez, I got a question."

She turns and asks with a smile, "What is it Sergeant?"

"Ah..." Mooch looks up and around, and back at her, asking, "Why did I get the QP-Gun project?"

"Why do you ask?"

"Honestly, there were a lot of your people who would have been more capable than I was and, I might add, better suited for it."

Maria smiles, "Should I suggest that's a dumb question?"

"I know you had several others working on it behind my back in case I tripped over my dick in the process."

"Could you do it?" Maria holds her hands out, "Did you do it?"

Confused, Mooch says, "I did do it."

"And *that* was the point!"

"What was the point?"

"You'll see tomorrow night."